Regional economic integration and development:
A theoretical and empirical conceptualization with particular
focus on the East African Community

Von der Fakultät für Geschichte, Kunst- und Orientwissenschaften
der Universität Leipzig
angenommene
D I S S E R T A T I O N
zur Erlangung des akademischen Grades
DOCTOR PHILOSOPHIAE
(Dr. phil.)

von Jonne Brücher
geboren am 30.08.1980 in Brühl

Gutachter:
Prof. Dr. Helmut Asche
Prof. Dr. Katja Werthmann
Acknowledgements

This work has been written as external candidate at the Chair of Economics and Politics of the Institute of African Studies, Faculty of History, Arts and Oriental Studies, at the University of Leipzig.

I am immensely grateful for the continuous support by my thesis advisor Prof. Dr. Helmut Asche who has critically challenged and faithfully advised me throughout all stages of this explorative and extensive research.

I am also grateful to Prof. Dr. Katja Werthmann who has thankfully accepted to co-advise on this thesis and who has added interesting questions and comments from a cross-disciplinary perspective, to Prof. Dr. Utz Dornberger for his willingness to co-chair the rigorsum as well as other members of the faculty who have supported the completion of this work.

I would like to acknowledge helpful discussions with various colleagues whom I have interacted with both in academic and work environments. All mistakes or omissions remain my own.

I am deeply indebted to my family for their support and understanding for the hours stolen away.
Table of contents

List of Tables 6
List of Figures 7
List of Acronyms 8

1. Introduction 11
   1.1 Regional economic integration: a multi-faceted phenomenon and double trade-off 11
   1.2 Economic theories with application to economic regionalism 14
       1.2.1 Stock-taking of theoretical frameworks 14
       1.2.2 Attempt at a categorisation of potential effects 15
       1.2.3 Structure and approach 18
       1.2.4 Justification and limitations 21

2. Historical sketch and typical phenomena of African regionalism 23
   2.1 Historical sketch: regionalism in Africa and beyond 23
   2.2 Paper tigers, spaghetti bowl and informality 26
       2.2.1 Illusionary regionalism: the political economy of signing, but not implementing regionalism 27
           2.2.1.1 Concealed political resistance 27
           2.2.1.2 Institutional weaknesses 28
           2.2.1.3 The spaghetti bowl 29
           2.2.1.4 Is regionalism virtual or real? 33
       2.2.2 Regionalism and the informal sector 37

3. Neo-classic perspectives: is regionalism doomed to failure? 39
   3.1 Neo-classical economics: trade diversion and absolute losses 40
       3.1.1 The destructive effects of trade diversion 40
       3.1.2 Some criticisms on the trade creation / trade diversion calculus 42
   3.2 Winners and losers 44
   3.3 Economic regionalism as a futile undertaking: no way out of the poverty trap? 45
       3.3.1 Size 45
       3.3.2 Homogeneity 46
       3.3.3 Preference erosion 47
   3.4 Empirics I: do RECs promote trade? 48
       3.4.1 Regional trade volumes, shares, intensities and their development 49
       3.4.2 The gravity model 49
           3.4.2.1 Results of the gravity model 51
           3.4.2.2 Factors for the variety and unreliability of the gravity model 52
       3.4.3 Alternative methodological approaches 58
           3.4.3.1 Panel approach 58
           3.4.3.2 Matching estimator 58
           3.4.3.3 REC depth differentiation 58
           3.4.3.4 Bayesian Model Averaging 59
           3.4.3.5 CGE: pseudo empirics or ‘could’ African RECs promote trade? 59
   3.5 Empirics II: do RECs hurt their members? 60
       3.5.1 Gravity and trade diversion 60
       3.5.2 CGE and welfare effects 62
       3.5.3 Finger-Kreinin index of similarity 62
       3.5.4 ROI and RCA 62
   3.6 Empirics III: winners and losers 63
3.7 Empirics IV: are African RECs ill-suited for regionalism?

3.7.1 Size 64
3.7.2 Homogeneity 66
3.7.2.1 Homogenous Africa? 66
3.7.2.2 A short digression: Linder or H-O? 70
3.7.3 Preference erosion 72

3.8 Empirics V: A closer look at NC aspects for the EAC 74

3.8.1 Computable General Equilibrium (CGE) 75
3.8.2 Descriptive statistics on absolute and relative trade growth 75
3.8.3 Finger-Kreinin index 81
3.8.4 Revealed comparative advantage approach 82
3.8.5 Disaggregated effects 83
3.8.6 Effects of disaggregated changes in preferential margins on relative trade growth 88
3.8.7 EAC: regional gains or losses? 90
3.8.8 EAC: winners and losers 92

3.9 Synopsis: The limits of regionalism or the limitations of NC approaches? 93

3.9.1 Empirical results 94
3.9.2 Insufficiency and arbitrariness of empirical instruments 97
3.9.3 Gains from regionalism in perspective (I): contribution to GDP 98
3.9.4 Gains from regionalism in perspective (II): extra-regional alternatives 99
3.9.4.1 North-South integration as alternative? 100
3.9.4.2 Unilateralism and multilateralism as better alternatives? 101
3.9.5 The need for looking beyond the Neoclassical Framework 103

4. Political economy: non-welfare oriented reasons for regionalism and implementation issues 106

4.1 Framing the ‘stepping stone vs. stumbling block’ debate: Larry Summers vs. Jagdish Bhagwati 106
4.1.1 Endogenous bloc formation 108
4.1.2 Endogenous protection 111
4.1.3 Institutional and negotiation aspects 115
4.1.4 Forgone gains vs. political feasibility – a case for ‘open regionalism’? 116

4.2 Empirics and synopsis: Regionalism and multilateralism – friends or foes? 117

5. Heterodox perspectives: what role for regionalism in development and structural change? 119

5.1 Regionalism as anti-globalism vs. regionalism as tool for structural change 119

5.2 Relaxed assumptions 123
5.2.1 Economies of scale 123
5.2.2 Imperfect competition and product differentiation 127
5.2.3 Trade costs, factor (im)mobility, diminishing returns and congestion 128
5.2.4 Technology, skills and (tacit) knowledge 129
5.2.5 Sector / goods heterogeneity and firm heterogeneity 130
5.2.6 Dynamism and endogeneity of factors 131
5.2.7 Non-clearing labour markets 132
5.2.8 Transaction costs 133
5.2.9 The importance of the short-run 134

5.3 Heterodox models and regionalism: catching-up and structural change? 134
5.3.1 Non-NC allocation effects 136
5.3.1.1 Love for variety 136
5.3.1.2 Competition-induced producer rent reductions and rent transfers 137
5.3.2 Levelling effects and adjustment costs in the short run 139
5.3.2.1 Is there a case for regionalism as a levelling force? 141
5.3.2.2 Is regionalism alleviating adjustment costs? 146
5.3.3 Location and accumulation effects 148
5.3.3.1 Competition and challenge-response increases in efficiency 154
5.3.3.2 Trade and investment: is there a case for tariff-jumping FDI?  
5.3.3.3 Liberalisation and learning by doing: is there a case for infant industry protection?  
5.3.3.4 Protection and competition: is there a case for regional industrial policy?  
5.3.3.5 Winners and losers: is there a case for regional compensation?  
5.3.3.6 Missing liberalization from the West in a dishonest debate: a case for tit-for-tat?  
5.3.3.7 Limits of liberalization and creating a flat world  
5.3.3.8 Trade costs vs. agglomeration: a case for regionalisation in the long run?  
5.3.4 Governance effects: regionalism and governance/public spending  
5.3.4.1 Regionalism as window of opportunity: does regionalism improve governance?  
5.3.4.2 Signalling  
5.3.4.3 Bargaining position  
5.3.4.4 Regionalism and harmonisation: transaction costs and levelling the playing field  
5.3.4.5 Regional public spending: regional public goods and economies of scale  
5.4 Some attempts at empirical strategies for heterodox approaches  
5.4.1 Literature review: heterodox empirical results and their discontents  
5.4.1.1 Allocation effects: love for variety and producer rents  
5.4.1.2 Levelling effects and adjustment costs  
5.4.1.3 Accumulation and location effects  
5.4.1.4 Governance effects  
5.4.2 Heterodox effect approximations for the EAC  
5.4.2.1 Regional export growth and export share growth  
5.4.2.2 Directions of trade in the EAC  
5.4.2.3 Sectoral disaggregation (I): CIP rankings  
5.4.2.4 Sectoral disaggregation (II): Manufacturing exports and technology content  
5.4.2.5 Sectoral disaggregation (III): Manufacturing exports and intra-regional trade  
5.4.2.6 Sectoral disaggregation (IV): ‘complexity’ and diversification  
5.4.2.7 Sectoral disaggregation (V): diversification and new trade  
5.4.2.8 Foreign Direct Investment  
5.4.2.9 Governance effects in the EAC: protocols vs. functional cooperation  
5.5 Synopsis: are heterodox dynamic effects the saviours of regionalism?  

6. Conclusion  
6.1 Insights from and debunking of the NC framework  
6.2 Insights from and debunking of the political economy framework  
6.3 Insights from and current limitations of the heterodox framework  

Annex  
Bibliography
List of tables

Table 1: Common variables in gravity models  
Table 2: Heterogeneity in comparison (I): capital-labor ratio variation  
Table 3: Heterogeneity in comparison (II): human capital-labor ratio variation  
Table 4: Heterogeneity in comparison (III): specialisation by sector  
Table 5: Tariff levels and peaks  
Table 6: Changes in intra- & extra-regional tariffs and preferential margins  
Table 7: Status and trends of similarities between EAC and ROW imports  
Table 8: Regional trade share development according to tariff lines  
Table 9: Regional trade share development according to volumes  
Table 10: Tariff line development according to initial levels  
Table 11: Changes in preferential margin and relative regional trade growth  
Table 12: Regional and global imports in relation to regional GNI  
Table 13: Regional and global imports in relation to regional GNI  
Table 14: Stepping stone vs. stumbling block (I): the Baldwin classification  
Table 15: Stepping stone vs. stumbling block (II): the case for open regionalism.  
Table 16: Stepping stone vs. stumbling block (III): liberalism vs. protectionism  
Table 17: Stepping stone vs. stumbling block (IV): transcending the dichotomy  
Table 18: Classification of adjustment costs  
Table 19: Exra-regional vs. intra-regional FDI projects in regional groupings  
Table 20: CIP rank gains and losses, global and African countries  
Table 21: Share of manufacturing trade, regional vs. global  
Table 22: SITC chapter 7 tariff lines with intra-regional trade  
Table 23: OECD FDI outflows into EAC as percentage of SSA, Africa & global  

Annex 1a: Intra-regional imports for individual EAC member states  
Annex 1b: Intra-regional import shares for individual EAC member states  
Annex 2a: ARCA values of Top-20 two-digit tariff lines  
Annex 2b: ARCA values according to deciles  
Annex 3a: Trade volume development according to initial levels  
Annex 3b: Import volume developments for EAC countries  
Annex 3c: Significant changes of EAC trade volumes (2 digit tariff lines)  
Annex 3d: Significant changes of EAC trade volumes (five percent)  
Annex 3e: Significant changes of EAC trade volumes (one percent)  
Annex 4: Regional export shares for the individual EAC economies  
Annex 5a: Origins and destinations of intra-regional exports  
Annex 5b: Origins and destinations of intra-regional exports  
Annex 5c: Origins and destinations of intra-regional exports (ex 27)  
Annex 5d: Absolute changes of origins and destinations of intra-regional exports  
Annex 5e: Relative changes of origins and destinations of intra-regional exports  
Annex 6: CIP trade-related dimensions  
Annex 7a: Percentage of EAC FDI inflows of global, African & SSA inflows  
Annex 7b: Percentage of EAC FDI inflows of global, African & SSA inflows / period  
Annex 7c: EAC FDI inward stock of global, African & SSA stock  
Annex 7d: Percentage of EAC FDI inward stock of global, African & SSA / period
# List of figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The spaghetti bowl of African regionalism: conveying chaos</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>Implementation status of trade policies at the national level (%)</td>
<td>34</td>
</tr>
<tr>
<td>3</td>
<td>Disaggregate trade effects</td>
<td>56</td>
</tr>
<tr>
<td>4</td>
<td>Intra-EAC imports</td>
<td>76</td>
</tr>
<tr>
<td>5</td>
<td>EAC intra-regional imports compared to ROW imports</td>
<td>77</td>
</tr>
<tr>
<td>6</td>
<td>EAC trade intensities for imports</td>
<td>79</td>
</tr>
<tr>
<td>7</td>
<td>Traditional depiction of supply and demand curves</td>
<td>124</td>
</tr>
<tr>
<td>8</td>
<td>Economies of scale and enlarged market size</td>
<td>126</td>
</tr>
<tr>
<td>9</td>
<td>Gains from integration of forex vs. labour constrained partners</td>
<td>144</td>
</tr>
<tr>
<td>10</td>
<td>Bell-shaped relation between transport costs and industry location</td>
<td>151</td>
</tr>
<tr>
<td>11</td>
<td>FDI inflows in African regional grouping as percentage of GDP</td>
<td>194</td>
</tr>
<tr>
<td>12</td>
<td>Regional export shares for the EAC</td>
<td>201</td>
</tr>
<tr>
<td>13</td>
<td>EAC intra-regional and extra-regional manufacturing exports</td>
<td>209</td>
</tr>
<tr>
<td>14</td>
<td>EAC intra-regional manufacturing export share</td>
<td>210</td>
</tr>
<tr>
<td>15</td>
<td>EAC intra-regional manufacturing import share</td>
<td>210</td>
</tr>
<tr>
<td>16</td>
<td>FDI flows into EAC countries, African countries and global flows</td>
<td>215</td>
</tr>
<tr>
<td>17</td>
<td>Total EAC inward stock</td>
<td>216</td>
</tr>
<tr>
<td>18</td>
<td>EAC FDI outflows</td>
<td>217</td>
</tr>
</tbody>
</table>
# List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACP</td>
<td>African, Caribbean and Pacific</td>
</tr>
<tr>
<td>AEC</td>
<td>African Economic Community</td>
</tr>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>AGOA</td>
<td>Africa Growth Opportunity Act</td>
</tr>
<tr>
<td>AK model</td>
<td>Labour-Capital model</td>
</tr>
<tr>
<td>APEC</td>
<td>Asia-Pacific Economic Cooperation</td>
</tr>
<tr>
<td>ARCA</td>
<td>Additive Revealed Comparative Advantage</td>
</tr>
<tr>
<td>ARIA</td>
<td>Assessing Regional Integration in Africa</td>
</tr>
<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
</tr>
<tr>
<td>AU</td>
<td>African Union</td>
</tr>
<tr>
<td>BIMSTEC</td>
<td>Bay of Bengal Initiative for Multi-Sectoral Techn. &amp; Economic Cooperation</td>
</tr>
<tr>
<td>BLNS</td>
<td>Botswana, Lesotho, Namibia and Swaziland</td>
</tr>
<tr>
<td>BMA</td>
<td>Bayesian Model Averaging</td>
</tr>
<tr>
<td>BoP</td>
<td>Balance of Payment</td>
</tr>
<tr>
<td>BTR</td>
<td>Bilateral trade resistance</td>
</tr>
<tr>
<td>CACM</td>
<td>Central American Common Market</td>
</tr>
<tr>
<td>CEMAC</td>
<td>Central African Economic and Monetary Community</td>
</tr>
<tr>
<td>CES</td>
<td>Constant Elasticity of Substitution</td>
</tr>
<tr>
<td>CEPGL</td>
<td>Communauté Economique des Pays des Grands Lacs</td>
</tr>
<tr>
<td>CET</td>
<td>Common External Tariff</td>
</tr>
<tr>
<td>CFA</td>
<td>Communauté Financière d’Afrique</td>
</tr>
<tr>
<td>CEN-SAD</td>
<td>Communauté des États Sahéliens</td>
</tr>
<tr>
<td>CGE</td>
<td>Computable General Equilibrium</td>
</tr>
<tr>
<td>CIF</td>
<td>Cost, Insurance, Freight</td>
</tr>
<tr>
<td>CILSS</td>
<td>Comité permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel</td>
</tr>
<tr>
<td>CiP</td>
<td>Competitive Industrial Performance</td>
</tr>
<tr>
<td>CM</td>
<td>Common Market</td>
</tr>
<tr>
<td>CMA</td>
<td>Common Monetary Area</td>
</tr>
<tr>
<td>COMESA</td>
<td>Common Market for Eastern and Southern Africa</td>
</tr>
<tr>
<td>COMTRADE</td>
<td>Commodity Trade Statistics Database</td>
</tr>
<tr>
<td>COPAX</td>
<td>Council for Peace and Security of Central Africa</td>
</tr>
<tr>
<td>CRS</td>
<td>Constant Returns to Scale</td>
</tr>
<tr>
<td>CU</td>
<td>Customs Union</td>
</tr>
<tr>
<td>CUSFTA</td>
<td>Canada–United States Free Trade Agreement</td>
</tr>
<tr>
<td>DFQF</td>
<td>Duty-Free, Quota-Free</td>
</tr>
<tr>
<td>DOTS</td>
<td>Direction of Trade Statistics</td>
</tr>
<tr>
<td>EAC</td>
<td>East African Community</td>
</tr>
<tr>
<td>EADB</td>
<td>East African Development Bank</td>
</tr>
<tr>
<td>EBA</td>
<td>Everything But Arms</td>
</tr>
<tr>
<td>EC</td>
<td>European Community</td>
</tr>
<tr>
<td>ECCAS</td>
<td>Economic Community of Central African States</td>
</tr>
<tr>
<td>ECOWAS</td>
<td>Economic Community of West African States</td>
</tr>
<tr>
<td>EEC</td>
<td>European Economic Community</td>
</tr>
<tr>
<td>EPA</td>
<td>Economic Partnership Agreement</td>
</tr>
<tr>
<td>EPZ</td>
<td>Export Processing Zone</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>FOB</td>
<td>Free on Board</td>
</tr>
<tr>
<td>FTA</td>
<td>Free Trade Area</td>
</tr>
<tr>
<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>gg</td>
<td>General Growth</td>
</tr>
<tr>
<td>GNI</td>
<td>Gross National Income</td>
</tr>
<tr>
<td>GTAP</td>
<td>Global Trade Analysis Project</td>
</tr>
<tr>
<td>HRT</td>
<td>Harrison, Rutherford and Tarr</td>
</tr>
<tr>
<td>HS</td>
<td>Harmonized System</td>
</tr>
<tr>
<td>H-O</td>
<td>Heckscher-Ohlin</td>
</tr>
<tr>
<td>ICGLR</td>
<td>International Conference on the Great Lakes Region</td>
</tr>
<tr>
<td>IDB</td>
<td>Inter-American Development Bank</td>
</tr>
<tr>
<td>IGAD</td>
<td>Intergovernmental Authority on Development</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>IOC</td>
<td>Indian Ocean Commission</td>
</tr>
<tr>
<td>IP</td>
<td>Industrial Policy</td>
</tr>
<tr>
<td>IRS</td>
<td>Increasing Returns to Scale</td>
</tr>
<tr>
<td>ISI</td>
<td>Import Subsidising Industrialisation</td>
</tr>
<tr>
<td>ITT</td>
<td>Intra-industry trade</td>
</tr>
<tr>
<td>JBS</td>
<td>Jagdish Bhagwati school</td>
</tr>
<tr>
<td>KES</td>
<td>Kenya Shilling</td>
</tr>
<tr>
<td>LDCs</td>
<td>Least Developed Countries</td>
</tr>
<tr>
<td>LSS</td>
<td>Larry Summers school</td>
</tr>
<tr>
<td>MERCOSUR</td>
<td>Common Market of the South</td>
</tr>
<tr>
<td>MFN</td>
<td>Most Favourite Nation</td>
</tr>
<tr>
<td>MIRAGE</td>
<td>Modelling International Relationships in Applied General Equilibrium</td>
</tr>
<tr>
<td>MRU</td>
<td>Mano River Union</td>
</tr>
<tr>
<td>MTR</td>
<td>Multilateral trade resistance</td>
</tr>
<tr>
<td>MU</td>
<td>Monetary Union</td>
</tr>
<tr>
<td>MVA</td>
<td>Manufacturing Value Addition</td>
</tr>
<tr>
<td>NAFTA</td>
<td>North American Free Trade Agreement</td>
</tr>
<tr>
<td>NATO</td>
<td>North Atlantic Treaty Organization</td>
</tr>
<tr>
<td>NBI</td>
<td>Nile Basin Initiative</td>
</tr>
<tr>
<td>NC</td>
<td>Neo-classic</td>
</tr>
<tr>
<td>NCTTA</td>
<td>Northern Corridor Transit and Transport Agreement</td>
</tr>
<tr>
<td>NCTTCA</td>
<td>Northern Corridor Transit and Transport Coordination Authority</td>
</tr>
<tr>
<td>NEG</td>
<td>New Economic Geography</td>
</tr>
<tr>
<td>NEGT</td>
<td>New Endogenous Growth Theory</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>NIE</td>
<td>New Institutional Economics</td>
</tr>
<tr>
<td>NIP</td>
<td>New Industrial Policy</td>
</tr>
<tr>
<td>NSTT</td>
<td>New Strategic Trade Theory</td>
</tr>
<tr>
<td>NTBs</td>
<td>Non-tariff Barriers</td>
</tr>
<tr>
<td>NTT</td>
<td>New Trade Theory</td>
</tr>
<tr>
<td>OBC</td>
<td>Open Bloc Creation</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>OBD</td>
<td>Open Bloc Diversion</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OLS</td>
<td>Ordinary least squares</td>
</tr>
<tr>
<td>OMVS</td>
<td>Organisation pour la Mise en Valeur du fleuve Sénégal</td>
</tr>
<tr>
<td>PE</td>
<td>Political economy</td>
</tr>
<tr>
<td>PPP</td>
<td>Purchasing power parity</td>
</tr>
<tr>
<td>PTA</td>
<td>Preferential Trade Area</td>
</tr>
<tr>
<td>RCA</td>
<td>Revealed comparative advantage</td>
</tr>
<tr>
<td>REC</td>
<td>Regional Economic Community</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>ROI</td>
<td>Regional Orientation Index</td>
</tr>
<tr>
<td>RoO</td>
<td>Rules of Origin</td>
</tr>
<tr>
<td>ROW</td>
<td>Rest of the World</td>
</tr>
<tr>
<td>RTA</td>
<td>Regional Trade Agreement</td>
</tr>
<tr>
<td>SAARC</td>
<td>South Asian Association for Regional Cooperation</td>
</tr>
<tr>
<td>SACU</td>
<td>Southern African Customs Union</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern African Development Community (SADC)</td>
</tr>
<tr>
<td>SDT</td>
<td>Special and differential treatment</td>
</tr>
<tr>
<td>SEZ</td>
<td>Special Economic Zone</td>
</tr>
<tr>
<td>SITC</td>
<td>Standard International Trade Classification</td>
</tr>
<tr>
<td>SPS</td>
<td>Sanitary and phytosanitary</td>
</tr>
<tr>
<td>SSA</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>STT</td>
<td>Strategic Trade Theory</td>
</tr>
<tr>
<td>TC</td>
<td>Trade Creation</td>
</tr>
<tr>
<td>TD</td>
<td>Trade Diversion</td>
</tr>
<tr>
<td>TFP</td>
<td>Total Factor Productivity</td>
</tr>
<tr>
<td>TNC</td>
<td>Transnational corporations</td>
</tr>
<tr>
<td>ToT</td>
<td>Terms of Trade</td>
</tr>
<tr>
<td>UBS</td>
<td>Ugandan Bureau of Statistics</td>
</tr>
<tr>
<td>UEMOA</td>
<td>Union Economique et Monétaire Ouest-Africaine</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UMA</td>
<td>Union du Maghreb Arabe</td>
</tr>
<tr>
<td>UNCITRAL</td>
<td>United Nations Commission on International Trade Law</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>UNECA</td>
<td>United Nations Economic Commission for Africa</td>
</tr>
<tr>
<td>UNIDO</td>
<td>United Nations Industrial Development organization</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
<tr>
<td>VAT</td>
<td>Value-added tax</td>
</tr>
<tr>
<td>WAEMU</td>
<td>West African Economic and Monetary Union</td>
</tr>
<tr>
<td>WAMZ</td>
<td>West African Monetary Zone</td>
</tr>
<tr>
<td>WIR</td>
<td>World Investment Report</td>
</tr>
<tr>
<td>WITS</td>
<td>World Integrated Trade Solution</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
1. Introduction

In our view, regional economic integration is essentially a double trade-off: it is a spatial trade-off between a local and a global solution and it includes forces of liberalisation within the region while upholding – or even amplifying – protection against outsiders. In addition, regionalism is a very multi-faceted, polymorphous and idiosyncratic phenomenon that (potentially) incorporates a great number of different policy areas and directions. In consequence, it seeks (or should seek) justification in a great number of different theoretical backgrounds. Albeit these are rather simple observations, it will become apparent during the course of this work that this focus on the trade-offs and idiosyncrasies sets a forceful frame for a more holistic and thorough discussion of the different aspects, theories and methodologies applied to regionalism. This is detailed in chapter 1.1. Based on this framework the economic theories and schools of thought with relevance to the discussion of regionalism will be shortly introduced, clustered and set into relation to each other in chapter 1.2. Finally, the structure of the work (1.2.3) as well as its justifications and limitations (1.2.4) are laid out. We are unaware of any existing work that addresses economic regionalism so holistically in a unified analytic framework. However, this novel approach and its very broad scope implies that several aspects can only be raised, but not conclusively addressed – particularly in view of the huge challenges on the empirical side with regard to methodological uncertainties and data availability issues.

1.1 Regional economic integration: a multi-faceted phenomenon and double trade-off

Following the five steps of Balassa (1961), the most common approach is to differentiate regional economic communities into sub-categories and to describe it as a more or less predetermined succession of five, six or seven steps that are traversed by integrating countries in chronological order. While a preferential trade area (PTA) partially liberalises internal trade in goods, a free trade area (FTA) abolishes all internal trade in goods. As an FTA is usually phased-in, a PTA in fact usually precedes an FTA. The next logical step is to harmonise external trade in a customs union (CU) with a common external tariff (CET). However, a CET does not necessarily require fully liberalised internal trade and many real world experiences show that both internal trade liberalisation and CET harmonisation are often part of a parallel process, but often develop at different speeds, including partial reversals and adjustments. For the remaining steps, the order is even less predefined, both in theory and in practice. A common market (CM) also liberalises non-trade related factors of production, thus enabling or easing investments, trade in services and labour migration. In order to
facilitate this, usually a common market also harmonises policies. This implies that a CM contains (or can contain) several relatively unrelated aspects. In addition, these liberalisation and harmonisation steps can be more or less pronounced. Consequently, common markets can be quite diverse in design, scope and depth. However, this internal liberalisation of factors of production is mainly an addition to a FTA and does not necessarily require the previous implementation of a CU as at least in theory a CM is possible without introduction of a CET (although not entirely unproblematic). Sometimes a monetary union (MU) with a common currency is presented as the logical next step, in other cases such a common currency is seen as part of an economic union that also features (or can feature) common fiscal policies and even stronger harmonisation than in a common market, touching also on aspects such as taxation, social welfare etc. However, it is difficult to draw a clear line between a CM and an economic union as aspects of the latter are often already partially harmonised in the former. Sometimes, the stage of a total economic integration is added as a situation where an economic union is really finalised. A (potential) last step is a political union that adds components largely outside the economic realm. In our view, any variety of a stage model has thus only limited explanatory power due to the unclear distinction of the categories and the idiosyncrasies involved in many regional integration processes that do not follow a clear order and often only partially implement certain steps while already initiating others.

We therefore propose to simply focus on the different policies instead that regionalism can (and cannot) entail. In our view, the very confusing panoply of economic regionalism can in fact be summarised in only four broad policy categories. These are

1. Preferential liberalisation of trade in goods which can be subdivided in liberalisation of internal trade and protection against external trade;
2. Preferential liberalisation of other factors of production such as labour and service provision as well as capital;
3. Coordination, harmonisation, minimum standards and / or mutual recognition of regulations and institutions in the economic realm (this category includes, for example, a common currency but also harmonization of product and quality standards, domestic taxes, incentive systems, work permits, professional standards, etc.); and
4. Coordination of public spending and joint public spending (with regional infrastructure projects being the most obvious case, but also the provision of other public goods such as specialised education, security etc. being potential areas in this regard).

Outside the economic realm, a fifth category may be added to cover regional dimensions of elections and political representation, but this aspect does not play a role in this work.

All of these four categories should be seen as entailing a double trade-off. This is quite obviously the case for the first and second policy bundles with their explicit focus on preferentialism. However, the same applies to almost the same degree to the latter two governance-related bundles as policy making and public spending on a supranational, national and subnational scale have all advantages and disadvantages alike. This can actually be easily grasped if one observes that attempts at regional economic
integration often run parallel with initiatives of devolution and local economic development strategies.

In our view, regionalism can ultimately best be described as a spatial trade-off between a local and a global solution and, consequently, as an approach that merges aspects of liberalisation and protectionism. These features are actually anything but unique as the same applies to the confinement of the economy on a national basis. Abstracting from the dominant role of the national unit and some regionalism-specific particularities in the political, cultural and economic spheres for a moment, regionalism is nothing but just another layer between the two extremes, the local level (or even the individual) and the global level (or humankind). In between these two extremes, there is a diversity of partially overlapping units, ranging from social categories such as different definitions of family, ethnicity and nation to organisational units such as different forms of firms and organisations and to administrative, governmental units such as sectors, provinces, states and regions. It may be rightly argued that regionalism has in fact more in common with a nation state than with multilateralism as the latter defines only an inside while all sub-global schemes define both, insiders and outsiders.

Although these observations may seem somewhat obvious, an analysis of the academic (economics) literature and policy debates and documents clearly shows that this simple reality is often only insufficiently taken into account. In other words, most analyses fail to compare regionalism to both (status quo) national and (potential) global solutions at the same time, thus considerably flawing the validity of any analysis that fails to do so. This applies particularly to approaches more sympathetic and assertive to regional economic integration. The neo-classic (NC) analyses and the political economy game theory approaches in contrast usually consider the two opposing alternatives and base a considerable part of their criticisms on this two-faced (Bhagwati & Panagariya, 1996) nature of regionalism, or, as protectionism is usually frowned upon from such a perspective, liberalisation at the cost of discrimination.

This trade-off becomes further apparent when grouping the diverse effects expected from regionalism into broader categories. Many of the expectations are a direct effect of liberalisation. This applies particularly to arguments on comparative advantages, competition and economies of scale. Other potential gains are simply a result of size. This applies for example to the insurance argument, to scale economies in public goods and public administration as well as to bargaining power. Opposed to these liberalisation and size aspects, many supporters of regionalism also stress the protective nature of regionalism against too stiff and too early competition from the outside and the need to maintain or even increase the revenue generated from tariffs. Some sophisticated views from a dynamic perspective even combine both aspects – liberalisation and enlargement of the market on the one side and protection on the other side – and argue that both are important for a successful structural change strategy. In our view, this combination of apparently antagonistic forces – liberalisation and protection – in a dynamic perspective is in fact the single most important argument in favour of regionalism – if not even the only truly and substantially valid one.

In this work, regionalism is explicitly discussed as a double trade-off: firstly between the local and the global sphere and as a consequence, between liberalisation/competition and protection. In fact, the question whether the theories and methodologies discussed make reference to this double trade-off and whether they
can explain why such a middle course may or may not be the most preferable solution as compared to both other alternatives is used as an important criterion for evaluating the usefulness of theories and arguments on regionalism.

1.2 Economic theories with application to economic regionalism

Given this multifaceted nature and the trade-offs involved, it is not surprising that regional economic integration is analysed in a diverse set of analytical frameworks, even if constraining oneself to economic approaches only.

1.2.1 Stock-taking of theoretical frameworks

The most well-known and probably most thoroughly developed approach to the question of whether or not regionalism may have or in fact empirically proves to have positive effects on economic growth and development stems from mainstream neoclassical considerations and allocation theory as part of welfare economics. This rich literature offers valuable insights particularly on the limitations of regionalism. It will be argued, however, that despite its popularity, apparent plausibility and its consideration of the double trade-offs depicted above, this framework has to be seen as extremely biased and flawed as it is implicitly and explicitly based on extremely stringent – and to a considerable part unrealistic – assumptions, thus disregarding important aspects of economic growth and development. A second reason for also focussing on analytical approaches outside this framework is the fact that if neoclassical economics and its results were taken at face value and as the only framework of analysis, regional integration should simply not take place – neither normatively nor empirically. Hence, the blossoming of regionalism would pose a serious puzzle from this perspective.

A close second school of thought with regard to popularity and productivity of studies focuses on forces that militate against the successful implementation of multilateral liberalisation and thus addressing the puzzle of the NC framework just discussed. Political economy (PE) approaches analyse vested interests of governments, firms or voters in game-theoretic settings in order to explain why and how actors embrace regional initiatives although it has been proven as the worst or at least not the best solution for (almost) any economy by the mainstream neo-classical economics. PE approaches do not attempt to substantiate this claim inside their models themselves. Instead, they usually take the main result of the neoclassic analysis for granted that regionalism is the better the more it shifts an economy and the world towards a situation that resembles global free trade and in converse argument has to be criticised if it creates dynamics that make global free trade less likely. The main question then boils down to the analysis of whether or not dynamics created by regionalism lead to multilateral free trade and thus to eventually overcoming itself.

Generally speaking, both the neoclassical and the PE approach thus support regionalism only in instances where it moves the economy closer to multilateral, global free trade. According to many representatives of these schools, this is rarely the case, even more when considering all alternatives, particularly direct multilateral solutions. While the analysis in terms of neoclassic economics puts its focus on the analysis of entrepreneurs and markets, the PE approaches centre on the actions of political forces that change market outcomes to the benefit of vested interests. Focussing on these
dominant two strands of literature alone, one might well arrive at the conclusion that regionalism is indeed doomed to failure. The expected effects are likely to be modest at best; they may turn out to be negative for some or all of the integrating members; any positive effect is likely to be only a fraction of the positive effects to be expected from global integration; and finally regional approaches may delay or even crowd out such a global solution.

However, there are other important approaches that receive much less attention in academic works and that are thus profoundly less well developed and elaborated, in particular when it comes to empirical strategies and substantiations. However, they play a considerable and increasingly strong role in policymaking and public debates. As discussed below in more detail, these approaches in fact address to a large extent crucial shortcomings of the NC approach by questioning its underlying assumptions and broadening the scope of analysis to a number of additional aspects and effects. Central to all these approaches is a focus on market imperfections and externalities. In consequence, most (though not all) of these contributions focus on (potential) positive effects not only on static welfare, but also on structural change and even growth rates – thus obtaining a dynamic picture instead of the neoclassical static one. For the purpose of this work, this broad category entails particularly the new school triumvirate of new trade theory (NTT), new economic geography (NEG) and new endogenous growth theory (NEGT). To some extent, also some aspects of Keynesianism, new institutionalism (together with some less formalised and more hands-on public finance aspects) as well as some more radical approaches that focus on underdevelopment and non-clearing labour markets are included in this category. Surprisingly, although a considerable share of the applied, policy-related discussions on regionalism – particularly those in favour of it – focuses on such additional positive effects, the analysis is plagued by a frequent lack of scientific justification, empirical substantiation and even a simple logical causal chain how such improvements could be induced by regionalism. In particular, most discussions fail to provide any explanation or a mere consideration of whether and why regionalism should be the most efficient and preferable solution when compared to both national and global/multilateral solutions and not only compared to one of these alternatives. Unfortunately, these dynamic aspects are rooted in a large and very diverse set of theoretic frameworks and scientific schools, some of them closely related to each other, others mostly unrelated. For lack of a better term, we call these approaches jointly heterodox, thus focussing on the common denominator, namely their diversion in one way or the other from the neoclassic paradigm. Admittedly, this terminology appears to re-establish a scientific worldview in which the neo-classic apparatus is seen as orthodox and everything else as heterodox if not heretic. While some may rightly claim that this perception has been considerably changed over the last decades, we would claim that – somewhat surprisingly – the scientific discourse on regional and global integration turns out to be to some extent a last refuge of this previous dominance. While this may be somewhat less the case with regard to theoretical discourses or those related to practical policy, it definitely applies to empirical strategies on the effects of regionalism.

### 1.2.2 Attempt at a categorisation of potential effects

While reviewing the extensive literature on regionalism we have been unable to find any classification and grouping of such effects that is both reasonably comprehensive
and logical. In our view, the reason for this striking void is simply that it is exceedingly
difficult to come up with a clear-cut, non-overlapping classification of all of the
(potential) effects of regionalism, particularly when non-standard, heterogeneous ones
are considered as well. Building on the in our view most appropriate, yet incomplete
classification by Baldwin & Venables (1995) we propose the following classification
which we will utilise as framework and structure throughout this work. Despite evident
flaws due to overlaps of particularly two of the five categories, the framework appears
to work satisfactorily well for our purposes.

Our classification has its starting point in the observation from the preceding sub-
chapter that regional economic integration can be fanned out into four distinct policies,
(preferential liberalisation of trade, i.e. internal liberalisation while upholding or
extending external protection, preferential liberalisation of other factors, harmonisation,
approximation and coordination of regulations as well as joint public spending). These
policies in turn can produce a number of effects or gains that can be more or less
clearly summarised into five groups of effects, namely

(1) Allocation effects;
(2) Accumulation effects;
(3) Location effects;
(4) Levelling effects; and
(5) Governance effects.

The first three of these effects are taken from Baldwin & Venables (1995), the two
latter are added from our side. The neo-classical Vinerian analysis and the game-
theoretic PE approaches constitute a considerable part of the literature, but even taken
together they only cover a very small fraction of the overall effect space. These
approaches exclusively deal with preferential liberalisation of trade in goods and none
of the other three policy bundles and only captures (a part of) the allocation effects, i.e.
the re-allocation of goods produced by given production patterns.

All other policy bundles and effects are thus only to be captured by resorting to what
we denominate as heterodox approaches since at least one of the NC assumptions
has to be relaxed.

One of the central assumptions to be relaxed is the assumption of perfect competition.
When restricting the analysis to the policy of trade liberalisation and to the group of
static allocation effects only, just the relaxation of this very stringent assumption
already gives rise to two additional strands that can be found in the literature. The first
strand assumes Dixit-Stiglitz monopolistic competition and thus gains from love of
variety become possible. The second strand assumes monopolistic or at least
oligopolistic setups and thus the existence of price mark-ups – and thus open
possibilities for their potential reduction or re-channelling by means of integration. As
for the NC allocation effects, also these heterodox allocation effects only deal with one
of the four policy areas of regionalism, namely preferential trade liberalisation.

For another static group of effects, the levelling effects, only the importance of the
short-run has to be added so that consumption smoothening may exert positive
effects, for example in the fields of business cycles, food security and the Dutch
disease. Again, the only policy bundle concerned is preferential trade in goods
liberalisation.
While allocation and levelling effects are (mainly) static in nature, the three other
groups of effects carry dynamic aspects. With regard to the term ‘dynamic’, it has to be
noted that it is used in the literature for three distinct, yet related dimensions and
qualities. Firstly, dynamic refers to effects that are not instant and require time to
realise and thus refer to production and inputs rather than trade aspects. Secondly and
closely related to the first point, dynamic may signify structural changes in the
underlying comparative advantage, production and, consequentially, trade patterns.
Thirdly, the term dynamic refers to changes in the growth rate as opposed to one-off
welfare changes. As changes in the growth rate are likely to be based on long-term
structural change, they are again closely related to the two aforementioned
dimensions. In other words, the term dynamic can be seen as a continuum of
dynamism: some effects simply take a longer time to materialise, but are still in line
with previous patterns and have thus no effect on structural patterns and the growth
rate. Other long-term effects do change structural patterns of the economy, but have
only short-term effects on the growth rate and do not change the steady state growth
path. Finally, some of these effects, particularly when affecting knowledge and human
capital accumulation as well as long-term savings and investment rates, can have a
long-term effect on the growth rate of an economy.

The closely intertwined, yet internally extremely diverse accumulation and location
effects play an extraordinary role in the analysis of heterodox effects in this work.
Approaches discussed in this category focus on regionalism (and multilateralism) as a
tool for structural change. Most of these schools draw heavily on the neo-classic
methods and tools box – while challenging the conventional neo-classic assumptions
and thus arriving at distinct results and policy recommendations. While imperfect
competition plays again a considerable role in these frameworks, in addition increasing
returns, factor mobility and immobility, transport costs, external economies and
knowledge spillovers as well as the (partial) endogeneity of comparative advantages
are the backbone assumptions of heterodox approaches. By selectively applying and
not applying these diversions from the NC framework, a wide range of to some extent
conflicting setups and outcomes is produced by the diverse heterodox schools and
approaches. In these two effect groups, the perspective is also shifted from the
exclusive focus on the positive effects of intra-regional liberalisation (and the negative
ones of extra-regional protection) to an additional consideration of potentially positive
effects of both measures when applied in unison. Likewise, the exclusive focus on
trade in goods is abolished and the (preferential) liberalisation of other factors, in
particular capital and labour, makes up a major part of the arguments. In addition,
some references to the other two governance-related policy bundles are in some
instances stroke. The most important heterodox theories with regard to accumulation
and location effects appear to be new economic geography, new trade theory and new
endogenous growth theory. Unfortunately, the policy literature on regionalism is rife
with rather vague references to concepts taken from these schools, but only few
academic works stemming from those heterodox schools specifically apply their
apparatus to regionalism themselves. As a result, a rigorous application of the models
on regionalism reveals that several of the policy recommendations apparently
stemming from these schools can in fact not readily be derived from them. This is
partially due to other geographical units that appear to be more important for some of
the approaches – either on a greater scale (i.e. multilateralism, North-South
regionalism) but in this case also on a smaller scale than a supranational region or
nation state (i.e. sub-national regions, cities, clusters). In addition, it appears to be also partially a result of the fact that not only the neo-classical models are mainly constructed with a view of analysing policies pertinent to already developed countries, but also the lion’s share of such heterodox approaches. Therefore, some additional enrichments and modifications are required to distil useful insights for the opportunities of regionalism among developing countries, some of which are attempted in this work. However, it also becomes apparent that some of the arguments and justifications apparently rooted in these heterodox schools do not hold up well against rigorous scrutiny. Concrete effects that can potentially be positively influenced by regionalism (in most cases amongst many other essential policies outside the realm of regionalism) include most notably the following areas: increased competition and thus efficiency; exploitation of economies of scale in production; intra- and extra-regional investment; the infant industry argument and structural change; knowledge transfers and knowledge accumulation; as well as labour market issues such as pooling and wage levels.

Lastly, governance effects are discussed as another potential source of dynamic gains, mainly by dropping the NC assumption of zero transaction costs. Thus, a number of additional policies and effects that may form part of deep integration schemes are discussed. According to the new institutional economics (NIE) paradigm, the harmonisation, approximation and coordination of rules and regulations can be instrumental in reducing risks, uncertainties and transaction costs. In addition, such an agreement to common rules may lock-in reforms so that individual countries find it easier to resist lobby towards unfair preferences and harder to introduce harmful policies. This in turn is likely to send out a positive signal to potential investors from both inside and outside the region, thus potentially supporting processes in the realm of location and accumulation effects. Some authors also argue that there is potential for institutional competition that may lead to better governance if a competitive rather than a centrally planned and harmonisation focussed approach is followed. Finally, from a public finance perspective joint or at least coordinated public spending and service provision may unlock unexploited economies of scale in public sector service delivery and render regional public goods provision more efficient.

1.2.3 Structure and approach

These theoretical approaches are considerably different with regard to literature depth, internal homogeneity, conceptual and empirical richness and, from our view, theoretical and empirical explanatory power. Nonetheless, all chapters follow the same logic of

1. Presenting the theoretical arguments;
2. If necessary translating the respective theoretical frameworks into concrete potential positive or negative effects (and thus into potential support or criticism) of regionalism as well as reviewing possible mitigating or inhibiting countervailing factors;
3. Critically analysing the secondary literature on empirical proof;
4. Whenever feasible and necessary compiling and calculating empirical evidence or at least indications from primary sources, mostly trade data; and
(5) Concluding on the relevance of the respective approaches for the analysis of regionalism and the conduciveness of regionalism for development, in particular in comparison to an alternative multilateral scenario.

While the review of empirical evidence includes secondary literature on regional setups worldwide, a focus is always set on results from developing countries in general and African countries in particular. In instances where our own calculations are added to the existing empirical literature, the focus is exclusively set on Africa. Whenever a focus on one region is necessary for practical considerations, the East African Community (EAC) is taken as testing ground in this work. This choice is based on a number of considerations. Firstly, the very strong degree of implementation compared to almost all other African Regional Economic Communities (RECs) makes the observation of effects at least possible – in other words, if effects are not observed in this poster child case, it is rather unlikely that less strongly implemented schemes are effective. Secondly, the relative recent implementation of liberalisation and harmonisation steps make changes in the last few years more easily observable (compared to, for example, the Southern African Customs Union (SACU), the other most strongly implemented scheme in Africa, but with a century long history that hardly allows for any ex ante – ex post comparison). Thirdly, data quality and availability for trade and foreign direct investment (FDI) statistics for the five members of the EAC is anything but good, but compared to other African countries and blocs actually relatively strong and thus allow for at least modestly reliable statistical analyses. Fourthly, the setup of the REC is not dominated by one hegemon (as for example SACU by South Africa) or countries exclusively focussed on natural resources. In most cases, trade and investment data from the years 2000-2005 will be compared to trade and investment data from the years 2006-2010 are compared as the customs union protocol was implemented from 2006 onwards. In order to reduce noise in the data from fluctuations due to reporting mistakes or factors unrelated to integration, mostly average for those groups of years are utilised. This choice is also based on practical considerations given that such a great number of empirical approaches are tested. We have decided against using more recent data than 2010 because the NC effects should take place instantly and not over a longer period of time. An inclusion for the – anyhow not very extensive – trade data analysis from a heterodox / dynamic perspective a change in data would have raised questions of comparability with the NC results if additional years would have been included.

The diverse theoretical frameworks and groups of effects are divided into three main clusters that are dealt with in the three subsequent chapters. In order to follow a logical order of questions towards the effects and effectiveness of regionalism, chapter 3 addresses the NC framework and its general criticisms towards regional integration. While the theoretical setup is surprisingly simple and very homogenous across most NC approaches, there is ample room for discussion and debate on the empirical side. A panopticum of almost identical and not so identical models and approaches produce completely inconsistent results on the gains or losses from regionalism – the only axiomatic bottom line shared by all NC approaches is that multilateralism would produce better results. In our view, the most important insight from the NC debate is, however, neither the strong disagreement on the empirical effects of regionalism nor the absolute agreement on the superiority of multilateralism. As discussed in detail below, whichever model or calculation method and whichever regional focus is chosen, even the very best scenarios on a hypothetical rather than empirical basis
promise positive effects of a magnitude that is ridiculously insignificant for any growth effort. Interestingly, the same applies for the (apparently) crowded-out multilateral approaches that likewise would produce only marginally stronger gains if implemented instead. In this regard, this chapter is largely a debunking exercise. The empirical results are not only much less unambiguous than usually assumed, but from a NC perspective both regionalism and multilateralism should be seen as pretty much uninteresting anyhow as neither positive nor negative effects of either from the two approaches appears to hold any potentially significant bearing on growth prospects of integrating countries. The main question thus remains whether this is a result of the inadequacy and insignificance of regionalism (and actually multilateralism, although this is rarely stressed) or of the NC approach.

As one possible explanation for the persistent interest in regionalism despite the apparent futility of such endeavours as established in the NC framework, Chapter 4 analyses the literature on political economy as discussed in a vast corpus of game theoretic contributions. The main questions addressed are why regional initiatives are implemented in the first place (with the answer confined to lobby interests) and whether regionalism is a road towards multilateral free trade or an obstacle to it (with the answer being inconclusive). In the broader picture, however, these game theoretic models appear to be theoretical curiosa or parables rather than useful tools for informing policy.

In contrast, chapter 5 analyses potential additional positive (and also negative) effects of regionalism and multilateralism that may make them attractive strategies from an economy- and society-wide perspective and not only as a tool for realising vested interests. In order to narrow down on this question chapter 5 relaxes the stringent NC assumptions one by one and thus covers the very diverse space of static and dynamic heterodox (or non-NC) effects. This chapter first discusses two classes of static effects (allocative and levelling effects) before turning to accumulation and location effects that are dynamic in nature, thus potentially influencing the growth rate and / or triggering or at least seconding structural change. Finally, some thoughts are spend on governance effects although they are relatively unrelated to the previous issues and debates. In this area, focus is laid on harmonisation and coordination efforts and thus changes in public spending and the pervasiveness of transaction costs. While we indeed find a number of additional potential effects of a much larger magnitude and a considerable number of them actually are positive effects of regionalism rather than multilateralism, it would be in our view presumptuous to claim that this constitutes a vindication of regionalism. In view of the intricacies to trace and quantify heterodox effects and even more so in view of the difficulties to directly relate them to regionalism, it appears to be only to arrive at the conclusion that regionalism may potentially be a significant contributor to growth in developing countries. However, this strongly depends on very detailed specifications in its setup and auxiliary reforms and investment endeavours on the national level.

Thus the Herculean – and thus unfortunately to a large extent elusive – task of eliciting meaningful, comprehensive and practical policy advice from these diverse and contradictory bundles of policies, effects, theoretical underpinnings and methodological (empirical and modelling) strategies from different schools of thought is reserved for the short concluding chapter 5. Given this overambitious goal, we are mainly able to highlight the complex nature of regionalism and to give a succinct overview of key
issues to be considered in further discussions and analyses rather than to arrive at a well-defined and unambiguous bottom line.

1.2.4 Justification and limitations

The guiding questions in this work are whether steps towards regional economic integration by governments may and actually do foster economic growth and poverty reduction in developing countries. To this end, several economic theories and arguments are analysed one by one with regard to their explanatory power on the link between economic regionalism and economic growth and poverty reduction. However, as the focus of this work is on developing countries in general and on Africa in particular, it is additionally scrutinized whether or not the general results apply and are meaningful and potent in the case of developing countries. Despite our conviction that analyses from the perspective of heterodox schools entail the most important insights for regionalism among developing countries as merely a more efficient utilisation of existing comparative advantages is unlikely to produce any significant momentum towards structural change and growth, we do not opt in favour of a certain theoretical framework (and thus against all others). To the contrary, we are convinced that the multidimensional and trade-off nature of regionalism requires a multi-disciplinary and multi-perspective approach that looks at different aspects, causal explanations and interpretations.


While contributions critical of regionalism from a NC perspective often fail to highlight the complex and multi-dimensional nature of regionalism and its many components, such approaches usually present regionalism well as a trade-off and consider both national and global solutions as alternatives. Conversely, many contributions that are more sympathetic towards regionalism often discuss its complexities, but more often than not fail to compare regionalism to both, more localised and more global alternatives – at least not in a rigorous way. The compilation of the Jovanovic handbook is a notable exception to this general observation as it sets regional and multilateral integration into relation to each other, explicitly also for non-trade related aspects.

Despite and partially as a result of the very great number of contributions to the debate, a critical stock-taking of the different analytical frameworks and dimension of regionalism appears, in our view, to be overdue. However, such a broad perspective inevitably implies a strong emphasis on theory. As we want to present a picture that is as holistic and complete as possible, we necessarily have to remain shallow on some of the questions and matters arising. Our holistic approach may risk being overly cameralistic at times, giving relatively equal weight to effects with varying degrees of explanatory power and might. This focus on a categorisation of the very complex and interwoven field also implies that we have to be overly dissecting, taking apart issues that are closely related to each other and thus creating artificial boundaries between
them. The division into theory and empirics is likewise somewhat artificial as (most) theories are based to at least some extent on empirics, empirical strategies relate to theories and some strategies are to be located somewhere in the shadowy no-man’s-land between theory and empirics, first and foremost Computable General Equilibrium (CGE) models and other models with more or less sophisticated calibration techniques. Despite our focus on theory we have opted for a hybrid approach as wherever possible empirical substantiations of the theoretical arguments are sought and discussed. In some instances, it appears only feasible to point out ways for empirical strategies that may be followed in the future. In particular, the poor quality of data must be seen as a severe limitation for the substantiation of some of the theories. In other instances intricate directionality problems, co-determination of effects and context specificity play a major role as well. Such a focus on theory and on secondary empirical literature from all over the world also risks to make too strong generalisations and to brush over local differences. This is particularly problematic as there is a strong bias towards industrialised countries in the existing literature. We try to counter this by placing particular emphasis on the discussion of whether or not a certain effect is likely to entail specific insights for developing countries and whether results from other countries are likely to have a stronger, weaker or opposite effect on such countries. We also report empirical secondary results for developing countries in general and African countries in particular in separate sections and we showcase and scrutinize many of the methodologies and approaches discussed with one particular group of developing countries as an example, the EAC.

We nonetheless hope that the work frames the debate on regionalism in an innovative and interesting way that encourages future research and discussions.
2. Historical sketch and typical phenomena of African regionalism

Before jumping into our discussions on the potential and actual effects of regionalism, we devote a short section to a historical sketch of regionalism in Africa and beyond and an extensive one to a number of specific features of African regionalism.

The historical sketch frames our discussion on regionalism and regional economic integration from a temporal perspective. In this section, we emphasise that the phenomenon of regional economic integration is not as novel as often perceived. However, significant changes have taken place in the last decade with regard to its frequency and quantity as well as its quality, depth and scope. Such changes are often subsumed under the somewhat lofty and poorly defined term new regionalism (2.1).

In addition, we discuss several typical patterns of African regionalism, that are crucial for understanding political and economic forces behind African RECs that are not captured in the standard statistical analyses of regionalism. Focussing on the tendency to sign, but not to (fully) implement protocols, capacity issues, overlapping memberships and the informality of African economies we claim that empirical analyses risk arriving at considerably skewed assessments of regionalism if such particularities of African economies are not sufficiently taken into account (2.2).

2.1 Historical sketch: regionalism in Africa and beyond

The commonly perceived picture of regional economic integration is that it is both a relatively recent phenomenon and continuously on the rise. Often classified into two or three waves, regional economic integration is portrayed as having its roots in the post-General Agreement on Tariffs and Trade (GATT) decision of Western Europe to form preferential communities in the 1950s and 1960s that led to imitations elsewhere in the just decolonised countries of Africa and Latin America. This development often followed a pronounced shift to a more inward-looking policy approach and import-substitution considerations and goals. However, most of the attempts outside Europe turned out to be rather weak and unsustainable: a great number was dissolved shortly after introduction or, more often, never really got off the ground and remained paper tigers at best. This applies particularly to African RECs where regionalism blossomed as part of the independence movements. However, these apparently new-born regionalisms were often just a continuation of ties that were forcefully forged under colonial rule. Until today, many of the existing RECs can be clearly traced back to a common coloniser with the Western and Central African Communauté Financière
d’Afrique (CFA) zones based on former French colonial rule, the original core of the East African Community (EAC) based on former British Colonial rule and the Communauté Économique des Pays des Grands Lacs (CEPGL) based on former Belgium colonial rule being the most vivid examples. Nationalist and protectionist sentiments, ideological disagreements that where often closely related to affiliations in the cold war dualism as well as perceived and real economic divergences crippled most nascent regional schemes leaving many completely dormant whilst others where even officially dissolved. A notable exception to this general feature is another REC with colonial / settler origins, the Southern African Customs Union (SACU), that was established in the early years of the 20th century and that remains up and running until this day. A second wave of regionalism was influenced by the conversion of the USA from ‘devoted multilateralist to ardent regionalist’ (Baldwin, 1994: 11) in the mid-1980s. Parallel to the establishment of the North American Free Trade Agreement (NAFTA), the European initiative at regional integration also appeared to bear first tangible fruits, making emulations ever more attractive and promising. However, the strongest growth in economic regionalism has been witnessed during the 1990s – notably and ironically isochronic with the establishment of the World Trade Organization (WTO).

This notwithstanding, the phenomenon of regional economic integration is not as novel and unique as it may appear at first sight. To the contrary, ‘regionalism has always been with us’ (Fawcett, 2004: 436), be it in the form of empires and spheres of influence or through outright unions and associations of political entities. Although the former were often, though not always, installed by force by one of the parties, the principal economic effects are in many regards similar to an economic union mutually agreed upon. Unions and associations like the German Zollverein, but also the banding of the United States of America, even more closely resemble current initiatives at regionalism (see Mattli, 1999 for an overview). What might simply have led to disregarding them as successful regional initiatives in retrospect is their enormous success of ultimately integrating on the political level under the constitution of a single state.

Nonetheless, it is rightly argued that in recent times regionalism has not only flourished in numbers and size, but also has undergone decisive qualitative changes of its shapes and scopes. The term frequently invoked for this change is very generic and unimaginative: new regionalism. Although we share the view that substantial changes have occurred that permit such a relabelling, the term itself is almost pointless as too many authors from too many schools and too many disciplines use the term to describe too many different – related, unrelated and sometimes even contradictory – concepts. Often the term is used in a temporal sense and evoked to simply denote the recent resurgence and revival of interest in regional integration, regionalisation processes and the study thereof (compare Hettne, 2003; Söderbaum, 2003: 2). Others claim that the new regionalism can be distinguished from older forms by its geographic spread as many regions ‘did not previously experience genuine regionalization or in which it was imposed from outside, more or less as a simple copy of the European integration model’ (Söderbaum, 2003). In a similar yet distinct vein, new regionalism is frequently used to denote North-South agreements between developed and developing countries – some of them with a marked inter-regional rather than regional outfit (first and foremost of course the controversial Economic Partnership Agreements). For others, new regionalism denotes the departure from purely shallow integration and its exclusive focus on tariffs and other closely trade-related issues and
the growth of forms of *deep integration*. This includes many additional aspects such as liberalisation of foreign direct investments (FDI) and incentives, liberalisation of labour migration, harmonisation of taxation and subsidies, harmonisation of macro policies such as fiscal and monetary policy (a coordinated exchange rate policy or even the establishment of a common currency) as well as other laws and rules and joint infrastructure development (particularly in transport and communication sectors, sometimes called *functional cooperation*). Finally, the term often stands for the establishment of joint institutions (secretariats, development funds, specialised regional institutions for oversight and promotion) that appear necessary to achieve and manage such deeper integration goals. Several RECs have even agreed to form political unions and associated transfers of power (The establishment of the respective governmental bodies such as regional parliaments has often been implemented far quicker than any real transfer of power, closely related to the discussion on the political economy of signing but not implementing regional integration in chapter 2.2.1). Another main feature of the *new regionalism* appears to be that it is ‘extroverted rather than introverted’ (Söderbaum, 2003). In connection to this greater interaction with the extra-regional world, there is a strong promotion from some quarters of the concept of what is likewise blurrily called *open regionalism*. This entails a push for open varieties of regionalism, the empirical observation that in fact most regional policies tend to be outwardly orientated as well as (theoretical) modelling that shows that regionalism is likely to be open and to lead to further (multilateral) opening. In itself, however, this concept is almost as heterogeneous as the *new regionalism* paradigm. While some authors refer to lowering external tariffs, others focus on the reliance of (unconditional or conditional) Most Favourite Nation (MFN) clause provisions and again others see open membership or mere WTO conformity as an open regionalism strategy – or even simply a voluntary commitment to lowering external tariffs by the integrating countries (Bergsten, 1997). From a more sociological and political perspective, others stress that the new regionalism is much less created from the outside as it was the case in the bipolar Cold War context, but rather a ‘spontaneous process from within and ‘from below’ (in the sense that the constituent states themselves are main actors)’ (Hettne & Inotai, 1994). This appears to apply particularly to developing countries as

[a] new sense of confidence and assertiveness has emerged in the Third World which seems to be rooted largely in three decades of untrammelled growth in East Asia and the realisation in Latin America in the 1990s that there is indeed "life after debt" [...] Developing countries, especially in Asia and Latin America (but much less so in Africa), are now deploying the laws of realpolitik in defining their own national and regional interests and pursuing them quite differently and more aggressively than before (Mistry, 1995:17f).

Moreover, one feels inclined to add, in recent times Africa seems to have strongly followed this tendency as well. This focus on integration from below has been further developed to analyse so called *micro-regionalisms* with a focus on border regions, clusters, corridors, (twin) towns and similar concepts that put emphasis on the second meaning of *regional*, namely the sub- rather than the supra-national level (see particularly for Africa Söderbaum & Taylor, 2008 and the contributions therein). Mostly in connection to such micro-regionalism debates, but frequently also stretching beyond to supra-national regions, it is frequently argued that economic regionalisation (denoting either strong or increasing regional economic ties among enterprises and other actors) may take place independent of any formal and state-run regional integration initiatives. In such a perspective contemporary regionalisation processes...
are not predominately driven by states and the formal agreements they have entered into, but rather by

_The forces of global corporatisation and global competition, by the globalisation of financial markets, capital flows, consumer demand, product/service brands; and by the global ease with which technology and innovation can now cross borders despite new requirements for the protection of international property rights_ (Mistry, 1995: 21).

In our view this is an important caveat against the widespread overreliance on the state-driven side of regionalism with its treaties and institutions, both with regard to the level of factual implementation as well as with regard to the influence such policies exert (or do not exert) on private sector agents (in chapter 2.2 we specifically analyse this situation for the African context in more detail). Likewise, it is certainly often seriously underestimated how strongly the private sector can regionalise in some situations without relying on virtually any formal initiative in this direction. For example, this is evident in Asia where regionalisation of the economy strongly grew in the past decades, but regional institutions remained weak. Although this should evoke caution that the relationship between (formal, public sector) regionalism and (private sector) regionalisation is complex, we would claim that particularly for Africa, Latin America and also Europe formal institutions play a considerable role (while, at least in the former two, non-state-led private sector regionalisation endeavours appear to be limited today). Notwithstanding this qualification, in many debates on new regionalism the private sector is generally seen more strongly as a driver in its own right.

### 2.2 Paper tigers, spaghetti bowl and informality

Before analysing any potential effects of regionalism, the observed weak implementation of a large number of regional schemes has to be addressed. This frequently omitted perspective may in part explain why regionalism has had limited success simply because it is not properly implemented or because policies in general are hampered in their effectiveness by a generally weak link between formal state action and informal business activity. This implies that weak responses to regionalism are not necessarily an indicator for inherent shortcomings of the concept of and theories on regional integration. This perspective certainly goes beyond the realm of the economic sphere deep into political and sociological territory. It will be nonetheless shortly discussed as it is felt that an omission to account for such incentives and counter-incentives for implementing regionalism and to consider the different qualities and levels of implementation must be seen as a prime reason for the weakness of many analyses that simply assume that implementation equals written agreements.

Such _paper tiger_ schemes are often characterised by weak secretariats, lacking translation of international treaties into national laws, widespread informality and the infamous _spaghetti bowl_ structure of overlapping memberships. It may be argued that the non-implementation is a logical reaction in order to prevent efficiency losses as indicated by criticisms from a Neo-classic (NC) background (discussed in chapter 3 below) or a result of lobby resistance as indicated by the criticism based on game theoretic political economy (PE) perspectives (discussed in chapter 4 below). In fact, however, we would claim that it is at least as sensible to interpret both the enthusiasm for setting up regional schemes and the subsequent weak implementation as corollaries of general political and economic conditions in Africa that are based on neo-patrimonialism and informality. From such a perspective the weak response of trade
structures is at least partially explained by politically sabotaged and consequently weak implementation rather than by missing potentials and causal effects. As such, it must be seen as an alternative explanation for the observed stagnation of trade patterns.

The argument can be divided into two relatively unrelated sub-groups. Firstly we analyse the arguments that focus on the behaviour of politicians and that lead to illusionary regionalism, plagued by concealed political resistance, weak implementation and institutions and overlapping memberships (2.2.1) in this context. Secondly, the possible influence of informality on the weak response to regionalism of entrepreneurs in the informal sector is discussed (2.2.2).

2.2.1 Illusionary regionalism: the political economy of signing, but not implementing regionalism

Assuming the economic feasibility and desirability of economic regionalism is established, it is often proclaimed that the problem simply hinges on the lacking implementation of regional schemes. In other words, if RECs were properly initialled, they may bring along prosperity. The main areas identified by such arguments are the unwillingness to cede authority, institutional weaknesses of the supra-national authorities as well as on the multiple memberships in various schemes.

2.2.1.1 Concealed political resistance

Paul Collier bluntly asserts that an important part of the answer to the question why regional economic integration has been so popular in Africa is simply that

*presidents could get in their jets, meet up with some of the neighbors and sign a trade protocol, set up a regional secretariat to which they appointed their friends, and fly out again, having garnered lots of publicity* (Collier, 2007: 264).

This quote already encompasses two varieties of the political economy argument on concealed political resistance. The first aspect of the argument assumes that regional economic integration is just another way of allocating rents to relatives as well as political friends and adherents – neo-patrimonialism at a regional scale. The second aspect emphasises that regional integration efforts are an attempt to create positive press coverage for the governments and kingpins involved, possibly also in an attempt to distract the public from less favourable developments in the domestic sphere. Regional integration appears to be a ‘politically correct solution’ (Collier, 2007) as it is gently wafted by the aura of amity, cooperation and solidarity while at the same time incorporating the logic of liberalisation and economic efficiency. It is therefore often welcomed not only by the public, but also by many donors – thus such attempts may create additional resources to be distributed. In addition, persisting concerns about sovereignty and national sentiments among the public may lead politicians to sabotage the ratification or implementation of regional schemes, leading to a political economy of signing, but not implementing regional integration.

What do empirics suggest on this question? Whether or not RECs are in reality not supported by politicians and thus only a vehicle of producing positive headlines and creating additional rents in the form of public sector jobs for their constituencies is difficult to assess due to the secretiveness of trade and integration negotiations. The assumption that the one or the other of the arguments does play a role is highly likely.
However, it should likewise not be dismissed a priori that the failure of implementation may also be a result of genuine fears that regional economic integration among developing countries could be unsuccessful or even damaging and political resistance hence not a spoiler, but a saviour. However, the extremely positive attitude of almost all governments in African and other developing countries towards regionalism should not be interpreted as mere rhetoric. Often there is a genuine political commitment and this support for regional integration is strongly rooted in the pan-African movement (which in turn dates back to the struggle for independence from colonial rule that took place in the late 19th and the first half of the 20th century). This support sometimes borders at blind enthusiasm and it sometimes appears more appropriate to alert the parties involved about threats and pitfalls with regard to regional economic integration rather than to convince critics of its potential merits. While in the past RECs have often abstained from serious implementation steps, this picture has definitely changed with some RECs having attained a fully liberalised market and others already implementing common market features. In addition, some commentators do see regionalism as largely political endeavours, but interpret this much less pessimistically. For example, Devlin & Ffrench-Davis state for Latin America that regionalism is driven by countries with a history of conflictive relations [that] are using economic integration to draw themselves more closely together into a common purpose of peace and prosperity (Devlin & Ffrench-Davis, 1998: 13).

For Europe and to a lesser extent for Africa and Asia this appears to apply as well.

### 2.2.1.2 Institutional weaknesses

Nevertheless, it is not even necessary to resort to corruption and cronyism or other political resistances in order to anticipate frequent stalemates in the negotiations and weak implementation of agreements. A quick glance at the capacity and assertiveness of many national governments in Africa does not give good reasons for excessive optimism. Adding general administrative problems of supra-national bodies (as also experienced in Western regional schemes), one would probably be rather amazed if any REC in the global South would be properly implemented at all. In addition, the concerns with regard to cronyism and unwillingness to concede authority are strongly correlated with the incapacity of these supranational bodies as nepotism is likely to decrease administrative capacity compared to merit-based recruitment systems and frequent cutting and withholding of funds for the regional schemes leave many secretariats ill equipped. This applies even more so for the failure to transfer decision-making power to the established regional bodies. Usually neither the secretariats nor the regional assemblies and parliaments have any substantial legislative or executive powers.

The case of institutional weakness is comparatively easy to assess. Admittedly, capacity constraints inside the regional bodies still are an obstacle, but finances and human resources continuously improve due to support from bilateral and multilateral donors and commitments of member countries. Still, regional secretariats themselves and other multi-national African bodies strongly stress their own institutional weakness as major impediment to the implementation of regional schemes. UNECA claimed that one of the four ‘key lessons and challenges’ is that the regional economic communities have limited capabilities and resources, leaving substantial gaps between what is written in treaties and what happens on the ground. Successful integration requires secretariats with the staffing, financial resources, and
While also acknowledging the need for external finance, the UNECA report however also stresses that self-financing mechanisms (such as community levies, airport taxes, fixed allocations from the overall government revenues or gross domestic income of the partner states, dividends from debt relief) must be introduced.

2.2.1.3 The spaghetti bowl

Betimes with overt ridicule, African regional efforts are described as a *spaghetti bowl* (Bhagwati, 1995). Indeed, several aspects of such an argument must be taken serious. Obviously, multiple memberships imply a multiplication of costs and human resources, adding to the problem of underfinanced and poorly staffed regional bodies discussed above. At the same time, multiple memberships may produce conflicts of interest. However, the main line of argument sees multiple memberships as problematic for other reasons. First and foremost, multiple memberships are a problem as soon as harmonisation (and not only liberalisation) efforts become part of a scheme. The reason is simple: a country cannot harmonise its actions in the same policy area with two different regional blocs (or only if they harmonise in the same way and hence are in fact one bloc). This applies particularly to all deep integration schemes, but takes also place when a country joins a customs union (or, even more problematic, two different unions).

Second, even if at least one of the schemes remains a preferential or free trade area, trade deflection is likely to occur whereby imports from the rest of the world (ROW) are channelled through the country with the lowest external tariff. This leads to inefficiencies (additional and unnecessary transport costs), lost tariff revenues for those members with higher tariff rates and potentially threatens to undercut (infant industry) protection. This is a general problem of any trading bloc falling short of a full-fledged Custom Union (CU) with a Common External Tariff (CET). However, this phenomenon is substantially aggravated by multiple memberships as in such instances there is a very high likelihood of manifold differences in external tariffs. If the CET of a customs union is being corrupted by the affiliation of one of its members to another group with free trade or preferential trade agreements, the same may also apply to an (imperfect) customs union.

In all cases, strict Rules of Origin (RoO) may prevent trade deflection but this requires complicated and expensive administrative efforts by the state bureaucracy and the traders and often comes at the expense of sensible division of labour in the region. Despite the prominence and plausibility of this argument, the problem of multiple and overlapping memberships appears to be of secondary importance on a closer view. To begin with, the spaghetti bowl as depicted repeatedly is not as problematic as it may appear at first sight. The depictions often only insufficiently distinguish between different kinds of regional schemes. Several of the agreements serve other purposes than regional liberalisation of markets (most prominently securing peace, combating natural disasters and managing natural resources as well as cooperation on several other issues).
Figure 1: The spaghetti bowl of African regionalism: conveying chaos

Source: Author.
Hence, to maintain the metaphor, not all noodles are spaghetti. Although in several of the other purpose agreements cooperation in issues relating to business and economics is included, reality shows that this is either mere diplomatic rhetoric or centres on very specific areas only (e.g. fisheries, tourism, water management). There are neither specific tariff cuts and trade and investment facilitation efforts nor other deep economic integration initiatives attached to these agreements. This applies for example to the Intergovernmental Authority on Development (IGAD), the Indian Ocean Commission (IOC), the Conseil de l’Entente, the Comité permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel (CILSS), the above mentioned CEPGL, the International Conference on the Great Lakes Region (ICGLR), the Organisation pour la Mise en Valeur du fleuve Sénégal (OMVS) and the Nile Basin Initiative (NBI). The same can be said about Economic Community of Central African States (ECCAS) as it has been re-assigned to exclusively deal with security and peace efforts inside the framework of the Council for Peace And Security of Central Africa (COPAX) following a financial aid agreement with the European Union (EU) that made a merger and task sharing with the Central African Economic and Monetary Community (CEMAC) a condition to any future funding. In several other cases, countries are indeed members in more than one operational, trade-related regional scheme, but the situation is best described as a box in the box phenomenon rather than an overlap. Two varieties of this phenomenon can be seen in the African context. On the one hand, regional schemes may inhibit core countries that have (already) formed closer ties and peripheral ones that are (still) only in a shallow mode of regional integration. This certainly applies to Southern Africa where the Southern African Customs Union (SACU) is a box in the Southern African Development Community (SADC) and where discussions are ongoing whether SACU can be expanded towards other SADC members. SACU may therefore be seen as a forerunner of a SADC customs union rather than as its rival. On the other hand, we can find situations where two boxes consist inside a larger agreement. In this case, the two nuclei might eventually merge to a larger scheme. This can be observed in Western Africa, where the Union Economique et Monétaire Ouest-Africaine (UEMOA) and the not yet fully functional West African Monetary Zone (WAMZ) form both important pillars of the Economic Community of West African States (ECOWAS) – and with some goodwill the Mano River Union (MRU) might even be seen as an additional ‘box in the box in the box’. Likewise, the frequently bemoaned overlaps of monetary unions and customs unions, as found in three instances in Africa, are not so much of a problem either. In all cases (the Common Monetary Area (CMA) inside the SACU and SADC frameworks and the two separate Franc-CFA currencies inside UEMOA and CEMAC) there is only a ‘box in the box’ phenomenon and no real overlap.

One might also interpret the newly revived East African Community (EAC) as a potential box inside the Common Market for Eastern and Southern Africa (COMESA). However, with Tanzania one member of the EAC is a member of SADC instead of COMESA. It is exactly this EAC-SADC-COMESA interplay that holds the most serious conflict potential. The overlap between SADC and COMESA is considerable as currently eight countries belong to both groupings and four of the EAC members belong to the latter while the fifth is a member of the former. This problem has been noted by the partner states and it is being addressed in the tripartite framework that arrived at an official agreement in 2015, although substantial implementation of liberalisation efforts has still to take place.
A small overlap also exists between COMESA and the Union du Maghreb Arabe (UMA) where Libya is a member of both agreements. On top of this, only the relatively newly established and more or less still-born Communauté des États Sahélo-sahariens (CEN-SAD) agreement could theoretically pose real problems of overlapping memberships as 15 of the 16 members have also ties to one or more other regional economic and trade agreements identified in this paper as significant. However, it is highly questionable whether this scheme will play an important role as it is a unilateral initiative started by Libya that has not yet initiated any integration steps at all.

While in Southern and Eastern African some of the spaghetti bowl arguments thus certainly do play a role, for Western and most of Central Africa the apparent Spaghetti bowl boils down to neat boxes that easily fit into each other. However, even in cases of ‘box in box’ phenomena, future frictions in the setup of regional communities cannot be ruled out as for example the Economic Partnership Agreement (EPA) negotiation process has evidenced. In this case, several Least Developed Countries (LDCs) among the member states preferred to reject the signature below the proposed, yet widely opposed EPAs without any serious damages, as they would have fallen back to the Everything But Arms (EBA) framework with almost identical preferences for exports to the EU. On the other hand, non-LDCs saw themselves compelled to sign, as their refusal would have led to the introduction of substantial tariffs on exports to the EU due to their ineligibility for the EBA framework. The same has proven true with regards to SACU-SADC interplay (see e.g. McCarthy, 2008) and changing, multiple and unclear negotiation affiliations of Tanzania and DR Congo.

It has to be emphasised that the spaghetti bowl is not only a result of patrimonial interests in staffing the secretariats with close allies to equip them with a well-paid position or some irrational decision processes. At least to some extent multiple memberships may just reflect economically justifiable interests and benefits of integrating with multiple economies. At least at shallow levels of integration this may not even be a major issue. However, although to date the spaghetti bowl situation appears to have been more or less manageable, problems are likely to intensify the more successful regional schemes become and the deeper forms of integration they pursue. Because of this and in order to minimise administrative costs, a rationalisation of the different regional groups may be necessary and could include some countries’ withdrawals from competing schemes, or perhaps even the entire abolition of some schemes. In fact, some countries have indeed noticed the problems associated with multiple memberships and have consequentially announced their withdrawal from other schemes. This applies for example to Tanzania, leaving COMESA while entering SADC (however, it did not leave SADC after re-establishing the EAC). Several other SADC members have also left COMESA in recent years (Lesotho, Mozambique, and Namibia). This is, however, not the only viable way. Accessions are also a possible solution (with members of customs unions entering into other Preferential Trade Areas (PTAs) or Free Trade Areas (FTAs) in which one of their co-members has trade ties). For example, as long as COMESA is not a Customs Union, there is no problem with the EAC members to remain inside COMESA if Tanzania would renew its membership. For the same reason, the membership in SADC of Tanzania would be unproblematic if the other four EAC members joined the scheme and as long as the PTA / FTA does not become a Customs Union. If the CETs of two customs unions (e.g. EAC and COMESA, EAC and SADC or all three of them) would be completely
harmonised, it is even imaginable that a smaller regional scheme (as the EAC) becomes as a whole part of a larger Customs Union (as, for example, COMESA or SADC). This would permit a quicker pace of regional integration in the smaller unit concerning deep integration (Common / Single Market, Political Union) while enjoying the greater scale in market access issues in the larger unit. Note that from an even larger (and utopian) perspective this is what has been initially envisaged by the African Union (AU) / African Economic Community (AEC) with the notion of different pillars of the AEC. It also resembles the discussion inside the European Union of the possibility of a Europe of two speeds.

2.2.1.4 Is regionalism virtual or real?

Although the situation is somewhat less hopeless than with regard to the dynamic time path question, it is almost by definition also very difficult to assess hidden or conflicting policy agendas as well as informal trade figures and developments thereof. We nonetheless try to find some indication on these areas both for African RECs in general as well as for the EAC in particular.

The status of implementation can be observed rather easily, but drawing conclusions from these observables on hidden agendas or neopatrimonial and opportunistic political behaviour can only be indicative at best. Although agreements are negotiated on a regional level, implementation almost entirely rests with the respective national authorities. This applies particularly for liberalisation and harmonisation, but to considerable degree also for functional cooperation. The United Nations Economic Commission for Africa (UNECA) concludes in this regard that a

\[\text{deeper understanding of the regional economic communities' situation [...] is feasible only after exploring how regional integration processes are viewed and implemented at the national level. Agreed integration objectives are not adequately internalized. Delays in ratifying regional economic community protocols hamper the timely implementation of decisions. And broad-based support for integration is lacking, with civil society and the private sector acting largely as spectators. Governments must readjust how they are organized to implement their regional agreements (UNECA/AU, 2006: 76).}\]

The implementation of tariff liberalisation schedules varies greatly from REC to REC, but more often than not, it appears to take place very slowly, inconsistently or simply not at all. This applies sometimes for whole blocs where either despite official intention no schedule is developed or where schedules are not implemented or for certain countries inside a bloc that do not ratify or implement agreed schedules.

Although the protocols on trade are indicated as being the most important ones by the national governments in a UNECA survey, the degree of implementation of agreed liberalisation schedules even from an official side is anything but satisfactory. Even when abstracting from unofficial, informal and extra-legal measures of non-implementation and non-compliance, only 28 percent of the countries indicated that they have fully implemented the agreed tariff reductions. A similar situation prevails for the agreed reduction of Non-tariff Barriers (NTBs) and Common External Tariff (CET) schedules. The harmonisation of customs procedures appears somewhat more advanced (see Figure 2). The same applies to a large degree for functional cooperation. For example, only 16 percent of African countries indicated that they had completed the promised links within their borders (UNECA/AU, 2006: 74). The Assessing Regional Integration in Africa (ARIA) report also highlights that only few countries have created and properly funded and staffed specific ministries for regional
integration and interprets this as a lack of commitment. More substantially though, it needs to be acknowledged that the weak implementation is often at least partially attributable to perceived losses from or lacking interest in the treaties’ contents. This explains for example the weak participation of some island states in infrastructure projects (UNECA/AU, 2006: 78f). And it certainly also partially explains the hesitant liberalisation due to fears of further straining national budgets by severe cuts in public income from tariffs or of being flooded with goods from more competitive neighbours, driving local producers out of business.

**Figure 2: Implementation status of trade policies at the national level (%)**

![Figure 2: Implementation status of trade policies at the national level (%)](image)


The very existence of the spaghetti bowl with overlapping customs union already univocally constitutes the fact that many regions are paper tigers as it is virtually impossible to implement two CETs at the same time. Even the functioning of FTAs (and even PTAs) is severely compromised by overlapping schemes as the relaxation of regulatory procedures of cross-border trade inside the region is hardly possible due to the greater need to check for re-exports from countries with whom the re-exporter, but not the importer has a FTA agreement.

Another indication for the ambivalent position towards regionalism despite publicly exhibited enthusiastic support is the weak authority and the weak financial support of most regional secretariats or other structures by their member states. In many instances these structures are heavily donor-financed and the compliance with paying membership fees is very low for some of the RECs (UNECA/AU, 2006: 60). Furthermore, the REC’s ability to implement substantial projects is curtailed by the unclear definition of the tasks vested in them and particularly a missing or weak distinction of these tasks from those of the national governments. Severe skills
shortages and staffing gaps are reported by the secretariats – a clear indication of shortages of financial support but possibly also of opportunistic crony staffing (UNECA/AU, 2006: 62). To sum up, the UNECA survey bluntly sums up that ‘most regional economic communities lag on almost all critical elements necessary for the success of an economic union’ (UNECA/AU, 2006: 64) and in

most African countries regional cooperation does not go far beyond signing treaties and protocols. The objectives of the treaties are not integrated at the right time or with the requisite commitment in national development plans or in the sectoral programmes of appropriate substantive ministries. The inability to translate regional economic community goals into budgets and national plans could also be attributed to lack of commitment to integration (UNECA/AU, 2006: 64).

With regard to the economic community in our main focus in this work, it can be noted that all five EAC members have – at least formally – fully implemented their regional tariff phase-out by 2008. The CET appears to be likewise in place with an average level of roughly twelve percent (eight percent for trade weighted values). Surprisingly, however, the external tariffs still show some differences, with Kenya, Tanzania and Uganda indicating an average CET between 12.08 and 12.94 percent while Rwanda and Burundi have a lower average CET of 9.96 and 9.78 respectively. Trade weighted values correspondingly are between 7.79 and 8.88 percent for the former group and 6.07 and 5.04 for the latter group. While differences in weighted values are unsurprising, the differences in notified average tariffs can either be a result of missing notifications for a number of tariff lines or persisting differences in external tariffs that violate the CET, for example as a result of product-specific countervailing or protective measures. With regard to the latter, the EAC tolerates so-called ‘stays of application’ – exemptions from the CET (with higher or lower levels than the other Partner States) that are granted for one year, but frequently are reapplied and granted for several years. An analysis of disaggregated two-digit tariff lines reveals that in fact some differences for the minimum and maximum values inside one specific two-digit line exist, but that in most cases the bands are similar. Nonetheless, slight differences exist for almost each two-digit tariff line for simple average figures, hinting at the fact that at lower levels of aggregation procedures are not fully aligned among the partner states. In addition, all partner countries, particularly Rwanda and Burundi, miss to report tariffs for a considerable number of tariff lines (although the number has decreased over time), thus also contributing to this difference. Nonetheless, comparing this internal tariff-phase out and parallel introduction of a CET in a very short period with experiences from other schemes in developing countries one feels compelled to note that the EAC trade liberalization schedule is in fact very real. Interestingly, however, it has to be noted that for some countries ROW liberalization has been almost as much or an even stronger part of the exercise than regional liberalization. While preferential margins for Kenya and Tanzania strongly and for Uganda considerably widened, the situation is less clear for Rwanda and Burundi (see Table 9 further below for a more detailed analysis of the notified tariff system and related developments of preferential margins). However, serious doubts are warranted as to whether formal tariff reductions and abolitions are really adhered to in a sufficient manner. As discussed in the subsequent chapter, informal trade may have been strongly reduced, but remains relatively high, thus hinting at non-implementation or issues with NTBs. Microeconomic case studies also suggest that tariffs are often not properly waived at border post level, partially as corrupt customs officers can take advantage of ill-informed traders who in turn often opt for carrying on with their established informal ways of trading (see e.g.
Similarly, on a political level the grandiloquent fraternisation vows and overambitious goals at political unity in virtually the blink of an eye are frequently run over as soon as national interests seem to be at risk. To name just a few occasions: Kenya in 2013 was again confronted with media articles on its intention to go rogue by (threatening) to single-handedly sign the EPA if the other member states did not move quickly to avoid missing yet another deadline in mid-2014 (Jaramogi, 2013). Despite the fact that this is understandable to some extent (Kenya as the only non-LDC country has more to lose from a possible withdrawal of EU preferences) this flies contrary to official statements by the Kenyan government, rejecting earlier media reports on the same matter as wrong (RoK, 2010). Tanzania on the contrary, has been reported repeatedly to delay and obstruct further negotiations and liberalisation steps inside the region, citing particularly the fear of jobs and land being taken over by Kenyans and Ugandans as main reason for their resistance. In addition to the overall slow implementation of jointly agreed treaties, political tensions abound with regard to Tanzanian initiatives to more coercively deal with the issue of rebels in the DR Congo and the alleged Rwandan and Ugandan backing thereof, the Tanzanian expulsion of allegedly illegal, but decade-long migrants from neighbouring countries, conflicts about statements by Tanzanian officials on the Rwandan genocide, unilateral increases in prices for regional work permits and other NTBs targeting particularly Kenyan goods and workers in Tanzania and rather odd court cases with Tanzanian nationals suing EAC institutions such as the East African Development Bank (EADB) with the blessing of the Tanzanian court system (Mkinga & Kimboyi, 2013; The Africa Report, 2013).

Recently, Tanzania had been excluded from Head of State Summits on Infrastructure of the self-declared coalition of the willing, comprising Kenya, Uganda and Rwanda, leaving Tanzania and Burundi largely in isolation. This has prompted the Tanzanian minister for EAC affairs to snap in parliament that “Tanzania will not wait for a “divorce certificate” from Kenya, Rwanda and Uganda, but will ‘shoot before it is shot’ (Obonyo, 2013). Under the somewhat less politically sensitive cover of talking about matters concerning to the ‘Northern Corridor’, stretching from Mombasa via Nairobi, Kisumu and Kampala to Kigali, such efforts seem to gain further momentum rather than being re-integrated into the EAC framework as of the year 2015. Extending beyond infrastructure and touching on several other issues, including the very sensitive matter of political federation, Burundi partially joined the three countries in the coalition of the willing as observer (Mkinga & Kimboyi, 2013) and later as full member. In 2015, even the non-EAC countries DR Congo and South Sudan have been awarded membership status while Tanzania at least joins some of the meetings as observer. As discussed below, there is also an alternative – and more positive – reading of this process that gives interesting insights into the potentials of variable geometry and functional cooperation as well as the utmost importance of the wholehearted support of the respective heads of state for the success of any regional integration efforts.

This notwithstanding, it is important to note that despite strong political rhetoric in favour of regionalism in all EAC Partner States, the contributions to the EAC secretariat and its aligned institutions and commissions is meagre and follows an absolutely startling: the total annual contributions of the five Partner States together merely cover a quarter of the total budget, the remaining part being provided by donor contributions (not counting the construction of the EAC headquarter financed by the German Government). These very low contributions sharply contrast with very high salary packages and soaring costs for conducting frequent meetings away from the
headquarter in Arusha – officially to ensure the partaking of all partner states, but daily subsistence allowance considerations may well play a role as well in this regard. Even more startling, though, is the fact that all five partner states are required to contribute an equal share to the EAC budget – implying for Kenya a contribution to the EAC of below 0.05 percent of its total national budget of roughly 20 billion USD. This compares to for example a value of almost 9 percent for German contributions to the EU (and still between two and four percent if only net contributions are calculated). In view of these political distractions and disruptions and the severe underfunding, both the development and implementation of protocols, regulations and joint policies as well as the regionalisation of the economy (as discussed in the chapters below) appears to be actually surprisingly well advanced – but these PE aspects discussed here clearly show that this is far from a full utilisation of the available potentials.

A better scrutiny appears necessary as to whether a REC is really functional are not and those with clear developments (e.g. EAC, SACU) and those with a lousy track record (e.g. CEN-SAD, MRU, CEPGL) and all those following in between these extremes have to be seen in different lights and treated accordingly. This is of course particularly problematic for cross-country comparisons that rely on a large number of observations, i.e. in this case RECs, and the clear-cut designation into to a yes/no dummy variable. Nonetheless, if implemented and not or poorly implemented RECs are treated in the same way, neither positive nor negative empirical results are meaningful as effects of implemented RECs may be overshadowed by the noise of non-implemented ones.

### 2.2.2 Regionalism and the informal sector

Informality is without question a major determining feature of (most) developing countries in general and African countries in particular. Given its relative sizes, it has to be assumed that also informal cross-border trade – in most, but not all cases at the same time illegal – is likewise to a considerable part unrecorded. This has several corollaries for both, the potential of regionalism and the measurement of the success of regionalism. From a theoretical, normative point, it may be rightly argued that a considerable part of trade is simply not affected by the implementation of regional liberalisation steps as informal trade circumvented old customs schemes and continues to circumvent new ones. Even more so, as informal trade is not restricted to intra-regional trade, the increased preferential margins of a customs area may not translate into a reduction of ROW imports and an increase of intra-regional imports as ROW imports continue or even increase to circumvent tariffs. A related aspect is the continued levying of extra-legal duties in the form of corruption. If such fraudulent practices continue to exist or grow after liberalization steps have been introduced, the trade response will be likely to be much smaller than expected. On the other hand, regional integration offers a decisive tool to reduce illegal and informal trade as the need to incentives of illicit trade shrink with the reduction or abolition of duties and the simplification of procedures, making the risk and cost comparison of legal and illegal trade more favourable to the legal one. This gives rise to an important caveat with regard to data quality and thus the measurement of trade volumes. It has often been noted that regional trade in Africa is likely to be strongly underestimated due to missing consideration of the high levels of informal trade. However, due to the switch from informal to formal trade the positive trade effect of regionalism may for the same
reason be well overestimated as some part of the trade that has allegedly been created has in reality simply been formalized. On the other hand, the abolition of duties may lead to relaxed data collection at border posts, thus not mirroring the positive effects of regionalism in the data.

With regard to the problem and effects of informality, empirical substantiations are even more difficult to obtain. It is without doubt that the informal sector plays a significant role in developing and especially African countries. Although accurate figures are not easy to obtain, estimates suggest that even when excluding the agricultural sector with its predominantly subsistence-oriented (and thus informal) peasants, informal employment is around four fifths in South Asia, two thirds in Africa and South- and Southeast Asia and a half in Latin America (ILO, 2012: 3). Not surprisingly, informal trade is likewise a common phenomenon, either because informal traders and enterprises are involved in trading or because formal enterprises evade tariffs and tariff administration, either fully or partially (for example by way of under-invoicing and thus underreporting). Estimates for different countries and regions in Africa vary in height and consistency, but they rarely are below 10 percent and for some countries the informal trade estimates even outsize the formal trade by far (UNECA/AU/AFDB, 2010). At some border stations the estimates of informal trade even surpass the value of the official statistics (see e.g. the COMESA estimates for the Mwami-Mchinji border between Zambia and Malawi with almost 35 million USD worth of informal trade compared to less than 20 million USD in the official trade statistics, compare Afrika & Ajumbo, 2012 and Njiwa, Nthambi & Chirwa, 2010). In East Africa estimates are even higher with not only non-processed foodstuff exported to Kenya and the arid South Sudan, but also Kenyan manufactures as well as re-exports in almost all areas. Particularly sophisticated data exist for informal exports from and to Uganda as the Ugandan Bureau of Statistics (UBS) spends considerable efforts on estimating informal trade flows in the region and values particularly for unrecorded exports are high, yet declining both in absolute and relative terms when compared to formal trade (Afrika & Ajumbo, 2012). Values for informal imports are considerably lower but it appears questionable whether this is a result of higher compliancy at the Ugandan border compared with its neighbours or because UBS was in a better position to collect export data as traders were less evasive because there are no export duties to be paid.
A large share of the literature on regionalism focuses on a neoclassical (NC) setup of models and assumptions. Inside this approach the most important, if not sole, theoretical underpinning for liberalisation – be it unilateral, bilateral, regional or multilateral in nature – is unquestionably specialisation according to comparative advantages. As subsequent discussions show this focus on liberalisation and comparative advantage specialisation is indeed often at the forefront in arguments in favour of regionalism. However, on closer inspection this focus produces in fact only rather weak support for regionalism: from a comparative advantage focussed perspective, multilateralism and even unilateralism almost univocally dominate regional approaches as the former cover more trade than the latter and as regionalism is even likely to lead countries to move away from their comparative advantages. In addition, enhanced competition is frequently quoted as an argument in favour of regionalism – but again, multilateral approaches appear to be dominant in this regard.

It thus comes as no surprise that many works on regionalism from a NC perspective are critical of its prospects, particularly when compared to alternative scenarios such as multi- and unilateralism. The points of critique against regionalism from this perspective are based on three separate strands of argumentation that we will discuss in detail in the three subsequent subchapters. The general argument centres on the argument spearheaded by Jacob Viner on the 'trade creation vs. trade diversion' dichotomy, establishing the case that regionalism in general and among developing countries in particular may hurt the countries involved and the world as a whole due to efficiency losses as a result of the occurrence and the dominance of trade diversion (3.1). A second line of argument focuses on the likelihood of diverging development paths among countries inside a regional bloc, known as the winners and losers debate that appears again to be a risk for RECs among developing countries in particular (3.2). Finally, a third and somewhat minor argument claims that especially regionalism among poor countries is likely to have almost no effect due to the small sizes of their economies, their homogeneity and the already accrued preference erosion (3.3).

While these three arguments and the theoretical NC framework as such are very unitary, concise, straightforward and outright simple (particularly if compared to the complex, heterogeneous and to some extent still ill-defined heterodox schools discussed in the subsequent chapter), this cannot be said about the empirical strategies. The great number of alternative methodologies for each of the three lines of argument and the strong divergence in results even in case of only minor changes in
the method specifications necessitate a detailed analysis. Therefore, five empirical sub-chapters review the evidence on these three issues separately, employing a wide range of different methodologies. Chapters 3.4, 3.5 and 3.6 probe whether regionalism leads to growth in trade, the implications thereof in terms of welfare as well as the evidence on winners and losers respectively. Chapter 3.7 discusses the evidence for the claim that Africa is particularly ill-suited for regionalism due to small sizes and homogeneity of economies involved as well as preference erosion of previous regional and multilateral initiatives. Subsequently, chapter 3.8 focuses on the EAC and tests these questions specifically for this outstanding poster child of African regionalism – with the underlying assumption that if regionalism is not successful in this case, it is doubtful that it is elsewhere in Africa. Finally, the synopsis summarises the general result of the NC literature as indicating that, inside the NC framework, regionalism is almost by default only a second best option. More importantly, however, we establish that not only the effects of regionalism on welfare, but also those of multilateralism/unilateralism are worryingly limited in size from a NC perspective, and thus caution has to be exercised in placing great hopes on either of these policies for growth and catching up in developing countries. While the limited potential of regionalism is often cited inside the NC schools, such references are very rare with regard to multilateral approaches, although both insights are based on the same data sets and methodologies (3.9). All discussions inside this chapter are confined to the neo-classical framework and thus the acceptance (for the moment) of the full set of very stringent assumptions thereof. This applies particularly for rational preferences, utility maximisation, complete information and consequently absence of friction, transaction costs, market failures, imperfect competition, increasing returns, factor immobility, transport costs, external economies, spillovers and other heterodox assumptions – these concepts are discussed more closely in chapter 5.2 where they are relaxed inside the heterodox frameworks).

3.1 Neo-classical economics: trade diversion and absolute losses

Absolute losses for the entire group of integrating countries are likely to accrue due to trade diversion and thus the provision of goods by inefficient producers. This trade diversion argument is a simple application of standard neo-classic economics methodologies on the analysis of the effects of tariffs, focusing on the traditional, century-old comparative advantages perspective.

3.1.1 The destructive effects of trade diversion

The concepts *trade creation* and *trade diversion* are essential components of neo-classical approaches towards regionalism, both in welfare analyses as well as in PE models (see chapter 4.1). However, particularly with regard to welfare calculations the concepts turn out to be entirely misleading because their exclusive focus on trade volumes ignores price changes and secondary effects (substitution, balance of payments). Nonetheless, the pure Vinerian analysis of the negative effects of trade diversion on member countries is still a main focus of most commentators. In Viner’s words:
Where the trade-diverting effect is predominant, one at least of the member countries is bound to be injured, both may be injured, the two combined will suffer a net injury, and there will be injury to the outside world and to the world at large (Viner, 1950: 52).

With regard to this process today’s economists simply refer to a switching from the most efficient supplier to a less efficient supplier so that prices net of duty payments to revenue authorities increase while consumer prices decrease only to a small degree (and sometimes even almost stagnate at the same level). If preferential tariffs lead to rising tariffs vis-à-vis the rest of the world (ROW) as predicted by some models discussed in the third chapter, consumer prices may even increase (although empirically this is very rarely the case).

Whether trade diversion empirically dominates trade creation and hence leads to net losses for the regional scheme and world welfare at large is a heavily disputed question among commentators. Viner himself explicitly points to this prevailing theoretical ambiguity of the welfare effects: ‘[c]ustoms unions are, from a free-trade point of view, neither necessarily good nor necessarily bad; the circumstances […] are the determining factors’ (Viner, 1950: 52). Although Viner leaves the question open from a theoretical perspective, he boldly displays his disapproval of writers who are all-too sympathetic of regional economic integration: according to Viner, it is obvious – though difficult to prove empirically – that

\[
\text{with respect to most customs union projects the protectionist is right and the free-trader is wrong in regarding the project as something […] which he can logically support} \quad (\text{Viner, 1950: 41}).
\]

One might even claim that an assessment based on the Vinerian definition of trade diversion is still too conservative and cautious. Adopting a genuine free trade perspective for a moment, it is rather surprising that trade creation on its part is almost undisputedly accepted by the JBS as inherently positive from a welfare economic perspective. Part of what is commonly classified as \textit{trade creation} is actually likely to be nothing but \textit{‘shadow trade diversion’}. Consider the following example: ROW is the most efficient supplier of a certain good. This good is, prior to a regional initiative, produced by the home country due to generally high tariffs. After the introduction of regionalism the good is supplied by the partner country (in other words, the revealed comparative advantage shows that in this case that in this example setup more the partner state is more efficient than the home country, but less efficient than ROW). Thus, a change in the trade flow is defined as \textit{trade creation} although trade that should come from ROW in a comparative advantage / efficiency view is diverted to the partner country. In other words, switching the comparison point from autarky to free trade uncovers that a good deal of \textit{trade creation} is nothing but (shadow) trade diversion. Surprisingly, this argument has not explicitly been put forward in the literature. To our knowledge only Wonnacott (2011) relates parenthetically to ‘diversion-related creation’ when commenting on a special case of granting quota preferences to a not globally competitive partner country. However, Wonnacott’s remarks are imprecise in two regards. First, his statement that this denomination is useful for distinguishing it from Vinerian trade creation is not entirely exact: his reading of Viner’s definition of \textit{trade creation} as being a shift only to a partner country that is the source with the lowest cost in a global comparison is wrong. In fact, Viner defined it as being a shift from a more expensive to a less expensive one, particularly from a more expensive domestic market to a partner country market. Second, this is nothing particular to quotas as any other form of trade creation to a partner country that is not the cheapest source entails such a relation to trade diversion. In other words, this is implicitly part and parcel of
laments on forgone gains if regionalism displaces multilateralism. In particular, results from CGE models that compare regional with global trade liberalisation approaches implicitly account for such shadow trade diversion.

3.1.2 Some criticisms on the trade creation / trade diversion calculus

Although the potentially detrimental effects of trade diversion are generally accepted, other authors see it as easily outweighed by trade creation. Correspondingly, even the detrimental effects of trade diversion on excluded countries are not as evident as often presumed: not only forgone gains from exports must be considered as effects on outsiders, but also gains from new or increased exports to this region, so-called open bloc effects. Such open bloc effects may be a result of lowered external tariffs, positive signalling and/or economies of scale and are largely equivalent to what is termed trade creation for intra-bloc trade. In addition, trade diversion may in some instances even be negligible for the integrating countries: if trade is diverted to a new trading partner that has similar endowments and similar levels of efficiency as the former trading partner, diversion is unlikely to lead to high losses or losses at all (Summers, 1991). In addition, of course, it is furthermore likely that structures of former and new trading partners converge to a similar level in the course of the integration process in line with dynamic effects discussed below in chapter 5.

It should also be shortly indicated at this stage that several authors judge trade diversion as a minor problem due to other gains outside the NC framework. This applies particularly to dynamic aspects of production functions through which integration may facilitate processes that bring productivity of former and new (regional) trading partners to similar levels as a result of the integration exercise (as discussed in detail in subsequent chapters). Assuming sufficiently high transport costs (particularly for longer distances), Krugman's (1991a) famous self-rebuttal arrives at the conclusion that although external tariffs may rise, regional economic integration among natural trading partners produces almost similar trade patterns as global free trade and hence also similar welfare effects as multilateralism. Similar arguments on natural trading partners have been proposed by Summers (1991) and Wonnacott (1989). However, these models are heavily criticised with regard to both the favourability of geographic proximity (due to lower trading costs) and the prior trade intensity (apparently indicating a revealed complementarity). With regard to geographic proximity, it is criticised that trade costs are already included in the price that determines efficiency. With respect to the prior trade intensity caveats are expressed that they may be already a result of (tariff or other) distortions and may simply change over time (Bhagwati & Panagariya, 1996; Panagariya, 1999; Schiff & Winters, 2003). Lipsey points out that a ‘complementarity in the range of commodities that are protected by tariffs’ (Lipsey, 1960: 498) are likely to cause losses while a great overlap will bring about gains. As Lipsey explicitly points out, this does not conflict with the view that a greater complementarity implies greater gains: his proposition concerns the likelihood of gains while the comparative advantage proposition identifies the magnitude of the gains if they occur. For RECs among developing countries, however, the trade pattern argument certainly does not apply. To the contrary, the similar endowment and trade structures of particularly African countries are frequently cited as major impediment for a successful regionalisation of the economies.
Even when remaining inside the restrictive NC corset it is difficult to understand why the assessment of regional economic integration has remained confined to the trade creation / diversion dichotomy for so many years. It is almost self-evident that important aspects are neglected (even when staying inside the neo-classical paradigm) while a more comprehensive alternative approach has been proposed several decades ago. Panagariya may well be right in assuming that an important reason for this exclusive focus lies in the simplicity of the concept that was utilised to popularise the ambiguity of RECs for welfare effects (Panagariya, 2000: 293). Nonetheless, focussing policy advice on a concept that simply produces wrong results appears to be distinctly odd. Following a tax analysis approach replicates the general ambiguity of the Vinerian analysis, but the results of determining specific regional schemes as welfare-enhancing or welfare-decreasing are distinctly different from a Vinerian analysis. However, calls for abandoning the terminology and methodology have largely been ignored to date. As first demonstrated by Meade (1955), Gehrels (1956) and Lipsey (1957a, 1960) even purely trade-diverting blocs may be welfare-enhancing for all member countries and ROW if not only trade volumes, but also price effects are accounted for (which had been assumed away by Viner). Following his model, Gehrels even established the proposition that economic unions in general would bring about gains. However, this result has been falsified by Lipsey (1957b) as this axiomatic gain vanishes if all three classes of goods are considered (domestic production, partner imports and ROW imports). It has to be emphasised that this possibility of welfare enhancing blocks with dominant trade diversion applies while remaining for the moment inside the static, neo-classical framework. In addition to primary effects of inter-country substitution (i.e. trade creation and diversion), it is evident that also inter-commodity substitution will take place: as long as consumer preferences are not (unrealistically) assumed to be completely independent of relative prices, there will certainly be modifications in the consumption portfolio. This, in turn, again shifts production until a new equilibrium is reached. In other words, there is a need to distinguish between real income and welfare:

*When a tariff is imposed it introduces a divergence between relative prices facing consumers and real opportunity costs of goods to the economy. It is, in this respect, identical to an excise tax, and constrains consumers to a non-optimal consumption equilibrium. When a customs union is formed, some dutiable goods formerly imported from outside sources will be replaced by the same goods imported from a partner country, duty-free but at a higher real cost. The shift to a higher-cost source of supply tends to lower the country's real income, and consequently consumer welfare; but the removal of the constraint on consumption may raise welfare. If the second effect is favourable, and out-weighs the first effect, there is a net rise in welfare (Cooper & Massell, 1965: 742).*

As discussed by Meade (1955) and taken up by Baldwin (2008), Terms of Trade (ToT) income effects and adjustments to ensure the balance of payments must be also considered in order to take full account of the welfare effects of regional economic integration (again inside a neo-classical framework of analysis). However, this correct approach is very difficult to translate into empirical analysis. Many authors, however, wrongly convey the impression that simply the full amount of trade creation and the full amount of trade diversion need to be offset against each other. Even when abstracting from ToT and Balance of Payment (BoP) aspects as discussed above this simply does not hold true as the gains from trade creation (TC) are much lower than the value of the created trade and the losses from trade diversion (TD) much lower than the value of diverted trade. This percentage of the effect as share of the total created / diverted
trade can vary greatly from one country setup to another and, in fact, from one product to another even with regard to the same trading partners. As discussed by Grimwade, Mayes & Wang (2011) the welfare gain of trade creation can be calculated by multiplying 50 percent of the reduction of the tariff times the increase in imports if demand and supply functions are assumed to be constant. Welfare losses from trade diversion are given by the price difference between ROW and the new partner country times the volume of trade diverted (abstracting for a moment from gains due to possible increased producer profits that are ruled out in the NC framework due to perfect competition and constant production functions).

3.2 Winners and losers

Another class of arguments focuses on the uneven distribution of trade creation and trade diversion between integrating countries. Frequently, the argument is also backed by insights from new economic geography as agglomeration effects may exacerbate the trade effects but this will be dealt with in a later chapter. Both, the uneven distribution of trade creation and diversion and agglomeration forces may tend to favour the initially strongest countries at the disadvantage of the smaller and poorer neighbours, thus leading to winners and losers. While the focus of this winners and losers argument is usually exclusively on an international perspective, likewise significant variations in the effects on different (subnational) localities, sectors, economic activities, professions, and population strata are likely – though rarely discussed in the literature. Both inter-national and, even more so, internal divergence processes are not only a threat from a poverty reduction perspective, but may also aggravate social unrest and thus fuel conflicts.

This argument is a direct corollary of the argument on trade diversion just discussed above. Although according to a Ricardian perspective pareto optimality should leave even a country with an overall low level of competitiveness and thus absolute disadvantages in (almost) every sector at least as well off as before after additional trade takes place, this is not necessarily so when it comes to preferential tariffs and thus trade diversion. The tricky point is that consumers never directly feel these losses as prices do not rise because of trade diversion but either slightly decrease or stay at the very least constant. The latter is the case if the comparative disadvantage of the partner country equals the granted tariff preference or where – somewhat outside the NC framework but still in the realm of allocation effects – imperfect competition leads to an increase in price mark-ups as discussed in chapter 5.3.1.2).

In addition, one might also regard situations in which a partner country does not lose absolutely, but where previously richer countries benefit more and thus divergence is a – usually undesired – result. In fact, conversion is often stated as a main principle and goal in treaties in order to combat poverty and to ensure social cohesion of the regions.

Nonetheless, the occurrence of convergence is not as watertight as it may seem at first sight. While even for North-North integration it is not entirely clear whether or not the distribution of trade creation and trade diversion lead to income conversion or diversion, the picture appears to look even bleaker for South-South schemes. Some authors argue that even if a union and the world at large are both better off under regionalism than under autarky, some member countries might be hurt and effectively
face welfare losses. This point is made explicitly in the multilateralism vs. regionalism debate by Bhagwati & Panagariya (1996: 4) but is also a common critique outside this specific debate, particularly with regard to developing countries (see especially Venables, 1999, 2003). His model reconciles the (apparently) observed convergence in South-South schemes and (apparently) observed divergence in North-North schemes. Following Venables’ argument, the Common External Tariff (CET) structures of North-North schemes keep out labour-intensive goods from poor countries. Consequently, those member countries with the cheapest labour gain new opportunities. These tend to be the poorest member economies – thus convergence takes place. From a global perspective, these economies are located closer to the global average as ROW is on average made up of low-cost producers with even cheaper labour. In other words, ‘the middle, with relatively cheap labour, is protected from the very cheap-labour extreme’ (Collier, 2007: 165). Conversely, South-South schemes tend to keep skill- and technology-intensive products from ROW out of the region and thus favour the initially richest members – leading to diversion rather than conversion. Put differently, the countries further away from the global average are likely to be most strongly affected by the negative effects of trade diversion while those closer to the global average benefit more strongly from trade creation and from Partner State imports that have been diverted from ROW to them. Both empirics (for example for the EAC) and discussions from a dynamic perspective will show that this tendency may well be much less cast in stone than this NC perspective suggests.

3.3 Economic regionalism as a futile undertaking: no way out of the poverty trap?

Some critics of regionalism maintain that while regionalism as such may be welfare enhancing, it appears to be less likely so with regard to South-South schemes due to their unfavourable economic structures. Given the small size of even the combined regional economies (particularly in Gross Domestic Product (GDP) terms) and the relatively strong homogeneity of economic and socio-economic structures, critics argue that there is little potential for product differentiation and variety gains. The fact that pre-existing tariffs have frequently already reached a low level both at the regional and at the global levels is seen as an exacerbating factor in this regard. Thus, so the argument, it is unlikely that significant supply responses and increases in the regional trade volumes will take place and such kinds of regional schemes are consequently destined to remain largely ineffective. The following paragraphs shortly review the arguments separately.

3.3.1 Size

According to Collier and others, one major reason for the failure of regional integration is that ‘even in the best-case scenario, the resulting markets remain tiny. A famous statistic is that the whole of sub-Saharan Africa has an economy about the size of Belgium’s’ (Collier, 2007: 264). The argument is clear and relatively easy to follow: the prime (economic) goal of regional integration is the enlargement of the market size. Such national scale effects include economies of scale, agglomeration effects, enhanced competition and specialisation, greater negotiation power vis-à-vis other economies, distribution of natural (comparative) advantages, and lower per capita
costs of public goods and governance. Although not everyone agrees (see for example the results in Rose, 2006), most models include such national scale effects and can base this decision on relatively well-established empirical results that find economic growth to be positively related to (population) size and openness, but negatively with the interaction term of both variables (Alesina, Spolaore & Wacziarg, 2005). If, however, the market is only marginally increased, the effects are only benign. This fact – and especially the comparison with Belgium – is time and again reiterated by several authors (Lee, 2003; World Bank, 2000a). The World Bank report adds another graphic comparison: the median GDP of the SSA economies is slightly above USD 2 billion and hence approximately equivalent to the output of a single town with a population of just 60,000 in a rich country (World Bank, 2000a).

3.3.2 Homogeneity

Another argument that points in the same direction is the apparently too strong similarity of the economic and socioeconomic structures. As Collier notes:

[…] if you combine a number of poor, slow-growing individual economies, you have a poor, slow-growing regional economy. Trade is really generated by differences, and the big opportunity for low-income countries is to trade with rich countries, harnessing the advantage of their cheap labor. Within a group of poor countries there simply are not sufficient differences to generate much trade (Collier, 2007: 164).

The observation that among Southern and especially African countries the specialisation of and differences between the national economies are rather small is intuitively correct. This is true completely irrespective of regional integration schemes and has continuously been noted as a major impediment for regional trade. Several commentators therefore conclude that only instantaneous and unexceptional global MFN liberalisation and consequently direct integration into the world economy should be the choice of developing country or at least regional integration schemes that include developed (or transition) countries (Greenaway & Milner, 1990; Schiff & Winters, 2003; Spilimbergo & Stein, 1996; Venables, 1999, 2003; World Bank, 2000b).

However, this pessimism with regard to the integration of similar economies is only valid as long as one considers the determination of trade flows solely by Ricardian or Heckscher-Ohlin (H-O) forces. According to the H-O models, relative differences in endowments – and specifically in differences between capital and labour abundance – are the prime creators of trade. Although in most H-O models factor endowments are the only determining elements under consideration, one should keep in mind that at least Ohlin did not advance the view that trade is exclusively defined by relative factor proportions. To the contrary, he also emphasised the importance of other elements factors such as tariffs, transport costs or economies of scale for the determination of trade patterns and industrial location (Ohlin, 1933). The Linder (1961) hypothesis is to be seen as the antithesis of the H-O theories, predicting that the absolute difference between the GDP per capita of two countries negatively effects the trade volume between them. Linder backs his hypothesis by mainly two lines of arguments, a positive and a negative one. On the one hand, he challenges the relevance of the H-O argument by stressing that goods may not differ in factor intensity in the same way at all relative factor prices. There may be reversals in factor intensities so that a labor-intensive good at one set of relative factor proportions is capital-intensive at another set. […] The possibilities of classing products according to their factor intensity and countries according to their factor abundance are probably overestimated […], particularly in a multi-factor, multi-
Capital is stored-up labor and labor is stored-up capital. The introduction of factor categories, such as “technical labor”, i.e., capital-intensive labor, is a gimmick which, when its superficial advantages are more closely examined, turns out to rob the factor proportions theorem of all meaningfulness (Linder, 1961: 85f).

Departing from the exclusive focus on the production side as seen in the H-O frameworks, Linder suggests that differences in demand preferences may play an important role as well. In this regard, Linder discusses a positive substantiation of his theory. He assumes that ‘the range of potential exports is identical to, or included in, the range of potential imports’ (Linder, 1961: 91) and domestic demand. Consequently, ‘[t]he more similar the demand structures of two countries, the more intensive, potentially, is the trade between these two countries’ (Linder, 1961: 95). This also suggests that ‘per capita income differences are a potential obstacle to trade’ (Linder, 1961: 98) rather than a driver of trade. In other words, trade is a mere ‘extension across national frontiers of a country’s own web of economic activity’ (Linder, 1961: 88). The reasons for such a proposition are presented as ‘variations on the same general theme, namely, unfamiliarity with foreign markets as compared with the domestic market’ (Linder, 1961: 87) – or, in more modern language, imperfect information. This includes unawareness of profit opportunities abroad, unlikelihood of inventions for problems that exist (only) abroad, and lack of intimacy with the target market so that attempts to cater to them are more likely to fail or to be excessively costly.

Whether Linder’s assumptions or those of the H-O framework are a more accurate depiction of reality will be discussed below in the empirical part of this chapter. This notwithstanding, other arguments that were only parenthetically referred to by Linder himself, have considerably gained in importance, reformulating the Linder hypothesis from another angle. As already mentioned by Linder, one has to take into account not only different products, but also the qualitative dimension of products as

\[\text{[e]ven minor qualitative differences in goods serving the same basic needs may be sufficient to introduce into the demand structure of one country some significant differences compared with that of another country (Linder, 1961: 95).}\]

This implies that different demand structures concerning the quality of goods – in some instances perhaps even differences in the mere consumer perception of quality – may impede trade among too heterogeneous economies. As lowering quality of goods produced for the domestic market for the sale on international markets is certainly easier than producing higher quality products, this seems to particularly be a problem for the poorer and less advanced economies. For example, discussions on prohibitive health and sanitary or phytosanitary standards and other Non-Tariff Barriers (NTBs) go into this direction.

**3.3.3 Preference erosion**

Preference erosion is often bemoaned in the context of WTO negotiations or of other bilateral negotiations of major developed trading partners. This term describes a situation where multilateral and bilateral liberalisation efforts have led to a depreciation of the value of any further liberalisation effort. This is particularly true with regard to the special and differential treatment (SDT) provisions in favour of African countries such as the US-American Africa Growth Opportunity Act (AGOA), in favour of African, Caribbean and Pacific (ACP) countries such as the European Lomé/Cotonou/Economic Partnership Agreements (EPA) structure or in favour of
Least Developed Countries (LDCs) in general such as the Everything But Arms (EBA) initiative. Although such asymmetrical, special and differential preferences may be inefficient from a global perspective, for the beneficiaries they are indeed welfare-enhancing as they open up export markets without increasing competition domestically and without leading to trade diversion (though also not to trade creation). While this argument on exports market rather than efficiency-enhancing imports is thus outside the Vinerian analysis it is often brought forward to explain the observed strong resistance against further global liberalisation rounds by the beneficiaries of SDT provisions, rightly fearing that preference erosion will take away some or all of these gains.

However, another variety of preference erosion may partially explain why the response of regional trade among African countries towards trade liberalisation may be weak at best. In view of the previously conducted unilateral, bilateral, regional and multilateral liberalisation steps, the scope for an additional impetus of further integration and liberalisation is weak at best. Particularly the spaghetti bowl phenomenon, discussed in more detail in chapter 2.2.1.3 above, is of relevance here. If countries have already fully liberalised their trade with a partner country before, the introduction of a new scheme or the advancement of a PTA to a FTA is unlikely to exercise any significant influence on trade flows. Even worse, the lowering of external tariffs – beneficial from other perspectives as they may be – hold the potential of even further lowering the already humble effects of South-South integration.

The preference erosion of the spaghetti bowl implies another difficulty for the assessment of the success or failure of regional economic integration. It is hardly possible to determine the real effect of such a scheme on the trade volumes as we are confronted with a double attribution problem. Not only the link between tariff reduction and growth in trade is difficult to substantiate – even whether and how much of the tariff reductions and preferences are a result of a specific regional agreement is to some extent arbitrary. It appears at least questionable whether a newly introduced preferential tariff should be measured against the MFN tariff. Instead, it could rather be compared to the existing status quo of all, including preferential, tariffs of the respective countries (implying that for different countries the introduction of the same preferential tariffs holds a different preference content).

### 3.4 Empirics I: do RECs promote trade?

Although there are several potential candidates for explaining why regional trade may not be boosted by regional integration and liberalisation steps, the empirical evidence suggests that these aspects are far from being prohibitive: given its sizes, levels of heterogeneity and preference margins, there appears to be considerable potential for regional trade growth. The question thus remains whether the purportedly weak response is actually true. Although we are not faced with the same problem of lacking alternative scenarios as in the case of the stepping stone vs. stumbling bloc debate that is discussed below, still serious attribution problems remain. Even when abstracting from the very poor quality and reliability of trade data and the questionable utilisation of a simple dummy variable for Regional Trade Agreement (RTA) membership that does not take into account the problems of lacking implementation and slow phasing-in periods, the results of various empirical studies are extremely diverse and in several cases outright contradictory.
3.4.1 Regional trade volumes, shares, intensities and their development

The least sophisticated approach is a simple calculation of the size and time trend of regional trade volumes (see e.g. Kelly & de la Torre, 1992; Krueger, 1999). In all but a few cases, such indicators exhibit a secular and significant upwards trend – and such rising volumes are presented as evidence for the success of regionalism. However, in most instances this rise in regional trade is matched or even overshadowed by a rise of trade between the integrating countries and the rest of the world. A somewhat more sophisticated analysis thus calculates the trade shares of regions (in relation to their overall trade as basis for a comparison in time and across regions. Such an approach indicates that most Southern regions display stagnating or even declining trade shares over time as extra-regional trade volumes are more strongly growing than the regional ones. Compared to Western blocs, the trade shares are extremely low, typically at or below the 10 percent threshold. In our view, this is largely a simple corollary of the small sizes of the regional blocs and trade intensities look much better for African blocs compared to developed regions such as the EU from this perspective, but again no clear positive trend is discernible.

3.4.2 The gravity model

In order to arrive at less biased estimates for the effects of regionalism in presence of such external influences the profession has resorted to so-called gravity analyses that attempt to correct the results for any other possible influences on the trade structures. Going back to contemptuous efforts by Tinbergen (1962), Poyhonen (1963) and Linnemann (1966), the gravity approach was, despite its strong explanatory power with \( R^2 \) values exceeding 0.8 even in some simple specifications, heavily criticised for lacking proper theoretical foundations. Following discussions by Leamer & Stern (1970) who assume that the basic gravity equation captures aggregate demand and supply of the economies, Anderson (1979) derived the gravity equation for the first time formally by applying utility functions under Armington assumptions (i.e. product differentiation by origin). In the following years, several authors have re-derived the gravity equation by building a model on monopolistic competition (Bergstrand, 1989) and on increasing returns to scale (Helpman & Krugman, 1985) as well as alluding to the Linder hypothesis with regard to intra-industry trade (Bergstrand, 1990). While these contributions point to a close relationship to new trade theory approaches, other authors have recently proven that the equation can also be derived inside an H-O framework (Deardorff, 1998; Evenett & Keller, 2002). Thus, Baldwin & Taglioni conjecture, ‘the gravity model went from having too few theoretical foundations to having too many’ (Baldwin & Taglioni, 2006: 2). It remains thus controversial whether this implies that ‘because the gravity equation characterizes many models, its use to test any of them is suspect’ (Deardorff, 1998: 21) or whether ‘alternative theories [...] predict subtle differences in key parameter values that should emerge in an estimated gravity equation, which can therefore be used to distinguish the theories’ (Feenstra, Markusen & Rose, 2001: 431; see also Evenett & Keller (2002).

In its simplest form the gravity equation replicates Newton’s formula in physics almost literally into the prediction of trade flows by predicting them through the interplay of the size of the involved countries (replacing masses of objects in physics) and the distance between them. In practice, the gravity equation is translated into a multiple regression
analysis. By taking logs we arrive at a linear relationship. Adding an error term specifies the equation in a typical form to be analysed by econometric techniques:

$$\log (X_{ij}) = A + \alpha \log (GDP_i \times GDP_j) + \beta \log (\text{distance}_{ij}) + \epsilon_{ij}$$

Although this basic equation already yields surprisingly strong results, it appears obvious that other factors have influences on trade. Thus, the basic model is augmented by a variety of other variables and, if it used to examine effects of RTAs, also a dummy variable for RTA membership that assumes the value 1 if both countries are connected via a regional agreement and 0 if they are not):

$$\log (X_{ij}) = A + \alpha \log (GDP_i \times GDP_j) + \beta \log (\text{distance}_{ij}) + \gamma (\log) (X_{ij}) + \delta (\text{RTA}_{ij}) + \epsilon_{ij}$$

With X denoting any other variable that is included in addition to the standard set. The methodological specifications are largely canonical. Some of the main differences include the specification of the dependent variable. Trade is either proxied by exports, imports or both, applies either for one country or for the average of both, and is measured at an aggregate or various levels (goods and classes of goods) of disaggregation. Another difference in the model configurations lays in the specification of the analysed periods (cross-section vs. panel approaches). In addition to the standard set of independent / predictor variables – GDP and distance – several other variables can be specified and added (see list in Table 1), leading to virtually infinite varieties. Most of these additional variables can be interpreted as non-physical dimensions of the barrier of distance.

Table 1: Common variables in gravity models

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sign</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjacency / common border dummy</td>
<td>positive</td>
<td>trade costs / political barriers</td>
</tr>
<tr>
<td>Common language dummy</td>
<td>positive</td>
<td>transaction costs / institutions?</td>
</tr>
<tr>
<td>Coloniser-colonised</td>
<td>positive</td>
<td>institutions / transaction costs</td>
</tr>
<tr>
<td>Democracy</td>
<td>positive</td>
<td>openness</td>
</tr>
<tr>
<td>Economic development / GDP per capita</td>
<td>positive</td>
<td>openness, infrastructure, scale</td>
</tr>
<tr>
<td>Waterways, ports, roads, infrastr. index</td>
<td>positive</td>
<td>trade costs / infrastructure</td>
</tr>
<tr>
<td>Landlocked</td>
<td>pos./neg.</td>
<td>trade costs / rel. trade costs</td>
</tr>
<tr>
<td>Island</td>
<td>pos./neg.</td>
<td>trade costs / rel. trade costs</td>
</tr>
<tr>
<td>NTBs</td>
<td>negative</td>
<td>trade costs</td>
</tr>
<tr>
<td>Remoteness (distance from third countries)</td>
<td>positive</td>
<td>relative trade costs</td>
</tr>
<tr>
<td>Similarity (GDPpc - GDPpc)</td>
<td>pos./neg.</td>
<td>Linder vs. Ricardo</td>
</tr>
<tr>
<td>Similarity (rel. factor endowments)</td>
<td>pos./neg.</td>
<td>Linder vs. Ricardo</td>
</tr>
<tr>
<td>Exchange rate risk (volatility$_{ij}$)</td>
<td>negative</td>
<td>risk</td>
</tr>
<tr>
<td>Floating currencies</td>
<td>positive</td>
<td>risk</td>
</tr>
<tr>
<td>Multilateral trade resistance (MTR)</td>
<td>negative</td>
<td>trade costs/risk/potential</td>
</tr>
<tr>
<td>Bilateral trade resistance (BTR)</td>
<td>negative</td>
<td>overall trade costs/risk/affinity</td>
</tr>
<tr>
<td>Common currency / monetary agreement</td>
<td>positive</td>
<td>transaction costs, risks</td>
</tr>
<tr>
<td>RTA dummy</td>
<td>positive</td>
<td>trade creation &amp; diversion</td>
</tr>
</tbody>
</table>

Source: Author.

Even though several of them are formulated in a positive way such as for example common language or bordering countries (both likely to have a positive effect on trade), this implies that differences in such dimensions (e.g. language differences, missing joint borders) have an impeding effect on trade. By leading to risks and
transaction costs, geographic distance is artificially scaled up. Other factors such as GDP per capita, democracy and indeed RTA variables are less closely related to the physics analogy as such factors make trade more likely without adding to the mass of the economies involved by making trade in general or on a preferential basis more open. The same applies to similarity – a particularly interesting case as this appears to be an instrument to test the opposing assumptions of Ricardo and Linder on whether differences in development levels enhance trade (as they are correlated to differences in factor endowments) or impede them (as they are correlated to consumer preferences).

Another often included variable measures remoteness (in most instances relative distance or relative trade costs as countries tend to trade ceteris paribus more with each other if both are far away from the rest of the world. A somewhat controversial question is the inclusion of fixed effects that account for unobserved country and time specific effects. Country-fixed effects (or multilateral trade resistance) and country-pair-fixed effects (or bilateral trade resistance) transform the gravity model into a \textit{within estimation}, the lacking inclusion of such a kind of 'gravitational unconstant term' is the most common and most severe ('gold medal') mistake committed in gravity analyses. Time-fixed effects correct the data for diachronic developments that affect the whole world equally. In consequence, the analysis is in such a case mainly based on a \textit{between estimation}. However, the perspective is not as radically changed as variation over time between the countries is still likely to remain significant (see e.g. Egger, 2000).

### 3.4.2.1 Results of the gravity model

Despite the frenetic enthusiasm for the gravity approach for a wide spectrum of questions with relation to regionalism (RTAs, MUs) and beyond, the results are anything but satisfying. Depending on the specifications and regional bodies covered, the results vary to an extremely high degree. First analyses for European integration schemes for the 1960s and 1950s usually find significant impacts, ranging from 50 to 280 percent increases (Ghosh & Yamarik, 2004). These results have been by and large confirmed by Frankel and his co-authors (Frankel, Stein & Wei, 1997, 1995). However, some studies have found that most results discussed above fail a serious robustness check. After controlling for the endogeneity of bloc formation, Magee (2003) warns that the PTA-trade link is very sensitive to model specifications. The fact that results are ‘dramatically different’ is particularly surprising as this even holds true if the set of studies is restricted to those with ‘plausible methodologies’ (Magee, 2003: 2). Accordingly, a stock-taking of 23 gravity calculations by various authors conducted by Henn, Papageorgiou & Eicher (2010) reveals that only very few regressors exhibit a clear effect across all the studies, among them particularly the two core gravity variables distance (23 negative, one insignificant at the 1 percent level, none negative) and product of GDPS (23-1-0). Likewise, the product of the GDPS per capita (9-1-2), the border effect (9-5-0), common language (12-1-1), common coloniser (3-0-0) and product of areas (4-0-0) show relatively robust results, while several economic policy variables, development and factor endowment variables, several geographic measures (land-locked, island, remoteness) indicate effects in both directions and often fail to be significant at the 1 percent level. Of the dummy variables for a selection of twelve regional bodies six have positive trade creation effects, the other six show insignificant
results, none negative ones. Based on an extreme bound analysis Ghosh & Yamarik show that the baseline ordinary least squares (OLS) without priors yields positive RTA effects while at the extreme bounds none of the analysed RTAs can be considered trade-creating across all priors, suggesting that ‘the trade creation effects of RTAs represent prior beliefs much more than sample information’ (Ghosh & Yamarik, 2004). However, although the authors include many of the commonly invoked variables, they surprisingly fail to include fixed effects in their analysis.

For developing regions, the literature is somewhat less developed. Similar results have been found to be true for some Latin American blocs specifically (e.g. Aitken & Lowry, 1972; Garman, Peterson & Gilliard, 1998) and they often form part of the average calculations. African blocs in contrast are excluded from most calculations. Nonetheless, some authors have opted for only computing a gravity regression for one or several African blocs (thus disregarding all other blocs with the resultant omitted variable bias discussed further below). The results show no clear picture of the effects in Africa. Alemayehu & Kibret (2008) calculate insignificant effects for both SADC and COMESA. Similar results are obtained by Agbodji (2008) for UEMOA. Although Longo & Sekkat (2001) claim to find ‘strong evidence of trade creation’ (Longo & Sekkat, 2001), looking at the calculations in detail reveals that these effects are anything but robust. They strongly dependent on the inclusion and exclusion of certain countries (South Africa, petroleum exporters) and positive effects take place in some RECs (ECOWAS, CEMAC, ECCAS), but not in others (CEPGL, COMESA) while for others results are extremely volatile depending on the respective specifications (SADC).

In contrast, Carrère (2004) finds for UEMOA, CEMAC and SADC trade volumes that are approximately three times higher than predicted by a gravity equation. For ECOWAS the value is found to be at least 20 percent higher than the prediction while for COMESA no significant effect has been found. Interestingly, but absolutely in line with the theory, she reports that when focussing on the evolution of the regional dummy coefficients a clear pattern of immediate post-implementation trade creation is observable with only little further positive steps in the medium run. However, she reports that specifically SADC and UEMOA continue to display trade creation in the medium run – a pattern that is not easily compatible with the neoclassical framework (but, in fact, with the heterodox schools discussed in chapter 5 below). Although aiming at the rather unrelated question of estimating unrecorded trade, Villoria (2008) calculates the impact of SADC, COMESA, CEMAC and the West African Economic and Monetary Union (WAEMU) as being significantly trade creating for both, agricultural as well as manufacturing trade, but not for extractive industries.

3.4.2.2 Factors for the variety and unreliability of the gravity model

While fixed effects are part and parcel of the more recent studies, other aspects of highest importance are surprisingly not addressed by most analysts and, in some instances, can indeed hardly be addressed properly at all. In the following, the aspects (1) endogeneity of bloc formation, (2) RTA varieties, overlapping memberships and MFN liberalisation, (3) omitted RTAs, (4) model uncertainty, (5) preferential margins, (6) poor trade data, (7) zero trade, and (8) interaction terms are discussed.
(1) Endogeneity of bloc formation
Although endogeneity of bloc formation is a backbone of the theoretical stepping stone vs. stumbling block debate discussed above, it has rather recently been included in gravity models and is not yet part of the standard specification. Following Lawrence who conjectures that ‘free trade areas may well be an endogenous variable – that is, a response to, rather than a source of, large trade flows’ (Lawrence, 1996: 59). Baier & Bergstrand (2004a) correctly predict the formation of regional agreements by utilising only economic and geographic (thus gravity-style) indicators to an astonishing degree: 243 of the 286 FTAs (85 percent) and 1114 of the 1145 pairs without FTA (97.3 percent) are predicted correctly (Baier & Bergstrand, 2004a). Both, approaches with instrumental variables and two-stage least squares control functions (Baier & Bergstrand, 2002, 2004b; Magee, 2003) as well as panel approaches (Baier & Bergstrand, 2007) are put forward.

(2) RTA varieties, overlapping memberships and MFN liberalisation
Likewise, the consideration of the different varieties of RTAs with regard to their depth, width, and implementation status is not part of most analyses. Surprisingly, however, Gosh & Yamarik (2004) show that proposed RTAs have almost as strong effects as implemented ones. This may be an indication for the only weak fit of the econometric specification. Alternatively, this underscores the possibility that trade creation already occurs prior to the actual implementation because of an anticipative reorientation of exports. The authors likewise distinguish between different levels of integration (PTA, FTA, CU, CM as well as MU). While they are not able to show significant differences for internal trade as integration proceeds, there appears to be quite a strong relationship between deeper integration and increasing outside trade (open bloc effects). This does not really come as a surprise. Particularly for the implementation of the CU vis-à-vis the FTA, almost only changes in the external trade should be expected as internal tariffs are untouched by this step. Only the change in relative terms may have some influence on intra-REC trade. Since in most cases the CETs lead to on average declining external tariffs, intra-REC trade is even more likely to slightly decrease following the implementation of a CU vis-à-vis a FTA. Similar arguments apply for the implementation of a CM. This step is not directly related to trade as mainly factor movements (capital, labour) and regulations are concerned. The enlarged market may well lead to open-block effects in exports as the distribution in the target markets becomes more efficient.

In general, however, the overlapping memberships pose huge problems for attributing the effects. Even more problematic, changes in MFN tariffs that run in parallel with internal liberalisation may seriously cloud the picture on the effects. This is particularly the case when considering CUs as usually some countries have to lower their MFN tariffs while others have to decrease them to arrive at a CET (see Lopez Gonzalez & Cirera, 2012). This implies that it is often virtually impossible to determine whether changes in the MFN tariffs or the intra-regional liberalisation have led to a certain change in import structures. In some instances, the strong reduction of a MFN tariff to a CET level agreed upon with Partner States can even lead to a redirection of imports that were previously imported from an integrating Partner State to ROW.
(3) Omitted RTAs

Although a significant part of the debate centres on omitted variable biases, there is a surprising silence on omitted RTAs. As indicated by Eicher, Henn & Papageorgiou (2008), omitting RECs introduces a bias as does the exclusion of any other explanatory variable:

> Our results emphasize that the appropriate empirical strategy to isolate effects of PTAs must involve as many PTAs as possible. The exact Open Bloc Trade Creation effect for a given PTA can only be determined after examining the exact interaction between PTAs. The actual impact of a PTA on bilateral trade is shown to depend not only on its own Trade Creation and Diversion but also on its trading partner's PTA effects (Eicher, Henn & Papageorgiou, 2008: 4).

Eicher, Henn & Papageorgiou even partially take the problem of overlapping memberships as indicated by Asche & Bruecher (2009) into account: the calculation from the log values to net trade flows explicitly considers different membership scenarios. However, a situation where two countries are members in the same two schemes and the resulting impossibility to unambiguously determine the effects of a certain regional agreement are not considered (Eicher Henn & Papageorgiou, 2008: 23). Despite theoretically acknowledging this problem, however, Eicher, Henn & Papageorgiou only replicate the Ghosh & Yamarik sample and thus miss to include a more complete sample of existing RECs. In particular, African RECs are completely excluded from this – and most – analyses although the countries show up in the country pairs. In addition, non-reciprocal schemes are excluded in all reviewed analyses although there is no reason why they should be left out. In view of the huge preferences extended by the EU (Lomé / Cotonou, in future EPAs) and the US (AGOA) towards African countries, trade from Africa towards these countries should be biased upwards. Consequently, trade with ROW, including the trade with other African countries and even partner countries, is likely to be lower than without the schemes (both relative and absolute because of trade diversion). The main reason for this non-consideration of non-reciprocal schemes lies in the fact that in most cases average trade flows of country-pairs are considered and the non-reciprocal preference only affects one direction of trade. This averaging of bilateral trade flows is in addition also an important source for inaccuracies in itself. As noted by Baldwin & Taglioni (2006),

> [t]he basic theory tells us that the gravity equation is a modified expenditure function; it explains the value of spending by one nation on the goods produced by another nation. That is to say, the gravity equation explains uni-directional bilateral trade. Most gravity models, however, are not estimated on uni-directional trade, for example French exports to Germany. Rather, they work with the average of the two-way exports, for example the average of French exports to Germany and German exports to France. There is nothing intrinsically wrong with this, but since it was done without reference to theory, most researchers mistake the log of the average for the average of the logs. […] This can seriously bias the results. The sum of the logs is approximately the log of the sums, but the approximation gets worse as the two flows to be summed diverge. […] In plain English, the error will not be too bad for nations that have bilaterally balanced trade […] but it can be truly horrendous for nations with very unbalanced trade. In the real world, bilaterally unbalanced trade is a huge issue especially for North-South trade flows (Baldwin & Taglioni, 2006: 9f).

(4) Model uncertainty

The general observation has to be made that the numerous different specifications of the gravity approaches are a direct corollary of a pronounced model uncertainty in this case. In other words, it is far from clear which variables / controls should be included
and which should not. Even worse, frequently the same proxy for such controls is invoked for different theories behind them, often with opposite expected signs (Henn, Papageorgiou & Eicher, 2010: 301). Symptomatic for this model uncertainty is not only a missing consensus among scholars with regard to the right specification, but also the fact that most papers include numerous alternative specifications themselves. As a consequence, the results differ significantly from setup to setup for any given bloc (Gosh & Yamarik, 2004; Henn, Papageorgiou & Eicher, 2010).

(5) Preferential margins

Related to the problems of omitted RECs and REC status is the lacking consideration of the preferential margins before and after the implementation. This is particularly surprising as the tariff cuts are actually the implied explaining variable while the REC membership is by and large a proxy for such free(er) trade. However, such an equation holds serious potential for biases and is evidence of a lacking understanding of regional economic integration efforts. As RTAs in developing countries are often formed among countries that are already members of other regional schemes that have partially liberalised their trade, the resulting additional liberalisation is only moderate (see discussion in chapter 3.3.3). Consequently, the trade response must be assumed to be only marginal too – without implicating that this is a proof for an ineffectiveness of trade agreements. Even more importantly, RECs – particularly Customs Unions – tend to cut external tariffs simultaneously with internal ones. In the gravity literature on regional economic integration this problem of simply attributing a dummy and thus losing a lot of information is to our knowledge not yet probably been taken up. Paraphrasing Srinivasan (1998), Gosh & Yamarik (2004) even provocingly assert that the coefficient of RTA dummies ‘like any other dummy (or should I say dumb) variable, merely assigns a quantitative magnitude for ignorance’ (Ghosh & Yamarik, 2004).

Clausing (2001) appears to be the only well-known example where tariff preferences are considered in an empirical application. However, his analysis is limited to a bilateral case (US-Canada). In his view, aggregate data are likely to ‘mask changes that may be occurring at a disaggregate level’ (Clausing, 2001: 684) as most trade had been liberalised before. His disaggregate gravity regression estimates that each percent of cumulative reduction in tariffs has been associated with a 10 percent increase in trade from 1989 to 1994. For aggregate data, neither trade shares nor a gravity model with otherwise similar specifications shows such a relationship. This importance of differences in trade response at an aggregate level is even better visible in a simple graph that compares the developments of intra-regional and extra-regional imports differentiated by the size of the tariff cuts (see Table 4). While for tariff lines with prior free trade the growth in imports over five years has been equally increasing by about 40 percent for imports both from the partner country (Canada) and ROW, distinct differences are visible for goods that have been liberalised for Canada, but not ROW. While import growth from ROW is between 40 and 60 percent throughout the sample, the figures are between 80 and 150 percent for the tariff cut categories that range from below five to more than 20 percent.

Although it is impossible to detect a viable and discreet relationship, there appears in fact to be stronger growth in most goods with stronger liberalisation. Thus, at least in this case the low response in already previously liberalised trade masks a strong
response in those goods that are liberalised by the regional agreement. As discussed later on, disaggregate approaches may also be preferable for other reasons.

Figure 3: Disaggregate trade effects

![Disaggregate trade effects](image)


(6) Unreliable trade data

Particularly with regard to trade among developing countries, the poor data quality may have a significant influence on the results of the estimations. For some of the schemes, important members fail to report any trade data for certain years or even completely abstain from reporting any data. As a result, some data banks such as Direction of Trade Statistics (DOTS) by the International Monetary Fund (IMF) fill the resultant gaps with mirror statistics or estimates and are thus of little reliability. In addition, the administration of reporting systems is often rather sluggish and defective. In cases where reporting takes place, the pervasiveness of informal and illegal trade as well as underreporting and incorrect declarations make the data extremely unreliable. The fact that export figures are in almost all cases significantly higher than import figures, can be only properly explained by such systemic underreporting in order to evade taxation. In fact, import figures are usually somewhat higher than export figures as the former is valued as Cost, Insurance, Freight (CIF) while the latter only contains Free on Board (FOB) costs (i.e. transport and insurance cost from the exporting to the importing country can only be seen in the import data). Even when calculating some losses in value due to damage, such huge differences cannot be accounted for. Incorrect declarations by exporters or problems in the data management process by the customs authority lead also to misspecifications of export. Particularly the common practice of omitting separate declarations of re-exports artificially inflates the imports and exports of countries with highly frequented sea ports and land-lock neighbouring countries. Certainly, these poor trade data are a problem
for any trade analysis including those discussed before. However, sophisticated regression approaches rely much more on complete data sets for a large set of countries over several indicators and thus tend to be more compromising with regard to quality of the data. Fortunately, some of the unrecorded trade can be recovered through reconciliation with data from trading partners. However, this is not possible in case of non- or misreporting – a situation that is again more frequent with regard to South-South trade than with regard to North-South or North-North trade, likely leading to a skewed representation of relative trade volumes.

(7) Log-linearization and zero trade

In most gravity analyses, parameters are log-linearized (safe for dummy variables). This causes problems in the presence of heteroskedasticity as the transformed errors tend to be correlated with the covariates, leading to potential biases (Santos Silva & Tenreyro, 2006). Another important problem of the log-linearization is that they are incompatible with zeros in the trade data as there is no log of zero. The problem has been noted by several authors and its relevance must be assumed high given that around 50 percent of country pairs evidence zero trade flows. This can either be a result of genuinely missing trade or of rounding and reporting errors – both instances are likely to be particularly prevalent in small, poor and distant countries, thus leading potentially to selection biases. In fact, Villoria (2008) reports in his sample of African countries that 85.7 percent of the trade flows exhibit zero values. In most cases, this problem is only unsatisfactorily dealt with as either country pairs are excluded or the zero values are replaced with values of 1 (or infinitesimal small trade). The alternative proposal by Santos Silva & Tenreyro (2006) as well as Westerlund & Wilhelmsson (2009) to abstain from OLS regressions and resort to specific maximum likelihood estimators. However, this appeal has only been taken up by few authors and at the same time has met severe counter-criticism. Answering to criticisms by Martínez-Zarzoso & Nowak-Lehmann (2007), Santos Silva & Tenreyro assert that ‘it is natural that some researchers find it difficult to accept that the long tradition of estimating gravity equations in the log-linear form is based on untenable assumptions’ (Santos Silva & Tenreyro, 2009: 7). Alternatively, Helpman, Melitz & Rubinstein (2008) propose a two-staged approach that analyses first selection into trade partners and in a second step the size of trade flows by invoking a model with heterogeneity of firms and differentiating for the extensive margin of trade (new entrants in the exports sector) and an internal margin of trade (volume changes by existing exporters).

(8) Interaction terms

The computation of average treatment effects masks potential interactions – for example, size and FTAs, distance and FTAs and, particularly, developmental status (GDP per capita) and FTAs. Thus, Baier & Bergstrand advise to include interaction terms in future analyses (Baier & Bergstrand, 2007). Likewise, the effects may be different for different categories of goods. The result of Foster & Stehrer for example indicate that there are heterogeneous effects on extra- and intra-industry trade (IIT): the overall effects of regionalism on IIT appear to be stronger than for non-IIT. However, the results also exhibit a second non-linearity as this relationship appears to be significant only for highly developed countries (Foster & Stehrer, 2010).
3.4.3 Alternative methodological approaches

Consequently, alternative approaches have been proposed that tackle at least some of the criticisms and problems just discussed. The most recent contributions of panel approaches are discussed here briefly, which are matching estimators as well as Bayesian Model Averaging.

3.4.3.1 Panel approach

Explicitly tackling the issue of endogeneity by employing a panel approach, Baier & Bergstrand (2007) report that according to their calculations an FTA increases bilateral trade on average by 86 percent after 15 years, thus multiplying the effect of a standard non-panel OLS estimation by more than six times using the same dataset and indicators. Employing a very similar approach, Kohl (2014, 2012) however finds considerably lower average effects of around 40 percent for the panel approach while the figures for non-panel OLS are considerably higher (at around 140 percent). In addition, Kohl also computes the results for different RECs separately, indicating that for more than 42 percent the effect is insignificant while for almost a third the effect is significantly positive (to a large share bilateral agreements between the EU and third parties) – leaving almost a quarter of the RECs with even significantly negative effects (Kohl, 2012: 97f). Despite his claim to include as many RECs and bilateral agreements as possible, Kohl only reports on four agreements involving SSA countries (ECOWAS, COMESA, ECCAS, WAEMU) with ECOWAS showing significantly negative effects whilst the others show no significant effects. The comparative analysis of these diverse results implies in our view that despite being an important advancement in the analysis of the effects of regionalism, such a panel approach appears not to solve the extremely high level of volatility of the results.

3.4.3.2 Matching estimator

As an alternative to OLS regression analyses, Baier & Bergstrand (2009) resort to utilising a matching-estimator approach that establishes ‘nearest neighbor controls’ for each country pair inside a FTA, i.e. another country pair that shares all characteristics with the first pair safe for the fact that they have not formed an FTA with one other. The results suggest that FTAs double bilateral trade after 10-15 years for the investigated FTAs, the European Economic Community (EEC) and the Central American Common Market (CACM). No results for Subsaharan Africa (SSA) were found for this methodology.

3.4.3.3 REC depth differentiation

Kohl (2012) attempts to provide a solution for the heterogeneity in the depth of RECs by replacing the REC dummy with an index of the comprehensiveness of the REC. His results suggest that deeper agreements that include non-trade WTO regulations have positive effects on trade growth. Conversely, those that even go beyond issues negotiated within the WTO rather decrease trade. However, quality of REC implementation is not considered in this case either.
3.4.3.4 Bayesian Model Averaging

It is highly questionable whether extreme bounds analysis discussed above is the best available tool for testing the robustness of models as this methodology does not cover the whole potential model space and weighs all potential model specifications equally. In contrast, Bayesian Model Averaging (BMA) weighs models according to their quality and includes an unrestricted search among all possible regressors. Thus, BMA is portrayed by its proponents as superior as it is more efficient and soundly grounded in theory and should thus be preferred over the extreme bound analyses that turn out to yield excessively stringent results. Henn, Papageorgiou & Eicher (2010) are to our knowledge the first and only authors that have applied this new tool to a gravity approach. Replicating the Ghosh & Yamarik exercise they show that PTAs exhibit a very strong positive effect on trade (indicating again that extreme bounds are too stringent). Correcting for omitted variable bias (caused by the non-inclusion of country-pair fixed effects) the strong effects are significantly muted, but still indicate a visible effect. Interestingly, even when fully controlling for natural trading partner effects, the data of Eicher, Henn & Papageorgiou supports Ghosh & Yamarik’s result of strong open bloc effects, i.e. imports from third countries – thus partially explaining the rise of external trade as indicated in the discussion on regional trade shares above and partially even attributing them directly as effects of regionalism. Unfortunately and despite the emphasis on the need to include as many RECs as possible and indeed the claim to do so, African RECs are completely left out in the calculations.

3.4.3.5 CGE: pseudo empirics or ‘could’ African RECs promote trade?

CGE models are frequently proposed as appropriate empirical tools to evaluate whether or not RECs create trade. However, this is in our view a bold statement given the current development state of CGE modelling with regard to its poorly established empirical micro-foundations and the unavailability of necessary data. In fact, CGE models are generally rather an ex ante tool for estimating policy effects and, besides this foresight function, have a particular advantage in estimating the effects for the whole economy, not specific aspects such as trade in goods. Thus they rather answer (if anything at all) the question whether or not and to what extent an envisaged REC could create trade – and not really to evaluate if this actually took place. In addition, there is currently still widespread controversy and in fact cluelessness about a wide range of elasticities that have to be assumed in a CGE model or, as it is usually put, they are taken from a wide range of econometric micro-level studies and are then calibrated to match the initial data set. The choice for one elasticity or base value can vary dramatically for the same set of country and policy question, primarily depending on prior beliefs of the respective author. This leads to a situation where even a small change in the choice of these values can lead to enormous differences in the results (and even open the possibility to simply fabricate a desired result). In other words, CGE models tend to be ‘theory with numbers’ (Baldwin & Venables, 1995: 1628) rather than empirical tests. The main problem with them is, in our view, less the uncertainty of the results that comes with such an approach, but rather the often lacking computation of the level of uncertainty as well as the acknowledgement thereof by both scientists and policy makers. In line with this George (2010) criticises in his general review of economic models that
Economic models are limited in what they are capable of modelling, and require many simplifying assumptions and approximations [...] This limits the accuracy and reliability of the findings. In principle, it is quite easy to quantify the level of uncertainty in the numbers than come out, by obtaining a reliable measure for all those put in, adapting the algorithms to evaluate variances as well as mean values, defining the range of validity of each of the equations, and presenting a best estimate of uncertainty alongside each of the results. This is standard practice for any mathematical model whose misuse can have disastrous consequences that are traceable back to the modeller, such as in the design of a nuclear power station. It is rarely done for trade economics models. Scientific rigour tends to be unpopular with decision-makers, who generally use the studies to support their own proposals and may prefer not to know how far from the truth the results might be. A rough indication can be obtained from the spread of results from different studies. Plus or minus 50 per cent at a tolerable level of confidence is typical. In some cases the uncertainty is bigger than the number itself, such that a number predicted to be positive could easily be negative (George, 2010: 25).

### 3.5 Empirics II: do RECs hurt their members?

Thus the rather simple question of trade creation – in other words the question whether or not regional integration leads to growth in intra-regional trade in goods and, in particular, more strongly so than on a global basis – is already surprisingly difficult to answer. The subsequent question of whether or not the welfare effects are positive or negative in case that trade volumes rise is even more complex. As discussed in the theoretical part of this chapter, all depends on the question whether trade diversion or trade creation prevails – again, of course, only if restricting the scope to a purely NC interpretation of the economy as we do in this chapter. However, even this is not sufficient, as not only the volumes of trade creation and diversion are important for determining static welfare effects. On the contrary, also the extent of the creation- and diversion-induced change, in other words the productivity difference between the partner country and the domestic market for trade creation and the productivity difference between the most efficient supplier in ROW and the one in the partner country.

Again, the most dominant approach appears to be the gravity model, discussed above as well as in the subsequent section (3.5.1). Alternatively, again, CGE models are employed to establish ex ante how the interplay of trade creation and diversion is likely to turn out (3.5.2). Other alternative approaches discussed focus on the Finger-Kreinin index of similarity (3.5.3) and Revealed Comparative Advantages (3.5.4).

### 3.5.1 Gravity and trade diversion

Adding an additional indicator in gravity or gravity / BMA models can give an indicative answer to this question – although the problems detailed above apply to the same degree as in models without trade diversion. Particularly the membership in multiple RECs makes an analysis complicated and the results not fully attributable. Instead of specifying the model as

\[ \text{Log (trade}_{ij}) = A + b_1 \log (\text{GDP}_i \times \text{GDP}_j) + b_2 \log (\text{distance}_{ij}) + b_3 X_{ij} + b_4 \text{RTA}_{ij} + \varepsilon_{ij} \]

an additional dummy variable is introduced that gets the value one if only one of the countries is inside a certain RTA, but not the other.
Log (trade$_{ij}$) = A + b$_1$ log (GDP$_i$ * GDP$_j$) + b$_2$ log(distance$_{ij}$) + b$_3$X$_{ij}$ + b$_4$RTA$_{ij}$ + b$_5$RTA$_i$ + ε$_{ij}$

Trade diversion then occurs if the RTA$_i$ term is negative. The results of such exercises are as mixed as those of the studies on trade creation. The extreme bound analysis of Ghosh & Yamarik (2004) indicates that no RTA is trade-diverting at the extreme bounds with EU and Asia-Pacific Economic Cooperation (APEC) showing open bloc effects. Relaxation of these assumptions shows more RECs as trade-diverting, but the empirical support for trade diversion appears to be weak from this study. Henn, Papageorgiou & Eicher (2010) review existing studies that measure trade diversion / open bloc effects, revealing that six indicate open bloc effects, twelve insignificant effects and ten trade diversion. Following their BMA approach, Henn, Papageorgiou & Eicher (2010) find not only strong evidence of trade creation, but also of trade diversion (and in addition also of considerable open bloc effects, i.e. a positive and significant RTA). In fact, in their preferred model setup five RECs exhibit trade diversion, four positive open bloc effects and three insignificant effects. Interestingly, there appears to be no strong connection between trade creation and the likelihood of trade diversion. If at all, the causality seems to runs counter to what theory would suggest. Of the six RECs with significant trade creation three have open bloc effects while two show trade diversion and one insignificant external effects. Of the six RECs with insignificant trade creation effects only one shows open bloc effects, three trade diversion and two insignificant effects. Although one should be wary to overemphasis this result, this appears to be an indication that successful RECs that have unleashed significant trade creation also have been more likely in preventing trade diversion and even in inducing open bloc effects. The trade diversion effects in general also appear to be on average smaller in magnitude than the trade creation effects. For SSA the results are as mixed as the global picture. Musila (2005) and Longo & Sekkat (2001) find weak evidence for either effect for COMESA, ECCAS and ECOWAS and a broader set of African RECs. Agbodji (2008) and Salisu & Ademuyiwa (2012) find diverting effects for UEMOA and WAMZ respectively. Cernat (2001) presents evidence that according to his measures all South-South RTAs are net trade-creating, almost all create trade regionally and globally at the same time and thus ‘South-South RTA’s, and African RTAs in particular, are not more trade diverting than other RTAs’ (Cernat, 2001).

As if this ambiguity would not be already enough, as indicated above it is often omitted to question whether or not this most common approach to measure trade diversion and its effects by the described addition of an extra-regionally geared FTA membership proxy to gravity models is the best – or even only possible – solution. In fact, what is measured here is the effect that a region has on reducing extra-regional trade, not trade diversion per se. The quality of this proxy depends on the questionable correctness of the assumption that these losses were in fact all a result of increased internal trade. In our view, it is highly unlikely that in all cases trade diversion is really caused by a switch to internal trade. For example, in instances where an indicator shows no trade creation whatsoever but considerable trade diversion (like in the Henn, Papageorgiou & Eicher 2010 study discussed above), certainly other factors outside the realm of regionalism must have caused external trade to plummet.
3.5.2 CGE and welfare effects

The criticism of CGE models for the purpose of trade analyses is as valid for the analysis of trade diversion as it is for the analysis of trade creation detailed above. CGE models are in this respect again a tool for attaching some data to a theoretical model rather than an outright empirical strategy. Not surprisingly, the occurrence of trade diversion and particularly the question of whether trade creation or trade diversion prevail is closely connected to initial (relative) levels of protection and the margin of protection and the development thereof. In addition, assumptions on the elasticities of substituting domestic production with regional trade play a decisive role. As particularly the latter is empirically only very weakly established as overgeneralisations across countries and products abound, it is not surprising that the results differ widely, particular for RECs among developing countries. While, for example, the World Bank cautions against such agreements in accordance with their CGE calculations (World Bank, 2000b), other authors arrive at much more favourable results, such as Flôres (1997) for Latin America as well as Lewis, Robinson & Thierfelder (1999) and Evans (1998) for Southern Africa.

3.5.3 Finger-Kreinin index of similarity

Lopez Gonzalez & Cirera (2012) propose to proxy trade creation and trade diversion by increasing or decreasing import similarity. The idea behind the utilization of this so-called Finger-Kreinin index of similarity between trade distributions is that a switch from ROW to a preferentially treated, intra-bloc trading partner should lead to a greater homogeneity of the intra- and extra-regional import structures of the integrating countries. In contrast, if trade creation is the reason for increasing regional trade, the import patterns should show increasing dissimilarity. Alternatively and probably even more sensibly, Lopez Gonzalez & Cirera (2012) also propose to calculate a Finger-Kreinin index comparing post integration intra-regional import patterns with ROW import patterns prior to the integration effort. As this work is focused on the EAC and no other works along the same lines could be found, empirical results will be discussed below in the section on results for the EAC (3.8).

3.5.4 ROI and RCA

Another alternative approach compares relative developments in regional trade orientation of specific product groups with an indicator as proxy for the revealed comparative advantage of this product group. The idea behind this approach is that if mainly those industries grow (relatively) in intra-regional trade where the region has a comparative advantage, one should expect trade creation to be the strongest force, while growth in cases where industries without comparative advantage inside the region are an indication for rampant trade diversion.

To this end, a regional orientation index (ROI) is calculated by dividing the relative share of a product group in intra-regional exports by the relative share of that product group in exports to ROW. Consequently, values range from zero to infinity with values below unity indicating disproportionally strong orientation towards ROW and values above unity a regionalized export structure. In addition, a measure of revealed comparative advantage is calculated. While some authors opt for the standard revealed comparative advantage (RCA) value that divides the relative share of product
group in the total external trade of a region or country by the share of this product group in ROW trade. Again, values range from zero to infinity with values above unity indicating a comparative advantage. Alternatively, Kokko, Mathä & Gustavsson Tingvall (2007) suggest calculating the additive RCA (ARCA) proposed by Hoen & Oosterhaven (2006) where the second, global term is deducted from the first, regional term rather than operating as a divisor. Consequently, values are symmetric around zero with positive values indicating a revealed comparative advantage.

In his analysis of the Common Market of the South (MERCOSUR), Yeats (1998) shows that among the 15 three-digit tariff lines with the strongest intra-regional trade growth from 1988-1994 as measured by the ROI, representing 92 percent of the total intra-regional trade gains, only one product group showed evidence of a revealed comparative advantage, thus hinting at a very high incidence of trade diversion. However, he focuses on manufacturing trade only as ‘trade in agricultural products is distorted by export incentives and trade barriers that are likely to obscure whether a country has a real comparative advantage or disadvantage in these products’ (Yeats, 1998: 9). While this point might be valid as a general observation we would argue that this is less the case for most developing countries as it is for Europe and the North America.

A similar approach is followed by Kokko, Mathä & Gustavsson Tingvall (2007) in a recent analysis of the trade-creating and trade-diverting effects of the EU. They find that of the ten two-digit industries with the fastest growing ROI values all but one had a negative ARCA in the period 1963-73, indicating massive trade diversion. In the next decade (1974-86) there are four industries among the top-ten with positive and negative values respectively (and two neutral ones), implying a rather balanced situation. For the last decade (1987-2000) the values appear to be even more favourable with four positive, three negative and three neutral values. When focusing on those ten industries with the largest absolute increases in the ROI, the same tendency is detectable, but less pronounced and with a stronger hint at the predominance of trade diversion. In the first period only one industry shows positive ARCA values while in the second and third at least three have positive and two negative values. Calculations for the ten industries with the largest increases in intraregional imports again show another picture with predominately positive ARCAs in all three periods, but a slight downward trend in the last period.

3.6 Empirics III: winners and losers

The question whether or not regional integration induces changes in trade patterns has already proven to be very difficult to answer. Not surprisingly, an unambiguous answer to the question of whether regional integration hurts a whole bloc due to the pervasiveness of trade diversion is even less easy to find. One might therefore rightly expect that the question of whether regionalism and particularly South-South RECs produce winners and losers and whether this leads to convergence or divergence is another step down the road of inconclusiveness. There is, however, a rather simple answer to the question. Without doubt, there will be winners and losers – as there are in consequence of virtually each and every policy intervention (as well as for a decision to not intervene and abstain from an intervention).
This simple observation is of course not a final point of discussion as it begs for a more thorough analysis as to who is losing, how strongly losers are losing and whether or not compensation is necessary, feasible and in fact implemented. At first sight, the literature on integration-induced convergence and divergence is vast. However, at scrutiny it becomes obvious that most contributions to the winners and losers and conversion vs. diversion debates are not written from a NC perspective, but focus on growth rates, deep integration, labour migration and FDI, agglomeration effects and other dynamic effects that are discussed in later chapters. This pronounced scarcity of empirical substantiations of the winners and losers argument is somewhat surprising given the weight that is attached to this point in policy debates. CGE models are usually calculated for a certain country and thus winners and losers can be disambiguated. The fact that these models are basically theory with numbers, however, simply implies that those countries win in such analyses that lower tariffs more and those countries lose that lower tariffs least. Gravity calculations, in contrast, usually do not report results for partner countries separately (although it would in fact be possible to allocate shares of the REC effect to the respective partners). We therefore analyse this aspect in depth as part of the following separate discussion on all questions discussed so far in general for our empirical example, the EAC.

3.7 Empirics IV: are African RECs ill-suited for regionalism?

As the question of suitability is a prerequisite for eventual effects and following the order of the arguments in the preceding sub-chapters, this part of the neoclassical criticism towards regional economic integration is addressed first. For the three main arguments – size, homogeneity and preference erosion – the respective empirical evidence is separately addressed.

3.7.1 Size

Looking at the real situation, Collier’s comparison with Belgium (see above in chapter 3.1.1) appears to be heavily exaggerated at best. If GDP is accounted on a nominal basis, SSA’s economy is currently more than twice the size of Belgium’s economy. As regional (and not global) trade is what matters in this regard, the purchasing power adjusted values suggest themselves as the more important ones. According to this measure the ratio is even 5:1 in favour of SSA. In comparison to the (envisaged) African Economic Community (AEC), Belgium’s purchasing power parity (PPP) adjusted is even less than a sixth of the AEC’s one (that also includes North African states). If population sizes are taken as measure, Belgium is a mere 1.4 percent of SSA’s population and the whole EU-25 is less than two thirds of it. However, large population sizes perhaps indicate a large potential for the future, but with such low per capita incomes, GDP values probably remain the more important measure in the short to medium run.

A comparison between the initial EU members and some of the African regional groupings however does not show very large differences in the initial size. The six founding members of the EU had a combined GDP of slightly above 600 billion USD (PPP) in 1968, the year of the implementation of the customs union while all AEC pillars taken together currently amount to a value that is 3.5 times higher than the initial EU size. As a pan-African economic region seems still a very long way to go, the more
interesting units for comparison are the individual pillars of the AEC, namely the proposed and implemented PTAS, FTAs and CUs. Out of the African RECs with serious implementation steps, only two are currently larger in GDP (PPP) terms than the EU has been in 1968. This applies to the strongly interrelated SADC and COMESA groupings (above 800 billion and almost 1 trillion USD respectively). However, this is almost exclusively a result of the membership of South Africa. The only long-lasting and functioning CU in Africa, the SACU, is only slightly smaller than the initial EU, due to the membership of South Africa with almost 550 billion USD. If CEN-SAD was implemented, it would also be distinctly larger than the initial EU due to the large membership base and the inclusion of the North African heavyweights Morocco and Egypt, but its virtual status does not qualify this region for such a comparison. In Western Africa, ECOWAS currently has at least more than a half of the EU’s initial GDP size (340 billion USD), but they are currently split into two subgroups concerning most economic integration aspects (UEMOA and WAMZ). In Central Africa, the original ECCAS group representing countries with a GDP of about 175 billion USD is currently distinctly reduced to less than a half as in the Economic and Monetary Union in place, CEMAC, the two heavyweights Angola and DR Congo are missing. Finally, the recently revitalised EAC in Eastern Africa, the smallest regional scheme by country membership, also has the smallest combined GDP of just above 100 billion USD.

Note, however, that even this apparent lightweight has at least a (GDP-PPP) size of about a sixth of the EU’s initial size. This comparison should caution against deeming such initiatives as completely irrelevant because of their small sizes. Particularly if the potential accession dynamics of regional schemes – as experienced particularly in Europe – are taken into account, the apparently small units may be seen as nuclei for larger regional schemes. Again, if other measures – such as countries involved or population – are taken into account, the ratio is even more favourable to the African regional schemes as compared to the initial EC-6. In comparison to the current EU (that has much higher values due to accession and growth since the 1960’s) or even just countries such as China and India, most African schemes are still rather small. Nonetheless, the combined populations of SSA and the AU have similar sizes as the Chinese and Indian markets.

In general, a comparison of the GDP and population data suggests that the small size of African regional schemes is to a large extent a result of poverty – and not of small size as such. However, if the combined GDPs of the current African schemes and the EC-6 in 1968 are set into relation to world GDP (i.e. relative size), the different points of departures of the European and the African initiatives become clearly apparent. While the GDP of the EC-6 made up more than 16 percent of the world GDP in 1968, the combined SSA GDP is currently between 1.5 percent and 2 percent of the global GDP only (Maddison data, measured in 1990 International Geary-Khamis dollar). For the whole continent, the value is only slightly above 3 percent. This implies that even the largest African group (COMESA) represents only a mere 1.1 percent of the global GDP, the smallest group (EAC) a negligible 0.2 percent. One might question whether such a relational size is actually important – but for some of the aspects concerned it certainly is. For example, market power arguments are in consequence of the small relational size very unlikely to play an important role in the African schemes and trade diversion is likely to be much more prevalent in schemes that are small compared to the rest of the world (see further discussion on trade diversion below). Nonetheless, the view that some of the African RI schemes may be seen as nuclei for larger
schemes remains valid. In several cases, RECs with only a small number of members have reached a distinctly more advanced status than their bigger counterparts (e.g. SACU vs. SADC, EAC vs. COMESA and SADC, UEMOA vs. ECOWAS), giving rise to the above described box-in-the-box phenomenon. As for the time being, extensive global (multilateral) or just continent-wide liberalisation must be ruled out for political and political economy reasons. Regional approaches – although small and maybe even too small – could at least be an improvement compared to the even smaller national units (see e.g. Mistry, 2000).

3.7.2 Homogeneity

Two assumptions inherent in the argument on homogeneity require closer consideration: are there really such small differences and – if so – does that necessarily exert an negative impact on the prospects of regional trade and regional South-South schemes or are the Linder effects more strongly backed by empirical data than the H-O assumptions and models?

3.7.2.1 Homogenous Africa?

With regard to the first question it must be first noted that there is no universally accepted definition of homogeneity or heterogeneity of economies. In general they can be divided into supply side approaches based on inputs and production and approaches that proxy production by trade data.

(1) Trade data proxy approaches

In absence of proper data on production and factor endowments at the domestic, intra-industry trade shares are sometimes used as a proxy for the homogeneity or heterogeneity of economies:

It is easy to see how IIT can serve as an indicator of economic similarity: for two countries to be able to export goods of a particular sector to each other, they both need to produce this good. Given the relative paucity of internationally comparable and sectorally disaggregated production and employment data, trade-based measures can provide uniquely comprehensive (though indirect) evidence on international specialisation patterns (Brülhart, 2009: 411f).

Although he admits that trade values are a ‘noisy measure of the underlying production values’ as export propensities vary significantly across sectors and regions and because of the well-known quality problems of data, he claims that the measure sufficiently well proxies the underlying production structures. In the same vein, Venables, Rice & Stewart suggest that ‘close countries do a lot of IIT because they have similar economic structures’ (Venables, Rice & Stewart, 2003: 1). However, intra-industry indices for the SSA economies are extremely low compared to almost all other regions. For the four Sub-Saharan regions analysed at five digit level, Eastern Africa is a winner by a nose, but its values do not exceed 4 percent for 2006. This compares poorly to values of 45 percent, 55 percent and 45 percent for Australia/New Zealand, North America and Western Europe respectively and of at least 34 percent, 27 percent and 18 percent for Southeast Asia/Pacific, Northeast Asia and South America. Only Southern and Central Asia exhibit values as low as the African ones. For the African RECs the values of internal intra-industry trade are 12 percent (CEMAC), 9 percent
(WAEMU), and 3 percent (EAC and SACU) respectively – compared to 46 and 45 percent for EU-15 and EU-27 respectively. Following the argumentation above this would imply that African economies are too heterogeneous to trade the same products with each other. Such a conclusion is certainly faulty. The numbers may partially be biased as the values are weighted for trade volumes and due to the small volume of intra-regional trade compared to extra-regional trade wrongly labelled transit trade (i.e. re-exports that are specified as exports) may exercise a strong influence. In addition, the similarity of African economies is particularly to be found in the primary sector, both with regard to agriculture and to mining. In both cases, the goods are highly dependent on specific natural conditions (particularly availability of natural resources but also climatic and soil conditions) and, even more important, almost entirely homogenous so that variety gains from trade play only a very minor role. This view is corroborated by Brülhart’s results, indicating for the global sample that primary goods (6 percent) are much less traded between the same countries than intermediate and final goods (35 and 27 percent respectively). Therefore, it would be more appropriate to compare the external trade patterns of these countries with the outside world or to compare its import demand structures with its export supply structures. To measure this, trade complementarity indices and revealed comparative advantage comparisons may be computed. This exercise leads one to draw a much grimmer picture of the trade prospects of African countries as the complementarity index figures are much lower than for other (successful) schemes in the West – although there are indeed interesting variations, giving much less reason for pessimism in the case of Cameroon, Madagascar, Djibouti, Togo, Mauritius, Ghana and particularly Senegal, Zimbabwe (at least at the time of writing) and Kenya with values close to those of MERCOSUR and half of the EU-6 ones – and, of course, the South African economy which was omitted in the analysis (Yeats, 1998: 82). Likewise, the revealed comparative advantages appear only to insufficiently match the import demand as none of the 17 analysed countries has a RCA in goods that have a combined total import demand from African countries above 15 % (Yeats, 1998: 99).

Based on trade similarity or trade intensity indices approach developed by Van Beers & Linnemann (1991) and relying on 1993 trade composition data, Oramah & Abou-Lehaf (1998) compute that the potential for improving intra-Africa trade is very modest. According to their results only some countries (Comoros, South Africa, Egypt, Sudan, Congo, Côte d’Ivoire, Gabon, Algeria and Cameroon) exhibit export structures that cover a significant part of the import structures of their African peers. Updating this exercise with current data UNECA/AU/AfDB (2010) by and large corroborate these results. Only Egypt and South Africa as well as some oil exporters (Cameroon, Nigeria and Algeria) evidence a high import-export correspondence index while even relatively strong manufacturers such as Ethiopia and Ghana show values below 25% for all countries of the region (UNEA/UA/AfDB 2010).

Opting for a gravity model instead the same UNECA/AU/AfDB (2010) report arrives at the conclusion that actual intra-African trade is well below the level predicted by a gravity model (see below for a more detailed discussion of the gravity model approach). For West and Central Africa, the comparison of predicted and actual trade shows that of the 22 countries eight have realised only less than 10 percent of the estimated values and another eight are below 50 percent so that almost three quarters of the countries not even reach half of the calculated potential so far. Only three countries fall into the 50 to 100 percent category and three countries show values that
are even higher than the estimated ones (Cote d’Ivoire, Togo and Sao Tome & Principe). The total trade weighted figure for the whole region is just above a third (36.4 percent) of the estimated level. For Southern and Eastern Africa, the situation is somewhat more positive. Of the 15 included countries, none falls below the 10 percent level but still almost a half (seven) of the countries is below the 50 percent mark. Of the remaining eight countries, six fall into the 50-100 percent category and two outperform the estimate (Djibouti and Mauritius) with South Africa reaching 95 percent. The trade-weighted average is likewise somewhat better than in West and Central Africa but also only barely reaches 40 percent of the estimated value. However, the values have to be treated very carefully as several trading partners are not considered and even some important African countries were not considered (for Southern and Eastern Africa for example Kenya). In addition, the empirical fit of the models is extremely weak with a R$^2$ of only 0.05 and 0.06 respectively. Interestingly, in one region the FDI variable is positive while in the other region it turns out negative, indicating that FDI in Southern and Eastern Africa is more market-searching while it is more resource-searching in Western and Central Africa. In addition, one might argue that in Eastern and Southern Africa more investment is regional and thus leading to intra-African trade rather than global trade, but this is not differentiated in the model. Even more surprising, the GDP difference has an insignificant positive sign in Southern and Eastern Africa, but a significant negative sign in Western and Central Africa, hinting on a Linder argument of demand similarity rather than an H-O Ricardian incentive for trade (compare the short digression on H-O vs. Linder in the next chapter below. Overall, these results thus indicate

that there are factors other than the relatively small size of African economies that are constraining intra-regional trade in Africa, and that there is significant scope for increasing intra-African trade through the removal of such constraints (Woolfrey, 2012).

**(2) Input and production proxy approaches**

However, it is quite evident that it is questionable whether current output or even trade structures should be used as proxy as they are likely to be influenced by trade policy. In fact, existing trade barriers (whether a result of political interventions such as tariffs or subsidies, administrative hurdles and inefficiencies, transport costs or weak infrastructure) make economic structures more homogenous than they would be under free trade as more goods have to be produced domestically. Assuming that trade sets in according to comparative advantage, *ceteris paribus* specialisation would follow and thus would make the economies’ export (and production) structures more heterogeneous.

Instead, educational levels or other levels of human capital, land-labour ratios, capital-labour ratios, and, as the latter is directly and the others indirectly connected to the prosperity of nations, with GDP per capita. It is obvious that median or modal values would be more suitable, but for want of almost any data with such specifications one has to recourse of the common arithmetic mean (see also Linder, 1961). As indicated in Table 5, the EU-27 exhibits indeed a significantly larger heterogeneity among its members with regard to their capital-labour ratios if measured by the range and standard deviation of GDP per capita than the African RECs.

However, if these measures are normalised with the mean values the picture changes drastically: although the EU-27 values comprise very poor new members of the EU, it
outperforms only three out of the seven RECs for coefficient of variation values and four out of seven for relative range values. Particularly the values for SSA and the AU imply a significantly stronger diversity than in the EU. If purchasing power adjusted values are used instead, the results are even more favourable for the African RECs and the AU – the latter even outperforming the EU-27 in the absolute range. The same applies for human capital-labour ratios.

Table 2: Heterogeneity in comparison (I): capital-labor ratio variation

<table>
<thead>
<tr>
<th></th>
<th>EAC</th>
<th>COMESA</th>
<th>CEMAC</th>
<th>UEMOA</th>
<th>ECOWAS</th>
<th>SADC</th>
<th>SACU</th>
<th>SSA</th>
<th>AU</th>
<th>EU-27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std deviation</td>
<td>210</td>
<td>3'312</td>
<td>3'943</td>
<td>257</td>
<td>664</td>
<td>3'174</td>
<td>2'235</td>
<td>2'587</td>
<td>2'859</td>
<td>21'456</td>
</tr>
<tr>
<td>Range</td>
<td>665</td>
<td>11'350</td>
<td>10'039</td>
<td>758</td>
<td>2'772</td>
<td>10'965</td>
<td>6'311</td>
<td>10'312</td>
<td>76'249</td>
<td>98'404</td>
</tr>
<tr>
<td>Coef. of var.</td>
<td>0.50</td>
<td>1.53</td>
<td>1.03</td>
<td>0.42</td>
<td>0.93</td>
<td>1.09</td>
<td>0.54</td>
<td>1.37</td>
<td>1.39</td>
<td>0.67</td>
</tr>
<tr>
<td>Relative range</td>
<td>1.57</td>
<td>5.24</td>
<td>2.63</td>
<td>1.24</td>
<td>3.88</td>
<td>3.78</td>
<td>1.52</td>
<td>5.48</td>
<td>36.94</td>
<td>3.08</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>EAC</th>
<th>COMESA</th>
<th>CEMAC</th>
<th>UEMOA</th>
<th>ECOWAS</th>
<th>SADC</th>
<th>SACU</th>
<th>SSA</th>
<th>AU</th>
<th>EU-27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std deviation</td>
<td>425</td>
<td>5'371</td>
<td>6'295</td>
<td>421</td>
<td>715</td>
<td>6'070</td>
<td>4'391</td>
<td>2'587</td>
<td>4'726</td>
<td>13'565</td>
</tr>
<tr>
<td>Range</td>
<td>1'301</td>
<td>13'222</td>
<td>15'592</td>
<td>1'142</td>
<td>2'956</td>
<td>21'162</td>
<td>13'059</td>
<td>10'312</td>
<td>84'827</td>
<td>69'748</td>
</tr>
<tr>
<td>Coef. of var.</td>
<td>0.40</td>
<td>1.39</td>
<td>0.98</td>
<td>0.35</td>
<td>0.56</td>
<td>1.13</td>
<td>0.59</td>
<td>1.37</td>
<td>1.29</td>
<td>0.46</td>
</tr>
<tr>
<td>Relative range</td>
<td>1.23</td>
<td>3.43</td>
<td>2.42</td>
<td>0.95</td>
<td>2.31</td>
<td>3.93</td>
<td>1.76</td>
<td>5.48</td>
<td>23.15</td>
<td>2.38</td>
</tr>
</tbody>
</table>

Source: Author, data from World Development Indicators.
Notes: 2007 per capita GDP in US dollar and PPP-adjusted dollar respectively.

As indicated in Table 3, all four (absolute and relative) measures of dispersion for the average years of schooling display a stronger heterogeneity for SSA than for Europe – even if South Africa (and Namibia for which no data are available) is excluded. Even compared to global measures the SSA absolute figures are surprisingly close while the relative measures again indicate a stronger heterogeneity. For the separate RECs the figures are less impressive, but still significant.

Table 3: Heterogeneity in comparison (II): human capital-labour ratio variation

<table>
<thead>
<tr>
<th></th>
<th>SSA</th>
<th>SSA without RSA</th>
<th>Europe</th>
<th>World</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Std deviation</td>
<td>1.77</td>
<td>1.56</td>
<td>1.40</td>
</tr>
<tr>
<td></td>
<td>Range</td>
<td>7.05</td>
<td>2.16</td>
<td>6.95</td>
</tr>
<tr>
<td></td>
<td>Coef. of variation</td>
<td>0.54</td>
<td>0.50</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>Relative range</td>
<td>4.97</td>
<td>1.52</td>
<td>0.77</td>
</tr>
</tbody>
</table>

Source: Author, data from Barro & Lee (2000).
Notes: Data for most recent information, missing entries left blank.

For a rough measure of comparative advantage and specialisation figures on employment rations in the primary, secondary and tertiary sector may be indicative – although these figures may be partially determined by current and past restrictive trade
policies. As indicated in Table 7, the standard deviation for the SSA economies’ specialisation patterns are larger than both the EU-27 and the global value, for the range it significantly exceeds the value for the EU for agriculture and services and slightly for industry while being only a very close second to the global figures.

One should nonetheless remain cautious not to exaggerate the validity and importance of these measures, in particular with regard to the relative ones that are biased upwards by the small GDP per capita measures. Other measures, such as for example expenditures on Research and Development (R&D), patents, number of technicians, sectoral Total Factor Productivity (TFP) etc. would probably evidence results that are much less favourable for the heterogeneity of African economies – but data insufficiencies particularly for the poorer countries do not allow for such an approach.

Table 4: Heterogeneity in comparison (III): specialisation by sector

<table>
<thead>
<tr>
<th></th>
<th>SSA</th>
<th>EU-27</th>
<th>World</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agriculture</td>
<td>Industry</td>
<td>Services</td>
</tr>
<tr>
<td>Mean</td>
<td>46.4</td>
<td>15.7</td>
<td>43.9</td>
</tr>
<tr>
<td>Std dev.</td>
<td>27.7</td>
<td>8.8</td>
<td>18.3</td>
</tr>
<tr>
<td>Range</td>
<td>77.2</td>
<td>28.9</td>
<td>54.0</td>
</tr>
</tbody>
</table>

Source: Author, data from World Development Indicators.
Notes: Data for most recent information, missing data left blank.

Nonetheless, it must be noted that there are indeed differences in poor (and not-so-poor) countries in Africa. Such differences are even noted by Collier himself. The above quote continues: ‘worse, the differences that do exist between poor countries will get reinforced rather than reduced’ (Collier, 2007: 164). This remark – being part of the winners and loser arguments discussed above – at least partially contradicts the homogeneity argument.

3.7.2.2 A short digression: Linder or H-O?

Reality has not proven very kind towards the H-O relative factor proportion theories. Following the formulation of the Leontief paradox (Leontief, 1954), several explanations have been indicated for trade flows that apparently go counter to the comparative advantages of the involved economies. Most of those explanations rather back than counter the argument. They either identify external influences and distortions (such as trade policies and particularly protectionism) as a source for the wrong specialisation or explain the specialisation as consistent with the theory if other input factors (as for example natural resources), the differentiation of input factors or differing factor productivities (e.g. human capital vs. labour, technology) are taken into account. Empirical tests of Linder’s depiction of trade have produced moderately corroborative results of his claim: the inclusion of a variable ‘absolute difference in GDP per capita between trading partners’ in gravity analyses (see below) have quite robustly produced negative signs if controlled for other factors and regressed against trade volumes. This applies both for rich and poor countries – but the effect appears to be rather small in magnitude (Arnon & Weinblatt, 1998; Bernasconi, 2009; Francois &
Kaplan, 1996; Frankel, Stein & Wei, 1995, 1997; McPherson, Redfearn & Tieslau, 2001).

Although this empirical proof is relatively robust, one must note that the empirical data even more strongly support the Helpman-Krugman theories, predicting a positive relation between the sum of the logs of the GDP per capita values of two trading partners and the log of their bilateral trade. This simply translates into the fact that economies will trade more as they become rich (as is the case also in reversal). This in turn implies that much of the homogeneity argument – as also much of the size argument – is in reality a slightly concealed argument on poverty rather than on homogeneity. As such, it is just another variety of the poverty trap discussion of the small size of economies.

Both, theory and empirics indicate that the effect appears to be stronger for some products while H-O considerations play an important role for other classes of goods: while the latter has by definition strong effects on natural resources and agricultural goods, the trade with manufactured products tends to be more strongly determined by the Linder effect. And indeed, Linder himself saw his theory as only applicable for industrial products while he retains the factor proportions approach for primary products due to the non-endowment of some countries, large quantities of consumption and clear signalling of demand, basic nature and homogeneity of the products, and little inventive effort (Linder, 1961: 92). This distinction between primary products and manufactures implies that trade patterns are partially explained by relative land endowments (and climate), but only to a much smaller degree by relative endowments with labour, capital and even technology. As Linder points out, this corroborates theories and scattered observations on comparative advantage prior to the H-O extension to other factors than land, notably capital-labour ratios (Linder, 1961: 86). For manufactured products particularly the growing share of intra-sectoral trade indicates the importance of the Linder hypothesis. Despite this clear distinction Linder emphasises that even in the primary sector such exports without corresponding domestic demand are usually initiated by foreign entrepreneurs and thus he suggests that ‘[i]f entrepreneurship could not move internationally, it is quite possible that our proposition could be applied to trade in primary products as well’ (Linder, 1961: 93). This argument hints on one of the probably most important reasons why demand structures (and hence considerable parts of Linder’s arguments) may have lost some of their significance in recent years. Note the example on Cadillacs in Saudi-Arabia:

> It will be evident that, although, for instance, the demand for Cadillacs in Saudi-Arabia is not totally absent, this kind of unrepresentative demand is not sufficient to turn luxury cars into potential export products for Saudi-Arabia (Linder, 1961: 87).

Although this holds still true as Cadillacs are not produced in Saudi-Arabia, there are frequent examples of situations where countries – particularly in Asia – have introduced production of goods that were initially only targeted on international markets – and only later on met or generated domestic demand. This seems to be mainly a result of globalisation that leads to easier information flows (via media and physical or virtual contacts) and strong foreign involvement in international markets. Thus, relative endowments may even have gained in importance in such sectors again.
3.7.3 Preference erosion

A glance at the existing applied MFN tariffs as notified to the WTO gives a completely different picture than the one perpetrated by those claiming that regionalism has no effects due to already low tariff levels. While all regions and most countries maintain MFN tariffs of considerable magnitude, Sub-Saharan Africa remains amongst the most protected regions (see Table 8) despite the effects of the structural adjustment programs and other trade reforms. This applies particularly to the general tariff structure (simple average of the applied MFN tariffs and the percentage of tariffs higher than 15 percent). The same holds true for bound tariffs. The tariffs of the SSA are at an average of 59.2 percent (plus 13.6 percent of the countries without any bound tariffs) and thus distinctively higher than in the other regions with mean bound tariffs of 26.9 percent. Likewise, the binding coverage is, at 44.9 percent on average, considerably smaller than the one of the remaining regions (on average 76.9 percent).

Table 5: Tariff levels and peaks

<table>
<thead>
<tr>
<th>Region</th>
<th>MFN applied simple average</th>
<th>MFN applied (duties &gt; 15%)</th>
<th>MFN peaks (highest applied tariff)</th>
<th>Perc. countries with peaks &gt; 100%</th>
<th>Av. ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
<td>Max</td>
<td>Min</td>
<td>Mean</td>
</tr>
<tr>
<td>EU candidates</td>
<td>6.8</td>
<td>6.5</td>
<td>9.6</td>
<td>4.9</td>
<td>6.1</td>
</tr>
<tr>
<td>USA &amp; Canada</td>
<td>6.0</td>
<td>6.0</td>
<td>5.5</td>
<td>3.5</td>
<td>15.8</td>
</tr>
<tr>
<td>Latin America</td>
<td>9.3</td>
<td>10.1</td>
<td>12.5</td>
<td>16.7</td>
<td>21.3</td>
</tr>
<tr>
<td>Arab States</td>
<td>6.0</td>
<td>5.3</td>
<td>11.5</td>
<td>3.3</td>
<td>6.3</td>
</tr>
<tr>
<td>Asia</td>
<td>9.9</td>
<td>9.8</td>
<td>22.1</td>
<td>0.0</td>
<td>18.3</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>7.9</td>
<td>6.8</td>
<td>15.6</td>
<td>3.0</td>
<td>7.1</td>
</tr>
<tr>
<td>EU-27</td>
<td>6.0</td>
<td>5.4</td>
<td>15.9</td>
<td>5.4</td>
<td>6.6</td>
</tr>
<tr>
<td>Caribbean</td>
<td>11.2</td>
<td>9.8</td>
<td>30.2</td>
<td>2.8</td>
<td>29.0</td>
</tr>
<tr>
<td>Other Europe</td>
<td>8.0</td>
<td>7.7</td>
<td>8.6</td>
<td>7.6</td>
<td>4.8</td>
</tr>
<tr>
<td>North Africa</td>
<td>17.9</td>
<td>19.3</td>
<td>26.8</td>
<td>0.0</td>
<td>32.5</td>
</tr>
<tr>
<td>Pacific</td>
<td>9.9</td>
<td>10.2</td>
<td>17.5</td>
<td>2.9</td>
<td>19.8</td>
</tr>
<tr>
<td>SSA</td>
<td>13.4</td>
<td>12.0</td>
<td>28.9</td>
<td>3.5</td>
<td>38.8</td>
</tr>
</tbody>
</table>

Source: Author, data source UNCTAD and WTO.
Notes: All but the last column in percent. The last column shows the average (mean) ranking of the regions and determines the order in the table (ascending from less to more protectionist). Tariff peaks above 1.000% are not indicated more specifically in the source and have been included in the calculation with a value of 1.000%.

However, tariff peaks are in SSA – compared to the other regions and contrary to the prevalent perception – relatively rare and moderate, indicating that non-African countries deploy their tariff protection more targeted and strategic while many African countries rather exhibit generally high tariff levels. The high levels, however, imply that at least for the moment the scope for regional economic integration in Africa is not strongly limited by past tariff cuts and thus preference erosion. Future multilateral liberalisation rounds might however change this situation. Collier even suggests that
the West should countervail the continuing preference erosion of the ACP countries by negotiating North-South (supra-) regional schemes such as the Economic Partnership Agreements (EPAs) and the Africa Growth and Opportunity Act (AGOA) while upholding higher tariffs towards Asia in order to create and maintain some space for African export growth to the North (Collier, 2007: 167).

For the EAC specifically the picture is mixed in this regard for the individual partner countries. As indicated above, all five members in fact fully implemented the phase-out of intra-regional tariffs by 2008. As Table 9 shows, this implied considerable decreases of tariffs, particularly for Kenya and Tanzania, in a magnitude of 14 to 20 percent for simple and trade-weighted averages from 2000 to 2010 (logically, as tariffs where without exception reduced to zero, these reductions correspond to the previous intra-regional tariff levels).

Table 6: Changes in intra- & extra-regional tariffs and preferential margins

<table>
<thead>
<tr>
<th></th>
<th>EAC</th>
<th>EAC- w</th>
<th>World</th>
<th>World- w</th>
<th>Pref- orig</th>
<th>Pref- orig-w</th>
<th>Pref- post</th>
<th>Pref- post-w</th>
<th>Pref- chang e-abs</th>
<th>Pref- chang e-abs-w</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>-19.15</td>
<td>-20.00</td>
<td>-6.11</td>
<td>-9.40</td>
<td>0.73</td>
<td>4.72</td>
<td>-12.13</td>
<td>-8.88</td>
<td>-12.86</td>
<td>-13.60</td>
</tr>
<tr>
<td>Tanzania</td>
<td>-16.48</td>
<td>-13.91</td>
<td>-4.92</td>
<td>-4.93</td>
<td>-1.38</td>
<td>0.84</td>
<td>-12.94</td>
<td>-8.14</td>
<td>-11.56</td>
<td>-8.98</td>
</tr>
<tr>
<td>Uganda</td>
<td>-4.11</td>
<td>-3.31</td>
<td>3.92</td>
<td>1.78</td>
<td>-4.05</td>
<td>-2.70</td>
<td>-12.08</td>
<td>-7.79</td>
<td>-8.03</td>
<td>-5.09</td>
</tr>
<tr>
<td>Rwanda (2001)</td>
<td>-2.10</td>
<td>-2.04</td>
<td>0.07</td>
<td>-0.21</td>
<td>-7.79</td>
<td>-4.24</td>
<td>-9.96</td>
<td>-6.07</td>
<td>-2.17</td>
<td>-1.83</td>
</tr>
<tr>
<td>Rwanda (2006)</td>
<td>-7.07</td>
<td>-3.75</td>
<td>-8.57</td>
<td>-4.11</td>
<td>-11.46</td>
<td>-6.43</td>
<td>-9.96</td>
<td>-6.07</td>
<td>1.50</td>
<td>0.36</td>
</tr>
<tr>
<td>Burundi (2002)</td>
<td>-4.84</td>
<td>-4.70</td>
<td>-12.12</td>
<td>-8.30</td>
<td>-17.06</td>
<td>-8.64</td>
<td>-9.78</td>
<td>-5.04</td>
<td>7.28</td>
<td>3.60</td>
</tr>
<tr>
<td>Burundi (2006)</td>
<td>-16.48</td>
<td>-17.93</td>
<td>-6.05</td>
<td>-12.45</td>
<td>0.65</td>
<td>0.44</td>
<td>-9.78</td>
<td>-5.04</td>
<td>-10.43</td>
<td>-5.48</td>
</tr>
</tbody>
</table>

Source: Author’s calculation, data source COMTRADE/WITS.
Notes: Left column indicates importers. If not otherwise specified pre-integration tariffs are 2000 data. For Rwanda only 2001 and 2002 data are available respectively. As tariffs increased from 2001/2002 for these countries also 2006 figures are reported. Columns marked ‘EAC’ and ‘World’ show decreases in intra- and extra-regional tariffs respectively (the former also indicating pre-integration tariff levels if the negative sign is removed). Columns ‘pref-orig’ and ‘pref-post’ show pre-integration and post-integration preferential margins with negative figures indicating preferences for the EAC partner countries while positive figures show preferences for ROW. Column Pref-change-abs’ show absolute reductions or increases in the preferential margin with negative values indicating a stronger and positive values a weaker regional preferential margin. Columns marked with ‘w’ show weighted data correspondingly.

Due to Uganda’s much lower pre-integration tariffs, reductions to zero only accumulated to an average decrease of four and three percent for simple and weighted averages respectively. Rwanda’s reduction from 2001 to 2010 was even only a meagre two percent for both calculations, but as tariffs towards its future EAC partners increased prior to Rwanda’s accession, a comparison with tariff levels in 2006 indicates that tariffs were reduced from seven and almost four percent for simple and weighted averages. Burundi likewise increased tariffs between 2002 and 2006 from below five to 16.5 (simple) and 18 (weighted) percent, thus strongly cutting tariffs compared to the levels immediately before accession, but not compared to levels that were already implemented around the millennium. External tariffs where decreased for all countries but Uganda (and Rwanda if compared to 2001 levels). Interestingly, pre-
integration preferential margins are very low for all countries but Rwanda (2006) and Burundi (2002). For Kenya and Burundi as well as for Tanzanian weighted values 2000 figures even show a slight preferential margin for ROW trade, for Kenyan weighted values this margin is even at 4.7 percent. As indicated above, due to changes towards regionalising the preferential margin, a clear, yet relatively small preferential margin is nonetheless conceivable on average in 2010 at ten to twelve percent (unweighted) that is further decreased to only five to nine percent if tariffs are weighted for trade. While this MFN simple average corresponds to the average figures for Sub-Saharan Africa reported above, it remains questionable whether such relatively low CET tariff levels are likely to exert a strong regionalising influence, particularly when weighted figures are taken into account.

Still, when digging deeper into disaggregated data it becomes apparent that the tariff schedule is quite diverse with specific tariff lines frequently reaching levels of 25 percent with some hikes that reach even three digit levels, thus definitely exerting a strong protection against outside trade.

### 3.8 Empirics V: A closer look at NC aspects for the EAC

As indicated above the caveats about size and homogeneity of integrating countries apply to the EAC to a rather strong degree, given its small membership base of only five countries. In the following sections it will be analysed in-depth what kind and magnitude of effects such a rather small, but comparatively well implemented scheme can have. To this end, we report and analyse results from several studies and calculate data for those approaches for which no analysis of the EAC exists. In addition, some descriptive statistics and a novel approach to calculate trade creation and diversion are added from primary data. In each case, the focus is first laid on the question of whether or not the region as a whole is rather trade-creating or -diverting. In a second stage, it is analysed who the likely winner and loser according to the respective approach are.

We first shortly report what CGE analyses have to say on the absolute and relative gains and losses from EAC integration. As indicated above, we are highly sceptical of the validity of these results as they are a numerical application of the theory rather than a true empirical strategy (3.8.1). We then compile a number of descriptive statistics that shed some light on the distribution of absolute and relative growth patterns of EAC and ROW trade, both individually and in relation to each other, indicating data for the entire bloc as well as for individual countries separately (3.8.2). However, these descriptive statistics only give a very vague picture on whether or not the reported increases in trade are a result of trade creation or trade diversion. We then report results from Finger-Kreinin calculations (3.8.3) for the individual countries and emulate and extend the ARCA approach proposed by Yeats (1998) and refined by Kokko, Mathå & Gustavsson Tingvall (2007) for the EAC (3.8.4). Subsequently, we focus on disaggregated effects at the two-digit level as changes in different directions of different products might offset each other and thus disguise and underreport trade creation and diversion. Again, results for the whole bloc and individual countries are indicated separately in order answer both questions on the total gain or loss from regionalism for the entire region as well as on winners and losers (3.8.5). In addition, we propose a relatively simple test for the extent to which such changes are really a result of the (absolute and relative) changes in the tariff structure and not a result of
other factors. By comparing absolute and relative developments in trade with absolute
and relative changes in tariffs for EAC, ROW and the EAC/ROW share on a two-digit
level (3.8.6).

This empirical analysis is very extensive and includes a large range of methodologies
that appear very similar at first sight. However, even small differences in methodology
yield in some instances significantly different results. For the approaches selected for
application to the EAC, the results turn out to be actually relatively consistent over the
different approaches (see overview of results in chapters 3.8.7 and 3.8.8). We have
opted to nonetheless report all possible approaches in their entirety to show that the
empirical approaches to answer the apparently ‘simple’ question of trade creation and
trade diversion are anything but clearly established. Readers with interest in the results
rather than the intricate differences in methodologies are advised to jump to the
synopsis in chapter 3.9.

3.8.1 **Computable General Equilibrium (CGE)**

CGE studies indicate that particularly Uganda will lose due to the increase in its
external tariffs to meet the CET while Kenya and Tanzania had to decrease their
external tariffs from significantly higher levels than Uganda’s pre-integration tariffs
(DeRosa, Obwona & Roningen, 2002; Othieno & Shinyekwa, 2011). As indicated
above, given the current state of CGE analysis, this however only implies that such
effects should take place if the economies react according to NC assumptions (and
nothing else).

3.8.2 **Descriptive statistics on absolute and relative trade growth**

Descriptive statistics already give a surprisingly good impression of the overall
directions of the results. For such a first impression, we calculate absolute and relative
developments of total trade patterns, intra-regional trade shares and trade intensity
indices. Since only imports count inside the NC framework, we focus only on the
import side in this section and use exports only as mirror statistics (note, however, that
other authors also use average data of imports and exports, but this actually incorrect
based on the NC theoretical framework).

3.8.2.1 **Intra-regional import shares of the EAC**

For our main example, the EAC, the development from 2000 to 2010 shows a steep
growth in total intra-regional imports. Depending on the choice of the four alternative
measures used (EAC import statistics including and excluding petroleum as well as
EAC export data as mirror statistics including and excluding petroleum), intra-regional
imports triple or even quadruple over a period of ten years. This is equivalent to an
average annual growth rate of stunning 29 to 54 percent (45 percent for mirror
statistics including petroleum, 29 percent of import statistics including petroleum. 54
percent for mirror statistics excluding petroleum and 47 percent for import statistics
excluding petroleum). The years from 2005, when most tariffs cuts came into effect, in
fact show the strongest growth, supporting on first sight that the growth in intra-
regional imports may really be an effect of the regional integration efforts. However,
over the same period from 2000 to 2010 exports to ROW grew from slightly below five billion USD to ten to twenty billion USD depending on the specification chosen (see Figure 4).

Figure 4: Intra-EAC imports

![Graph showing Intra-EAC imports]

Source: Author, data source Comtrade/WITS.  
Notes: Volumes of total trade in thousand USD. Mirror data are export data of EAC. Data marked ‘ex 27’ exclude HS 1996 two digit tariff line 27, i.e. petroleum and gas.

Putting the astonishing EAC growth in this context of general import growth of the EAC economies certainly cautions against enthusiasm. Interestingly, even trade to other Sub-Saharan countries – with most of whom no tariff cuts were implemented over this period – grew at least at the same pace as intra-EAC trade, thus casting some doubts on the preferential gains. A better impression on the relative development of the regional trade intensity thus can be obtained by a comparison of intra- and extra-regional trade. For three of the four specifications the intra-regional import share of the EAC shows an oscillating tendency with a possibly a slight downward trend from 5-8 to 5-6 percent. Mirror statistics, i.e. export figures, show an oscillating trend around the proverbial 10 percent threshold. The import figures for extra-regional trade, however, differ significantly from the export data mirrors (although the graphs look almost alike): imports from ROW start at significantly higher levels between four and five billion USD and steeply grow to values between 15 and almost 25 billion. Surprisingly, the ROW import data of the EAC countries themselves are considerably higher than the mirror statistics, thus reversing the picture for intra-regional EAC trade.
Figure 5: EAC intra-regional imports compared to ROW imports

Source: Author, data source Comtrade/WITS.
Notes: Volumes of total trade in thousand USD. Mirror data are export data of EAC and ROW. Data marked ‘ex 27’ exclude HS 1996 two digit tariff line 27, i.e. petroleum and gas. First table depicts total EAC and ROW imports and second table the relative size of intra-EAC in total EAC imports in percent.

This can be partially explained by the fact that non-regional trade is less prone to under- and non-declaration, thus not artificially decreasing the value of imports vis-à-
vis export figures for which an undervaluation is uninteresting as rarely or never export duties are collected. However, this does not explain why import mirror (and thus ROW export) statistics are even significantly lower than those data on imports from ROW that the EAC countries report themselves.

The only logical explanation that we can think of – apart from outright mistakes in data collection – is that apparently some countries (and among them important trading partners of the EAC) fail to declare all their exports to the EAC. Given the particularly striking difference for trade including tariff line 27 (petroleum) and the much less striking difference for the mirror exercise when excluding this tariff line, it must be assumed that this applies particularly to petroleum-exporting countries. Because of the much higher levels of extra-regional imports, the intra-regional import shares are much lower than the intra-regional export shares – an observation that implies that the EAC has a considerable trade deficit towards ROW. Tariff line 27 again plays an interesting role. Particularly for the EAC (non-mirror) import data the values for the intra-regional share are higher including trade in petroleum and gas than without it – again a clear indication of re-exports. Exactly at the implementation of the EAC in 2006 the two lines cross, leaving the values for the import share excluding petroleum higher than those for total imports. This might imply that trade reforms connected to the EAC treaties have limited the faulty declaration of re-exports of petroleum. The main difference for the level of import shares, however, appears not to be the inclusion or exclusion of tariff line 27 but rather the use of import or mirror (export) statistics: while the import statistics of the EAC countries indicate levels between five and eight percent, mirror statistics indicate significantly higher levels of seven to fifteen percent. More importantly, the import statistics show a by and large stagnant tendency with considerable losses in 2009 / 2010.

While this trend is corroborated by the significantly more volatile mirror statistics including petroleum, the data for mirror statistics excluding petroleum even indicate a slight increase from nine to eleven percent – a gain that was mainly realised in the years following the implementation of the EAC tariff reduction schedule. At first sight, the level and development of EAC intra-regional imports is thus very disappointing. However, there might also be an alternative view on the increasing trade with ROW that is often overlooked in analyses like those presented above and in those described in the chapter below. It may be rightly argued that the rising external trade volumes are to some extent a result of the simultaneously decreasing external tariffs of the respective regions. This in turn is a key demand of the open regionalism school (see below in chapter 4.1.4) and other authors who advocate for such an approach in order to prevent the adverse welfare economic effects of trade diversion. Likewise, the somewhat better export statistics signified by the better mirror statistics (and supported by import data as mirrors in the discussion further below in chapter 5.4.2) may simply imply that an increase in regional exports has somewhat mitigated a general trend of rising ROW imports and thus has at least prevented an even larger trade deficit.

### 3.8.2.2 Trade intensity indices of the EAC

Another perspective on the comparatively low levels of EAC (and other African as well as developing regions in general) trade shares appears warranted. For the trade index approach the EU-27 with its intra-regional trade share of around two thirds (though slowly shrinking since 2003) the intra-regional trade intensity index is only 1.6 to 1.8.
African blocs, on the contrary, boast intra-regional trade intensity indices with high two-digit and sometimes even three-digit figures. For example, for the EAC these values are between 30 and 170 for imports (and with even much higher figures for exports). The reason is simple: a part of the trade from EU countries to EU countries must be explained not by regional integration and not even by closeness, but by the fact that EU-27 countries are simply the most attractive export market, constituting 36 to 40 percent of world trade. A more definitive answer hardly appears to be possible given the low data quality (as exemplified by the huge differences that surface when looking at mirror statistics and the strange role tariff line 27 plays in intra-regional trade) as well as the attribution problems (since the development of trade is obviously also strongly influenced by a number of factors outside the realm of regionalism and trade policy in general).

Figure 6: EAC trade intensities for imports

While for the latter some of the methodologies discussed below offer (partial) solutions, the data quality issues unfortunately compromise the quality of the results for all of the approaches at least to the same degree as they do for the calculations above. Still, this analysis clearly suggests that factors outside the realm of regionalism and trade policy have a significant effect on the development of the volumes, directions, and composition of the trade with partner countries and the rest of the world. The absolute and relative changes are thus not necessarily a result of the regional schemes. This implies that the effects of regionalism may well be smaller than assumed at first sight. Conversely, the importance of such factors not directly related
to trade policy may also imply that regionalism has been more successful in boosting regional trade than visible by a simple analysis of the data. It is at least perceivable that outside factors promote a globalisation and thus de-regionalisation of trade patterns while the implementation of a regional scheme has led to a rise in regional trade and thus countered this trend, leaving a more or less stagnant trend or, in our view, in fact slightly positive trend of intra-regional trade for the EAC.

3.8.2.3 Intra-regional export and import growth and shares of the EAC partners

When calculating the same statistics for the EAC partner states separately, it can first be noted that all five countries appear to have rising regional imports, with most countries taking in fact a significant hike in the year of first implementation (2006).

Surprisingly, Kenya's role in intra-regional imports is initially very small – as discussed later, the same is not true for regional exports where Kenya initially had a dominant position. Safe for one specification (mirror data, including tariff line 27), the statistics clearly show that Kenyan regional imports in absolute (sic!) figures are more or less at par with those of Rwanda and Tanzania and significantly lower than Ugandan regional imports. This is certainly striking in view of the fact that the Tanzanian GDP stays at three quarters of the Kenyan GDP, the Ugandan GDP just above half and the Rwandan at a mere fifth (see Annex 1a). When focusing on import shares instead, Kenya's weak reliance on regional imports becomes even more apparent: less than one percent of Kenyan imports stemmed from the region prior to the formation of the EAC (see Annex 1b). Both the absolute figures and particularly the relative figures, however, show a very strong growth of Kenyan imports from the region. Albeit from a very low level of less than one percent, the regional import share more than doubled following EAC implementation from 2006 onwards. Mirror statistics show a somewhat more volatile picture and a higher general level, but with a similar increase of roughly one percent (from four to five percent).

Although Tanzania's regional imports appear to be rising even more strongly than the EAC average, due to likewise soaring ROW imports the intra-regional trade share is even slightly decreasing according to all four specifications from moderate levels between four and nine percent.

Uganda's intra-regional trade development is similar to the one of Tanzania, but the tendencies are more pronounced in most regards. The initial intra-regional import shares are much higher with values of 18 percent for Ugandan figures excluding tariff line 27 and between 29 and 37 percent for the other specifications. All four specifications show a significant drop in the intra-regional trade share down to below 15 percent for Ugandan figures and down to slightly above 25 percent for mirror statistics (note that total and ex 27 figures suddenly become very close in 2006 for both Ugandan and mirror statistics while ex 27 figures were much lower before).

Rwandan imports show a pronounced increase in regional focus from already high initial levels between 13 and 20 percent. While Rwandan data show an increase to slightly less than 30 percent, mirror statistics consistently show figures between 35 and 40 percent in the years 2007-2010, in both cases thus roughly doubling the intra-regional import share. However, it is doubtful whether this very strong relative development that goes alongside with the strongest import growth development of all EAC economies is in fact mainly due to EAC integration. Rwanda has joined the union
later and almost all the increase took place prior to 2006 – from that point onwards particularly the Rwandan statistics rather show stagnancy while the very volatile mirror statistics can only be interpreted as expansionist with a considerable degree of goodwill. In other words, either this strong increase took place in anticipation of preferential tariff cuts or it is rooted in other, non-integration related causes.

Burundi finally shows a marked decrease in its initially very high intra-regional import share of 20-40 percent and a marked increase in 2007, but this gain slowly fades away over the next years, leaving for the total trade figure a markedly negative trend while the ex 27 trend is more or less stagnant. Mirror statistics, however, show a strongly increasing trend from slightly above ten percent to 40 percent with most of gains coinciding with the early stages of EAC implementation and a stagnant tendency in the years from 2008 – again a surprising result given that Burundi started with its tariff phase out later than the original three members of the EAC did.

From this descriptive picture, a first idea about winners and losers can be obtained. It appears that from a NC perspective, Kenya is a clear loser given that it has strongly growing intra-regional import shares. However, given that Kenyan regional import share was by far the lowest, this appears to be rather positive from an equalisation and cohesion perspective. In other words, the originally strongest country appears to have lost some of its dominance and might have been the major bearer of trade diversion – although it cannot be ruled out that other, non-integration-related aspects such as the violence-ridden 2007 election and its aftermath might have played a significant role in the development. This is certainly an unexpected outcome given the concerns put on the table by Collier, Venables and others. Tanzania and particularly Uganda appear to be the clear winners from a NC perspective as both have evidenced markedly decreasing intra-regional import shares from moderately high and high levels, respectively. This appears to rule out a dominance of trade diversion almost by definition. Particularly with regard to Uganda, this result is extremely surprising and puzzling. Theory and common sense would assume that a country that is strongly lowering preferential tariffs while even increasing external tariffs (Uganda had to do as its pre-integration external tariffs were lower than its integration partners’ and lower than agreed upon for the CET), will have a rapidly increasing intra-regional import share and, as a consequence, dominant trade diversion. However, this has clearly not been the case. For the two smaller economies, results are less clear but especially Burundi appears to have experienced a strong increase in its regional exports with the potential of trade diversion making up a considerable share of it.

3.8.3 Finger-Kreinin index

Contrary to neoclassical theory and consequently the CGE estimates but in line with our descriptive statistics above, Lopez Gonzalez & Cirera (2012) observe that although Kenya and Tanzania lowered average external tariffs as a result of the EAC CET and Uganda had to increase its average tariff levels, Uganda’s intra-regional import share did not increase. In fact, it strongly decreased instead, suggesting ‘that there was little trade diversion for Uganda as a result of EAC integration’ (Lopez Gonzalez & Cirera, 2012: 28). However, the picture changes when relying on the Finger-Kreinin index. Again taking the EAC as an example, the data reveal that for Burundi, Kenya and Uganda the trend shows increasing similarity and thus potentially indicates trade-diverting forces while for Tanzania and Rwanda no such developments are detectable.
(see Table 13 taken from Lopez-Gonzales & Cirera 2012). While for Burundi, Kenya and Rwanda the values become more similar both in the pre-CU period 2000-2005 and the phasing-in period 2005-2010, Tanzania und Rwanda both show such a trend in the pre-CU period, but for the latter period the trend is reversed, leading eventually to a similar level as in the year 2000.

Alternatively, Lopez Gonzalez & Cirera (2012) also calculate a Finger-Kreinin index comparing 2010 intra-regional import patterns with ROW import patterns from 2000 and 2005. Subtracting the values for the synchronic comparisons for 2000 and 2005 confirms, but softens these tendencies. Tanzania still shows strong trade creation in both periods and Rwanda in the second period. Burundi shows strong trade diverting tendencies only in the first period (thus before its accession to the EAC) and only negligible tendencies after 2005.

Table 7: Status and trends of similarities between EAC and ROW imports

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
<th>FKI between imports from the world in 2000 and imports from EAC in 2010</th>
<th>FKI between imports from the world in 2005 and imports from EAC in 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>0.157</td>
<td>0.183</td>
<td>0.286</td>
<td>0.239</td>
<td>0.223</td>
</tr>
<tr>
<td>Rwanda</td>
<td>0.153</td>
<td>0.300</td>
<td>0.154</td>
<td>0.174</td>
<td>0.222</td>
</tr>
<tr>
<td>Kenya</td>
<td>0.065</td>
<td>0.092</td>
<td>0.158</td>
<td>0.138</td>
<td>0.147</td>
</tr>
<tr>
<td>Tanzania</td>
<td>0.362</td>
<td>0.409</td>
<td>0.323</td>
<td>0.331</td>
<td>0.317</td>
</tr>
<tr>
<td>Uganda</td>
<td>0.214</td>
<td>0.240</td>
<td>0.352</td>
<td>0.245</td>
<td>0.284</td>
</tr>
</tbody>
</table>


For Kenya, this alternative calculation significantly reduces its trade-diverting tendencies as measured by this index after 2005. According to this calculation, Uganda is the only country that still shows increasing similarity patterns of the intra-regional imports with former ROW import patterns. This is, one might claim, anything but surprising given that Uganda was the only country that had to increase its external tariffs in order to meet the CET standard.

From this perspective, Tanzania and Rwanda hence stand out as the explicit winners and Uganda as the only unfortunate loser while for Kenya and Burundi losses seem to have been at least contained from that time onwards when integration efforts began exerting an influence. Particularly the results for Uganda are in stark contrast to the results from the descriptive analysis above (and from most analytical approaches discussed below as well).

3.8.4 Revealed comparative advantage approach

Comparing the results for the EAC with those for the EU of Kokko, Mathä & Gustavsson Tingvall (2007) shows that the data for the top 10 industries in absolute and relative ROI gains of the regional bloc are comparable to those of the EU in the first phase. This indicates relatively strong trade diversion with only one and three of
ten industries showing positive ARCA’s respectively (see annex 2a). The picture however changes significantly when considering the top 20 industries, indicating that ten, four and seven industries have positive ARCA values for the three rankings respectively. The calculations appear to be also more favourable if instead of the three measures Kokko, Mathä & Gustavsson Tingvall have chosen, alternative measures are selected for ranking the industries by importance. Five out of the top ten and eight of the top twenty industries have positive ARCAs when ranked according to relative growth figures of intra-EAC trade. When taking the development of the percentage of intra-EAC trade in total trade of the EAC indicator for the ranking, the respective number of tariff lines increases to four and six out of the top ten and nine and eleven out of the top twenty industries (for the relative development of the EAC share in total trade of the EAC, measured by deducting the post integration share from the pre integration share and by dividing the post integration share from the pre integration share respectively). Still, this picture conveys the impression that according to most measures, trade diversion seems to dominate trade creation as rarely even only half of the most important tariff lines indicate positive ARCA’s.

However, one has to keep in mind that of the 95 two-digit tariff lines only 25 and thus merely a little more than a quarter have a positive ARCA (indicating that the EAC has revealed comparative advantages in a quarter of the cases, ROW in the remaining three quarters). It appears thus more correct to set the occurrence of positive ARCAs in the top ten or twenty – or even in the first half of the distribution – in relation to the occurrence outside these groups. Such a calculation (see annex 2b) arrives at results that indicate a much stronger focus on trade creation than on trade diversion compared to the approach followed by Kokko, Mathä & Gustavsson Tingvall (2007). In none of the specifications, less than 60 percent of the positive ARCAs are in the upper half of the distribution. The same applies for positive ROI developments. This indicates at least a slight dominance of positive ARCAs in the stronger growing sectors. Focusing on the upper 30 percent reveals that in all specifications more than a third of the tariff lines are concentrated in this strongly trade-creation suggesting area. In several cases, the values are close to or even above the 50 percent threshold. For the upper 20 percent the picture is a bit less unambiguous, but still five of the six specifications show values greater than the 20 percent that would be expected if ARCAs were evenly distributed.

This indicates that trade diversion could be indeed an issue, but that on the other hand trade creation in sectors where revealed comparative advantages exist seems to be rather strong given that those tariff lines with RCA tend to be concentrated in sectors with stronger growing regional trade. In theory, one could also calculate these figures for the individual partner states to get a better view on winners and losers. However, there are methods described further below that appear to be more suitable for analysing the question of winners vs. losers than the ARCA approach.

### 3.8.5 Disaggregated effects

Given these somewhat conflicting results of the Finger-Kreinin index and the RCA approach it appears worthwhile to take a closer look at relative trade developments at a disaggregated level. To this end we first compare EAC and ROW growth by tariff line and then move on to weigh the developments by trade volumes. We then analyse whether relative changes take place in product groups where EAC or ROW was
dominant prior to integration both by two-digit tariff lines and by trade volume. This approach has not been tested yet so far, but in our view as much (and as little) justification to be used as the other approaches discussed above.

3.8.5.1 Disaggregated effects on two-digit level

We first compare average EAC imports from EAC and from ROW for the pre-integration period 2000-2005 as well as for the post-integration period 2006-2011 as trade appears to be too volatile and/or poorly reported to compare a single baseline year with a single final year. The data show that while intra-EAC trade only shrinks for three two-digit tariff lines and thus is in line with the theory, extra-regional trade also only shrinks in three tariff lines for absolute values. This seems to indicate that almost no trade-diverting influences exist at all given that ROW appears not to be losing any ground and definitely does not lose ground stronger than the EAC.

Table 8: Regional trade share development according to tariff lines

<table>
<thead>
<tr>
<th>Number of tariff lines, change in percentage</th>
<th>Positive</th>
<th>Stagnant</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive &gt; 0%, Negative &lt; 0%</td>
<td>72</td>
<td>-</td>
<td>24</td>
</tr>
<tr>
<td>Positive &gt; 1%, Negative &lt; 1%</td>
<td>47</td>
<td>35</td>
<td>14</td>
</tr>
<tr>
<td>Positive &gt; 5%, Negative &lt; 5%</td>
<td>26</td>
<td>63</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: Author, data source Comtrade/WITS.

Juxtaposing those tariff lines with stronger absolute gains for intra-EAC imports than for ROW imports seems not only to support this first impression, but appears to even indicate that ROW trade is growing stronger than EAC trade: only 16 tariff lines (16.7 percent) show stronger EAC import growth while 80 (83.3 percent) show stronger ROW trade growth. However, this is mainly a result of the small relative size of the EAC economies. When comparing the relative growth rates, the picture changes quite dramatically: in 72 tariff lines (75.0 percent) EAC grows stronger in relative terms, leaving only 24 (25.0 percent) with stronger growth in ROW imports. When focusing only on those relative gains that change the distribution of trade by more than one percent of the respective tariff line, 35 tariff lines indicate a stagnant tendency while of the remaining 61 tariff lines more than three quarters (77.0 percent) reveal stronger growth for EAC.

For very strong relative growth larger than five percent, 63 tariff lines indicate stagnancy while again more than three quarters (78.8 percent) of the remaining 33 tariff lines indicate stronger relative EAC growth. While all results for relative gains must be seen as partially based on the low base values of the EAC, they still indicate that there may indeed be some strong trade diverting forces at work.
3.8.5.2 Disaggregated effects on two-digit level according to trade volumes

The picture changes dramatically though if tariff lines are weighted by trade volumes. Only 52.6 percent show relative EAC growth in this case and thus indicate an almost balanced relative growth picture. If we subtract the very high volume of tariff line 27 (petroleum and gas), again roughly two thirds (69.2 percent) of the trade volume show stronger relative EAC growth, but this value is still considerably lower than the above figures of three quarters and above. Likewise, the values for considerable (> 1 percent) and strong (> 5 percent) relative changes by and large confirms these figures. For the one percent threshold including petroleum, more than half of the import volume shows stagnancy while only 44.8 percent of the remaining half show stronger EAC growth. Data excluding tariff line 27 show stagnancy for more than two thirds, but of the remaining third almost 90 percent show stronger EAC import growth. It is particularly interesting to look at the five percent threshold. If petroleum is included, more than two thirds have a stagnant tendency while only less than a fifth of the remaining third shows stronger EAC growth (with more than 25 percent showing stronger extra-regional growth while a mere six percent show stronger intra-regional growth).

Table 9: Regional trade share development according to volumes

<table>
<thead>
<tr>
<th>Changes by trade volumes (tariff line times percentage of tariff line)</th>
<th>Positive &gt; 0%, Negative &lt; 0%</th>
<th>Positive &gt; 0%, Negative &lt; 0%, ex-27</th>
<th>Positive &gt; 1%, Negative &lt; 1%</th>
<th>Positive &gt; 1%, Negative &lt; 1%, ex-27</th>
<th>Positive &gt; 5%, Negative &lt; 5%</th>
<th>Positive &gt; 5%, Negative &lt; 5%, ex-27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive &gt; 0%, Negative &lt; 0%</td>
<td>52,62</td>
<td>-</td>
<td>47,38</td>
<td>69,18</td>
<td>30,82</td>
<td></td>
</tr>
<tr>
<td>Positive &gt; 0%, Negative &lt; 0%, ex-27</td>
<td>69,18</td>
<td>-</td>
<td>30,82</td>
<td>21,50</td>
<td>26,51</td>
<td></td>
</tr>
<tr>
<td>Positive &gt; 1%, Negative &lt; 1%</td>
<td>28,26</td>
<td>68,36</td>
<td>3,37</td>
<td>28,26</td>
<td>68,36</td>
<td></td>
</tr>
<tr>
<td>Positive &gt; 5%, Negative &lt; 5%</td>
<td>6,10</td>
<td>68,02</td>
<td>25,88</td>
<td>6,10</td>
<td>68,02</td>
<td></td>
</tr>
<tr>
<td>Positive &gt; 5%, Negative &lt; 5%, ex-27</td>
<td>8,03</td>
<td>89,43</td>
<td>2,54</td>
<td>8,03</td>
<td>89,43</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author, data source Comtrade/WITS.

However, this surprising reversal of the general tendency appears to almost entirely hinge on tariff line 27 as the exclusion of this tariff line re-established the general picture with intra-regional imports growing more strongly in eight percent of the cases and extra-regional ones in a mere 2.5 percent. With petroleum excluded, almost 90 percent of trade show a stagnant tendency while 75.9 percent of the remaining 10 percent again show stronger EAC growth, indicating trade diversion.

3.8.5.3 Disaggregated effects and initial levels

Another worthwhile undertaking appears to be looking at the initial levels of the percentage of EAC imports according to tariff lines. Similar to the RCA approach described above it might be assumed that comparative advantages exist for those tariff lines with initial levels of high EAC percentage. The validity of this assumption of course depends on whether there was a rather level playing field or already strong preferences prior to the integration effort. As the analysis in Table 9 above has elicited, most countries in fact had relatively small preferential margins prior to the
establishment of the EAC, thus indicating that our assumption on utilizing the pre-integration relative trade shares as approximation of the 'natural' trade patterns induced by comparative advantages is acceptable. In 2000-2005, 69 of the tariff lines had a very low level of EAC imports (below ten percent), 21 had a moderately low level (between 10 and 40 percent) while four had an even distribution between EAC and ROW imports (between 40 and 60 percent) – leaving a meagre two tariff lines with the EAC share higher than 60 percent. Consistent with the statistics described above, the picture changes slightly in favour of EAC imports for the 2006-2011 period. The first category shrinks considerably to 58 tariff lines while the second, third and fourth category increase to 26, 9 and 3 tariff lines respectively. In the 0-10 percent category of initial EAC share 54 of 69 tariff lines (78.3 percent) show stronger relative EAC growth. For the other three categories, the values are 14 of 21 tariff lines (66.7 percent), 3 of 4 tariff lines (75.0 percent) and 1 of 2 tariff lines (50.0 percent) respectively. This appears to confirm that EAC growth has at least as strongly taken place in the group of trade with initially very low levels of intra-regional imports as in the other categories. This in turn indicates indeed a rather strong occurrence of trade diversion. However, admittedly significance levels are certainly a big problem with regard to the very small number of tariff lines in the third and fourth category. The respective figures for stronger growth above the one and five percent levels respectively largely confirms this impression (see Table 16). Again the first category (0-10 percent) shows the strongest concentration of EAC gains in both cases (78.3 and 86.5 percent respectively) while the 10-40 percent category shows significantly lower levels (61.1 and 61.5 percent respectively). The neutral category and the one with initial EAC head start show very low EAC gains (but again the total number of observations is an issue here).

**Table 10: Tariff line development according to initial levels**

<table>
<thead>
<tr>
<th>Positive &gt; 0%</th>
<th>Number of tariff lines with positive change according to initial percentage levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive &gt; 1%</td>
<td>54 14 3 1</td>
</tr>
<tr>
<td>Positive &gt; 5%</td>
<td>32 11 3 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Positive &gt; 5%</th>
<th>Number of tariff lines with positive change according to initial percentage levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive &gt; 5%</td>
<td>15 8 2 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N.a.</th>
<th>Number of tariff lines with stagnant tendency according to initial percentage levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.a.</td>
<td>- - - -</td>
</tr>
</tbody>
</table>

| Stagnant > -1% < 1% | 32 3 0 0 |
| Stagnant > -5% < 5% | 54 8 1 0 |

<table>
<thead>
<tr>
<th>Negative &lt; 0%</th>
<th>Number of tariff lines with negative change according to initial percentage levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative &lt; 0%</td>
<td>15 7 1 1</td>
</tr>
<tr>
<td>Negative &lt; 1%</td>
<td>5 7 1 1</td>
</tr>
<tr>
<td>Negative &lt; 5%</td>
<td>0 5 1 1</td>
</tr>
</tbody>
</table>

Source: Author, data source Comtrade/WITS.
When weighing according to trade volumes, the data show a slightly more balanced pattern: 68.9 percent of the 0-10 percent category, 23.3 percent of the 40-60 percent category and 47.8 percent of the 60-100 percent category show stronger relative intra-regional import growth compared to extra-regional imports (figures relate to non-stagnant growth figures only). The 10-40 category displays a very low level of 17.6 percent for the calculation including tariff line 27, but relatively high levels of 84.3 percent if petroleum is excluded. This implies that at least when excluding tariff line 27 the strongest growth appears to have taken place in the second (10-40 percent) category with considerable, but not the highest initial comparative disadvantages (see annex 3a). The lowest levels appear to take place in those categories with balanced initial levels or even prior advantages of the EAC (although part of the explanation is surely a base effect). Interestingly, for stronger growth above the one and five percent thresholds intra-regional trade gains are much stronger for the 0-10 percent category with 98.5 and 100 percent of non-stagnant growth, but lower or the same for all three other categories.

Taken together, the results in fact corroborate the previous findings that trade diversion is in fact occurring. In addition, it has been shown here that this is apparently also occurring in areas where the EAC appears not to have a prior comparative advantage given that it had very low levels of trade in these specific commodities prior to integration.

### 3.8.5.4 Disaggregated effects and initial levels for individual countries

Following the same logic, tariff line data of individual countries suggest that trade shares for Tanzania and Uganda have been declining in most tariff lines while two thirds of tariff lines for Burundi and Rwanda increased, leaving Kenya at an intermediate level. When tariff lines are weighted by trade volumes, Uganda stands out as the clearest winner from a NC perspective due to its very small volume of disaggregated trade that saw an increase (although this picture is somewhat mitigated when excluding tariff line 27). Tanzania remains the runner up while Kenya appears to join Rwanda and Burundi at the bottom, implying that a lot of new regional trade has been channelled into these countries, likely including diverted trade. However, this perception is considerably mitigated when considering the initial levels (see Table 11 and Annex 3b-3e).

Rwandan data in particular show a lot of increases in regional trade in tariff lines where regional imports already made up 40-60 percent (9 tariff lines) or even more than 60 percent (6 tariff lines) of the total imports. At the same time, Rwanda, Uganda and Burundi also seem to have quite considerably experienced changes towards ROW imports in tariff lines where initially trade was evenly distributed between EAC and ROW or where the EAC partners had an even larger share, hinting somewhat counter-intuitively at trade diversion towards ROW. This might even be explainable in the case of Rwanda and Burundi due to their decreasing external tariffs, but certainly not in the case of Uganda as explained above.

Given that this particularly concerns the three land-locked EAC members, an alternative explanation is simply that a significant part of this apparently former EAC trade was in reality made up of re-exports from ROW all along, being wrongly attributed as regional exports of the transit countries Tanzania and particularly Kenya.
The trade increases in areas where EAC partners have comparable or even higher shares than ROW initially become even more apparent for Rwanda when weighing the tariff lines according to volumes traded. An outstanding 10.9 and 11.9 percent of trade sees regional increases in the 40-60 percent category for total and ex 27 trade respectively and 6.7 and 7.3 percent in the 60-100 percent category. This appears to be a solid indication that Rwanda may have experienced strong trade diversion, but at the same time considerable trade creation as well. ROW diversion appears to be much less pronounced after weighing the data for volumes for Rwanda and to a lesser extent for Uganda and Burundi, at least if tariff line 27 is excluded. When focusing only on significant changes larger than 1 and 5 percent respectively, it becomes apparent that Kenya’s trade is the least affected as most imports show no major changes in the origin. Rwanda and Burundi, in contrast, have experienced massive changes in the lion’s share of their imports. Non-weighed figures see Kenya, Tanzania and Uganda with very similar, low levels of increasing regional trade (roughly a sixth for total trade and around a third for ex 27 figures). Rwanda and Burundi, in contrast show figures around and above 50 percent in this regard. Weighing for trade volumes confirms this dualism with Kenya, Tanzania and Uganda showing little increases in regional trade while Rwanda and Burundi show significantly higher levels both for calculations with one and five percent borders. Again, Rwandan data show evidence of strong growth in sectors with an initial head start of regional trade, thus indicating trade creation rather than trade diversion.

Table 11: Import developments for EAC countries for 2 digit tariff lines

<table>
<thead>
<tr>
<th>Number of tariff lines, change in percentage</th>
<th>Number of tariff lines with positive change according to initial percentage levels</th>
<th>Number of tariff lines with negative change according to initial percentage levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pos.</td>
<td>Neg.</td>
<td>0-10%</td>
</tr>
<tr>
<td>Kenya</td>
<td>51</td>
<td>45</td>
</tr>
<tr>
<td>Tanzania</td>
<td>42</td>
<td>54</td>
</tr>
<tr>
<td>Uganda</td>
<td>33</td>
<td>63</td>
</tr>
<tr>
<td>Rwanda</td>
<td>62</td>
<td>34</td>
</tr>
</tbody>
</table>

Source: Author, data source Comtrade/WITS, HS 1997, two digit level.

3.8.6  Effects of disaggregated changes in preferential margins on relative trade growth

In addition, a closer look at the preferential margins at disaggregate levels appears necessary to find answers to the question whether and how strongly absolute and relative tariff cuts actually influence the relative changes in trade volumes discussed above. Or else, whether most of the changes have actually taken place as a result of changes in the global or local economy irrespective of any tariff cuts and other trade reforms. Surprisingly, we were unable to find any attempt in the literature to verify the effect of tariffs through a similar or, in fact, any method.
Changes in the preferential margins vary across two-digit tariff lines and we can find increases, stagnancies as well as decreases for different categories for individual partner states and the EAC as a whole. We propose cross-tabulations that show changes in absolute tariffs for a) intra-regional trade, b) extra-regional trade and c) in preferential margins on the one side. On the other side a) relative absolute and b) relative changes in intra- and extra-regional trade (imports) as well as c) relative trade
(import) shares are calculated. If tariffs were to exert a strong influence, tariff lines with strong negative values in the development of the height of the tariff (in other words large tariff cuts) should have a strong increase in trade, thus showing a negative relationship in the scatter plot.

This appears to be somewhat stronger the case when restricting the analysis to strongly (> 5 percent) growing/declining intra-regional trade share and/or to strongly increased/decreased (> 5 percent) preferential tariffs. In general, the relationship appears to be rather weak, indicating that tariffs did play a role, but that this role appears to be minor compared to other factors of influence. Interestingly, the relationship is even less evident for most EAC partner countries if analysed separately. This might be due to the afore-mentioned re-export issue that might have been on the decline since regional integration took place and its repercussions might well cloud the picture when comparing pre- and post-integration data. In addition, a cross-tabulation of regional tariff cuts and regional import developments (as well as and MFN tariff cuts and ROW import developments) likewise does not show a clear relationship, corroborating that in fact the relative tariffs (or in other words preferential margins) are of prime important and less the respective absolute levels.

3.8.7 EAC: regional gains or losses?

Our specific analysis on the EAC clearly provides evidence on the trade enhancing effects of the EAC, but these appear to be not only with regard to intra-regional trade, but also with regard to extra-regional trade, leaving in consequence the intra-regional trade share almost untouched with even a slight downward trend for the whole region. A bold statement about the welfare effects for the EAC is in our view almost impossible given the divergent results of our different specifications, but the tendencies for individual countries appear to be more reliable at least for most of the EAC partner countries.

The simplest descriptive statistics indicate that EAC regional imports slightly decreased according to import statistics, from seven or eight percent to six percent while ex-27 figures show a slight increase from five to six percent. Mirror statistics show a volatile picture before 2006 (nine to fourteen percent) and a slight positive trend from nine to eleven percent from 2006-2010. Excluding tariff line 27 shows a development from nine to 11-12 percent. Interestingly, the regional export share improved more strongly in almost all specifications than did the import share. Volatile figures around 18 percent (16-22 percent) in the pre-EAC are improve slightly to a stable 20 percent level. Only for mirror statistics this development is less clear cut. It appears pivotal to compare this rather sluggish increase in the intra-regional import share with the much stronger development of the intra-regional export share. While both home country data as well as mirror statistics show a rather volatile picture with a stabilisation on the upper end of the band for total trade, particularly the ex-27 figures speak a very clear picture: intra-regional exports improved from 15 to 20 and from 10 to over 15 percent for home and mirror statistics respectively. This appears to confirm the impression that a general trend of increasing global / ROW imports was partially mitigated by significant integration-induced intra-regional export growth, thus also somewhat mitigating the otherwise even more severely widening trade deficit of the region and thus the BOP dangers alluded to in the theoretical debate.
Our ARCA calculations for the EAC give a rather bleak picture at first sight. The number of revealed comparative advantages in the regionally strongest growing industries is rather low. However, this is not surprising as in total this small region naturally has a RCA only in very few industries. When looking at the distribution of the industries with an RCA, the picture improves considerably. According to most specifications, industries with RCA are more heavily concentrated in strongly growing industries than in the slower growing ones, both working with relative and absolute indicators. Hence one could interpret this a situation where natural trade diversion does strongly occur due to the unfavourable preconditions discussed above (small size, homogeneity), but that given this rather auspicious circumstances the EAC has in fact fared much better than would have been predicted. When disaggregating trade by two-digit tariff lines an interesting picture emerges. While imports in three quarters of the tariff lines have been growing stronger regionally than from extra-regional sources, this figure is reduced to 53.6 percent when weighing the data by trade volumes, but this increases again to 69.2 percent when excluding tariff line 27. Most of this trade with regional increases, however, seems to be very marginal as figures for the one and five percent thresholds show that trade has been roughly stagnant in most tariff lines (35 and 63 tariff lines for the two specifications and between 52 to 90 percent for weighed values depending on threshold and tariff line 27).

Overall the results seem to indicate a somewhat inconsistent pattern. Both trade creation and diversion took place, but with no clear result on which of the forces prevailed over the other. More importantly, trade was also strongly created for ROW imports and, particularly surprisingly, in several instances it seems to have been even re-directed from intra-regional partners to ROW sources. We intentionally use the term ‘re-directed’ here instead of the term ‘open bloc diversion’ that was used in an earlier version of this work or the term ‘reverse trade diversion’ used by Baldwin & Wyplosz (2015: 136) as it may erroneously imply that these new trade flows from ROW signify less efficient trade flows than the previous (intra-regional ones). This is, however, not possible as tariffs for ROW are by definition either higher or equal to intra-regional tariffs and consequently producers from ROW can only supply if they are more efficient than intra-regional ones (safe for non-NC reasons of market power, branding etc.). Instead, this change in trade is likely to be an effect of the following two instances. On the one hand, a positive change in productivity in ROW (or a negative one in the region) may lead to such a ‘diversion’ of trade – thus such a change would be independent of the regional integration efforts altogether. On the other hand, there are two possible scenarios where regional integration itself is actually the trigger for this change. Firstly, the enlarged market and reduced tariff and non-tariff barriers to trade may invite suppliers from outside to find it attractive to start exporting to the region. Secondly, regional integration, particularly customs unions, frequently entail reductions in tariffs for ROW that are at times stronger than the reductions for the (already previously preferential) regional tariffs so that in consequence the preferential margin is lowered instead of increased. In any case, there is no immediate welfare loss involved – at least from a NC perspective. Nonetheless, it appears to be important to differentiate such cases from normal open bloc effects, i.e. increasing trade from ROW in goods that were previously domestically supplied.

This strong tendency of increasing ROW imports implies that the trade developments are significantly more complex than (NC) theory would suggest. It also indicates that the EAC integration schemes appear to be sufficiently open towards ROW.
Adding trade creating forces from intra- and extra-regional trade and subtracting diverting forces indicates that overall there seems to have been a net gain from the integration exercise from a NC perspective. However, this gain appears to be to a substantial part due to the decreases of external tariffs by implementing a CET with a lower tariff level than previous national tariff structures rather than from regional liberalisation and preferentialism per se. In addition, our comparison of tariff reductions and trade volume developments at a disaggregated level revealed that only a relatively small part of the trade volume development appears to be actually based on the tariff cuts as such.

### 3.8.8 EAC: winners and losers

For the individual countries a rather clear and a likely winner, a clear and a likely loser as well as a country with a mixed record seem to emerge from the majority of the methodologies employed. Simple import shares show Kenya (from very low levels and only for Kenyan, but not for mirror statistics), Rwanda and Burundi (particularly according to mirror statistics) increasingly as sourcing from the EAC, while for Tanzania and particularly Uganda the shares are considerably shrinking. For the former group this might also suggest that trade diversion might occur to a considerable extent while it appears to be less likely for the latter two countries. Export shares are increasing for Tanzania, Uganda, Burundi and Rwandan mirror statistics while Kenya shows a stagnant level. The Finger-Kreinin results reported here are the only truly empirical approach that confirms the CGE assumption that Uganda would be on the losers’ side with trade diversion being strongest, while for Kenya and Burundi the post-integration period sees the trade diverting tendency reduced or even surmounted. Tanzania shows trade creation in both periods while Rwanda reaches such a status in the post-integration period. On the disaggregated level, it is confirmed that Kenyan trade is the least affected and Rwandan and Burundian trade changed most significantly, both on tariff line level and for weighted figures with Rwanda and Burundi having also the highest initial levels of intra-regional trade according to tariff lines with Uganda in a middle position. According to tariff lines Rwanda and Burundi and to a smaller extent Kenya have more changes towards regional trade then towards ROW trade, while Tanzania and particularly Uganda show a clear tendency towards ROW imports. A similar situation prevails for significant changes above the one and five percent level with the only exception that Kenya shows regionalization tendencies on a much lower level that are comparable to Uganda and Rwanda and ROW tendencies at the lowest level of all as most trade is stagnant. Weighted values confirm this picture with Uganda even more clearly on the de-regionalisation side.

At the one and five percent levels Uganda again clearly stands out as the country with the weakest re-orientation of imports to the regional partners and thus as the country with the least likelihood of high diversion levels – but consequently of course also lower levels of trade creation. On the other side of the distribution Rwanda stands out as the country with the strongest re-orientation of imports towards regional partners and at the same time as the country with the second-lowest trade volume in tariff lines with increasing ROW shares. Tanzania’s increases in relative regional imports again almost match those of Uganda for the five percent level, but less so for the one percent level while the high levels of extra-regional import share growth seem to mainly hinge on tariff line 27 with distinctly lower levels after excluding trade in oil and
gas. Kenya shows a middle position in relative terms, close to the Tanzanian figures, but has by far the lowest tendency for increases in ROW import shares. Burundi again shows relatively high levels of both increases in intra- and extra-regional import shares. Initial levels of import shares indicate that Rwanda features the strongest regionalization in sectors that were already heavily regionalized prior to integration, strongly indicating that trade creation occurred. Kenya, Rwanda, Burundi and, for the one percent level, also Tanzania show high levels of regionalization in the 0-10 percent category, thus indicating that mainly Uganda has been spared from trade diversion.

Most calculations thus indicate that Uganda, Tanzania and possibly Rwanda are on the winning side or at least have a balanced account while Kenya and particularly Burundi are on the losing side (although Kenya seems have offset these internal losses with gains from global trade). While the relative success of Uganda, Tanzania and Rwanda might be seen as welcome given the initial head start Kenya still has, the dismal performance of Burundi has to be seen as extremely worrying, although it does not really come as a surprise.

Reporting on the results of a much less comprehensive analysis of EAC trade developments, Cirera arrives at similar conclusions:

\[\text{It is hard to interpret these changes in regional import shares because one cannot disentangle whether MFN liberalisation or internal liberalisation drove these. Nevertheless, the bottom line is that intra-regional imports rose, albeit very little, which implies that the aggregate incidence of welfare effects (trade creation or trade diversion) is likely to have been relatively small for Burundi, Kenya, Tanzania and Uganda (Cirera, 2013: 8).}\]

However, Cirera also confirms a tendency towards convergence with Kenyan dominance slightly diminishing, a development that ‘may be welcomed by the other EAC countries which were concerned that Kenya’s trade would expand at the cost of their own’ (Cirera, 2013: 8).

### 3.9 Synopsis: The limits of regionalism or the limitations of NC approaches?

The theoretical NC setup makes it very clear that regionalism may be only supportable because it enlarges the market size and thus allows for efficiency gains due to specialisation according to comparative advantages. As such, regionalism may from such a perspective be only preferable over solutions at a smaller spatial scale such as national solutions. Consequently, a regional solution is, from such a NC perspective, a priori inferior to global free trade.

Furthermore, even its dominance over national solutions is not a certainty, taking into account the trade diversion argument: if trade diversion dominates trade creation, so the argument, the whole scheme suffers efficiency losses and thus absolute losses for the whole region – adding to the losses that ROW incurs as trade is diverted away from it.

As discussed in this chapter, there are additional arguments that depict regionalism as a losing deal, in general, but particularly also for Africa. Unfavourable conditions with regards to size and homogeneity of African regional schemes combined with the administrative costs of deeper forms of integration as well as the weak implementation and the weak response of trade patterns to regional integration attempts in Africa leave little optimism. As trade creation and trade diversion are typically unevenly
distributed across the integrating territory, winners and losers are also almost a certain outcome.

These are weighty arguments that make one inclined to doubt whether the regional road should be followed at all. In this concluding chapter on the NC approach we shortly revisit the lengthy empirical discussions above. Chapter 3.9.1 highlights that the empirical results are actually much less bleak when compared to the theoretical argument. This applies both for our literature review as well as for our own calculations with primary data for the EAC.

However, it also need to be emphasised again that the diverse empirical strategies are not only and even not primarily a sign of a mature field of empirical analysis. This diversity clearly also hows that the calculations of gains and benefits based on the trade creation / diversion calculus are actually not properly defined. As discussed in chapter 3.9.2, the choice of methodology is mostly arbitrary and not one of the methods (including the ones used in our primary analyses) can really give a full picture as changes in efficiency levels are not part of the calculations. As a result, the trade creation vs. trade diversion antagonism is not only an empirical question, but also strongly hinges on what definition and measure is used to estimate them.

More importantly, however, the extensive discussions on minor differences in empirical strategies mask a much more serious problem that is rarely mentioned despite its blatantly devastating effects on either the usefulness of regional and multilateral trade liberalisation or of the usefulness of the NC approach. As discussed in chapter 3.9.3, regional integration holds potentials for neoclassical trade creation gains that are only extremely small when set in relation to the respective GDPs and GDP growth rates. As subsequently discussed, the same actually applies to North-South schemes (3.9.4.1) and unilateral or multilateral approaches (3.9.4.2). Therefore, the chapter concludes that, we have to leave the cosy realm of neoclassics and look elsewhere for answers if we want to make sense of regionalism (3.9.5).

### 3.9.1 Empirical results

However, the empirical analysis has shown that the picture is not as bleak. As discussed in this chapter, although arguments predicting a weak response of the trade flow to (further) initiatives in the area of regionalism in general and South-South integration in particular cannot be brushed away, they certainly have to be qualified. African RECs are indeed rather small, they are made up of poor, little diversified and rather similar economies, and large parts of Africa are already relatively liberalized. As the data show, the prospects are in our view not as dismal as often perceived: African regions are not as small, homogenous and informal economies dominated as commonly assumed. The improvement of the regional infrastructure is in most cases one of the priority areas of the regional schemes themselves and attempts at conflating and harmonising existing smaller schemes are a specific response to the small size of the schemes in economic terms. The argument about heterogeneity likewise has to be significantly adjusted as heterogeneity in general may be only of secondary importance for several aspects. Similarity may have not only negative corollaries but also its virtues while differences also entail impediments for certain processes, and African RECs are distinctly more diverse than commonly assumed. Still, the problem of lacking diversity prevails. Particularly the almost complete absence
of economies in the upper areas of the global distribution with regard to capital and skills is a serious threat to the success of African RECs and other agreements of the South-South type. In this context, it is probably more appropriate to point not only to the small degree of differences across countries, but rather to the relatively low production and export diversity inside most of the African economies: only few African countries export merely half of the potential product lines at a very high aggregated (three digit) level (Yeats, 1998). This lacking diversity is again strongly correlated with the general poverty levels (and the causality can be assumed to run both ways). The fact that African countries on average trade significantly less with each other than many other regions is according to some authors entirely explained by their low levels of GDP (see e.g. Foroutan & Pritchett, 1993).

Whether pessimism or optimism with regard to real effects of regionalism on trade volumes is supported by trade data proves to be difficult to assess. Although there is anything but paucity of empirical studies, the results lack robustness to support either claim. Our discussion clearly shows that the typical gravity approaches are not the only appropriate approach and that they are certainly not sufficient for analysing the questions at hand. However, it remains difficult to state which of the diverse approaches would be the most appropriate one. As a result, a subtle and evasive, yet honest answer would be that the effects depend on various factors and the empirical strategies chosen. Certainly, data quality, methodological uncertainty and attribution problems are not satisfactorily solved to allow for a more definitive statement.

Data quality appears to be the problem that could be most easily resolved and our empirical work above suggests that for the EAC data have tended to become more reliable in the last years. However, particularly for the less developed countries this problem is still immense and risks disqualifying any empirical strategy that relies on such data. The best that can be done in our view at this point is simply to invest additional efforts in triangulating and verifying the plausibility of data by utilising different sources, reports and, if need be, by excluding unrealistic data (as we do with mirror statistics and the exclusion of tariff line 27). Secondly, it is essential to communicate the uncertainty of the results in a transparent way, including differing results of alternative specifications. Such an approach produces results that are certainly less concise and unambiguous and thus probably also less accessible for policy makers. The huge diversity of approaches and methodologies lead to a situation where results are often impossible to reconcile. It appears to be particularly worrying that often very similar empirical strategies with only minor differences produce highly divergent results, thus questioning the robustness of either result. In our view, this can only be solved by triangulating results from various approaches in order to be able to estimate how robust results are. With regard to attribution, both factors outside the realm of trade policy in general and regional integration in particular play an important role, and so does the question of time. With regard to the latter NC theory clearly assumes immediate effects, but empirical strategies struggle with the fact that effects tend to take a longer time to materialise due to lengthy phasing-out schedules and sluggish reactions from the private sector or sometimes even precede implementation in anticipation. More sophisticated approaches, that include various variables and IVs, as well as panel approaches are one important venue in this regard, but again transparency about existing levels of uncertainty is important as well. For example, Kohl clearly states that
it can be concluded, on the one hand, that researchers should be wary of overstating EIA’s effects on trade when they ignore endogeneity bias; on the other hand, disregarding the fact that trade liberalisation schemes are gradually enforced over a long period of time may underestimate the EIA effects (Kohl, 2012: 103)

Unfortunately, such careful approaches tend to be rare and problems of data quality and methodological diversity and weaknesses are often either tucked away in the annex or footnotes or altogether concealed. The same uncertainty with regard to data quality, methodological pluralism and resultant ambiguity of results as well as the failure of a clear attribution applies consequently to the question whether such changes in the direction of trade have positive, neutral or negative welfare economic effects and whether individual countries are winners or losers. In addition, it is worrying that with regard to the concepts of trade creation and diversion most analyses stop at a very early stage and then assume the resultant effects. In particular, the occurrence of trade creation and diversion is always at the forefront of the analyses, but no attempts at calculating the strengths of both forces given the underlying relative efficiency levels of former and new source country are undertaken. To be fair, such an undertaking is complex, intricate and resource-consuming as it would require microeconomic empirical studies on firm level as well as meso data on respective price levels and tariff income. This is clearly a hurdle that might prevent such a holistic approach towards trade creation and diversion for years to come. More importantly, however, it appears to be questionable whether under such circumstances the exclusive focus on trade creation and diversion is actually warranted. Again, the methodological strategies also seem to fail to accommodate the fact that these welfare effects take place in a dynamic setting. Furthermore, the effect itself is a static, once-off effect. As our calculations show, trade creation relative to trade diversion may thus be heavily overestimated as a consequence, at least if a broader definition of trade diversion is evoked.

If pressed to give a succinct statement on the effects of changes in trade patterns induced by integration, the majority of studies seems to indicate the following. Large regional schemes among industrialised countries appear to have considerable welfare-enhancing effects. This appears to be less unambiguous for smaller schemes and schemes among developing countries. Still, regional integration might be also seen as a countervailing measure to prevent the decline of intra-regional trade compared to global trade at times with a pronounced trend of the integration of formerly peripheral regions into the world economy. Still, a majority of studies arrives at least at small trade-enhancing effects from most regional schemes among developing countries and likewise in most studies trade creation appears to be dominating over trade diversion. The literature on the winners and losers argument is unfortunately almost exclusively a model approach without attempts at an empirical verification.

For our example of the EAC, the increase in external trade – particularly in exports but also in imports – appears to have exerted a larger influence on the economic situation than the regional trade given that on average intra-regional import shares slightly decreased. That increase might just be a result of a general tendency towards global trade, but is in fact likely to be a direct corollary of the decreases in the CET and abolition of NTBs and trade facilitation in the realm of the EAC integration process that not only benefits the partners, but also ROW exporters. The analysis on a disaggregated level shows that for most countries and the EAC at large the specific tariff cuts did in fact have a measurable effect on increases in trade volumes. Tariff lines with larger absolute tariff cuts appear to give evidence of slightly higher absolute
and relative growth rates and those with larger gains in preferential margins for the EAC show slightly stronger regionalisation tendencies. In both cases this appears to hold true if the analysis is restricted to only tariff lines with strong (i.e. > 5 percent) movements of absolute tariff cuts or relative changes in preferential margins and / or tariff lines with strong (i.e. > 5 percent) gains and losses in relative values of imports. Even in these restricted cases the influence of tariffs on trade patterns must be described as modest at best. This leaves much to factors outside the area of tariff cuts – such as trade facilitation, NTBs and also the simplification and greater reliability of the tariff system, transport cost reductions, awareness rising – and even outside the realm of trade policy – such as shifts in demand and global and regional production and productivity patterns.

3.9.2 Insufficiency and arbitrariness of empirical instruments

The multitude of more or less sophisticated empirical strategies should not only be seen as a sign of maturity and widespread acceptance of the Vinerian TC/TD approach. To the contrary, the many alternative approaches show that trade creation and trade diversion are theoretically well-defined concepts, but the empirical strategies measure different estimates and approximations for both forces only.

For example, dependent on this we report both slight TC and TD dominances for the EAC for different measures. Particularly when also considering the rather increasing intra-regional export shares in contrast to the slightly decreasing intra-regional import share, one might be inclined to conclude that the EAC has somewhat mitigated a general trend towards importing more strongly from global sources, but that at the same time the EAC has also eased this process due to its openness towards ROW. From an NC perspective, this increased openness towards ROW indicates that in all likelihood the EAC must have gained from its regional initiative even without attempting to analyse trade creation and diversion and their exact effects, but simply due to efficiency gains as a result of a lowered (and simplified) CET.

Our analysis on winners and losers from a NC perspective is plagued by a similar problem. In consequence, it might well be that the correct question is not which country is a winner and which one is a loser, but which is winning most and which is winning least or, possibly, which is losing most and which is losing least. Although again data quality is a problem and the choice of data sets and methodologies has considerable influence on the results, we feel rather confident to conclude that from a NC perspective Uganda and Tanzania stand out as clear winners while Kenya and Burundi have to be seen as losers (with Rwanda indicating a mixed picture with a slightly positive tendency).

In addition, it is important to note that even if the question on the dominant force would be clear without doubt, it would still be impossible to deduct an overall welfare effect from such a result. As discussed in the theoretical chapter 3.1.2 above, none of the NC approaches takes into consideration that trade creation and trade diversion can have stronger or weaker effects depending on the strengths of the change in efficiency levels induced by those two forces. In cases where TC and TD volumes are not very far from each other, differing changes in efficiency enhancement (of trade creation) and reduction (of trade diversion) can easily overturn calculations solely based on comparisons of the volumes.
Unfortunately, the question of how much more efficient an import from a partner country is than the previous home production is impossible to answer with trade data and would require very disaggregated data on price and production levels that are, to our knowledge, not obtainable. The efficiency losses from trade diversion would in theory be somewhat easier to calculate as only trade and tariff revenue data would have to be utilised. However, prices are influenced by forces outside the realm of NC theory (i.e. for example by price-mark ups due to imperfect competition as discussed in chapters 5.2.2 and 5.3.1.2 below) that would not allow for a direct calculation either. Given that a comparison with welfare effects of TC is anyhow not possible for the reason given above, such a cumbersome calculation of the real effect of trade diversion appears not to be warranted either.

This implies that all calculations of trade creation and trade diversion need to be taken with a considerable pinch of salt and be taken for what they are – approximations whose actual effect on the economy also depend on qualities that are actually not being measured at all.

### 3.9.3 Gains from regionalism in perspective (I): contribution to GDP

However, there is a much more crucial consideration than the issues with methodologies, data and missing inclusion of the magnitudes in the changes in the respective efficiency levels. Having a look at the percentage that intra-regional trade makes up in relation to regional GDP volumes is eye-opening if not shocking. Borgatti (2011) reports shares of regional and total merchandise trade in relation to GDP and the evolution thereof from 1995/96 to 2005-06 for five African regional blocs. For total trade these figures increase for all but one REC (ECOWAS), bringing the lowest share of one third to 47 percent for COMESA while all other countries arrive at shares between 54 and 59 percent. For intra-regional trade two regions have growing shares, one stagnant ones and two slightly decreasing ones. More importantly, these values are between 1.0 and 7.8 percent only. In our view, the situation would even be better described if figures are halved as Borgatti includes imports and exports in an accumulated total figure instead of using either imports or an average of imports and exports.

### Table 13: Regional and global imports in relation to regional GNI

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>6.3%</td>
<td>5.3%</td>
<td>16.6%</td>
<td>19.5%</td>
<td>23.0%</td>
<td>24.8%</td>
</tr>
<tr>
<td>Kenya</td>
<td>0.2%</td>
<td>0.6%</td>
<td>31.1%</td>
<td>31.4%</td>
<td>31.3%</td>
<td>32.0%</td>
</tr>
<tr>
<td>Rwanda</td>
<td>4.2%</td>
<td>5.4%</td>
<td>14.1%</td>
<td>13.2%</td>
<td>18.2%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>1.2%</td>
<td>1.3%</td>
<td>20.0%</td>
<td>30.9%</td>
<td>21.2%</td>
<td>32.2%</td>
</tr>
<tr>
<td>Uganda</td>
<td>5.9%</td>
<td>3.2%</td>
<td>14.9%</td>
<td>21.1%</td>
<td>20.8%</td>
<td>24.3%</td>
</tr>
<tr>
<td>EAC</td>
<td>2.0%</td>
<td>1.8%</td>
<td>23.0%</td>
<td>27.4%</td>
<td>25.1%</td>
<td>29.2%</td>
</tr>
</tbody>
</table>

Source: Own calculations with COMTRADE data accessed through WITS. 2000-2005 and 2006-2010 averages.
For the EAC, results are in similar ranges (if compared to the halved Borgatti figures as we calculate only import levels). However, there are major differences between countries with Uganda, Rwanda and Burundi showing high regional shares while Kenya and Tanzania show high ROW shares – the latter after an impressive hike from 20 to 30.9 percent from the pre- to the post-integration period – and in consequence also the highest total shares. The EAC total average is higher than (the half of) all figures reported by Borgatti, indicating that the EAC is relatively well integrated into the world.

However, as changes include both trade creation and diversion forces, most of this already very small percentages cancel each other off. Finally, we have to consider the caveat discussed above that only relatively small fractions of trade creation and trade diversion volumes themselves actually signify the effect on welfare. As discussed by Grimwade, Mayes & Wang (2011), only the efficiency gains for TC and efficiency losses for TD should be considered and not the full volumes of created and diverted trade. This depends of course on the productivity differences (minus transport costs). As discussed above, this is difficult to observe, but at least for trade creation the change in tariff rates can be used as a proxy in this regard. Simply put, if the efficiency difference (minus transport costs) would be greater than the tariff change / preferentialism, no trade creation would take place as provision from outside already took place pre-integration. If the efficiency difference (minus transport costs) would be smaller than the tariff reduction, imports would not change either as the as domestic production still enjoys a price advantage post integration. As discussed by Grimwade, Mayes & Wang (2011), the welfare gain of trade creation can be calculated by multiplying 50 percent of the reduction of the tariff times the increase in imports if demand and supply functions are assumed to be constant. Referring back to Table 9, we can remind ourselves that for the EAC as a whole, the average tariff reduction was only 10.62 percent. When weighing for actual trade, the reduction was even only 6.51 percent. Multiplying thus 50 percent of a 6.51 tariff reduction times the value of trade creation of well below 1 percent of the GNI, we arrives at estimated values in the area of hundredth of a percent at best. It needs to be emphasised that this figure is only an estimate for the gross effect of created trade without deducting the negative effects of trade diversion.

Although the exact determination of the net effect appears elusive given the arbitrariness in the definitions to distinguish trade creation and trade diversion and our inability to properly estimate the actual welfare effects of trade diversion, the insight from this finger exercises are simple and unequivocal. From a neoclassical perspective, we are apparently talking about a net welfare effect in the order of parts per hundred or even parts per thousand of the GNI – in other words: entirely negligible.

### 3.9.4 Gains from regionalism in perspective (II): extra-regional alternatives

Whatever the size and direction of welfare effects, it appears thus highly unlikely that static, welfare-economic gains from such small-scale South-South schemes have any significant effect on poverty reduction or even growth. Consequently, multilateralism or, as a result of stalled negotiations with regard to further MFN liberalization, at least North-South integration appear the only remaining potential sources of considerable gains for developing countries. However, as the short discussion in the next two sub-
chapters illustrates, the potentials in this regard are likewise so small that they can almost be regarded as almost entirely meaningless.

3.9.4.1 North-South integration as alternative?

Taking the Economic Partnership Agreements between the EU and the ACP countries as an example, it is unquestionable that such an agreement would change trade patterns more strongly than any South-South scheme can (at least in the short to medium term). The reason for this is simple. The EU countries make up a far bigger part of world trade and are thus able to react on tariff cuts without necessitating any major changes to their production capacity. Given the ACP countries’ (including the EAC group’s) considerable tariffs towards the EU and ROW, considerable changes in tariffs can be expected from a full or even a partial EPA liberalization. The caveat that ACP countries are almost unable to obtain almost any additional access to the EU as more than 97 percent of ACP exports already entered the EU duty and quota free prior to the EPA negotiations is of minor concern from a NC perspective. As discussed before, only the import side plays a role for welfare from an NC perspective – see also the further discussion in chapter 3.9.4.2 below on the case for unilateralism.

South-South regionalism or North-South regionalism, the Vinerian case of regionalism is and remains an ambiguous one with trade-creating and trade-diverting forces pitted against each other. For the EAC for example, the EU makes up around a fifth of imports, leaving between half and three quarters of imports to ROW sources. This implies that there would be more trade creation, but also considerable amounts of trade diverted from ROW to EU exporters. Interestingly, all of it is actually borne by the EAC countries as the EU is not able to offer any significant additional market access (given that the EU market is already virtually open towards the EAC) and thus no trade diversion from ROW to the EAC can occur for EU imports. In a partial general equilibrium model that by and large abstracts from non-Vinerian effects, Milner, Morrissey & Zgovu (2008) calculate that imports from the EU may increase by 2.4 to 5.8 percent of GDP for the three major EAC economies. This only represents 0.2 to 0.7 percent of GDP increase in total imports given the relatively low percentage of imports from the EU in total imports. This implies a minor welfare loss of 0.03 percent of GDP for Tanzania, 0.5 percent of GDP for Uganda and 1.3 percent of GDP for Kenya. For Kenya a consumption effect (i.e. trade creation) of 817 million Kenyan Shilling (KES), mainly in the area of manufacturing, and a regional substitution effect (probably best circumscribed as a revocation of previous trade diversion to regional EAC partners, but possibly also only a partial revocation as the most efficient supplier might still be in ROW) of 124 million KES is overwhelmed by a massive 16 billion KES extra-regional substitution (i.e. trade diversion from ROW to EU). If sensitive products, most of them agricultural products, are excluded in an exclusion basket (as planned and implemented), the resulting net welfare effect of minus 15 billion KES is more than halved, being mainly constituted of trade diversion in manufacturing products.

Other calculations predict a more heterogeneous picture with some ACP countries gaining and others losing. For example, Morriseey & Zgovu (2009) calculate gains and losses for agricultural products only. Again, the results are only for some small-country island outliers considerably outside the +/- 0.1 percent range of GDP. Karingi, Mustapha, Oulmane, Perez & Ben Hammouda (2005) report trade creation values that exceed trade diversion values, but at the same time caution that significant levels of
Trade diverted from partner countries of African RECs (and not only ROW) must be seen as major impediment for extending intra-African trade. Busse & Grossmann (2004) report potential for small gains for (most) West African countries as trade diversion volumes appear to be smaller than those of trade creation. The estimation by Vollmer, Martinez-Zarzoso, Nowak-Lehmann & Klann (2009) arrives at results that are significantly positive for Botswana, Cameroon, Mozambique and particularly Namibia (with values around 5 percent of GDP, for Namibia even 10 percent). Slight welfare decreases are estimated for Cote d’Ivoire, Kenya, Tanzania, Uganda and particularly Ghana (below 1 percent for all countries but Ghana in one of the specifications).

This spread of results again highlights that unambiguous results are almost impossible to obtain due to methodological and data-related question marks. However, the much more important outcome of these analyses is that effects are very limited anyhow when set into relation with GDP levels. In other words, as Vinerian welfare gains are once-off gains and do not exert and influence on the growth rate as such, even the highest reported result such as the 10 percent for Namibia in the Vollmer, Martinez-Zarzoso, Nowak-Lehmann & Klann estimates are only worth two years of normal growth rates at most.

3.9.4.2 Unilateralism and multilateralism as better alternatives?

Multilateralism, in contrast, should bring increased gains from trade creation while completely ruling out the occurrence of trade diversion by definition. Consequently, the danger that some countries lose should also be ruled out by definition – although this is only true in absolute terms as disproportionately high gains for richer countries might still lead to divergence.

In principle, however, NC economics are not a case for multilateralism, but simply unilateralism as gains in the NC framework accrue exclusively from home liberalization, not foreign liberalization. This is a matter that has led to some confusion given that in trade negotiations the negotiating parties take an opposite bargaining position, offering as little home liberalization for as much foreign liberalization as possible – an observation that either hints at an absolute ignorance on the part of the negotiators or at the limitations of the NC approach.

Whether multilateral or unilateral in kind, empirical approaches to measure such gains of not yet implemented global liberalization have naturally to be ex ante and thus usually rely on CGE estimates. As discussed above, given the nature of CGE calculations in general and in the area of trade policy in particular, the results diverge to a huge degree. The most often reported results stem from the World Bank's LINKAGE model, but even the results from this model have been heavily downsized and also appear much stronger skewed towards industrialized countries in recent years. In his critical review of CGE models and their role in WTO negotiations Ackermann & Gallagher observe:

What a difference two years make. In the discussion leading up to the WTO negotiations in Cancún in 2003, it was common to hear about the hundreds of billions of dollars of benefits available from trade liberalization, most of it going to developing countries. In 2003, World Bank economists estimated that an agreement to reduce tariffs could increase global income by as much as $520 billion, two-thirds of it going to developing countries, and lift an additional 140 million people out of poverty. By 2005, leading up to the next round of negotiations in Hong Kong, the World Bank estimated that even complete trade liberalization (a more extensive degree of liberalization than assumed in the 2003 estimates) would create less than $300 billion in global gains, of
which only one-third would be received by the developing world (Ackerman & Gallagher, 2008: 51).

Von Arnim & Taylor (2007) masterly exemplify this problem of assumptions by computing the welfare gains for SSA and ROW for a full liberalization model with Armington elasticities ranging from values of below two to sixteen. As a result, ROW welfare is relatively constant at three to four percent of GDP – indicating that this is a model with much higher gains than most models. The SSA figures, however, vary extremely from six percent for the high Armington elasticity to negative figures for Armington elasticities with values of two and four. This not only low, but negative outcome might surprise at first, but is a result of non-Vinerian features build into the models, that for example also take into account the producer’s side, so that countries may lose out in absolute terms. In addition, the inclusion of the ToT – again taking thus exports in relation to imports into account – can lead to such a scenario. As cautioned for example by Panagariya (2005) even without such non-Vinerian effects losers may well be an outcome of global liberalisation if not only tariff reductions, but also the abolishment of export subsidies are considered. As these export subsidies are currently mostly used by developed countries to support their otherwise shrinking agricultural sector, net food importers will be likely worse off as food prices will rise, leaving also a number of developing countries (89 in the developing world, 31 thereof in SSA, only Rwanda and Burundi from the EAC members) on the losing side. Critics of these subsidies from mainly the Non-Governmental Organisation (NGO) sector however see an abolishment as welcome because (small-scale) farmers in developing countries are likely to obtain better prices for their produce. The best way from a welfare and distributional perspective would of course be simply neutralizing these agricultural subsidies in industrialized countries by tariffs so that in effect consumers and producers in developing countries are unaffected while a money transfer from industrial countries’ governments to developing countries’ governments takes place. These occurrences, however, are by far not the only potential sources for inter- and intra-country divergence (or missing convergence), but they all extend over the borders of the NC framework, dealing for example with questions of market segmentation, unemployment and wages and will thus be discussed further below. Responding to their own rhetoric question whether or not LINKAGE is thus achieving what it is supposed to achieve, Von Arnim & Taylor remind that the model

serves a purpose, providing arguments for powerful political interests behind the free-trade agenda’ [...] and that thus] developing countries would be ill-advised to follow the radical recommendations of the World Bank’s liberalization strategy insofar as it rests on results from the LINKAGE model (Von Arnim & Taylor, 2007: 31f).

Even the more modest World Bank Linkage estimates by Anderson, Martin & Van der Mensbrugge (2005) are according to Ackermann & Gallagher ‘based on modelling innovation that extend the assumed behavioural structure far beyond the standard models’ (Ackerman & Gallagher, 2008: 51). Consequently, they report significantly higher gains even than other dynamic CGE models such as the Modelling International Relationships in Applied General Equilibrium (MIRAGE)-based calculations put forward by Bouet (2006) with 100 to 150 billion in global gains. The same lack in robustness of the results applies for the poverty reduction impact as altering very basic assumptions on modelling techniques and parameters can ‘turn the expectation that, for instance, Africa’s poor stand to gain from further trade opening under the Doha Round into one in which they would stand to lose’ (Vos, 2007: i).
Overall, of the 19 models and model specifications reported in Bouet (2006) only two of the Linkage models and the dynamic version of the Harrison, Rutherford and Tarr (HRT) model proposed by Cline (2004) arrive at gains above 500 billion USD and thus a relative size that reaches a mere one percent of the global GDP. This is in our view in fact the main point to make in this debate: irrespective of any uncertainty about model specifications and huge differences in the result, the effects on welfare of global trade liberalization, particularly but not only for developing countries, are marginal at best from a static NC perspective. Even when abstracting from the fact that most of the discussed CGE models already incorporate certain degrees of non-Vinerian dynamic effects in their calculations, thus even further decreasing the estimates for static effects, a comparison to GDP levels is again eye-opening. Of the 80 billion USD gain of a full MFN liberalization that are calculated in the Global Trade Analysis Project (GTAP) model specification which has been developed by Hertel & Keeney (2005), 22 billion accrue in developing countries, the remaining 60 billion in industrialized countries. This corresponds to only 0.44 and 0.23 percent of GDP respectively. Even when using the (more recent) LINKAGE results instead the numbers are only marginally improved to 86 and 201 billion and thus 0.8 and 0.6 percent of GDP respectively. For a more likely Doha scenario short of total liberalization the respective values shrink to 16 and 80 billion in LINKAGE and 4 and 24 billion in GTAP, representing 0.16 and 0.08 percent of GDP for developing countries and 0.25 and 0.1 percent for industrialized countries respectively. Even more staggering is a distribution of the gains on a per capita ratio: every citizen of a developing country would gain according to these calculations between 84 cents (GTAP, likely scenario) and 16.8 USD (LINKAGE, full liberalization scenario). The values for the industrialized countries are likewise not mind-blowing, but with 23.2 USD to 198.6 USD still roughly 25 times the values of the developing per capita figures for the likely Doha scenario and twelve times for the full liberalization estimates. This certainly invites at least a small question mark on the often heard assertion that developing countries would benefit most (in fact, they appear to do so with regard to the percentage of the gain to GDP, but not so in absolute terms as well as in per capita terms). These small figures seem painfully familiar from the regionalism debate above, indicating that global trade has not really more to offer in this regard. This is particularly evident if one remembers that it is a common mistake to assume that such a gain will be recurring every year, thus adding to the growth rate (see for example IMF, 2001). Despite some dynamism incorporated in the models, these static gains from tariff liberalization can in fact not be assumed to accomplish this as the gain ‘is not a rate of change, it is a single one-off change, giving a single one-off rise in income’ (George, 2010: 33).

### 3.9.5 The need for looking beyond the Neoclassical Framework

Given the methodological diversity and unresolved weaknesses and the missing robustness and ambiguity of results, Panagariya is probably right in summarising that all empirical approaches have ‘sufficiently serious problems […] that the results based on them are unlikely to change the minds on either side of the regionalism debate’ (Panagariya, 2000: 325). Despite this ambiguity, there appear to be three rather undisputed, almost stylized facts that crystallise out of this imbroglio.

Firstly, abstracting from some special cases such as the abolishment of export and production subsidies and export-sector related issues such as unfavourable ToT and
BOP developments and focussing on tariff liberalisation only, the answer to the question whether to prefer regional or global approaches from a NC perspective is fairly simple and straightforward. If one believes that the NC and framework and its constituting assumptions are sufficiently correct in describing the real world, multilateralism, or in fact unilateralism must be the preferred option (with North-South integration being an awkward substitute that is partially mimicking MFN liberalisation at most). From this perspective, regionalism must be seen as inferior to multi- and unilateralism and thus should be abandoned for the latter. Secondly, gains from either regional integration or multilateral liberalisation in trade in goods are likely to exert only a negligible influence on welfare and poverty reduction and, by definition, none on mid- or long-term growth when remaining inside a NC framework. This implies that from such a radical perspective, neither strategy should be seen as a worthwhile undertaking and thus regionalism would be seen as not deserving attention not in contrast to multilateralism, but alongside it. Thirdly, this implies that any relevant support for regionalism has to come from effects outside the NC framework, both with regards to magnitude as well as with regard to the edge it might have over multilateralism (either in general or with regard to certain integration aspects and/or with regard to sequencing). In other words, one cannot really be a wholehearted adherent of the NC framework and at the same time support regionalism. It is therefore understandable that commentators trapped in the NC framework are found guilty of the implicit assumption that

the terms "regionalism" or "regionalisation" are antithetical, second-best, inferior or sub-optimal option, if not pejorative, while the terms "multilateralism" or "global liberalisation" invariably convey a sense of something positive, first-best, superior or optimal (as criticised by Mistry, 1995: 11)

Such a bottom line certainly begs the question why we then have devoted so much time and space either to such a flawed policy (regional integration) or to a flawed framework (NC). We would claim that both interpretations might hold some truth, but that the main problem is the unnecessary confinement to the NC framework. As discussed in the two coming chapters, there are in fact other aspects of regionalism and other analytical frameworks that arrive at considerably less disappointing results.

This leaves the question why we have analysed regionalism in such depth under this overly stringent neoclassical framework. The reasons for this are fivefold. Firstly, this framework and particularly the concepts emanating from this framework (although often not explicitly linked to it) still dominate the discussion and thus a comprehensive discussion appears to be essential in order to debunk or at least qualify some overly simplistic arguments. Secondly, this framework is the most well-developed perspective when it comes to quantity and to a certain extent also scientific rigour, thus there is simply a lot to be reported about. Thirdly, most other approaches discussed further below explicitly or implicitly relate to the NC framework, both by utilizing considerable parts of the NC logic and methods and by delimiting themselves by objecting or qualifying certain NC assumptions. Therefore, the NC framework contains important information that is also essential for analysing other approaches discussed in subsequent chapters. Fourthly, several empirical strategies that have been discussed and applied in this chapter may in fact be seen as unintentionally already picking up effects that go beyond the NC framework and thus partially already giving evidence of non-Vinerian effects and will thus be referred to and modified in subsequent chapters. Fifthly, the NC framework does in fact a very good job in cautioning against inherent
risks of regionalism and particular against irrationally high expectations. The caveats about trade diversion and winners and losers need still be taken very seriously even if other frameworks show additional positive effects of regionalism. Minimising potential and actual negative effects should thus be a priority for the design of regional schemes. Quite worryingly, for example, the EAC trade reports 2006-2008 do not even mention the possibility of the occurrence of trade diversion. In our view, particularly the tendency of divergence and winners and losers are genuine threats that are often not properly taken into account in regional schemes in the South – or they are at least rarely addressed by compensation and cohesion policies.
4. Political economy: non-welfare oriented reasons for regionalism and implementation issues

In this section, we condense the vast literature on PE models and the so-called dynamic time path question, focusing mainly on relations between lobbies and politics and the effect of regionalism on the future and progress of multilateralism (4.1). We also shortly review the scattered evidence on this question (4.2).

4.1 Framing the ‘stepping stone vs. stumbling block’ debate: Larry Summers vs. Jagdish Bhagwati

As discussed in more detail in chapter 3 above, most arguments in favour of regionalism from a neo-classic perspective are arguments in favour of liberalisation and trade in general rather than in favour of regionalism. Maximising the gains from the two main sources of comparative advantage, specialisation and competition, would a priori suggest a multilateral, global liberalisation rather than a regional one. Hence, the rise of regionalism is a strange phenomenon for many economists. The neo-classical tool box is based on assumptions that interpret economic activity as being independent of time, space and context. Global free trade is thus interpreted as the quasi-natural goal of any sound welfare-oriented economic policy. Regionalism, therefore, must be a result of political or political economy forces that inhibit the move to global free trade. Following such a line of thinking, a major strand of research on economic regionalism has been devoted to the question whether regionalism makes it more or less likely that the world arrives at global free trade and whether it accelerates or retards this process. This literature has become known as the stumbling blocks vs. stepping stones debate and is subsequently discussed. The only justification for regionalism from such a view is that it may in general or under certain circumstances lead to free trade. As will be detailed below, we grant such game-theoretic models only limited explanatory power for the explanation – least the improvement – of regionalism, but the vast literature does still imply some important aspects for the consideration of regionalism. At least, the double trade-off is for once fully considered as it is the backbone of this argument. The focus of the chapter lies on the exclusively theory-based stepping stone vs. stumbling block debate with its two antagonistic tendencies of endogenous bloc formation (4.1.1) and endogenous protection (4.1.2) as well as negotiation aspects (4.1.3) and the compromise proposal of open regionalism (4.1.4).
A number of interesting review articles exist on the vast stepping stone vs. stumbling block literature (Baldwin, 2008; Bhagwati, 1993, 1999; Panagariya, 1999, 2000; Winters, 1996). Tellingly, all end up with distinctly different classifications of the debate. The focus of the current review is mainly placed on three important characteristics. The probably most important feature of the debate is that it is almost exclusively based on models that are not tested against reality. Another very symptomatic feature of the debate, used in this article to structure the somewhat overlapping arguments, is found to be that almost every aspect touched on by one of the schools has its counterpart in the other school: minimal changes in otherwise identical model settings often yield completely opposing results. This leads to situations where authors find potential support for both arguments, depending on slight changes in the specifications of the model setup or on the kind of regional scheme discussed (Bagwell & Staiger, 1997a, 1997b; De Melo & Panagariya, 1993; Krugman, 1991a, 1991b; Riezman, 1999).

Table 14: Stepping stone vs. stumbling block (I): the Baldwin classification

<table>
<thead>
<tr>
<th>Stepping stone (Positive Assessment)</th>
<th>Stumbling block (Negative Assessment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larry Summers school (LSS)</td>
<td>Jagdish Bhagwati school (JBS)</td>
</tr>
<tr>
<td>Discriminatory liberalisation =</td>
<td>Discriminatory liberalisation =</td>
</tr>
<tr>
<td>liberalisation.</td>
<td>discrimination.</td>
</tr>
</tbody>
</table>

Endogenous bloc formation:  
- Trade diversion: domino effects.  
- Trade diversion: preference erosion.

Endogenous protection:  
- Declining tariffs: juggernaut, rent destruction, coalition games.  
- Trade creation: saturation and cherry picking.

Institutional aspects:  
- Multilateralising regionalism: learning, experiments, emulation.  
- Tariff wars / TOT, hegemons, no MFN free-riding for poor countries.

- Inefficiency of WTO / complexity.  
- Capacity/interest diversion, spaghetti bowl, inefficiencies.

Regionalism facilitates global liberalisation.  
Regionalism hampers global liberalisation.


While these two characteristics are increasingly acknowledged and criticised (though not very much is undertaken to solve this problem), a third aspect is rarely mentioned. The debate is characterised by a common bias: all contributions discussed in this chapter stem from a decidedly neo-classical framework and unambiguously regard the quickest possible accomplishment of global free trade as most beneficial to everyone. Both apparently antagonistic positions are thus much more similar than usually perceived. Not only are they both exclusively based on theoretical models without serious attempts at an empirical substantiation, but they also build on almost the same argument. The only difference appears to be that the Larry Summers school (LSS) combines the assumed likelihood of stepping stones (i.e. the timely attainment of global free trade) with a positive assessment, while the Jagdish Bhagwati school (JBS)
combines the assumed likelihood of stumbling blocks (i.e. the retardation of global free trade) with a negative assessment.

The best start into the debate on the relationship between regionalism and multilateralism is Baldwin’s division into two schools:

The Larry Summers school-of-thought looks at discriminatory liberalisation and sees liberalisation. An outcome it welcomes since it views regionalism as having a largely benign effect on the multilateral system. The Jagdish Bhagwati school looks at discriminatory liberalisation and sees discrimination. An outcome it views as a serious threat to the WTO-centred world trading system (Baldwin, 2004: 2).

The JBS emphasises particularly the first part of discriminatory liberalisation and regards economic regionalism hence as a threat to the liberal, multilateral world trading system embodied by the WTO. According to the stepping stone argument promoted by the LSS, regional economic integration is a discriminatory way of liberalisation, but still liberalisation and hence a step into the right direction. In general, the representatives of the LSS aim at the greater (political) feasibility of regional integration rather than its greater potential while the JBS focuses on the greater economic potential (and fairer distribution thereof) in a multilateral process and the corruption of incentives in regional economic schemes.

### 4.1.1 Endogenous bloc formation

It is intuitive to assume that the arguments of the JBS focus to a large extent on the negative effects of trade diversion while the LSS emphasises trade creation that makes the world move further towards free trade patterns. But this is not the whole story. In fact, the LSS has produced several models exhibiting positive (i.e. liberalisation-inducing) effects of trade diversion while the JBS also contains models that show negative (i.e. liberalisation-inhibiting) effects of trade creation. All of them focus on government decisions that are strongly influenced by political economy aspects.

A large body of studies in the JBS tradition focuses on the negative effects on third parties (bystanders or outsiders). This may stimulate dynamics making the world end up regionalised instead of globalised, a caveat that has been popularised by Bhagwati as ‘dynamic time path question’ (Bhagwati, 1993). The basic idea is simple: the authors of the stumbling block models consider policy making as strongly influenced by political economy aspects. Such a strong focus on political economy aspects is particularly noteworthy as such models explicitly stand in a neo-classical tradition – a school of thought that is famous and infamous for consistently assuming perfect competition and thus the absence or negligibility of political economy forces. The reason for resorting to imperfect competition in this case is obviously a consequence of the incommensurability of established neo-classical models that unambiguously prove that global free trade is generally and invariably preferable to regionalism with the real world observation that economic regionalism exists and thrives. Hence, it must be concerted special interests or unfortunate constellations in democratic decision processes that lead to such inferior solutions. The models usually rest on three basic assumptions: trade policy is strongly influenced (or even determined) by lobbies; only exporters / producers exert such an influence while consumers and other, unorganised producers have no influence; and trade diversion is the one and only incentive to pursue regional economic integration. This implies that the more trade diverting a
prospective regional agreement is, the more likely it will be put into place. The intuition is simple and model-immanent: whenever a trade agreement gives rise to trade diversion, there will be narrow interests that enjoy private gains, while costs will be shared by all taxpayers. To the extent that industry interests are better represented in the political process than taxpayer’s interests, trade diversion will enhance political viability while contributing to an inefficient allocation of resources in the two partner countries (Grossman & Helpman, 1995: 680; Krishna, 1998). Precisely these highly trade diverting schemes, so the argument, are at the same time those that reduce incentives for further, multilateral liberalisation most as global free trade would eliminate all gains (i.e. rents) from trade diversion. Therefore, this variety is sometimes labelled ‘preference erosion stumbling block’ (Baldwin, 2008). As Baldwin notes,

*the opposition of small developing nations to agricultural liberalisation [...] is a classic example of the preference-erosion stumbling block. Had the EU not unilaterally granted these nations preferences, these nations would probably have been pushing for EU market opening in sugar and other goods* (Baldwin, 2008: 19).

A genuine stumbling block exists in line with this argument if multilateral liberalisation has been politically feasible – or in this model context: more correctly: feasible for interest groups – in absence of regional schemes but ceases to be so after the introduction of regionalism. In other words, if the option of regionalism would not exist, interest groups would choose multilateralism over the national, protectionist status quo because they expect some gains from the liberalisation of the world markets (albeit smaller than in a regional scheme). Note that these gains do not stem from trade diversion anymore, but from trade creation. Thus, the interest in pursuing MFN liberalisation of exporters stems from efficiency gains that had been actually ruled out. This may tempt to ‘conclude that countries should be restricted to pursuing GATT style multilateral liberalization’ (Krishna, 1998: 19). Similar results are obtained when combining interest group and voter considerations, as the former group has the potential to tip the scales towards regionalism (see e.g. Albertin, 2008). Other authors in the JBS tradition move completely away from concerted interests and focus on models with median voters only. In this tradition, Levy (1997) proves that under a Heckscher-Ohlin (H-O) setting regional economic integration may never be preferred over multilateralism by the median voters of both prospective partner countries. Therefore, regional integration should simply not take place as either autarky or multilateralism is preferable for the median voters. As regionalism does indeed take place in reality, one of the assumptions of the model must be violated. Possibly, interest groups as discussed above play a more decisive role than other parts of the population. Alternatively, voters do not act profit-maximising or prefer a regional solution for other, non-economic reasons. Another alternative could be that other economic gains outside the H-O framework tip the scales towards regional integration. In this vein, Levy introduces a second model with differentiated products that takes into account utility gains from product variability. In this case, economic regionalism may be rationally preferred by the median voter over autarky, but it appears to be a stumbling block as multilateralism would have been preferable for the median voters before regional integration, but not after the introduction of regionalism.

Likewise, Andriamananjara (1999) shows that incentives for MFN liberalisation may be corrupted in both member and excluded countries at the same time. In fact, depending on the level of preferentialism and size of the bloc, member countries and outside countries tend to favour and oppose different kinds of MFN liberalisation (small vs.
large cuts) that lead to a frustration of multilateralism due to unanimity requirements in international trade negotiations. As demonstrated by Limão (2007) and Limão & Olarreaga (2005) the same preference erosion logic applies if non-economic gains are exchanged for preferential trade access – a situation that is termed ‘goodies-bag stumbling block’ by Baldwin (2008). Allowing for accession of other members to regional schemes, Krugman’s (1991a) model predicts the eventual establishment of three very large trading blocs that are – given his model settings – far from achieving a maximisation of world welfare.

The most important part of the LSS stepping stone arguments is the assumption that such regional economic liberalisation efforts are likely to trigger future liberalisation on the regional and global level. Baldwin discusses such processes as domino and juggernaut effects (Baldwin, 2004). Domino effects are instances where a (politically motivated) regional economic integration scheme operates as an idiosyncratic shock that makes exporters of a non-participating country – who had been indifferent with regard to tariff issues prior to the establishment of the regional scheme – to lobby their governments for accession. More precisely, this will apply to those exporters who formerly exported into the newly built or deepened bloc but who have lost revenue due to this discriminatory liberalisation. In other words: those who have suffered from trade diversion. If a government had been close to indifferent towards membership such an ‘extra activity may tilt the balance and cause the country to join the bloc’ (Baldwin, 2004: 6). This incentive to join is further enhanced by the increasing size of the existing bloc. In this connection Baldwin’s metaphor of the domino is less convincing and one could rather point to analogies with gravity where increasing masses cause increasing gravity and vice versa. As long as the existing bloc welcomes such accessions, it continues to grow (as for example the EU enlargement process exemplifies). In cases where the option for accession is disallowed by the member states the ‘new political economy flames may find vent in preferential arrangements among excluded nations’ (Baldwin, 2004: 6). An example for such a process might be MERCOSUR, which has been initiated by countries that were not accepted into NAFTA. The results of Baldwin’s analysis are particularly striking as the model setup is quite similar to the JBS models discussed above: both focus on the reaction of lobby groups on the occurrence of trade diversion. The completely different outcome turns out to be a result of only two changes in Baldwin’s model. One difference concerns the idiosyncratic shock or the fact that the first regionalism step is exogenously induced (or even imposed for political reasons) without any prior support for either global or regional free trade by interest groups or (median) voters. This implies by definition that regional economic integration may not act in this setup as a stumbling block as support for global liberalisation has been previously (politically) not feasible. However, one might claim that an idiosyncratic shock may also directly move to free trade, but the assumption that this is more likely to occur on a regional basis seems to be plausible and empirically sound. Nonetheless, his recourse to an external shock as the starting point of regional integration – or the exogenisation of the decision to regionalise – is at least questionable and clearly hints on the LSS view that regional economic integration holds no inherent value other than overcoming political economy resistances in order to move to global free trade as rapidly as possible. The second difference concerns the option to join a trade bloc rather than to stay outside or form competing blocs (the Krugman model just discussed above likewise allows for accession – but assumes that this process will come to terms short of the grand coalition). This implies that while the
JBS models only discuss the corruption of incentives of exporters / lobbies in the member countries, Baldwin, who is a representative of the LSS, emphasises a possible dynamic that inspires calls for liberalisation by exporters / lobbies of the outside countries.

Interestingly, the LSS does not contribute any models to the debate that display liberalisation-inducing effects of trade creation. Therefore, trade creation is only promoted as important argument with regard to welfare economic considerations and not with regard to the dynamic time path question. In contrast, several LSS models show that multilateral liberalisation may be undermined by trade creation effects. For example, members of RECs with relatively similar factor endowments may reap considerable gains from variety effects, economies of scale and competition. Therefore, further liberalisation with dissimilar countries will provide fewer gains – mainly those of the comparative advantage kind – while political costs and adjustment costs remain in the same magnitude and severe. Baldwin refers to situations in which countries thus choose to refrain from multilateral liberalisation as ‘cherry-picking stumbling blocks’. This seems to be mainly the case for RECs among large, developed countries where problems with unemployment and lower wages at least for unskilled workers are likely to occur. Severe adjustment costs that are linked to competition may however also make RECs among poor countries to refrain from further multilateral liberalisation.

Conversely, such an interest diversion may also occur among excluded economies: Ornelas’ (2005a) model assumes that a dominance of trade creation over diversion can only be achieved by lowering external tariffs, thus fostering trade with ROW (so-called open block effects). Producers from outside may be already satisfied and expect only few additional gains from following the multilateral track while the associated (political) costs remain constantly high. One might therefore term such a situation saturation stumbling block. Based on a completely different design, Aghion, Antràs & Helpman (2007) derive results that are similar to those of Ornelas. They assume a leading country (agenda setter) that is a ‘residual claimant on the surplus from global free trade and […] has the ability to compensate other countries for the abandoning of suboptimal agreements’ (Aghio, Antràs & Helpman, 2007: 27). Positive externalities (i.e. open bloc effect trade creation and TOT gains, possibly following tariff reductions) are likely to hamper the move towards global free trade as it is more expensive to buy countries into the scheme that gain from the current regional solution to which they are not participants. Conversely, negative externalities (i.e. trade diversion and TOT losses, possibly following tariff escalation) are likely to make economic regionalism act as a stepping stone because it is simply cheaper for the agenda setter to buy an outsider into the regional scheme if it currently experiences losses. This implies a rather counterintuitive conclusion: following such a model setup – and the same applies for the majority of the models discussed above – the by neo-classic assumptions derived goal of free trade is achieved in occasions where (innately negative because inefficient) trade diversion dominates while it is hampered in occasions where (innately positive because efficient) trade creation dominates.

4.1.2 Endogenous protection

A related strand of the discussion shifts the focus to the analysis of tariff dynamics. Again, proponents of both schools have contributed to the debate and trade creation
and diversion remain central features in most contributions. While some models again emphasise political economy aspects (Baldwin, 2004; Ornelas, 2005a, 2005b, 2005c, 2008; Panagariya & Findlay, 1994), others interpret the height of protection as a classical beggar-thy-neighbour policy (Bond & Syropoulos, 1996; Krugman, 1991b; Riezman, 1999; Zissimos & Vines, 2000). In other words, contrary to the above models where rational decisions by individual actors or groups do or do not lead to inefficient and thus irrational decisions at the country level, this second group inside the models on endogenous protection assumes governments to act independently of interest groups’ considerations and thus – taken individually – rationally. However, the JBS models reveal that this may nonetheless lead to inefficient solutions from a global perspective.

An often-proclaimed fear of the JBS is that regional integration may lead to rising tariffs against ROW, resulting in outright trade wars. A somewhat unintentionally comical political economy approach has been followed inside the JBS by Panagariya & Findlay (1994) who show that labour that was formerly employed to lobby against current FTA/CU partners will drive down wages in the lobbying sector and hence make the remaining anti-ROW lobbying stronger, leading to heightened MFN tariffs. It is however certainly unlikely that such a small labour section in the economy will have anything but a miniscule effect on wages in that way. Similarly but somewhat more realistic, Bhagwati & Panagariya remind us that because protectionism against partner countries is ruled out by the regional treaties, declining industries may lobby for erecting barriers against the outside as this is their only remaining option (Bhagwati & Panagariya, 1996: 20). Another aspect highlighted in the Panagariya & Findlay paper focuses on the difference between FTAs and CUs. In the latter, it is argued, lobbying becomes a public good to all lobbies of the different countries, leading to free riding behaviour of all but one lobby (the one that is most destitute to lobby). Hence, a CU is preferable over a FTA as special interests are somewhat diluted and (outside) tariffs hence on average lower. This effect is the more pronounced the more members a CU contains. Taken together, this certainly sounds like a stepping stone argument rather than a stumbling block (increasing members and lessened tariffs). However, Panagariya & Findlay retrieve their argument against regionalism by claiming that exactly this fear from diluting lobbies’ strong-hold on protection may be a reason for opposing the accession of new members to a regional scheme in general and a CU in particular, thus making it a stumbling block of the endogenous bloc formation kind discussed above (Panagariya & Findlay, 1994: 22). More importantly, lobbies might band together and pool resources or resources spent by one lobby may suffice to uphold the tariff level, thus increasing the protection of formerly less protected partner countries. Cadot, De Melo & Olarreaga (2001) make this point explicit: although acknowledging the importance of power dilution, free riding, tariff-revenue competition and consumer arbitrage opportunities in FTAs, they claim that in deeper forms of regional integration lobbying should rise again as a result of new opportunities created by a common central government body and a united, regional lobby.

Contrary to this, Baldwin’s so-called juggernaut effects imply that once a liberalisation step has been implemented (either idiosyncratically or as a domino) the principle of reciprocity leads exports firms to lobby for further liberalisation rounds:

*Reciprocity turns each nation’s exporters from bystanders in the tariff debate to fervent opponents of protection within their own nation. Why? The principle of reciprocity means exporters win the prize of better access to foreign markets only if home tariffs*
are lowered. Thus lobbying against domestic tariffs becomes a way of lowering foreign tariffs (Baldwin, 2004: 8).

As an initial reduction in the protection will lead to a relative gain of the size of the export sector and a relative loss of the size of domestic production, the ‘proliberalisation camp will be systematically stronger in every nation’ (Baldwin, 2004: 8) and so will support for further tariff cuts increases. While this implies that the incentives of powerful interest groups are shifted towards economic regionalism, Ornelas (2005c) additionally shows how regionalism may successively deprive these interest groups of their influence on economic policy decision making (rent destruction). In his basic model, Ornelas takes the exact opposite view compared to Grossmann & Helpman (1995) and Krishna (1998) in assuming that interest groups lobby for tariff levels, but not for or against FTA formation. This view is corroborated by the assumption that it is much more difficult to organise lobbying across the whole economy: reaching consensus and preventing free riding is substantially more intricate than just doing so for certain sectors, industries or goods only. In this basic model Ornelas reaches a very pronounced result, namely that welfare-decreasing FTAs (due to high or even increasing external tariffs) may be entirely ruled out by a simple causation chain: higher free riding implies lower external tariffs that lead to decreasing rents for producers (rent destruction). This in turn results in lower contributions to the government. Anticipating this, governments only support regional schemes if they are sufficiently trade-creating. Such a stark result holds only true if lobbying for and against FTAs is ruled out, but even when including this possibility the likelihood of politically supported welfare-decreasing FTAs remains very low.

Krugman (1991b) develops the idea that rising tariffs may be a result of regional integration even in the absence of lobbying. He assumes that intra-bloc behaviour on tariff setting maximises national welfare while extra-bloc tariffs are set non-cooperatively. Under this setting, the optimal external tariff of a bloc rises with its size as the enhanced market power of any newly-built trade bloc offers opportunities for ToT improvements. Whether this also holds true for regional schemes among relatively small and less developed countries, such as those in Africa, remains doubtable as there are only very few if any goods for which they exert some influence on world prices. This leads to more and more trade diversion by which the competing blocs would hurt each other and hence finally to decreasing welfare in every region and the world at large. Interestingly, it turns out that the least beneficial number of trading blocs turns out to be three – a scenario that seems to be somewhat imaginable in the real world (i.e. the Americas-Caribbean, Europe-Africa, Asia-Pacific). As Krugman himself cautions, the result is highly sensitive. For example, assuming international trade talks instead of trade wars (i.e. negotiations instead of non-cooperative tariff setting) completely changes the outcome. Or, as discussed in Krugman’s famous self-rebuttal, geography and transport costs may make trade diversion meaningless (see discussion below). A related view is advanced by Bond & Syropoulos (1996) in an asymmetric setting: if blocs increase in relative size some blocs may end up above their free trade level, but they remain to hurt the welfare of non-members. This replicates the general proof by Kennan & Riezman (1990) that large countries can indeed win from tariff wars.

An important caveat highlighted by the LSS against such fears is to recall is that WTO/GATT regulations do not permit regional economic integration if they lead to rising tariffs. However, tariffs should be viewed in such models as ‘representing
protection resulting from various trade policy instruments such as voluntary export restraints, anti-dumping actions, and other mechanisms’ (Panagariya & Findlay, 1994: 3f) that may well be possible if WTO/GATT regulations are observed. Even in absence of increasing protectionism, economic regionalism may act as a stumbling block. Drawing on the Krugman and Bond & Syropoulos approach, Zissimos & Vines (2000) demonstrate that economic regionalism may act as a stumbling block even if GATT article XXIV, prohibiting the increase of tariffs to the outside world, is observed and no formal or informal protectionist devices are employed. This may be the case as currencies of member states appreciate and thus the purchasing power of members increases with regard to outside products and hence ToT gains can be reaped. In other words, although initially the bloc grows, the incentives for further bloc expansion will not continue until a single, all-encompassing customs union (i.e. global free trade) is obtained. Although further expansion in bloc size brings about higher ToT gains per good purchased from outsiders, it simultaneously reduces the number of goods for which this applies. Following their model with given parameter values it appears to be likely that the process will stop at two blocs, one large with a welfare level that is higher than under free trade, and another small one that is significantly poorer (Zissimos & Vines, 2000: 33), thus leading to growing world inequality.

This threat of growing inequality is exacerbated by the fact that economic regionalism disables the mechanisms of the MFN clause, the ‘cornerstone of the post-World War II trading system’ (De Melo & Panagariya, 1993: 3). Therefore, it is rightly feared, free-riding on the MFN clause is not possible anymore, particularly for poor, developing countries that have not much on offer in bilateral or regional trade negotiations. They may hence end up worse in a regional scheme – being dominated by a large neighbour – than in WTO negotiations where the MFN clause provides for an automatic transfer of concessions that have been negotiated between two or more heavyweights. Likewise, aggressive unilateralism and particularly trade sanctions are more likely to be used by hegemonic players. Bhagwati on his part asserts that the United States have turned from an ‘altruistic hegemon’ that backed the multilateral system to a ‘selfish hegemon’ after they have become aware of the benefits of using retaliatory action for protection (Bhagwati, 1994).

While Baldwin & Ornelas focus on incentives and power of lobbies to establish that RECs are likely to lower barriers to trade, Riezman (1999) represents the non-political economy side of the LSS and is therefore the proper opponent to Krugman’s (1991a) model. Matching general equilibrium considerations with game theoretical methods, Riezman models economic regionalism as a coalition game that may overcome inferior Nash equilibrium results (i.e. non-liberalisation). In one of his calibrated scenarios (with a large and two smaller blocs), the results are startling: free trade is neither attainable if regionalism per se is prohibited nor if only FTAs are permitted. In the former case, non-cooperation will be the result as the dominant economy wins the tariff war and enjoys higher welfare than under free trade while the smaller blocs and the world at large loses. In the latter case, the two losers benefit to some extent from forming an FTA, but still are less well off. Only if CUs are also permitted, free trade is reached as the smaller economies’ threat to form a CU makes the dominant bloc agree to free trade. Therefore, Riezman concludes, ‘banning bilateral trade agreements can lead to more, not less protection’ (Riezman, 1999: 764). In this case, regional schemes are not observed as they only play a role in blocking less efficient solutions – making this stepping stone model somewhat unrealistic in view of the current blossoming of RECs.
However, assuming a more equal distribution in the initial country sizes, Riezman receives almost the opposite results: free trade is reached in absence of regionalism and if only FTAs are permitted. If CUs are permitted, however, the two larger economies build such a bloc and exploit the smaller one, making CUs in this case act as an outright stumbling block with adverse distributional effects. Andriamananjara’s (2000) model again reinforces the stepping stone argument with regard to retaliation threats of outside countries, thus contradicting his own previous work on the negative effects of regionalism on the multilateral system (Andriamananjara, 1999). In response to losses caused by trade diversion, they are likely to raise tariffs against the newly established bloc. Such a procedure would make the world end up more protectionist and farther away from multilateral free trade. However, it is rational for the integrating economies to pre-empt this retaliation risk by negotiating MFN trade liberalisation agreements in parallel to the preferential ones, thus directly fostering the progress of multilateralism. In practice, such instances can particularly be observed during introduction of customs unions where often not only unitary, but also lower tariffs with lesser peaks are introduced (usually in three or four clearly defined tariff bands with only few exceptions). Focussing on the differential between gains from defecting from multilateral agreements and losses from international retaliation, Bagwell & Staiger (1997a) predict initially rising protection in FTAs (but not CUs) in the transition (i.e. negotiation and phasing-in) period when trade patterns have not changed yet (making defection from multilateral free trade attractive). In contrast, the expected trade volumes with ROW after trade diversion has occurred are much lower, thus making the retaliation threats less severe. However, once the FTA is fully established, the current and expected future gains are in balance again and a restoration of more liberal multilateral trade policies is assumed. Interestingly, the companion paper (Bagwell & Staiger, 1997b) predicts exactly the opposite reaction path for CUs (or, more precisely, for those regional schemes that capitalise on ToT gains): an initial honey moon of liberalising external (multilateral) trade policy is followed by a re-tightening of protection. With regard to FTAs (but not to CUs) some authors even predict a race-to-the-bottom in external tariffs, i.e. unilateral reductions of tariffs (see e.g. Richardson, 1993). Note that this would imply an eventual break-down of the FTA as all members liberalise unilaterally in order to gain from commodity arbitrage. Vousden (1990) even explicitly makes this point. Such a situation has however not been observed in reality and seems highly unlikely to happen, partially because of stringent rules of origin (RoO), but certainly also because integrating countries simply agree on certain minimum levels.

### 4.1.3 Institutional and negotiation aspects

Another argument inside the JBS evokes the fear that the resources spent on regional integration lead to a postponement of the multilateral process as capacity to discuss on the global level is heavily constrained by the multitude of ongoing regional negotiations (see e.g. Greenaway & Milner, 1990: 63). Therefore, such a situation may be called capacity diversion or attention diversion stumbling block as resources are utilised for a less efficient solution (regionalism) instead of the most efficient solution (multilateralism).
Conversely, the LSS argues that agreements on the regional level may simply act as experiments that not only tame fears and build trust among the population and interest groups (and in addition shift the incentives of the latter as discussed above), but also offer a learning process. In this view, regional agreements may be emulated on a multilateral or plurilateral level. Baldwin discusses such opportunities under the telling heading ‘multilateralising regionalism’ (Baldwin, 2006) that focuses on the cutting-edge character of regional liberalisation which fosters future multilateralism. This takes place as the same or similar liberalisation and harmonisation efforts – and in many cases even the verbatim adoption of liberalisation schedules, rules and regulations – get spread by the proliferation of regional (and bilateral) schemes. In this line of thinking, the often-criticised *spaghetti bowl* proves to be much less diverse as it may appear at first sight. To the contrary, the *spaghetti bowl* may even be interpreted as useful as it is easier to build on such achievements and eventually rationalise, harmonise and generalise the different commitments instead of arriving at multilateral agreements in the first place. Nonetheless, the debate on the question whether it is more complex and resource consuming to follow such an approach and negotiate regional agreements first and subsequently arrange negotiations between those blocs or to start with substantial and far-reaching multilateral negotiations with a great number of independently negotiating countries immediately remains unresolved. Winters, for example, acknowledges the possibility that regionalism may have been an effective strategy to ‘bring trade partners to the multilateral negotiating table’, but cautions that this has been a risky endeavour (Winters, 1996: 58).

**4.1.4 Forgone gains vs. political feasibility – a case for ‘open regionalism’?**

In between these two extreme positions, a third approach is increasingly gaining momentum. This *open regionalism* agenda builds on some virtues of regionalism as discussed above (incentive shifting, learning-by-doing and a smoother adjustment process). Primarily, however, this approach advises against protectionism and foreclosure. Such arguments take up insights stemming from theoretical models from both the endogenous bloc formation and endogenous protection literature. In this line of thinking, it is increasingly acknowledged that the future path of global liberalisation in the face of regional economic schemes is not determined by the mere existence or absence of economic regionalism, but by its design. With regard to endogenous bloc formation for example Yi (1996) slightly qualifies the stepping stone assumption: the results of his model imply that the WTO

> should allow the formation of customs unions only under the condition that any outsider country that is willing to abide by the customs union rules be permitted to join it. With this rule, the formation of regional customs unions should lead to global free trade (Yi, 1996: 179f).

With regard to endogenous protection, it has been proven that it is always possible from a theoretical perspective to tame trade diversion by setting tariffs in such a way that trade creation outbalances trade diversion (Kemp & Wan, 1976; Ohyama, 1972; Panagariya & Krishna, 2002). In the most extreme case, this leads to an external tariff that restores the pre-CU external trade patterns. Trade diversion is completely avoided and the scheme thus has no effects on outside countries while for the partner countries also no losses accrue from trade diversion and some, albeit small, gains from trade creation still take place.
A very important merit of this part of the open regionalism school is certainly that it directs attention to the importance of the height of preferences relative to MFN levels. However, one has to remain very cautious as such optimal tariff are rather unrealistic in the real world, both for political economy and administrative reasons. Nonetheless, some authors even advocate changing the GATT rules according to these insights, requiring not only that unions do not raise external tariffs, but also that they set them in such a way that external trade flows are at least kept constant (McMillan, 1993). Such a restriction to open regionalism schemes that keep ROW welfare unaffected and improve union (and therefore also world) welfare would imply that incentives to pursue further liberalisation would also not be corrupted, reinforcing the open regionalism arguments on open membership above. Taking into account transport costs and the simultaneous formation of blocs, however, Frankel & Wei even claim that ‘the McMillan proposal may unnecessarily prevent the emergence of welfare improving blocs’ (Frankel & Wei, 1998: 452). Even among many hard-core critics of regionalism (and fervent supporters of multilateralism), the emergence of a widespread disillusion with regard to the political viability of a purely multilateral strategy and thus the acceptance that ‘regionalism is here to stay’ is observable (see e.g. Baldwin, 2006; Bhagwati, 1999; Krueger, 1999). The focus has thus shifted towards ‘making regionalism work’ (Freund, 2005) or even ‘multilateralising regionalism’ (Baldwin, 2006).

4.2 Empirics and synopsis: Regionalism and multilateralism – friends or foes?

The debate on the dynamic time path question is unsurprisingly still far from being solved and lingers on and on. Dozens of competing models have been developed, predicting almost any perceivable result. Conclusive empirical proof has largely remained in want for, owing to difficulties of attribution, unclear definitions and problematic measurements of the concepts regionalism and multilateralism, difficulties to construct proper counterfactual scenarios and the relatively young history of genuine and effective regional economic integration in most parts of the world. Testing the PE approaches described above is thus considerably more difficult than for the
more economy-related discussion in chapters 3 and 5. Testing empirically whether or not countries engage primarily in regional integration because of vested interests of private sector lobbies or political classes rather than out of welfare oriented decisions, is in our view hardly possible, although some studies appear to suggest that protection is in fact at least partially for sale (see e.g. Gawande & Bandyopadhyay, 2000; Mitra, Thonakos & Ulubasoglu, 2002). In the remainder of the chapter, we thus are left with the discussion of the question whether regionalism leads to multilateralism or hampers its attainment – but even here the lacking alternative scenario is a serious impediment.

Although the predictions are not testable in a rigorous manner, some scattered empirical evidence suggests that the stepping stone theories may come closer to what is going on in reality. The past decades have evidenced that for the most part the same countries who have supported multilateralism (the EU-6/EEC, the UK, the Scandinavian countries, the USA, Canada), have at the same time also spearheaded regional approaches. Other countries have tended to resist both, regional and multilateral strategies at least until recently (either openly like Japan, China and several other Asian countries or informally by non-implementation as in Africa and Latin America). Even more, the specific resistances and bottlenecks on multilateral level are often mirrored at the regional level – industrial countries resisted mainly agricultural trade liberalisation and developing ones trade in manufactures both multilaterally and regionally (Baldwin, 1997: 865). For Africa, there appears to be a rather clear-cut distinction between the enthusiasm for regionalism and the sharp criticism against further multilateral reform. However, on a closer look the public and political enthusiasm is restricted mainly to South-South cooperation only and North-South schemes – particularly in the Economic Partnership Agreements (EPAs) with the European Union – are met with the same scepticism as multilateral schemes.

Amidst this empirical limbo the debate has in general since quite some time been described as ‘fundamentally murky’ (Krugman, 1991a: 9) even by authors who have spent considerable time and effort themselves to contribute to this discussion. Other assessments go even a step further, criticising that the

the multilateralism versus regionalism literature [...] looks distinctly odd from today’s perspective. It tries to use simple theory to answer what is intrinsically a complicated empirical question [...] and are therefore] mainly of interest to historians of thought (Baldwin, 2008: 16).

Others bemoan the lacking robustness of the results to infinitesimal model setup changes, implying that the results are often nothing but ‘theoretical curiosa’ (Abrego, Riezman & Whalley, 2002) rather than a guidance for real world policy making and that the models should be interpreted as ‘parables rather than sources of testable predictions’ (Winters, 1996: 1). Although disillusion with such indistinct results is certainly comprehensible, such a complete rejection of the usefulness of the stumbling block vs. stepping stone debate appears clearly exaggerated as theoretical insights on potential interdependencies should be at least considered as part of the discussion on the gains and losses from regional economic integration.
5. Heterodox perspectives: what role for regionalism in development and structural change?

Although the analyses discussed in the previous chapter have indicated some support for regionalism, the results are far from establishing a strong case in favour of regionalism, both based on the theoretical arguments as well as on the empirical proof. Reviewing the dominant debate on economic regionalism leaves the impression that it is inherently a compromise solution in the absence of political will to move to multilateralism on a direct route. However, there appears to be quite some unease with such a perspective. Indeed, there are a number of alternative approaches towards the analysis of regionalism that make it appear distinctly less futile than the previous chapters suggest. In other words, economic regionalism may indeed hold significant potentials for development. Some of them again apply to multilateralism as well and thus regionalism may again be only a second best solution. Others however are unique to regional approaches or at least appear to be more feasible on a regional scale and thus may be sacrificed if the focus is on rapid and full implementation of multilateral liberalisation and integration instead of regional approaches.

We first shortly distinguish between anti-globalism sentiments that discuss regionalism as a tool against multilateralism (and often make references to heterodox schools as well) from approaches that see regionalism as tool for structural change and development rather than as a weapon in the largely ideological fight against multilateralism (5.1). After explaining the relaxed assumptions of the different heterodox approaches in some detail (5.2), the main analysis is divided into four classes of effects, namely non-NC allocation effects (5.3.1), levelling effects (5.3.2) and most importantly accumulation and agglomeration effects (5.3.3) as well as governance effects (5.3.4). Finally, we present some empirical evidence – as far as such evidence is obtainable or feasible to produce, otherwise at least some estimates or potential empirical strategies for future research are proposed and discussed (5.4) – and conclude in a short synopsis (5.5).

5.1 Regionalism as anti-globalism vs. regionalism as tool for structural change

Before analysing each of these potential gains separately, it appears essential to distinguish such arguments in favour of regionalism in general or as a tool for structural change and catch-up from other arguments, that at least at the surface also make reference to heterodox schools of thought, but evoke regionalism as anti-
globalism. From such a perspective, multilateralism, economic globalisation, neoliberalism and capitalist exploitation by multinationals are seen as inevitably linked and as having detrimental effects on non-economic fields (such as cultural diversity, morality or the environment) as well as on the distribution and concentration of wealth. Such a perspective appears to be sometimes put forward by an (unholy) alliance of mostly extreme-left anti-globalists and predominantly right-wing but also some unionist nationalists. Stripping the arguments of their excessive ideological baggage, the criticism in our view boils down to two main aspects. One aspect simply concerns the often unwelcome homogenising forces that are attached to this process, leading both to a very strong influence of Western values and of capitalist ideas formed in the West. From a purely economic standpoint, inequality appears to be the main reason for worries and criticism. This view is not only expressed by populist voices, but also explicitly corroborated by eminent economists such as Stiglitz (2002) and Sen (2001). Globalisation and multilateralism have evidently at least not been successful in reducing inequality – both within countries and between them – and may well have even played an inglorious role in sharpening the divide (for theoretical arguments and empirical proof on liberalisation-induced widening of wage differences in both developing and industrialised countries see Beaulieu, 2007).

### Table 16: Stepping stone vs. stumbling block (III): liberalism vs. protectionism

<table>
<thead>
<tr>
<th>Stepping stone</th>
<th>Stumbling block</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Larry Summers school</strong></td>
<td><strong>Regional fortress school</strong></td>
</tr>
<tr>
<td>Discriminatory liberalisation = liberalisation.</td>
<td>Regionalisation prevents (harmful) globalisation &amp; liberalisation.</td>
</tr>
<tr>
<td>- Support for future global liberalisation.</td>
<td>- Power of regional blocs as weapon against multilateral liberalisation.</td>
</tr>
<tr>
<td>- Gains from regional liberalisation.</td>
<td>- Protection of jobs, social security.</td>
</tr>
<tr>
<td><strong>Thin-end-of-a-wedge school</strong></td>
<td><strong>Jagdish Bhagwati - WTO school</strong></td>
</tr>
<tr>
<td>Regionalisation leads to (harmful) globalisation &amp; liberalisation.</td>
<td>Discriminatory liberalisation = discrimination.</td>
</tr>
<tr>
<td>- The ‘thin end of a wedge’.</td>
<td>- Retardation of global liberalisation.</td>
</tr>
<tr>
<td>- Loss of sovereignty / policy space.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author.

Following such an *anti-globalisation* perspective for a moment, two opposing assessments on the desirability of economic regionalism are possible. In reference to Baldwin’s classification as discussed in chapter 4.1, a simple two-way crosstab illustrates a classification into four schools (see Table 16). In such a classification, the Summers school occupies the intersection of the stepping stone argument with a positive assessment of economic regionalism while the Bhagwati school is placed at the intersection of the stumbling block argument with a negative appraisal of economic regionalism. As discussed above, these two schools both view liberalisation as

120
univocally positive. In contrast, the two approaches added here assess liberalisation in general more critical. Mirroring the Summers vs. Bhagwati case, the two anti-globalist perspectives agree on the assessment of the desirability of global liberalisation and multilateralism (in this case its rejection), but they differ in their assessment of whether economic regionalism will be helpful or detrimental to impeding the – in this view harmful – globalisation processes. They might thus be termed regional fortress school and thin-end-of-a-wedge school respectively.

Popular arguments of the regional fortress school interpret regional economic integration to be a stumbling block and hence as a suitable weapon against multilateral liberalisation so that national jobs and social protection and welfare systems can be safeguarded. This may be a result of increased negotiating power and of gains from liberalisation that can already be realised on a regional basis, thus mitigating the exigency to liberalise multilaterally. This argument thus resembles the saturation stumbling block argument discussed above – in this case however with a positive assessment. Such a view is certainly most prevalent in industrialised countries – and probably most well-known from the European Union – as the protection of already achieved prosperity often appears to play a very decisive role in such countries. In the words of former Commissioner for Foreign Relations of the EC de Clerq: ‘We are not building a Single Market in order to turn it over to hungry foreigners’ (de Clerq qt. Hamilton, 1991: 378). Similar arguments are also voiced in support of regional initiatives in developing countries, for example under the somewhat mystic cloud of panafrikanism.

A likewise often encountered anti-globalist view on regional integration combines the scepticism towards globalisation and liberalisation with the stepping stone argument. From such a perspective, the tendency towards further global liberalisation is seen as endangering livelihoods and increasing inequalities. This occurrence is sometimes termed ‘thin end of a wedge’ (see e.g. Woolcock, 2003) and may particularly occur as a result of attempts to read obligations of most-favoured-nation (MFN) treatment ‘expansively in order to incorporate into the Agreement a host of substantive and procedural obligations from other […] treaties’ (Van Harten 2008:4). The sovereignty loss involved in regional (and in extension possibly global) integration is feared to adversely affect politics, culture, and policy space. Interestingly, both anti-globalist positions share a strong emphasis on political economy aspects with the neo-classical PE school of thought discussed in the first part of the second chapter above – albeit with completely opposing assumptions and observations and hence conclusions. In clear dissociation from the game-theoretic PE approaches, particularly the thin-end-of-a-wedge school claims that monopoly power increases rather than decreases with freer trade: competition is not enhanced, but, to the contrary, power is further concentrated in a few dozen multinational companies that operate almost uncontrolled by any political control body. The main reason for this appears to be that no powerful global body with sufficient authorities exists and coordination between national oversight bodies appears to be weak and hampered by weighty disincentives to do so. While thus a functional global governance system and hence multilateralism could be logically seen as solution for such flaws rather than a threat, many critics distrust multilateral institutions, imputing a close collaboration between them and the detested multinationals (see e.g. Harris & Seid, 2000 and the contributions therein).

In our view, both anti-global positions on regional economic integration produce only very limited insights into the boon and bane of economic regionalism simply because
they are arguments on multilateralism vs. nationalism rather than on regionalism per se. For the fortress school economic regionalism is first and foremost instrumental in slowing down globalisation, without any significant intrinsic values attached to it. A better option from this perspective would be to advocate for better multilateralism rather than to fight it. Indeed, this is what most scientific authors who are critical of multilateralism as it is propose – and mostly these contributions do not even mention the alternative option of regionalism, neither critically nor approvingly (Rodrik, 2007a, 2007b; Sen, 2001).

### Table 17: Stepping stone vs. stumbling block (IV): transcending the dichotomy

<table>
<thead>
<tr>
<th>Stepping stone</th>
<th>Developmental view</th>
<th>Stumbling block</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSS Discriminatory liberalisation = liberalisation.</td>
<td>Temporary protection and stepwise liberalisation.</td>
<td>Regional integration prevents globalisation.</td>
</tr>
<tr>
<td>Positive Assessment</td>
<td>Selective protectionism by the West.</td>
<td>Power of blocs as weapon against multilateralism.</td>
</tr>
<tr>
<td></td>
<td>Non-clearing labour markets.</td>
<td>Protection of jobs, social security.</td>
</tr>
<tr>
<td></td>
<td>Dynamic comp. advantage &amp; infant industry, agglomeration / path dep.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complementarity view</td>
<td>Fortress view</td>
</tr>
<tr>
<td></td>
<td>Permanent regional sphere.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cultural affinity, cohesion, differences.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Competition of regions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environment / trade costs.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stepping stone</th>
<th>Developmental view</th>
<th>Stumbling block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thin-end-of-a-wedge view Regional integration leads to (harmful) globalisation &amp; liberalisation</td>
<td>Jagdish Bhagwati - WTO school Discriminatory liberalisation = discrimination</td>
<td></td>
</tr>
<tr>
<td>Negative Assessment</td>
<td>Increasing inequalities.</td>
<td>Retardation of global liberalisation.</td>
</tr>
<tr>
<td></td>
<td>The 'thin end of a wedge' / loss of sovereignty / policy space.</td>
<td>Welfare losses and unfair distribution of gains.</td>
</tr>
</tbody>
</table>

Source: Author.

Nonetheless, the general criticism should not be entirely disregarded for two reasons. First, these are opinions widely held by a majority of citizens and politicians and they need therefore to be addressed. Second, the criticism of the negative (side) effects of unregulated globalised capitalism in fact requires much closer attention than is usually attributed to it in NC, equilibrium-centred, perfect world models. We claim and will try to establish in the following section, however, that the main reasons for any potential negative effects from rapid global liberalisation are not primarily rooted in some kind of sinister collusion between malicious multinationals and governments and multilateral institutions. To the contrary, they are to a large extent simply structural problems that can be analysed and explained with heterodox adaptions of the market-centred NC framework rather than with PE-centred approaches. In this line of thinking, we focus in
the present chapter on approaches that (might) assign a particular role to regionalism and its double trade-off nature as a temporary tool for structural change and catch-up (and possibly also to some extent as an efficiency enhancing long-term strategy). Therefore, the approaches discussed in this chapter occupy an intermediate position between the four main positions presented in the two-way cross tab discussed above (see Table 17).

5.2 Relaxed assumptions

New Trade Theory (NTT) models are primarily based on the introduction of internal and external economies of scale (5.2.1) as well as the dual relaxation of the assumptions of perfect competition and the homogeneity of products (5.2.2). The core of New Economic Geography (NEG) models likewise rests on a combination of two assumptional changes. On the one side, again (external) economies of scale are assumed that lead firms to cluster in a certain location and thus agglomeration occurs. On the other side trade costs and/or the (partial) immobility of factors (physical capital and particularly labour) are introduced as countervailing forces that lead to a dispersion of economic activity, sometimes conjoint with the NC standard assumptions of diminishing returns and congestions that have similar countervailing dispersive effects (5.2.3). New Endogenous Growth Theory (NEGT) approaches in addition focus on the importance of skills and technology and their spillover vs. tacit nature (5.2.4). NEGT, structuralism and more practical applications such as new industrial policy (NIP) often also question the homogeneity firms and products from another perspective than the imperfect competition and ‘love for variety’ heterogeneity advanced by Dixit-Stiglitz. Models and approaches focussing on firm heterogeneity are often referred to as ‘new new’ economic geography (5.2.5) while some structuralist approaches assume that certain sectors and products differ from others with regard to the magnitude of internal and external economies of scale, the pervasiveness of imperfect competition and thus the potentials for mark-ups, the size of trade costs (particularly if weight-value ratios are considered), as well as the related technology and knowledge and related potentials for automation and skills premia (5.2.6). A somewhat more radical relaxation relates to NC assumptions on market closure rules, in this case questioning in particular whether labour markets really automatically clear (5.2.7). Abolishing the unrealistic abstraction from transaction costs opens the discussion to new institutionalism and thus the need for and economic gains from governing the economic sphere (5.2.8). Finally, the exclusive focus on the long run is put into question, opening up discussions on levelling effects and friction costs and thus touching on Keynesian ideas (5.2.9). Each of these assumptions itself can be a complete game changer. Combining and applying them creates a much more realistic, but unfortunately also very complex and ambiguous framework for the analysis of regionalism and multilateralism.

5.2.1 Economies of scale

Relaxing the assumption of constant returns to scale (CRS), internal economies of scale may accrue in larger firms due to fixed costs and indivisibilities in production and market power. External economies of scale can accrue from positive technological spillovers in a specific location, at industry level or in an economy as a whole. As will
be discussed below, both kinds of scale economies give rise to centripetal forces and agglomeration. Both kinds of economies of scale have been observed and accepted as being important in size and impact by a vast majority of scholars. Yet the dominance of the NC framework based on CRS and diminishing returns has left this aspect for a long time out of formal analyses and, in consequence, also by and large out of policy advise that is strongly based on model results of the NC framework. One of the main reasons for disregarding such effects in modelling is certainly associated with the fact that both internal and external increasing returns to scale (IRS) are seen as introducing problems into models as their inclusion would suggest that there is an ever increasing centralisation of production, either in the form of monopolisation (internal IRS) or agglomeration (external IRS). Such a dynamic instability (and thus ultimate extinction) of competition is, however, neither observable in reality nor desirable. This problem has only been solved by introducing trade costs and / or monopolistic competition (or other dispersion forces) in parallel with IRS as discussed below.

There is almost nothing in the rich universe of economics that appears to be as carved in stone as the assumption of decreasing marginal utility and increasing marginal costs of production with rising quantities. The emblematic graphical representation of an upward sloping supply and a downward sloping demand curve features in the first lessons of economics 101 and it is rehashes time and again whenever the superiority of the market over harmful (i.e. inefficiency-producing) state interventions appears to be expedient. This combination of two inversely running, intersecting lines – whether depicted as linear, step intervals or curves – is doubtlessly burned into the thinking of economists, making attempts to critically challenge its universal validity for real world problems rather difficult.

**Figure 7: Traditional depiction of supply and demand curves**

![Supply and Demand Curves](image)

Source: Author.
Notes:  
- P = price (production price and selling price), Q = quantity, S = supply, D = demand.

However, reality shows that markets for many goods are not characterised by infinite, small producers that are the ideal underlying the assumptions of a *perfect market*. Instead, markets for specific goods are frequently dominated by a few large providers or even monopolies. The main reason for such occurrences is the existence of internal economies of scale, i.e. increasing marginal returns (or decreasing marginal costs)
with increased volumes of production. Such decreasing costs are to some part a result of so-called pecuniary internal economies of scale, namely market power and consequently volume discounts for the purchase of intermediate goods and other inputs, cheap capital costs and better lobby opportunities. Likewise, marketing, management and administration as well as risk bearing tend to become more economical with increasing scale as they are subject to fixed costs or indivisibilities. Pecuniary economies of scale can even take place across products, activities and even sectors as for example discussions on multi-purpose companies showcase: not only the scale of the production of one specific good holds potentials for productivity gains, but there appears be some kind of economies of scope as well (see e.g. Panzar & Willig, 1981). Most importantly, economies of scale can be found in the technology and human capital dimensions of the production. Dynamic technological economies of scale accrue from learning by doing and specialisation of labour while static technological ones are a result of certain fixed costs for machinery, R&D and other bulky investments, particular with regard to initial investments but also for several running costs. In some cases – again particularly with regards to machinery and expenditures for R&D and innovations – indivisibilities are a major source of economies of scale that lead to rigid minimum sizes for any (sufficiently efficient) production (see World Bank 2009: 128). In the common depiction of supply and demand curves, however, the production of larger quantities apparently leads to higher prices. The reason for this fact is that such depictions assume that consumers’ willingness to buy determines the quantity of production. In other words, in this model world every small producer is able to produce only one single good and decides whether to produce it or not (and thus another good) depending on his production and opportunity costs and the price buyers are willing to offer. If economies of scale are to be depicted in the common demand and supply curve way, the supply curves have to be convex, just as the demand curves are. This implies that for increasing quantities the (production) prices decrease – an intuitive scenario – but in turn also that for decreasing prices more quantities are produced – admittedly a less intuitive scenario. Thus, the logic of standard demand and supply curves depicted above is reversed and not the price determines the quantity, but the quantity determines the (possible) price. This implies that in many scenarios there will be two possible equilibria. The first one is characterised by high prices due to small economies of scale (and likely a low-tech solution) and thus low demand. The second one shows lower prices due to better utilisation of economies of scale (and likely a high-tech and mechanisation solution) and higher demand. The latter of the two scenarios is certainly preferable from consumer and producer perspectives alike. As production costs still have to be lower than or at least equivalent to consumers’ willingness to pay, an existing demand may in some instances not even be met by the supply at all because a sufficiently high level of production that allows for a sufficiently large utilisation of economies of scale is not reached. If this situation prevails in autarky in one economy (see non-intersecting supply curve $S$ and demand curve $D_A$ in Figure 8), it may be solved by increasing the market size through integration. In this example the combination of two economies with the same size and with unmet demand in autarky in a combined market where now local production is economically viable (see intersecting supply curve $S$ and demand curve $D_{A+B}$ in Figure 8).

As economies of scale are likely to be exhausted from a certain point onwards (thus a straightening of the line) or even to diseconomies of scale (thus an upward sloping
line), such a supply curves are actually likely to intersect twice with the demand curve. As the first intersection (I) marks a point from which onwards producers produce more cheaply than consumers are willing to buy, the attainment of this point is likely to trigger a relatively easy and almost automatic extension of increased production until the second intersection (II) is reached. If some degree of competition is maintained despite economies of scale (as in monopolistically competitive markets with differentiated products or otherwise oligopolistic markets without decisive collusive activities), the attainment of this efficient market equilibrium at point II is thus likely to be reached. Only if an unchallenged monopoly exists, the producer may choose a point between I and II that maximises the producer rent that is determined by the maximisation of the rectangle i,ii,i',ii' by choosing i (see Figure 8).

**Figure 8: Economies of scale and enlarged market size**

The roots of the recognition of economies of scale date back to Greek scholars such as Plato and are part and parcel of Classical (not to be confused with neo-classic) economics, in particular in the shape of the proverbial Smithian pin factory and the related arguments on the gains from division of labour. In the 1930s, internal economies of scale were thoroughly discussed among economists such as Robinson (1933) and Chamberlin (Chamberlin, 1933). However, as a result of the post-war focus on Keynesianism-inspired macroeconomics and on Walrasian formalism, they almost fell into oblivion for almost five decades and left the issue to the business economics literature for a long time – before they were revived by the heterodox schools discussed in this chapter. External or generalised economies of scale describe instances where positive externalities accrue from the economic activity of firms. The externality most closely related to internal economies of scale is again related to the division of labour.

In fact, some contemporary commentators have argued that the Smithian exclusive focus on intra-firm division of labour and thus the omission to more clearly spell out the extension of his analysis to economy-wide specialisation patterns has set the economist’s profession on the wrong track for a long time:
Smith’s familiar illustration has been misleading because it draws attention away from the phenomenon of economywide increasing returns and toward increasing returns to scale of operation within the single producing unit, in his case, the pin factory. [...] The metaphor is ill chosen and, as a result, the pin factory is taken to represent the production unit for one of the many end-items of the economy, and an unimportant one at that. The focus is shifted away from the limitless range of potential advantageous specialization of inputs in a complex economic network and to the simple division of tasks among workers on something like an assembly line (Buchanan 1994: 5).

Such an extension to externalities is mainly and amongst others attributable to Marshall (1890) and Young (1928, 1913), both indicating the virtue of a larger market for demand and labour pooling, outsourcing and cooperation. As discussed in more detail below, the establishment of the NEGT some 50 years ago (and previously already in some contributions by Kaldor) focussed on the importance of spillovers from one firm to another with respect to knowledge, innovation and adaptation. In all cases, externalities may be either narrowly defined as vertical (up- and downstream) or horizontal (between competitors) inside a certain industry or activity or interpreted in a wider sense as positive effects on all sectors of an economy. As external economies of scale imply that the price of production decreases with size as much as internal ones do, the graphs drawn above can be simply re-interpreted as depicting production prices of the entirety of competing firms rather than of a single monopolist. Therefore, external economies of scale can be realised by enlarging market sizes without (or with lower) risks that mark-ups are increased as part of the process. This also implies that external IRS already contain a partial counterweight to the centralisation forces that appear so overwhelming from a perspective focussed on internal IRS. Instead of inevitably resulting in monopolistic structures and ever increasing production in a single factory, competition is a barrier to such developments. As particularly discussed in the NEG framework, however, this does not apply to agglomeration forces that appear to ravage even stronger when focussing on external IRS. Other countervailing forces (chiefly trade costs and factor immobility) are necessary to keep models realistic and traceable.

5.2.2 Imperfect competition and product differentiation

Imperfect competition likewise constitutes a major breach with the NC framework. For the discussion of regionalism (and multilateralism) it can play a significant role in two main regards, one related to love of variety gains, the other to producer rents and pricing strategies. Firstly, the concept of monopolistic competition was, according to our understanding, mainly developed as a as a counterforce to tame the effects of economies of scale in models that would otherwise converge to infinity and thus suggest monopoly as the typical (and even favourable) organisational form. Dixit & Stiglitz (1977) formalised the concept of monopolistic competition pioneered by, inter alia, Chamberlin (1933) and Robinson (1933). Monopolistic competition is based on the observation that consumers have a love for variety. This love for variety produces a semi-competitive framework where a small number of relatively large firms produce similar, yet distinct goods. Therefore, this concept describes the world as being neither a world of perfect competition with an infinitive number of infinitively small firms like in the NC framework nor as one that tends to have a single dominant producer for a particular product – a rather sensible compromise in our view, at least for most products. Secondly and outside the monopolistic competition framework that assumes that there is no room for price mark-ups, it is at least perceivable that product
differentiation introduces an element that is not captured by scarcity or cost concerns and thus potentially leads to profits from mark-ups in the form of producer rents. In addition, such producer rents can be a result of collusion and other political economy aspects, but also simply from sheer market power of bigger companies and heterogeneous productive capacities, both most likely due to IRS in production as discussed above.

5.2.3 Trade costs, factor (im)mobility, diminishing returns and congestion

The inclusion of IRS in international growth and trade models has been proven unfeasible without a conjoint introduction of some kind of dispersion force that bridles these scale-induced agglomeration tendencies. Four of them will be shortly discussed, two of them additions or changes to the NC framework (trade costs and factor immobility), the other two closely related to the NC framework (diminishing returns and congestion costs).

The most popular force that qualifies as such a counterweight is the consideration of trade costs, both natural (transport, transaction and time costs) and artificial (tariffs and NTBs). The consideration of trade costs has of course been part and parcel of micro-economic behaviour since humankind started trading thousands of years ago. However, NC theory commonly just acknowledges them as an impediment to the efficient allocation of scarce resources. Consequently, such costs should be sought to be minimised by removing political barriers (for artificial costs) and investing in infrastructure (for driving down natural costs). However, from a NC perspective they do not significantly alter the general results and can thus safely be assumed to be non-existent. While this is true for the most part of the NC models, the empirical mainstream literature has in fact included different kinds of trade costs at least since the introduction of the gravity approach (compare the discussion above). In recent analyses from a NEG perspective, trade costs have regained uttermost importance. Following a very broad and extensive definition, they include

all costs incurred in getting a good to a final user other than the marginal cost of producing the good itself: transportation costs (both freight costs and time costs), policy barriers (tariffs and non-tariff barriers), information costs, contract enforcement costs, costs associated with the use of different currencies, legal and regulatory costs, and local distribution costs (Anderson & Van Wincoop, 2004: 792).

Picking up ideas originating from Von Thünen (1826), Samuelson (1954) first modelled trade costs as iceberg costs, i.e. the value of the respective goods melts with distance. Krugman later made use of this concept in order to simplify his models by abstracting from an explicit trade service sector. Most NTT and NEG contributions have since followed this lead. However, some more recent contributions have emphasized that this apparently convenient solution may have considerable (and unintended) impacts on the results. Instead, the transport sector may be organised in an oligopolistic way and pricing strategies may differ according to volume, product price, demand elasticity and protection level (Hummels & Levinsohn, 1995; Hummels, Lugovskyy & Skiba, 2009). The transport sector may also exhibit economies of scale and thus higher transport costs are likely to be charged for smaller trade volumes (Rudolph, 2009). This applies for transport costs in a stricter sense, but is even more evident for other transaction costs that are part of a broader definition and that are subject to learning-by-doing, skill intensity and replication.
The question whether and to which extent the factors of production are mobile or not, is also of uttermost importance for weighing agglomeration and dispersion forces against each other (as well as for welfare economic considerations). Factors commonly considered are physical and human capital, the latter sometimes differentiated into skilled and unskilled labour. Reasons for the complete or partial immobility of factors can be attributed to several aspects, most of them with relatively direct equivalents in the discussion on trade in goods. Protective measures that control or even prevent migration and investment are a barrier to factor mobility, similar to tariffs and quotas. In addition, transaction and adjustment costs (language, resettlement, imperfect information, etc.) may be seen as a parallel to transport costs. In addition, several non-economic, social aspects may prevent people from migrating. Such non-price-related aspects may be assumed to have a much stronger influence than in the case of trade where only the Linder hypothesis on consumer preferences that strongly favour local production may be seen as a partial equivalent. In most models, only one of the two inputs is assumed as mobile in order to keep the models traceable and to arrive at unique solutions and equilibria. However, depending on the decision which factor (or which sub-component of a factor) is modelled as mobile or immobile results vary significantly. In models where (near) perfect mobility of physical capital is assumed, the interesting situation accrues that FDI and trade are almost perfect substitutes.

Finally, while many models in the NEG and NTT tradition abstract from diminishing returns to investment (as a result of competition) and congestion costs (in particular housing, but also other costs of living as well as of producing), such more NC-related aspects are sometimes included in NEG models and also serve as a force of dispersion.

5.2.4 Technology, skills and (tacit) knowledge

Another major diversion from the NC framework focuses on the skills dimension of human capital, intermediate inputs and technology. Although these aspects have always been of primary importance in microeconomics and specialised studies on labour and technology, they have only recently gained serious momentum in macroeconomics. This is all the more surprising as the classics already seem to have valued education and human capital as an important part of the macroeconomic equation (see e.g. Belfield, 2002; Warsh, 2006). Although Pigou (1928) already referred to the term human capital and to the need to invest in education, it was only in the late 1950s that neoclassics such as Mincer (1958), Schultz (1961) and Becker (1964) took up these ideas in modern analysis, yet in microeconomic frameworks only. In NEGT frameworks, this was soon after translated into the macroeconomic sphere as well. This implies that ‘new ideas, more than savings or investment or even education, are the keys to prosperity, both to private fortunes, large and small, and to the wealth of nations’ (Warsh, 2006: xv). Arrow highlights two specific features of technology which distinguish it from most other inputs, as technology

can be possessed only imperfectly, and it is difficult to prevent others from using it [and] the use of knowledge in productive activities obeys the law of increasing returns, since the need for knowledge in a given activity is independent of its scale (Arrow, 1965).
In other words, technology is closely related to both internal economies of scale and externalities. In addition, learning by doing is stressed as an important aspect since in many instances the so-called Horndal effect can be observed whereby output per workers rises in the absence of additional investments. However, knowledge appears to be highly localised despite its scalability, due to its tacit nature, being embodied in people rather than patents and machines (see particularly Polanyi, 1962).

### 5.2.5 Sector / goods heterogeneity and firm heterogeneity

With respect to economies of scale and spillovers, technology, oligopolistic competition and other features discussed above it is often observed (and more frequently just assumed) that several of the characteristics of heterodox schools discussed above more strongly apply to some sectors, goods or activities than to others. Although such a differentiation has forcefully re-entered the academic debate only recently, the forefathers of development economics already strongly argued into this direction (see e.g. Hirschman, 1958; Rosenstein-Rodan, 1943). For the sake of simplicity, this assumption is usually translated into a dualism, particularly in model approaches, that defines the specific factor which is assumed as heterogeneously distributed among sectors as existing in one subsector and as fully absent in the other. Such a certainly too rigid assumption must be seen as a proxy for different intensities in the respective subsectors. At least such a moderate assumption appears to be reasonable and does not significantly alter, yet mitigate, the results of the models that work with extreme case assumptions.

In NEG, NEGT and NIE models, particularly in those that are leaning towards structuralism, it is frequently assumed that the possibility for mechanisation, the knowledge intensity and the possibility for product differentiation are more pronounced in the industrial sector than in the agricultural one. This in turn implies that economies of scale, externalities, mark-ups as well as agglomeration tendencies are also stronger in this sector. In other instances, a distinction is simply made between modern and traditional sectors of the economy with the former being much stronger subject to the above discussed desirable characteristics than the latter. Again, others further disaggregate into higher and lower levels of sophistication between sectors, but also inside a certain sector and subsector. Services often remain outside of the analysis, particularly as their tradability is distinctly less pronounced. However, it has to be kept in mind that even inside the very broadly defined sectors a variety of goods exists that is to differing degrees subject to economies of scale, trade costs, monopolistic competition, innovation and mechanisation. In addition to mechanisation, knowledge intensity and product differentiation, Greenwald & Stiglitz (2006) also refer to the empirically observed greater average size and stability of industrial enterprises as an additional argument in favour of the manufacturing sector:

> The key assumption […] is that the industrial sector is the source of innovation. The justifications for such an assumption are rooted in the nature of industrial activity. Such activity takes place in firms that (relative to firms in the other sector) are large, long-lived, stable, and densely concentrated geographically. Agricultural/craft production, by contrast, typically takes place on a highly decentralized basis among many small, short-lived, unstable firms (Greenwald & Stiglitz, 2006: 143).

This in turn implies a greater ability to invest into R&D, a better and longer usage of created knowledge and a greater specialisation of tasks that leads to gains from learning by doing. The authors even refer to the easier taxability for the state that is
thus better able to support innovative activities and education. This observation does
not deny that there is indeed potential for innovation and mechanisation in the primary
sector. To the contrary, the usage of capital goods (machinery) and better varieties or
new crops is an inevitable part of a growth strategy of almost any developing country.
However, besides the difficulties and missing incentives to invest in innovation in this
sector, we would also claim that at least the extensive margin of innovation holds more
potential for long-run growth in non-primary sectors.

The same may apply for economies of scale and even more so for agglomeration
forces. While economies of scale in the industrial sector are often only fully exploited at
levels where thousands of workers collaborate and specialise, agricultural and
artisanal activities are naturally difficult to separate into a large number of specialised
tasks. Particularly agricultural activities are very land-intensive and thus agglomeration
must even be seen as detrimental to productivity in the agricultural sector. In fact, the
main gains from economies of scale in this area appear to be with regard to land size
that is farmed by a single person (or a small group) rather than by clustering a great
number of people on a small piece of land. This is not to deny that proximity to a town
or at least to appropriate infrastructure that connects a farm to consumer markets is
conducive to the profits of farmers. However, considering a given area of land,
agricultural activities in developing countries are often distinctly past the point from
where additional workers lead to very low or even negative marginal returns. In other
words, the economies of scale with regard to land appear to be much stronger than the
ones with regard to labour. All these sectoral differentiations boil down to the major
insight that

[development is fundamentally about structural change: it involves producing new
goods with new technologies and transferring resources from traditional activities to
these new ones (Rodrik, 2007b: 6).]

However, Lederman & Maloney (2012) caution that even ‘very finely categorized
exports’ (Lederman & Maloney, 2012: 77) are likely to miss important dimensions,
among them quality heterogeneity and the fact that the production of a certain high-
technology product often includes very basic, low-skill manual work (a caveat that is also
discussed, yet not solved, by UNIDO, 2013). In addition, Lederman & Maloney
emphasise that even if a sector or product is suitable for externalities, this does not
necessarily imply that they are actually being realised. In addition to such sectoral
heterogeneity some more recent developments in NEG and NTT models also diverge
from the sectoral view and focus on heterogeneously endowed firms that react
differently to a given policy intervention. Following ideas by Hopenhayn (1992), Melitz
(2003) has incorporated heterogeneous firms in monopolistic competition models.
Such models are sometimes referred to as new new economic geography and new
new trade theory. However, while this appears to be important to better match
empirical data with NEG and NTT models, this appears to be no major factor in our
discussions on regionalism.

5.2.6 Dynamism and endogeneity of factors

Such sectoral heterogeneity would mean little if comparative advantages were static
and venturing into more promising sectors would thus be in vain. In many strands of
the literature that deal with particularly technology and knowledge and (internal and
external) economies of scale, but also to some extent with differences in trade costs
(weight / value differences), agglomeration and competition, the notions of endogeneity and dynamism are therefore of uttermost importance. This implies on the one hand that future volume, quality and consequently costs of production factors are (partially) determined by the previous volume and quality, giving rise to potential vicious and virtuous circles with a considerable degree of persistence and path dependence. On the other hand, endogeneity and dynamism of factors also open the opportunity for the public sector to exert a positive influence on future outcomes by investing in such factors and by guiding the economy into sectors that are pertinent to knowledge accumulation and thus growth. In this regard the term *dynamic comparative advantage* as opposed to the traditional static, Ricardian specification has been coined (see e.g. Klein, 1973; Redding, 1999). However, there is considerable disagreement among proponents of such structuralist perspectives as to how strongly countries should (at least initially) focus on activities that are close to their comparative advantage. For example, Chang proposes to largely defy current comparative advantages while for example Lin cautions that failures of industrial policy have often been a result of attempts to leap forward too fast and too far (Lin & Chang 2009). Hausmann and several co-authors also clearly demonstrate this trade-off in different strands of their publications. On the one hand, they strongly advocate that ‘what you export matters’ (Hausmann, Hwang & Rodrik, 2007) and that therefore it is of uttermost importance to reach a stage where a country is able to produce and export sophisticated products in a diversified export portfolio. On the other hand, they stress that jumping from certain products to others is extremely difficult if they are too dissimilar from products already produced with respect to production factors (labor, land, capital), technological sophistication, inputs and outputs in an existing value chain and required institutional quality or combinations thereof (Hidalgo, Klinger, Hausmann & Barabási, 2007: 482ff).

### 5.2.7 Non-clearing labour markets

The in our view most radical relaxation of NC assumptions focuses on the heart of NC models, namely the closure rules. In most cases, wages are modelled as fully flexible and in consequence, the labour market automatically ends up being always fully cleared. In other words: unemployment does not exist in this model world. There are, however, good reasons to call this into question. This is possible without invoking the most radical perspectives such as the Marxian ‘reserve army of labour’ (Engels, 1845) and thus as an intentional or unintentional tool by capitalist systems to keep labor costs at bay or the relatively well refuted Malthusian crisis (Malthus, 1798). Structural unemployment is simply an outcome of political or unionised actions that lead to setting of minimum wages and/or provide for unemployment benefits – the former decreasing demand for workers and the latter decreasing incentives to work (for low wages). Unemployment created by such political influence is in fact not even questioned by NC proponents, although it is frequently viewed as a nuisance or a case of governance failure that should be overcome. In most countries, however, we would claim both forces are likely to prevail and thus the possibility of un- or underemployment cannot be simply assumed away. In addition, some more radical views stress that in developing countries the supply of labour appears to be virtually unlimited. For example, the two sector model proposed by Lewis (1954) is based on the fact that there is a minimal level of income that a human being needs to survive. In
situations where an offered wage does not fulfil this criterion (and if an entrepreneurial engagement is not an option due to credit, skill or regulatory constraints), individuals have to opt out of the economy and survive on what they produce themselves – in other words: subsistence agriculture. While such cases of full segregation from the economy are nowadays very rare – though not entirely obsolete – in today’s world, there appear to be many self-employed workers in developing countries who are far from being fully integrated into the economy. This applies particularly in the area of agriculture, but also in informal activities in the service sector that are often characterised by a combination of underemployment and fixed prices, some of them relying on voluntary contributions from service recipients rather than outright payments for the service delivered, thus resembling a social transfer rather than a remuneration of a demanded output. This extreme assumption by Lewis of unlimited supply (and thus the absence of any effects from a rise in output on the level of wages) is of course at least as unrealistic as the NC model of full closure. A more realistic assumption appears thus to be that the elasticity of wages towards a rise in demand for employment is not as strong as under perfect labour markets.

A third important argument emphasises limited labour mobility, either inside a country (for reasons of preferences to stay in the countryside) or globally (due to preferences or in consequence of missing liberalisation in this area) as well as sector-specific unemployment of workers with sector-specific skills. Un- or underemployment may thus be explained by political inferences or by the more radical unlimited supply, marginal subsistence and limited mobility arguments. In addition, these two explanations may in fact be more closely related than is obvious at first sight as political and unionised pressures for minimum wages may to some extent take subsistence levels and decent life conditions into account. It is therefore relatively insignificant for the purpose at hand which explanation is the correct one, at least if it can be safely assumed that political interferences are here to stay. If this holds true, not only the results from the NC framework must be challenged, but also the conclusions of many heterodox schools that do not take into account effects of regionalism and multilateralism on unemployment levels.

### 5.2.8 Transaction costs

Transaction costs are defined as any costs that are incurred as a result of a market interaction. The (reduction of) transaction costs can be seen as the second main reason for the existence of companies in addition to internal economies of scale. The main discussion on transaction costs then deals with remaining risks and uncertainties of the interaction between different firms and economic agents. The reason for such transaction costs lies in the fact that humans may potentially behave opportunistically and thus potentially attempt to acquire more than their fair share from an interaction. In addition, economic agents are sometimes seen as acting not fully rationally and as basing their decisions on imperfect information. All this leads to insecurity that can be either contained by lengthy ad hoc negotiations and costly or business-impeding safety measures or by institutional arrangements. Most initial works focussed on firms, contracts, property rights, the price mechanism and exchange rules as the main instruments – thus mainly betting on the self regulation of the market (see e.g. Coase, 1960). Others also focus on the (in our view logical) extension to a government as developer and guarantor of rules and regulations to reduce transaction costs in view of
positive and negative externalities and incentives for fraud (see e.g. North, 1990, Meade, 1952). In other words, from such a point of view transactions costs are one of the main and most powerful arguments in favour of government involvement in the economic sphere. On the other hand, complicated, heterogeneous, cumbersome or even fraudulent governance systems can be seen as another source of high transaction costs (see e.g. the World Bank’s ‘Doing Business’ literature).

5.2.9 The importance of the short-run
First developed in the realm of microeconomics to distinguish between a period where one or more factors of production are fixed and those for which such sunk cost investments do not play a role anymore (Marshall, 1890), the distinction between short and long run was also translated to macroeconomics. Long run effects where the NC framework might have a (somewhat) more realistic standing thus need to be distinguished from short run effects where price stickiness (e.g. of wages), business cycles and adjustment costs are pivotal. As iconically termed by Keynes: ‘in the long run we are all dead’ – or as the famous quote less widely known continues: ‘economists set themselves too easy, to useless a task if in tempestuous seasons they can only tell us that when the storm is long past the ocean is flat again’ (Keynes, 1923: 80).

5.3 Heterodox models and regionalism: catching-up and structural change?
The alternative approaches discussed in this chapter include some static effects that are not dealt with in the NC framework, such as effects on price mark-ups and short-term levelling. The most important potential gains lie in our view however mainly in dynamic effects. As discussed in the introduction above, the term dynamic is often invoked with regard to regionalism and liberalisation, but in our view, it is nonetheless not clearly defined and specified. In fact, it is used for signifying three partially related, yet distinct phenomena and characteristics. Firstly, it is used for effects that simply take time to materialise. Secondly, it signifies effects that lead to structural change in the trade and underlying production patterns and related knowledge production and entrepreneurial, investment and savings systems and thus focus on dynamism and the (partial) endogeneity of comparative advantages and the need to also consider competitive advantages. Thirdly, it signifies effects that lead to changes in the growth rate rather than static once-off changes. These three dimensions are strongly intertwined. Structural change and changes in the growth rate are unlikely to occur in an instant and structural change is one of the most important venues for consistently increasing the growth rate of poor countries (if not the only one). We thus include all aspects in this chapter. The huge attractiveness of analysing these dynamic aspects stems from the insight discussed in the previous chapter that static effects of any kind, be it South-South, North-South or multilateral in nature, do not even come close to offering a way out of poverty. In contrast, gains (and potentially also losses or missed opportunities) emanating from such long-term dynamic effects are potentially very powerful and thus in our view potentially considerably more relevant for growth, development and poverty reduction. However, this attractiveness is severely undermined by a number of disadvantages afflicting this field of study.
Firstly, these effects build on a vast corpus of heterodox schools and are approaches, leading to a much more differentiated, but also confusing picture. In particular, the *new theories triumvirate* – consisting of the related yet distinct *new trade theory* (NTT), *new economic geography* (NEG) and *new endogenous growth theory* (NEGT) – plays a major role. In addition, some aspects rooted in institutionalist and Keynesian ideas are considered as well. This chapter covers some non-NC allocation effects as well as levelling and governance effects, but at the heart of the analysis, accumulation and location effects are discussed in great detail. These two groups of effects are so closely intertwined that the only solution appears to be an integrated discussion of them.

Secondly, most heterodox models and approaches make no specific reference to regionalism itself. In consequence, most of the theoretical heavyweights of heterodox economics, among them most prominently New Trade Theory (NTT), New Strategic Trade Theory (NSTT) and New Industrial Policy (NIP), New Economic Geography (NEG), New Endogenous Growth Theory (NEGT), Keynesianism and New Institutional Economics (NIE), do not lend themselves easily to the assessment of regional economic integration. The reason for this may to some extent be that regionalism is again interpreted as only a second best alternative to multilateralism. In most cases, however, the special case of regionalism is simply not considered given the general nature of the approaches and the developmental stage in which these schools still struggle with more general challenges and the special case of regionalism would render the analysis even more complicated. Frankly speaking, in particular with regard to NEG and NTT/NSTT, it is in general not very clear what the policy implications of the model actually should be. Krugman observes in this regard that

*policy morals are fairly subtle – for example new trade theory does suggest a possible role for government interventions, but also suggests bigger gains from trade liberalization. Mainly my work in trade and geography was about understanding the world, not driving a political agenda* (Krugman, 2008).

Thirdly, most schools discussed in this chapter are predominately theoretic in nature, heavily relying on models or spelling out the ideas in plain text. Empirical strategies are rare owing to the complex nature of the interactions (compared to, for example, the rather simple mechanics of NC static effects), the long time span of dynamic effects (again in contrast to static effects) and above all the very weak data availability for indicators that proxy for example labour migration, FDI stocks and flows, productivity data as well as R&D and knowledge, both on aggregate and sectoral levels. Many models thus resemble basic research for which a practical application and policy implications still have to be found. Fourthly, these heterodox schools deal with a much greater variety of assumptions than the approaches in the previous chapters. As these assumptions are alternately relaxed or upheld, concise and robust statements on the mechanics and magnitude of the heterodox effects as a whole or even of a certain effect or of a policy bundle only are rendered by and large impossible. While some of the above-mentioned assumtional changes are directly connected to one and only one scientific approach and one related effect, other assumptions play a significant role in several heterodox models and approaches. Conversely, many of the models are based on a number of relaxed assumptions. In many cases the inclusion, exclusion and combination of assumptions give rise to varieties inside the respective frameworks that often produce dissimilar, sometimes even contradictory outcomes and effects.
Lastly, in addition to trade other aspects of integration also play a considerable role, most of all FDI and labour migration. Again, the focus on such a great variety of policies and their respective multiple effects makes generalisations and robust quantifications of the magnitude of such effects a futile undertaking. In consequence, the complex nature of the matter, the current state of many of the academic approaches essential for the analysis of regionalism as well as the many idiosyncrasies related to the kind and quality of the respective regional initiatives do not allow for the computation of a ‘final figure’ that quantifies and subsumes all the discussed positive and negative effects into a likely change of the growth rate or other absolute or relative quantifications in relation to the GDP. As the discussions and estimates in subsequent pages elucidate, there appears to be indeed considerable potential in such dynamic effects. However, the realisation of such effects depends much more on the specific design of regionalism as well as on essential auxiliary reforms and support measures. This implies that regionalism on its own remains far from being a panacea for the growth misery in African countries and beyond.

As indicated in the introductory chapter, we have been able to single out four different groups of effects and sixteen separate, yet partially overlapping potential gains from regionalism that relate to one or several of the heterodox theories discussed above – although this list is certainly not exhaustive. The four groups of effects include allocation effects (5.3.1), levelling effects (5.3.2), location and accumulation effects (5.3.3) and governance effects (5.3.4).

### 5.3.1 Non-NC allocation effects

The first two potential reasons for the conduciveness of regionalism that we would like to review are firmly rooted in the static world and they are like the NC framework pure allocation effects. The only assumption that needs to be relaxed for these additional effects is perfect competition (and the underlying forces for imperfect competition such as economies of scale, product differentiation / love for variety etc.). While the first argument on love of variety (5.3.1.1) is, in our view, again mainly an additional argument in favour of liberalisation as such (and thus by extension in favour of multilateralism rather than regionalism), the second argument on price mark-ups (5.3.1.2) constitutes a first instance of gain that is exclusively a feature of regionalism and not of multilateralism. Despite their potentially considerable role in appraising the virtues and detriments of regionalism in general and in comparison with multilateral initiatives in particular, this relaxation of the assumption of perfect competition unfortunately produces ambiguous results as effects appear to head into different directions for different sub-components of the discussion. In addition, empirical strategies are rarely undertaken as they are, at least for some of the aspects, very difficult to design and implement.

#### 5.3.1.1 Love for variety

Product differentiation and consumers’ valuation thereof is a centre piece of NEG and NTT approaches chiefly as a tool to tame otherwise infinitely increasing gains from (internal) economies of scale. Usually this is modelled by assuming that every firm produces a slightly different product and consumers can choose one or more varieties, leading also to intra-industry trade along the road. This love for variety of consumers
implies that in addition to efficiency gains, liberalisation may open up gains outside the realm of pure NC economics as consumers value diversity in (non-homogenous) products and thus experience gains of variety – although the exact value is of course not unproblematic to quantify.

Although the original Krugman (1980) model is based on a constant elasticity of substitution (CES) function and many CGE models follow this approach, there is widespread criticism that one should take into account that the gains from additional varieties are likely to follow a marginal utility function instead (Ardelean, 2006). One might thus claim (somewhat in line with Krugman’s case of natural trading blocs in Krugman 1991a) that a relatively large share of the potential benefits could be already obtained by regional integration and further liberalisation would add only little in this regard. A similar argument along the lines of the Linder hypothesis (Linder, 1961) can be constructed by claiming that differences in preferences for desired specifications of goods may cause regional varieties to be demanded more than global ones. A very particular caveat on diminishing utility of ever-increasing varieties is modelled by Egger & Falkinger (2013) who introduce limited consumer attention and advertisement (costs) in an otherwise standard NTT model with Dixit-Stiglitz / CES love for variety. As a result, lower trade costs (tariffs or transport) may lead firms to overinvest in advertisement that consumers cannot fully process. While the resulting ‘selection effect at the bottom of the productivity distribution’ and the associated rise in average productivity is welfare increasing, the additional dead-weight costs of advertising might tilt the balance to an overall loss making situation, particularly if the additional trade costs are also included in the equation. This might again be interpreted as an instance were regional integration already realises the most part of the potential gains and further liberalisation only adds little or even reverses gains to losses.

However, such arguments seem to rest on very shaky ground and are largely based on guesswork rather than rigorous logic or even proof. This frustrating lack of empirical indications on the size of (potential) love of variety gains in general and on what portion of such variety gains could be realised in regional schemes notwithstanding, it appears safe to claim that the inclusion of gains from variety implies that the overall benefits of any form of liberalisation are likely to be somewhat higher than the very disappointing figures reported in the NC framework. Again, however, this appears to be an argument in favour of multilateralism – or in fact actually against unilateralism to be precise – rather than in favour of regionalism. Global liberalisation would open access to even more varieties, thus creating at least some additional gains compared to a regional solution, even under a more realistic assumption of decreasing marginal valuation for varieties and thus limited love of variety and possibly even a strong preference for national and regional varieties.

5.3.1.2 Competition-induced producer rent reductions and rent transfers

Producer rents and price mark-ups are at the heart of Strategic Trade Theory (STT) arguments. Most STT contributions, however, deal with a very specific situation – a two-country case with export subsidies rather than tariff reductions – and thus do not lend themselves easily to the analysis of regionalism. In addition, in our view the STT analyses are also not well suited to deal with questions of the size of mark-ups and thus the relation between consumer and producers. The general argument on producer rents and price mark-ups can be extended to tariff reductions on multilateral
and regional level and to producer-consumer relations, thus making the results more suitable for generalisations. Assuming Eastman-Stykolt pricing behaviour (Eastman & Stykolt, 1967) we are able to distinguish three distinct effects. Even for more competitive industries than those assumed by Eastman-Stykolt the main effects discussed here may in our view still play a considerable role, although the strength of the effects is likely to be much weaker.

Firstly, liberalisation holds potentials to increase competition and thus to reduce mark-ups of home producers, consequentially leading to a more efficient welfare economic outcome and probably also a more equal distribution of welfare (in addition competition may increase productivity and thus have dynamic implications). This process of competition-induced reduction of price mark-ups for home producers again appears to be stronger for multilateral (and unilateral) liberalisation than for regional approaches. However, it is likely that regionalism could at least lower the necessity for an immediate full-scale multilateral liberalisation (that may be unattainable for political reasons and/or undesirable for other reasons as discussed in this chapter as well as in the following chapters on dynamic aspects). In addition, regionalism may have a similar market disciplining effect on ROW producers that is unlikely to take place under multilateralism where barriers are uniformly reduced and thus do not change relative competition threats. Therefore, regionalism may be seen in this regard as almost equally beneficial as multilateralism. It appears worthwhile to note that such mark-up reductions may take place without any change in the origin of the respective trade low. In other words, shadow competition or the mere threat of a competitor entering the market may drive down prices of home or ROW producers (the former under regional and multilateral liberalisation scenarios, the latter specific to regional integration only).

Secondly, importing partners are likely to be deprived of at least parts of the expected gains from trade creation in unilateral, regional and multilateral liberalisation initiatives and negative effects from trade diversion in regional schemes are likely to be exacerbated. Both effects may reduce the positive effects of regionalism and multilateralism (and unilateralism) alike, but more strongly so for regionalism as the positive effects of trade creation are likely to be reduced for all three alternative liberalisation scenarios while the negative effects of trade diversion apply per definition only to regional integration. In consequence, the superiority of multilateralism and unilateralism over regionalism as discussed in the previous chapter on the NC framework does not only remain untouched, but is even likely to be (slightly) strengthened when taking this second effect on mark-ups into account.

Thirdly, these by and large pro-multilateralism results are considerably challenged if the other side of the medal is considered as well. As a corollary of the second effect, both trade creation and trade diversion are likely to have positive effects on the partner country’s exporters. In consequence, unilateral approaches tend to be clearly less conducive than a multilateral or regional approach, thus providing a first (partial) explanation for the strong preference for negotiating regional and multilateral treaties rather than simply liberalising unilaterally as the NC framework would suggest. At the same time this implies in our view that this is in fact the first example in which regionalism may in fact be seen as preferable over multilateralism as a regional bloc as a whole is likely to benefit more from regionalism than from multilateralism and (some) mark-ups from ROW are re-channelled (or diverted) into the regional bloc. However, it has to be kept in mind that this again implies a distributional effect inside the regional bloc with winners and losers. Likewise, being a STT-like approach, such a
policy can be easily countered and copied by ROW with a tit-for-tat strategy. However, given that most developing countries already enjoy duty-free, quota-free (DFQF) entry into many third markets we estimate this risk as rather low.

A final assessment from this perspective hinges on the respective strengths of several factors – in addition to the factors discussed in the NC framework (i.e. elasticities and tariff structures) particularly efficiency gaps between Home, Partner and ROW as well as market concentration, power and competition and the resultant pricing behaviour of firms. It therefore appears impossible to properly assess how strongly the situation is improved for both regionalism and multilateralism and whether regional integration may be more beneficial than multilateral liberalisation (or at least less inferior) from such a perspective. This notwithstanding, the introduction of market structure, imperfect competition and hence mark-ups considerably alters the overall picture: when considering mark-ups the axiomatic dominance of multilateralism (and North-South regionalism) over South-South regionalism receives a first crack as some of the aspects indicate that multilateralism may have certain disadvantages (particularly for developing countries) when compared to regionalism. However, we would claim that the effects are most likely not sizable enough to alter the general results of the NC framework, namely that regionalism is under the so far employed assumptions inferior to multilateralism and that neither regionalism nor multilateralism are likely to trigger significant growth processes in developing countries.

### 5.3.2 Levelling effects and adjustment costs in the short run

Levelling effects do not belong to the categorisation by Baldwin & Venables (1995). However, in the literature one can sporadically find arguments that tend to see regionalism as a potential levelling force in two main respects. On the one hand, regionalism might help to level out certain windfalls and deficiencies in the respective countries (5.3.2.1). On the other hand, we would like to discuss the issue of adjustment costs under this topic whereas regionalism could be seen as a less harsh policy than immediate multilateralism (5.3.2.2).

Levelling is closely related to the short run and Keynesianism. On a first look however, Keynesianism has little to contribute to the developmental impasses in developing countries in general and to the question of liberalisation, regionalism and multilateralism in particular. The main reason for this poor fit of Keynesian analysis and policy prescriptions can be traced back to three main features of Keynesian economics. Firstly, Keynesianism is predominantly concerned with short and mid-term effects while developmental aspects imply a long-term perspective. Secondly, it is concerned with stabilising a booming and busting economy while economies of developing countries are often characterised by long-term stagnation rather than excessive volatility, making poverty trap arguments inspired by Rosenstein-Rodan, Myrdal and Hirschman more appealing. Thirdly, Keynesian economics focus on demand side interventions while it appears safe to claim that many of the problems in developing countries are in fact to a large extent on the supply side. Nonetheless, some insights from Keynesianism may be adapted to the general situation of developing economies in general and regionalism in particular. Keynesianism has emerged in the early 20th century and has been developed as an alternative to the NC framework and has since fanned out into a variety of directions, leading to a diverse and incoherent set of competing approaches:
The set of economists that claim to be Keynesians is large, but since Keynes wrote the General Theory (Keynes 1936), no one has been quite sure what Keynes had in mind, and there have been many interpretations of Keynesian ideas. [...] These are quite different models, however, with different policy implications. In policy discussions, when Keynes is invoked, we can never be sure what people have in mind. Is this the Keynes of the general theory, or Keynes as interpreted by Diamond, Kiyotaki, Mankiw, Woodford, or someone else? (Williamson, 2011).

In view of this diversity, a succinct nutshell depiction is utterly difficult, but we would claim that the following does at least some justice to the general approach. According to Keynesian views and in sharp contrast to the general equilibrium assumptions of the NC framework there appear to be instances where excessive private saving takes place, i.e. savings that go beyond planned investments. This refutation of Say’s law has already been sketched out by Malthus as general clutches (in addition and in stark contrast to the much more well-known Malthusian trap of overpopulation and overconsumption of scarce resources that Malthus had developed prior to the theory on underconsumption, see Malthus, 1798). In Keynes’ view, such instances are a result of a decline in consumer demand, previous over-investments (bubbles) and overly pessimistic business expectations. In the view of Keynesians the NC effect of reductions in the cost of finance has only marginal countervailing effects as demand and supply of money are relatively inelastic to prices and predominately determined by profit expectations. Such excessive saving withholds money from being spend and thus consumption further declines, potentially leading to a vicious cycle of low consumption and low spending. As wages appear to be sticky or rigid, i.e. relatively inflexible, such a recession is likely to lead to high levels of unemployment. High unemployment rates in turn lead to decreases in demand. As a cure, Keynesians advise to use anti-cyclic public spending as a stimulus to overcome such deadlocks. Conversely, heavier taxation burdens and tight monetary policies are proposed in times of booms in order to combat inflation and to finance spending in times of recession (for a more detailed discussion of the core of Keynesian ideas compare Cate, Harcourt & Colander (1997)). Keynesian economics – both classical and more recent contributions – are to our knowledge almost entirely silent on regionalism. As one of the main theoretical justifications for state interventions, it is by extension almost naturally strong in support of national sovereignty. Thus, it may be thought of as in fact opposed to regionalism with its liberalising tendencies and with its restrictions to the policy space that prevents economies to independently react to asymmetric shocks. With a similar argument regional economic integration may however also be portrayed as supported by Keynesian arguments in as much as it is a stumbling block that prevents multilateral schemes and thus preserves, or even strengthens, policy space. This ambivalence is simply a mirror of the NC and PE approaches. In other words, the Janus-faced nature of regionalism strikes again. Interestingly though, the logic of Keynesianism with regard to market and market size is in fact not a perfect reversal of the NC the bigger the better principle. On the one hand, the ability to properly counteract shocks inherently depends on the available policy space to implement an appropriate policy for each specific spatial unit – so that a ‘the smaller the better’ principle appears to apply. On the other hand, however, such kinds of policies require a certain economic and political power to be effective:

[T]he whole idea of Keynesian demand stimulus was developed [...] in the context of self-contained national economies. Keynesians filled up the warm water of fiscal stimulus in a national bathtub. [...] In any case, it only ever worked for the larger states. The smaller states could not do Keynesianism in a hand basin (James, 2009).
At the same time, enlarged market scale without accompanying harmonisation and coordination efforts is likely to lead to free-riding and thus indirectly decreases policy space: ‘When the national bathtub has holes, and other people benefit from the warmth, the exercise loses its attraction’ (James, 2009). This suggests, that in a region (or world) with very low trade and other barriers there may be indeed a need for some policy coordination as otherwise free-riding and consequently insufficient provision of supportive action by governments may take place (compare in this regard arguments on governance effects (5.3.4) and on industrial policy (5.3.3.4) further below).

5.3.2.1 Is there a case for regionalism as a levelling force?

Levelling of shocks by policy measures is closely connected to Keynesian ideas. In this regard we focus the analysis on two aspects that are frequently evoked in the analysis of regionalism, namely business cycles and natural resources (windfall gains and Dutch Disease vs. scarcity) – although some more varieties of the general argument may exist in the literature as well, for example in the area of food security (Matthews, 2003). Although the argument is on liberalisation and not on liberalisation-cum-protection per se, there are several reasons why the discussion on business cycles is quite clearly in favour of regionalism rather than multilateralism. With regard to natural resources, regionalism may be more suitable because of a higher political feasibility – although we would claim that several proposed strategies are currently even unrealistic in a regionally confined setup.

(1) Volatility and business cycles

Although trade and economic integration are commonly perceived as the major transmission channels for the alignment of business cycles, at least the impact of the former is from a theoretical perspective ambiguous. As Fiess (2007) observes, only intra-industry trade integration is likely to synchronise business cycles of trading partners while increasing inter-industry trade and thus increasing specialisation are likely to lead to a divergence of business cycles as ‘shocks specific to particular industries will become responsible for shaping business cycles’ (Fiess 2007: 2). In other words, standard NC theory would actually predict liberalisation to lead to dissimilar business cycles. Heterodox schools that (also) focus on vertically integrated or horizontal intra-industry trade with countries specializing in different production stages of the same good and/or cross-hauling of different varieties of the same product to each other, predict an alignment of business cycles over time. However, there might also be a harmonising link between dissimilar economies via migrant workers and remittances with adjustments in consumption in the labour sending country although that has to our knowledge not been established empirically yet (Fiess, 2007). In our view, this implies that neighbouring countries, that tend to be on average economically more similar to each other than countries far away, not only have more similar business cycles at the starting point, but that such similar, regional countries’ business cycles tend to align in the process of trade integration. In contrast, increasing trade with countries from other continents and at different stages of development tends to increase specialisation and thus a rise in the dissimilarity of business cycles. Although the alignment process might be more pronounced among industrialised countries as their trading potential in non-primary products and thus in intra-industry trade and
value chain integration is distinctly higher, the same tendency appears to hold true for developing regions. However, according to the so-called Consumptions Correlations Puzzle is observed that consumption cycles align less strongly than production cycles. As an explanation for this missing consumption smoothening Obstfeld & Rogoff (2000) offer the argument that not only market imperfections, but also simply the existence of trade costs (and related home biases in trade and investments) hamper such alignment processes. In our view, this again implies that business cycle harmonisation is much more likely inside a region also natural and artificial non-tariff trade costs tend to be lower in regional trade.

This leaves the question whether or not a synchronisation of business cycles is necessary or even desirable at all. From a Keynesian perspective, one could argue that increasing the size of the economic entity and diversifying along intra-regional intra-industry trade rather than specialising in international inter-industry trade can be a measure against too strong amplitudes (booms and bust cycles). As noted by Braumoeller (2006), econometric analyses are commonly based on the causal effects of mean values only and potential causal effects of the variations of right-hand-side variables are rarely considered. Braumoeller explicitly cites the possible positive effect of smoothened boom and bust cycles by Keynesian politics as an important example for such an omission.

In addition, James’ hand basin vs. bathtub argument above on the minimum size of an economic entity to conduct effective Keynesian style anti-cyclical demand stimulus policies is of highest importance in this regard. In other words, regionalism might simply be essential for both, rendering any stimulus strong enough as well as preventing direct bathtub leakages (i.e. positive spillovers) to non-contributing countries. Joint regional policies may thus be the only feasible way to prevent free-riding (note again the very close link of this argument to governance effects (5.3.4) and regional industrial policy (5.3.3.4) discussed below).

A second aspect of the discussion on the synchrony and asynchrony of business cycles centres on the insight that in case of strong trade links, synchronous business cycles and frequent shocks a ‘coordination of macro-economic policies can become desirable, with a common currency as the ultimate form of policy coordination’ (Fiess, 2007: 2). Conversely, this implies that policy coordination, particularly in the form of a common currency, is not desirable if business cycles are too dissimilar (an argument that is at the core of discussions on the suitability of accession candidates to the EU, the acquis communautaire and the Euro crisis). As similarity of business cycles (and thus the economies as a whole) make policy harmonisation both imperative and non-destructive while dissimilar business cycles appear to imply that harmonisation could do more harm than good, this argument on business cycles can be interpreted as strong support for deeper forms of integration that are confined to regional solutions among similar countries rather than multilateral solutions. Interestingly, this discussion from a business cycle and policy harmonisation perspective puts the caveats regarding the too strong homogeneity of African economies from a NC perspective on its head (compare chapter 3.3.2). In addition, there are some indications that the process of business cycle alignment and policy harmonisation is self-reinforcing with for example monetary integration reducing exchange rate uncertainty. Such uncertainty is a major impediment to intra-industry trade and its reduction may thus lead to growth in intra-industry trade and in extension of the argument above to business cycle alignment (Fontagne & Freudenberg, 1999). However, as Hughes-Hallet & Piscitelli (1999) stress
this appears again only to be the case if sufficient symmetry exists prior to the implementation of such policies and thus again regional South-South solutions may appear more conducive than multilateral or North-South arrangements.

(2) Volatility and natural resources: Dutch disease and windfall gains
Volatility has recently also gained more attention as it appears to be not only a short-run problem for temporarily laid-off workers as envisaged by Keynes, but in addition it may have dynamic implications by slowing down growth as well. The most prominent example for such growth inhibiting effects of booms and bust and of a lopsided economy in general are negative effects of mineral richness due to Dutch disease (along with other concomitants of the resource curse). As noted by Corden & Neary (1982), windfall gains from high international prices for some primary products often lead to a serious overvaluation of the currencies of countries that have a high share of exports in these particular goods. Due to this overvaluation it becomes expensive to export and cheap to import and thus the goods sector is commonly neglected in favour of the service and construction sectors. From such a perspective, it is explicitly the volatility of internationally set prices for these goods that has a disastrous effect. As long as prices remain high and deposits are not exhausted, the economy appears to be working well. However, once income from this sector starts to fall, the neglect of the other goods sectors and particularly the production for exports becomes a serious problem. Thus, a Keynesian cure is commonly prescribed to prevent economies from falling ill from Dutch disease: exchange rate stabilisation and contra-cyclical public spending (neutralisation of money during booms and spending during bust cycles). Interestingly, the perspective is in fact somewhat different from the Keynesian one. The latter focuses mainly on the bust period and thus on the necessity of public spending – although tight monetary and fiscal policies in the boom phase appear essential to save for harder times and to prevent the emergence of bubbles. Conversely, those advocating for fighting Dutch disease particularly emphasise the neutralisation of the windfall gains during the boom cycle – using these saved resources to vitalise the economy during recessionary developments is from this perspective a welcome secondary effect rather than the prime goal.

Interestingly, it is frequently claimed that negative shocks have stronger negative effects than positive shocks do any good (see e.g. Collier & Goderis, 2009). It may thus be justified both on efficiency and equity grounds to implement suitable policies to pre-empt or minimise the frequency and severity of such shocks and to keep the damage low and counteract them as they occur. According to Collier & Venables one such policy to tame risks of volatility may be regional economic integration as risks are being pooled in a larger integrated economic area. Again, a global solution might be seen as even more expedient from a simple size and risk pooling perspective. However, we can think of three arguments that potentially assign a specific role to regionalism with regard to the Dutch Disease. Firstly, the strongest effect of levelling out volatility will not take place by trade alone, but rather by introducing a common currency and / or liberalising labour migration – both policies that are currently absolutely not on the agenda of multilateralism and thus appear only feasible as a regional solution. Secondly, when also considering structural issues rather than volatility only, regionalism may be seen as benefiting both the resource-rich, but in particular also the resource-constrained partner of a regional bloc – particularly if such
a bloc is located in a remote corner of the world. Venables exemplifies this effect by an
extreme example with a resource rich and a completely resource-constrained
economy, but the same applies in general to less extreme cases. In autarky the
resource-scarce economy is mainly constrained by lack of forex income (to invest in
machinery and inputs) while the resource-rich economy is labour-constrained (see
Figure 9). In view of their higher wages and unfavourably high exchange rate, the
economy is unable to produce goods for exports at prices that are globally competitive
as well as to add any further services to the already overinvested service sector.

**Figure 9: Gains from integration of forex vs. labour constrained partners**

![Diagram showing gains from integration of forex vs. labour constrained partners]


According to Venables, this holds even true if the wages do not rise and possibly even
if the exchange rate is artificially lowered by monetary policies as the remoteness of
the economies (and the higher prize of imports associated with the artificial
undervaluation of the exchange rate) still prevent sizable exports. Thus, Venables
argues that this presents

> a compelling case for regional integration. Simply merging the two economies has the
effect of doubling income. Regional trade should mean that the resource-poor country
can increase its foreign exchange earnings, while the resource-rich country can import
goods that were previously supply constrained (Venables, 2009: 8).

His further analysis, however, shows that the distribution of gains is very unequal when
assuming that there is a considerable range of (potential) exports inside the region that
is feasible due to high trade costs and tariffs while exports outside the region are very
limited given the weak production capacities and the high trade costs associated with
remoteness. According to his model that assumes exclusively resource exports to
ROW, Venables shows that the resource-rich economy gains more from multilateral
liberalisation through a steep reduction in cost of living. However, wages are likewise
reduced and gains may end up completely in the hands of governments (or
multinationals) due to resource rents, thus making the (more) positive effect contingent
on a redistribution of this wealth to workers ‘either directly or through investments in
human capital or other measures that enhance productivity and thereby raise wages’.
In contrast, the resource-poor economy gains more from regional integration than from multilateralism due to its preferential access to the market of the resource-rich country, thus redistributing wealth in the region (an effect that may be amplified by labour migration). As this may lead to persistent opposition against further multilateral liberalisation, Venables suggests ‘to look for other policy measures that can accompany non-preferential opening’ (Venables, 2009: 22). In this line of thinking, he proposes to directly share the resource wealth among regional partners and to invest this resource wealth into the development of regional infrastructure in order to improve the competitiveness of the regional economies to survive and prosper in liberalised global markets. Although this is not mentioned by Venables, such a resource sharing would entail the additional advantage of improving natural resource wealth governance due to the joint supervision of rents and thus reduced opportunities for appropriation by small elite groups. As a global sharing of resource wealth appears again anything but feasible, this is the third argument that assigns a potential specific role to regionalism. However, such arrangements are in our view, despite the potentially very high benefits from such sharing agreements, highly unlikely given the fact that the resource-rich countries would give up part of their domestic wealth in exchange for apparently nothing – although they may well benefit overall and in the long-run. Such a sharing agreement appears to be somewhat more feasible in cases where either the resource-rich country is considerably less developed and/or due to its location heavily dependent on the other members of the bloc and thus can hope for massive positive effects from their interaction with the bloc. In other words, a country might want to buy into a successful bloc with its natural wealth. Such a situation might for example be the case with South Sudan and the EAC (and possibly also the DR Congo and the EAC) but even in such very specific cases it would be surprising if such an agreement would even be seen as a potential option. A natural resource rent sharing agreement might also be more feasible in regions where so far no considerable amounts of natural resources have been found and where ideally prospection takes place in all countries with unclear outcomes in each of them. In this regard, the EAC is again an almost perfect candidate with discoveries of or at least strong indications of gas and petroleum deposits across the whole region. In such a case, an agreement on resource revenue sharing could even be seen as a hedging tool given the uncertainties involved in prospecting endeavours. However, political barriers against such an approach appear immense. Nonetheless, we would claim that it could at least be discussed whether members would be willing to contribute at least a small percentage of their royalties to a regional fund which would at least open the door for somewhat greater transparency and accountability, increase the communal spirit and provide funding for joint projects in infrastructure and productive capacity upgrading. However, it is in our view very unlikely that this is politically feasible to an extent that would have an effect on Dutch Disease and volatility concerns. This in turn clearly showcases how far even a well advanced community such as the EAC is from achieving the proclaimed political union. In a nation, rents from resources naturally accrue to the whole entity and provinces that host such deposits often receive only a slightly higher share of the royalties (if at all). Still, this potential gain is again clearly unique to South-South agreements as North-South schemes or multilateralism are absolutely unlikely to lead to such deeply integrated markets, let alone extend to resource sharing agreements.
5.3.2.2 Is regionalism alleviating adjustment costs?

The main assumption in addition to the Keynesian importance of the short run that has to be dropped for the inclusion of adjustment costs is the one of a frictionless world. In other words, every change in the economy comes at a cost for redeploying factors (re-training of workers and replacement of obsolete technology and capital investments). Such costs include 'hiring, firing, and training labour, installing and adapting machines and buildings, and doing marketing and adapting the production distribution nets' (Forteza & Patron, 2003: 96). This implies not only costs for workers and investors in the private sector but also for the public sector. On the one hand, the state may be needed to help the private sector to adapt to the changes. On the other hand, implementation costs of the reforms and in particular losses in tariff revenue and thus the need and costs involved in shifting the tax revenue base have to be considered as well (see Table 32). The best proof for the fear of such overwhelming adjustment costs – though not necessarily their occurrence per se – appears to be the common implementation procedure of regional and multilateral liberalisation alike that usually take place in steps that can take several years if not decades to be finalised. Such sequencing involves both lowering tariffs for only certain goods first as well as lowering the tariffs incrementally. However, regionalism may also be interpreted as a more gradualist approach itself when compared to multilateral liberalisation (and South-South integration more than North-South integration). Although adjustment costs appear to be less directly connected to the core Keynesian ideas, in our view this framework is still the most suitable one for the analysis of adjustment costs.

Table 18: Classification of adjustment costs

<table>
<thead>
<tr>
<th>Private sector</th>
<th>Labor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Opportunity costs of unemployed labor</td>
</tr>
<tr>
<td></td>
<td>Obsolescence of skills and skill specificity</td>
</tr>
<tr>
<td></td>
<td>Lower wage levels</td>
</tr>
<tr>
<td></td>
<td>Re-training costs</td>
</tr>
<tr>
<td></td>
<td>Personal costs such as psychological suffering</td>
</tr>
<tr>
<td></td>
<td>Other costs (e.g. rent-seeking)</td>
</tr>
<tr>
<td></td>
<td>Capital</td>
</tr>
<tr>
<td></td>
<td>Opportunity costs of underutilized or unemployed capital</td>
</tr>
<tr>
<td></td>
<td>Cost of capital rendered obsolete (Capital write-offs)</td>
</tr>
<tr>
<td></td>
<td>Transition costs of shifting capital from one activity to another</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Public sector</th>
<th>Shift tax revenue base</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Social safety net spending (e.g., unemployment benefits)</td>
</tr>
<tr>
<td></td>
<td>Erosion of benefits from preferential treatment</td>
</tr>
<tr>
<td></td>
<td>Efforts to ensure macroeconomic stability</td>
</tr>
<tr>
<td></td>
<td>Implementation costs of trade reforms</td>
</tr>
<tr>
<td></td>
<td>Non Trade Concerns: food security, support to rural areas, environmental concerns</td>
</tr>
</tbody>
</table>


As will be indicated below, NEG approaches provide insights into this topic although adjustment costs themselves are usually not included in such models. In general, adjustment costs are at the core of discussions on a gradualist approach to trade liberalisation (Michaely, 1986). It is quite obvious, that regionalism is less abrupt and unsettling than multilateralism in the short-run as competition is increased to a lower extent. This may leave economic players more time to adapt and increase their competiveness incrementally and this may be required given the stickiness of certain factors (i.e. wages), the relatively slow development of others (i.e. skills) and the potentially disastrous effects that even a temporary hike in unemployment can have on health, education and other factors that are crucial components for growth and
development. Apart from competition, the effect of liberalisation on tariff revenues plays a major role in the debates.

In theory, losses of tariff revenue can be off-set by other taxation such as value-added tax (VAT) or income tax, but many countries find it utterly costly and difficult to collect such taxes given the levels of informality in the economy and administrative capacities and integrity deficits among the administration. Under the heading ‘[p]racticing the art of the possible in trade liberalization’, Devlin & Ffrench-Davis, (1998: 14) emphasise that liberalisation does not only create trade and raise competition, but also

has immediate fiscal costs, real resource costs by creating obsolete capital and redundant labor, and political costs because of the real and imagined threats of globalization. Thus, the process of adjustment must move in tandem with the political and economic capacity to digest those costs. The large and rapid liberalization of recent years encountered initially considerable “water” in national tariff schedules and the needed fiscal adjustments were quite straightforward. But now tariffs are presumably closer to actual differential margins of competitiveness between home and abroad, while fiscal options are narrower. [...] Meanwhile, multilateral rounds come in spurts, the schedule of which is largely out of the control of developing countries. In the case of the Uruguay Round the region still is in the process of digesting existing commitments. In this context, authorities can use regional integration as a window of opportunity for continued liberalization, but in the more predictable and controlled environment of a reciprocal agreement of circumscribed scope. In fact, regional integration adds a compensatory ingredient to import liberalization, by fostering reciprocal exports in tandem with reciprocal imports. Hence, the doses of positive and negative impulses to economic activity and investment are more balanced with regional integration, than is the case in pure unilateral import liberalization. Moreover, the regional agreement does lower the average level of protection vis-à-vis the status quo, creating trade, raising competition and promoting specialization in the subregional market. The arrangement for liberalization can meet less political resistance (and indeed even be quite popular as in the case of MERCOSUR) because of a number of associated factors such as public sentiments about “getting together” with a known neighbor, compensation through reciprocity with guaranteed market access, and more limited impacts on fiscal income (Devlin & Ffrench-Davis, 1998: 14).

In an interesting model that assumes a fixed adjustment cost per worker who has to relocate (and retrain) from a previously protected, inefficient sector to a new activity is proposed by Furusawa & Lai (1998). By simply adding a moderately large discount factor they show that the

most-efficient, self-enforcing bilateral trade liberalization agreement from which neither country has incentive to deviate throughout the liberalization process and after [...] is one in which] countries are willing to cut tariffs gradually to the long-run optimal level (Furusawa & Lai, 1998).

One might claim in addition that the discount factor should be even much higher in the notoriously cash-constrained economies of developing countries. While not including discount factors or taking into account any other of the above arguments and thus disagreeing with the potential usefulness of a gradualist approach from a purely economic perspective, Forteza & Patrón (2003) demonstrate that if a gradualist approach is necessary for other (presumably political) reasons, it would be most efficient to preannounce such steps so that economies can adjust smoothly in anticipation of the upcoming policy changes. Interestingly, others illustrate that adjustment costs and gradualism may lead to a stepping stone argument as

the existence of adjustment costs may give rise to an incentive to adopt trade liberalization agreements that are of a sequential nature when the policy choices are discrete. Adjustment costs have two effects in considering the benefits of liberalization. One is that the presence of a large number of workers in a sector makes liberalization more difficult to sustain because of the high cost of moving the workers. A second is that once the sector has been shrunk by past liberalization, it becomes more difficult to go back to the previous policy. These effects seem intuitively appealing, as they
capture the idea that the liberalization process becomes much more secure once resources have been moved out of a sector. This locking in of resources from early stages of liberalization can be used to facilitate later types of integration (Bond, 2005).

NEG models also provide weighty insights into the problem of adjustment costs. For example, Krugman & Venables (1996) demonstrate in a NEG model that workers will suffer a loss of real wages during the adjustment process and, in a more realistic model, we might well imagine that they will also experience a rise in unemployment adding to the painfulness of the adjustment. The political difficulties posed by this adjustment problem are obvious. [...] Nations may be enthusiastic about the benefits of economic integration in the abstract. But when it turns out that such integration involves losses as well as gains, and in particular that the geographic consolidation of industries means that some national industries vanish, the charges of 'social dumping' are sure to fly (Krugman & Venables, 1996: 967).

The important question to pose is whether particularly poorer countries are able and willing to bear such costs in the short-run, both politically and economically – all the more as from a NEG perspective the poorer countries are likely to be those where industry and thus wealth is re-locating away from in the first stages of NEG effects. Although these arguments can be clearly seen as one of the reasons why countries opt for regional integration first before considering opening up at a global scale, there is an important caveat to consider from an adjustment cost perspective. Countries that participate in regional integration should ceteris paribus specialise away from their current export and thus production structure and, by extension, their (observed static) comparative advantage. This implies adjustment costs (mainly inside the region, but to some extent also in ROW). If that region decides after some time to integrate globally, it will in all likelihood specialise again somewhat towards their previous trade and production structure. Adjustment costs will therefore again be involved in the second adjustment process. In the most extreme case where post-multilateralism production patterns are re-adjusted back to the previous pre-regionalism production patterns both adjustment costs would be completely deadweight costs. This is, however, only the case when abstracting from dynamic comparative advantage and dynamic factor endowments that will be discussed in the subsequent chapter. Introducing them considerably weakens the counterargument described here, though not necessarily completely. Taking into consideration that investments and skills need to be renewed periodically irrespective of structural changes weakens both the general discussion on adjustment costs as well as the caution on potentially increasing and deadweight adjustment costs introduced by regionalism. In addition, whether gradual, immediate, regional or multilateral in kind, liberalisation appears to call for active government involvement to alleviate and ease necessary adjustment processes (see Furusawa & Lai 1998). This seems particularly imperative as not only gains tend to be asymmetrically distributed, but also the burden of adjustment costs.

### 5.3.3 Location and accumulation effects

Location and accumulation effects are most intimately connected to the New school triumvirate of New Economic Geography (NEG), New Endogenous Growth Theory (NEGT) and New Trade Theory (NTT), the latter with its adored and abhorred stepsiblings Strategic Trade Theory (STT) and New Industrial Policy (NIP). Models and approaches in the realm of NEG, NTT/STT and NEGT rely on a methodological apparatus that is relatively similar to the mainstream NC one. In fact, many authors include both NC and heterodox assumptions in their models and analytical frameworks. In consequence, the borders between NC and heterodox economics have
become somewhat blurred and certain heterodox assumptions are sometimes presented as part and parcel of NC approaches although they clearly violate one or several of the NC axioms. As a result of these sometimes only very minor assumptonal changes, heterodox analyses frequently arrive at results that are completely at odds with the NC ones. In other words, a large part of ‘the theory of uneven development fits in very well with the Heckscher-Ohlin theory of trade’ (Krugman, 1981:150) as it is possible ‘to apply the tools of orthodox economics to some of the ideas of the economic system’s radical critics’ (Krugman, 1981:160). Again, (internal and external) increasing returns and transport costs are key assumptions that diverge from the NC approach, but in addition factor mobility and immobility and particularly factor endogeneity / dynamism play a major role as well. Although firm heterogeneity plays a considerable role in many models as an assumption that helps to better match the models with heterogeneous processes that take place among real world companies, the additional explanatory power of this component on policy in general and on regionalism vs. multilateralism in particular is in our view rather limited. In contrast, sector heterogeneity with regards to many of the afore mentioned assumptions / relaxations – i.e. increasing returns, transport costs (in particular relating to the weight/value ratio) and factor dynamism – is in our view of paramount importance. The probably most radical perspective also allows for non-clearing factor markets as a crucial aspect of any analysis on dynamic effects of regional integration. Before discussing eight potential accumulation and location effects of regionalism and related arguments on regionalism vs. multilateralism separately we shortly review the new school triumvirate (that in itself is surprisingly silent on regionalism and multilateralism and usually only refers to generic liberalisation).

According to Deardorff (1984) and Helpman & Krugman (1985), the main rationale for the development of the NTT approach was to find an explanation for three patterns that could not be explained by standard Ricardian or H-O theories. These three patterns are the strong increase in the ratio of trade to GDP, the increasing share of trade among industrialised (and thus similar rather than complementary) economies as well as the increasingly intra-industry nature of trade that comes along with this trade among equally endowed economies. In addition, the observation that a relatively small number of large firms dominate trade led to the question whether increasing returns might play a role in this process and not only differences in factor endowments and technology. Likewise, the fact that the growth in heterogeneous goods increasingly outgrows the trade in homogenous goods indicates that economies of scale might be at play. Such increasing returns are also likely to lead to imperfect competition so that the three components increasing returns, imperfect competition and differentiated products constitute the cornerstones of this approach. Although the addition of transport costs is a marked feature of NEG models, some earlier NTT models already include transport costs in their analyses as well. Assuming two identical countries in terms of both consumer preferences and endowments (technology, labour, capital), fixed labour (i.e. no migration takes place), monopolistic competition and love for variety (with diminishing marginal utility thereof) Krugman (1979) showcased that (intra-industry) trade can be explained in such a NTT model and that it can be mutually beneficial even among two completely identical economies. In addition, Krugman observes that if labour mobility is introduced into the model extreme migration will occur with the initially bigger region eventually hosting the entire labour force – in other
words ‘in the presence of increasing returns history matters’ (Krugman, 1979: 478). Subsequently Krugman developed a similar setup that introduces to the so-called home market effect, implying that countries tend to export goods for which they have a large market and, as this particularly applies for goods that are produced under economies of scale, larger countries tend to specialise in such industries (Krugman, 1980). In a related paper Krugman models this to the perceived divergence of the world economy with growing industrialised countries and lagging, non-industrialised third world countries and shows that according to simple processes at work an uneven development pattern might emerge that can be seen as reminiscent of radical theories of underdevelopment, both via trade and investment channels (Krugman, 1981).

Closely connected to NTT, STT was likewise formalised in the 1980s. It mainly focuses on oligopolistic competition and internal and external economies of scale, focussing exclusively on trade without strong references to investment or labour migration. The analytical setup is focussed on game-theoretic considerations rather than equilibrium based models (and thus somewhat resembles the PE models discussed in chapter 4 rather than the NC models in chapter 3 or most of the heterodox schools discussed in the current chapter). In contrast to its predominantly theory-oriented sister approaches, STT is heavily criticised for its very strong policy advise implications. For example, in the Brander & Spencer duopoly model governments can intervene to shift profits from foreign to domestic producers/exporters by the introduction of an export subsidy (Brander & Spencer, 1985) as exemplified in the well-known Airbus vs. Boeing example by Baldwin & Krugman (1988). The same logic can, however, be applied both to other government interventions (such as preferential tariffs and differentiation of tariffs for final products and inputs) and to economic effects that go beyond price mark-ups and excess profits (such as productivity gains and knowledge accumulation). In addition, NTT contributions again heavily depend on assumitional choices, in this case on the nature of the industries with regard to economies of scale, PE aspects of lobby pressure and government information availability and the likelihood of retribution by the other countries.

NEG can be seen as a direct extension of the NTT framework with a stronger focus on labour and capital mobility and their respective remunerations. In asaddition to the NTT home market effect, labour mobility and a related consumption-demand linkage as well as vertical linkages among firms and thus co-location of firms strengthen agglomeration forces and thus a core-periphery pattern emerges (Ottaviano & Puga, 1997). Many models start with two completely similar countries and thus an unstable equilibrium where either chance or an initial policy intervention can tilt the balance towards either of the two countries. However, once this has taken place, any reversal becomes much more laborious. In other words, a process of cumulative causation is set into motion and therefore many NEG models represent a clear case of path dependency. The most important difference to the NTT models, however, is the inclusion of decreasing returns on investments due to either capital mobility (and increasing competition) or labour mobility (and increasing wages). This constitutes a centrifugal force that partially offsets the agglomeration or centripetal forces of the home market (consumption-demand linkages and vertical linkages among co-locating firms). As a result, most (but not all) NEG models predict a bell-shaped association between the agglomeration of economic production and welfare in a few places and the intensity of trade liberalisation' (Ascani, Crescenzi & Iammarino, 2012: 18).
In other words, at low levels of liberalisation (and thus also by extension of regional integration) and high levels of natural and artificial trade costs (the former basically transport and other distance-related trade resistance components, the latter tariffs and NTBs), the spatial distribution is dispersed. Lowering (natural or artificial) trade costs by liberalisation, regional integration or advances in transport technology leads to agglomeration for medium levels of (natural plus artificial) trade costs. Finally, a turning point of this tendency is reached at very high levels of integration and very low levels of trade costs where dispersion is again taking place (see Figure 10 for a graphical representation).

Recently, a number of models have been advanced that focus on heterogeneity of firms (usually on a continuum of profitability) or workers (with regard to skills) that leave the general mechanics untouched, but focus on underlying micro effects. Growth of some firms is thus accompanied by the exit of other firms, leading both to positive effects (as the average productivity of the economy rises) as well as negative ones (as workers may have to be at least temporarily laid off). Such approaches are sometimes termed new new economic geography models (Ottaviano, 2011).

**Figure 10: Bell-shaped relation between transport costs and industry location**

![Bell-shaped relation between transport costs and industry location](source)


In addition, many NEG models set a strong focus on external economies of scale and thus also sub-national geographic units like regions, cities and clusters. In this regard NEG has somewhat converged towards economic geography as discussed inside the geography discipline, including century-old German location theory (Christaller, 1933; Von Thünen, 1826; Weber, 1922) and regional science (Isard, 1960). In order to overcome the weak empirical fit of the Solow model Arrow claimed in the early 1960s that ‘[a]ll that has to be added is the obvious fact that knowledge is growing in time’ (Arrow, 1962: 155). Arrow’s ideas on learning by doing and knowledge spillovers have inspired further modifications by Uzawa, Lucas and others that focus on knowledge accumulation as essential complement to capital accumulation (Lucas, 1988; Uzawa, 1965). In such labour-capital (AK) models growth takes place endogenously despite
constant (or exogenously determined) technology as skills accumulate in time and so does the ability to utilise technology. Arrow’s work can also be seen as major antecedent to a separate strand in the literature on endogenous technological change developed by Romer (1990), Aghion & Howitt (1992), Grossman & Helpman (1994) and others that finally placed knowledge, innovation and ideas at the heart of the growth debate – the birth of NEGT. In most endogenous technological change models, one or more additional sectors are added to account for knowledge production (R&D sector), skill production (human capital sector) and/or technology as inputs (intermediate goods sector). As a result, growth becomes endogenous and thus self-propelling. At the same time, however, (partial) excludability of technology and the (partially) tacit nature of knowledge imply that such technology-propelled growth does not necessarily and automatically occur and that it does not necessarily and automatically spread to all parts of the world:

It was by marrying nonrivalry to the concept of excludability (...) that Romer cast a new light on the ubiquitous role of ideas in the economics of everyday life – meaning trade secrets, formulas, trademarks, algorithms, mechanisms, patents, scientific laws, designs, maps, recipes, procedures, business methods, copyrights, bootleg copies, collectively, that is, the economics of knowledge. He illuminated an inescapable tension between creating incentives for the production of new ideas and maintaining incentives for the efficient distribution and use of existing knowledge – the social choice that creates what we call intellectual property. Managing the tension between these ends – furthering the growth of knowledge while ensuring that its benefits are widely shared – is a responsibility of government every bit as important as monetary and fiscal policy. If the intricate system of incentives to create new ideas is underdeveloped, society suffers from the general lack of progress (most of all, the poor). So, too, if those incentives are too lavish or too closely held (Warsh, 2006: xvii).

This trade-off between incentives for creating knowledge and for making it available for an efficient distribution and widely shared utilisation is likely to look differently for countries and the lower and higher end of the technological frontier. Almost by definition, poorer countries possess smaller portions of existing technology and knowledge – and as a result, such countries tend to be more interested in the efficient distribution part of the equation. In contrast, developed countries have little to gain from leapfrogging and catching up to existing technology and thus tend to put a considerable focus on protection of intellectual property, both in order to safeguard profits accruing from past discoveries as well as to incentivise new discoveries.

In addition, the endogeneity dimension of technology and knowledge is of prime importance. Given current lower levels of skills and technology, the likelihood of future production of knowledge is also lower in developing countries than in industrialised countries, potentially and in fact in many cases actually resulting in a vicious circle of low skills, specialisation in low technology activities, low profits and low investments in skills and technology. This may appear surprising as the potential gains for developing countries that are far away from the technological frontier must be seen as vast and catch-up and leapfrogging thus as a simple way of improving the lives of millions, even billions of people. However, in addition to the vicious circle (or poverty trap) of low levels of skills and technology, specialisation in skills and technology-extensive activities, low profits and low investments in technology and skills, it is often observed that in addition to (long-term) investments in human capital and technology, experimenting and adaptation are also required in order to transfer technology into new contexts. As such incremental changes often do not qualify for intellectual property protection, incentives to invest in such activities are considerably lower than original research (see e.g. the debate on copy-cats in Rodrik, 2004).
In our view NIP can be seen to some extent as a modern successor of STT (see Rodrik, 2004 for the most concise description of NIP and DeCarlo, 2007 and Hart & Prakash, 1997 for a discussion of the relation of STT and NIP, the latter even joining the two into a combined concept termed Strategic trade and industrial policies). In contrast to STT, NIP has strongly moved away from import subsidising industrialisation (ISI) approaches that tended to be at the heart of many infant industry arguments. Thus the NIP tool box can be seen as distinctly more moderate, but at the same time also as more widely applicable as not only export subsidies and tariffs are discussed as insights from institutional economics and NEGT (and to a lesser extent also from NEG) are incorporated in NIP. In particular the possibility and necessity to actively exercise and influence on factor endowments (in particular human capital / skills / technology) plays a major role in this approach, leading to a distinction between the standard, ‘observed’ and static comparative advantage and something that is by some authors termed dynamic comparative advantage (Redding, 1999). Another important underlying assumption of NIP follows a structuralist tradition in as much as it assumes that growth in certain sectors is more likely and more beneficial to the economy than in others. As the original arguments of structuralism based on the Prebisch-Singer ToT predictions appear not to properly mirror today’s complex realities, the focus of the debate has largely shifted to the analysis of sectors that more strongly exhibit desirable traits. These traits include knowledge accumulation and thus wage premia, technology spillovers and forward and backward linkages, employment potential, potential for value addition, economies of scale and other aspects that make an economic activity or sector more likely to contribute to growth. This is for example discussed in detail in the United Nations Industrial Development organization (UNIDO) literature on the Competitive Industrial Performance (CIP) with its focus on the primacy of manufacturing in general and the production of sophisticated products in particular (UNIDO, 2013). Similarly, Hausmann, Hwang & Rodrik (2007) claim that a ‘country’s fundamentals generally allow it to produce more sophisticated goods than it currently produces’ and that ceteris paribus ‘an economy is better of producing goods that richer countries export’ (Hausmann, Hwang & Rodrik, 2007). These results are in stark contrast to standard models of comparative advantage that hold that policy-induced reorientations and upgrading of specialisation patterns produce inefficiencies and thus are notoriously a bad decision for a country. Quite to the contrary, NIP assumes that countries ‘can get stuck with lower-income goods’ and policies to overcome such barriers may thus lead to higher economic growth (Hausmann, Hwang & Rodrik, 2007).

As indicated above, none of these heterodox schools shortly portrayed here has produced considerable contributions to the regionalism debate in the core models and works. However, references to these schools can frequently be found in the specialised regionalism literature, but in most cases, such references are vague conglomerate of different effects and theories and lack stringency and rigour. We have been able to single out eight partially overlapping, but distinct potential effects in the area of accumulation and location effects that refer to one or several heterodox schools of thought. These effects include competition-induced efficiency gains (5.3.3.1). This effect is again applicable to both regionalism and multilateralism, but as it particularly reduces the negative effect of trade diversion it can be seen as somewhat tilting the balance towards seeing regionalism as an acceptable alternative in the short run. The next three effects are (potentially) particular virtues of
regionalism. As such, regionalism may lead to growth in tariff-jumping FDI (5.3.3.2). As indicated in the short description of NEGT, structuralism and NIP, these models incorporate considerable trade-offs (the former between incentives for knowledge creation and its widespread utilisation, the two latter between competition and protection). Not surprisingly, knowledge transfers and learning by doing in infant industry protection schemes (5.3.3.3) and industrial policy interventions (5.3.3.4) may be more successful in regional setups than in both national and multilateral ones as economic regionalism itself incorporates trade-offs as well and may thus best address the challenges involved. Two additional arguments centre on the differences in political feasibility of multilateral and regional solutions. On the one hand, regionalism is more likely to include provisions to compensate (relative and absolute) losers from integration than multilateral agreements do (5.3.3.5). More importantly, it is often overlooked that not only the developing countries are hesitant in entering into multilateral or North-South agreements, but even more so the richer countries. While the former are well known for their resistance against multilateral trade liberalisation, the latter have been successful in keeping other potential liberalisation steps, in particular labour market liberalisation, completely off the agenda of multilateral and North-South negotiations. In our view, it may be rightly claimed that only such multilateral deep integration steps would have a strong positive effect for developing countries while being potentially disruptive for the developed world. In other words, the common impression of a liberalisation-adverse developing world and a liberalisation-embracing West is in our view to a large extent the result of a skewed and dishonest debate, thus potentially indicating that trade liberalisation should be retained as a bargaining chip to also achieve advances in the field of labour market liberalisation (5.3.3.6). Finally, two potential location and accumulation effects stemming from the NEG frameworks in particular are discussed that show potential benefits from regional economic integration even in the long-term. With reference to the bell-shaped nature of accumulation it may have to be considered whether natural trade costs alone may lead to an uneven pattern of economic development even if all artificial trade costs are gotten rid of. This would potentially imply that at least for the less developed regions artificial trade costs should be upheld against the outside world in order to not allow agglomeration forces to withdraw industrial activity from the region without prospects of reaching a state of re-dispersion (5.3.3.7). Related to such residual trade costs that cannot be eliminated, one may have to also consider whether regionalism is a tool for a more dispersed distribution of economic activity that may be efficiency enhancing if (natural) trade costs play a more significant role than internal and external economies of scale (5.3.3.8).

5.3.3.1 Competition and challenge-response increases in efficiency

Liberalisation in general is likely to lead to challenge-response increases in efficiency through increased competition, most likely via Schumpeterian innovation and creative destruction of existing business models. As domestic and regional (and possibly ROW) production becomes more efficient, consumer prices are reduced over and above the reduction in price mark-ups discussed above. Such a challenge-response reaction is particularly likely if and as

local factor markets are incomplete or distorted. Labor training, technology and long-term capital are scarce, with inexistent or infant markets and foreign direct investment (FDI) – a potential bearer of some of these scarce factors – is frequently coquettish,
playing one national suitor off against the other in a world of imperfect information. These market failures are more significant for non-traditional exports of differentiated products, whether of natural resources, manufactures or exportable services. If access to external markets is improved for these exportables, it can be a catalyst for completing markets and diluting segmentation (Devlin & Ffrench-Davis, 1998: 15).

While such challenge-response efficiency gains do play a role for created trade, it is particularly interesting for diverted trade as such Lipsian-style reductions of consumer prices change the conventional NC perspective on trade creation vs. trade diversion dramatically:

The conventional literature on the benefits and costs of economic integration focuses on tariff preferences in a framework of optimal competitive equilibrium. This equilibrium is assumed to be disturbed only by the existence of import restrictions. In this framework, integration is beneficial only if it implies a move toward free trade; that is, if the effects of trade creation (shift toward cheaper sources of supply) are larger than those of trade diversion (shift toward more costly sources of supply). The crucial issue, however, is how costs are measured; in the standard approach it is at actual market prices net of tariffs, assuming away transitional costs and incomplete markets, as well as accruable competitiveness. The assumptions lead to the obvious conclusion that overall unilateral liberalization is always the optimal national policy and better than regional integration. But the real world is more complicated. For many non-traditional products, access to markets is more limited and unstable, making economies of scale, the emergence of externalities of location and agglomeration and specialization more difficult to achieve. It is for these types of products that regional integration becomes a potential platform for diversifying growth of exports, and to improve trade’s contribution to development. In the face of distortions in world markets, guaranteed access to regional foreign markets can be a catalyst for exploiting potential externalities; indeed, this is a leading objective of policy-makers and a major force encouraging regional integration. Moreover, in face of economies of scale, what otherwise would be a costly trade diversion can eventually become a cost-reducing and welfare-enhancing effect (Devlin & Ffrench-Davis, 1998: 15).

Adding a structuralist perspective and noting that diverted trade predominantly occurs in manufacturing and other modern and knowledge-content sectors, makes the importance on the TD side even more important. It may thus be argued that trade diversion is, from such a dynamic and heterodox perspective, not an unavoidable evil that ought to be outweighed by trade creation. In contrast, trade diversion can actually have a positive effect on its own (at least for the REC members, though not for ROW) and its incidence might thus turn out to be too low rather than too high. In turn, multilateralism and to a large degree North-South regionalism do not offer the same degree of additional benefits in this regard.

5.3.3.2 Trade and investment: is there a case for tariff-jumping FDI?

In our view the probably most obvious possibility for regionalism to have a positive effect (and an effect that multilateralism would not bring about) from a new schools triumvirate perspective is related to FDI – and, somewhat counter-intuitively at first sight, particularly with regard to FDI from ROW rather than from partner states. Unfortunately, the gains from FDI in general are much less straightforward and much more complex and conditional than purely trade-related aspects:

A difficulty in assessing the role of regional integration agreements on FDI is that there are many different channels through which RIAs could potentially have an impact on the location of FDI. Moreover, not all of them go in the same direction. The impact could depend, for example, on the reasons that bring about foreign investment in a particular country. For instance, a firm may invest abroad in order to exploit a highly protected domestic market, thus serving through sales of a foreign affiliate a market that it could serve through trade only at a high cost. Alternatively, it may invest abroad following a strategy of international vertical integration, exploiting differences in comparative advantage for different stages of production of a given good. As we will
see, depending on the motive for foreign investment, the formation of trading blocs may have completely different implications for the location of FDI and the impact of the relaxation of trade barriers implicit in an RIA. [...] The impact of RIAs will also depend on other characteristics of the host countries that make them relatively more or less attractive than their RIA partners as a potential location for foreign investment (Yeyati, Stein & Daude, 2002: 3).

Regional integration may indeed entail preferential treatment for regional investors such as freer access to all sectors, lower minimum levels of investments, lower minimum standards for job creation, local content and other social impact indicators, easier labour market access for bringing along fellow nationals as managers and technicians etc. Such a liberalisation of the FDI regime and related polices may indeed play a major role – but again the effect would be stronger if such policies were applicable to ROW as well. Such incentives and easing of investments apply to both vertical and horizontal investments while the former are not strongly affected by the other major effects on FDI discussed below. In other words, vertical investments that are based on the search for resources, cheap or skilled labour and/or conducive business environments to supply global, home or third markets are almost exclusively opened up for regional investors by regional schemes. In contrast, ROW investors may rather be crowded out as they may find it more difficult to compete given the preferential treatment of regional investors. This may even lead to a situation where regionalism hampers rather than promotes the integration of the regionalising economies into global value chains. However, there are two potential reasons why this not necessarily needs to be the case and how this can be prevented. Firstly, in many cases at least some liberalisation steps and incentives for FDI that are introduced in the wake of regionalism for regional players only, are either quickly extended to non-regional investors or they are even liberalised on a non-preferential basis in the first place. In such situations, regionalism thus appears to be a window of opportunity for a general improvement of the investment climate rather than a genuinely regional integration step with its Janus-faced character. Secondly, while resource endowments are certainly not affected by regionalism, skills levels and particularly the business environment may change for the better over time, thus increasing incentives for vertical investments from ROW as well.

Nonetheless, the main difference between unilateral or multilateral and regional approaches towards FDI promotion is in our view related to the trade-off or substitutional relation between trade and investment. In this regard, regional trade integration is likely to lead to horizontal FDI from ROW while multilateralism is not. This tariff-jumping argument is based on the premise that horizontal / market searching investments in particular can be regarded as an alternative mode and almost perfect substitute to trade (Blomström & Kokko, 1997; Mundell, 1957). This implies that horizontal FDI is likely to be maximised under regional trade integration that is increasing the internal market (and thus allowing for intra-bloc production of previously unfeasible goods due to economies of scale) while upholding external tariffs (and thus making the supply from the country of origin unfeasible). In contrast, vertical FDI is likely to be maximised under multilateral trade liberalisation rather than under regional trade liberalisation. However, such a vertical integration is likely to follow current trade patterns and thus to continue to largely confine specialisation patterns of the South to primary products, deterring if not inhibiting structural change.
An interesting perspective on such tariff-jumping and thus mainly horizontal / market seeking investments has been added to the debate by Puga & Venables (1998) with a full-fledged NEG model. In good NEG tradition, the authors assume that cumulative causation has created concentrations of industrial activity in particular locations (developed countries) and left other areas more dependent on primary activities [...] as a result of increasing returns operating in imperfectly competitive environments [...] and forward and backward linkages between firms (Puga & Venables, 1998: 223).

This initial equilibrium setup is characterised by strong differences in both wages and unit labour costs. Nonetheless, firms from the more advanced region are reluctant to invest in the low wage region despite potential gains from lower wages and a monopolistic position in this market because ‘it would forego the benefits of proximity to its suppliers and its industrial customers (the forward and backward linkages)’ (Puga & Venables, 1998: 222). Consequently, liberalisation leads to benefits from linkages and disadvantages from import competition. Logically, although some gains may accrue by unilateral action, concerted liberalisation offers greater returns as market access plays an important role (contrary to the dominant trade creation vs. diversion dichotomy discussed in the NC framework above). Interestingly and in line with our reasoning in this chapter above, this setup implies not only that reciprocity trumps unilateralism, but also that regional integration offers better results than multilateral liberalisation. However, Puga & Venables caution that South-South regionalism predominantly brings along benefits of an enlarged market size and less so through easier and thus cheaper access to inputs. Even if one concedes that an input effect is not unlikely to accrue at least in the long term as well in regional schemes, this missing or weak link to cheaper inputs in the short-run makes the tariff-jumping effect to some extent a sibling of Vinerian trade diversion. This caution mirrors fears in earlier works on tariff-jumping that have largely focussed on welfare losses due to weakened efficiency of the new, FDI-financed, but locally based production units (see e.g. Brecher & Diaz-Alejandro, 1977; Johnson, 1967; Jones, 1984). Even when considering tax income, employment effects and other benefits from these new locally incorporated ventures, it remains ambiguous whether this can outweigh the expected efficiency losses. This is particularly a question because taxation of foreign capital is usually modest and prone to be reduced by competition and races to the bottom to attract investments as well as legal and illegal tax engineering to drive down the tax burden. Consequently, a case of ‘immiserizing growth’ may be the result. However, when adding structuralist perspectives to the NEG setup, an important difference to Vinerian trade diversion becomes apparent: FDI holds the potential to create a critical mass and thus potentially a viable and welfare improving industrial base (Puga & Venables, 1998). Unfortunately, this success crucially depends on a minimum combined market size in order to attract industry and many South-South regional schemes may simply be too small to achieve such positive effects. Citing Corden (1993), Puga & Venables (1998) argue further that even Argentina and Brazil must be seen as too small players in this regard – thus painting a rather bleak picture for any African attempt that falls short of a far-reaching pan-African solution. In addition, Puga & Venables argue that

[a] North-South PTA spreads a larger share of industry to the liberalising Southern economy, and gives this economy higher real wages, than any of the other arrangements we have considered [...]. This is because a PTA with North gives a Southern economy the benefits of both improved access to the large Northern market and low cost availability of Northern intermediates. The liberalising Southern economy suffers from more competition from Northern firms but, because Southern wages are
lower, the balance of better reciprocal market access is in favour of South (Puga & Venables, 1998: 238f).

However, while this assessment on the primacy of North-South (trade) regionalism appears to be correct inside the chosen model, it is in our view faulty because the model does not depict reality in several important regards.

Firstly, it assumes that South-South regionalism is associated with high tariffs not only from South towards North, but also from North to South. The empirics show that this is simply not the case as (most) developing countries benefit from DFQF entry into (most) developed markets without any further North-South initiatives.

Secondly, the argument rests on the implicit assumption that tariffs will be uniformly applied. In fact, however, many regions allow for duty free entry, much lower duties and/or duty drawback schemes with regard to intermediaries while upholding higher tariffs for finished goods. Therefore, access to cheaper imports from the North is in fact not inhibited and efficiency losses thus less likely. With these two positive aspects of North-South regionalism – DFQF entry into the North and access from cheap Northern inputs into the final good production in the South – integrated into South-South schemes, the only remaining difference appears to be the (negative) effect of increased competition that is only taking place in North-South schemes.

Thirdly and as discussed by the authors themselves (Puga & Venables, 1998), the North may lose (depending on certain specifications) from both South-South regionalism and multilateralism and thus the best policy for them would be a hub-and-spoke approach – and this is something that appears to be actually implemented by e.g. the myriad of bilateral and EPA agreements of the EU. Unfortunately, however, such hub-and-spokes agreements are the least favourable for the spokes (the developing countries), both in the Puga & Venables model as well as according to the Wonnacott (2011) results discussed above.

Fourthly, Puga & Venables explicitly abstract from ‘underlying differences in technology or relative factor endowments’ (Puga & Venables, 1998: 222) in order to isolate the NEG effects from comparative advantage considerations. However, this masks another important potential benefit that is likely to be stronger in tariff-jumping investments than in vertical investments and those in search of cheap labour

if it is recognized that in a developing economy, foreign firms usually possess superior technology in the sense that factors they employ are more productive than those in domestic firms (Xu, 2001: 1).

Such positive spillovers include higher average wages for workers and efficiency-increasing competition among domestic firms as well as the potential for learning by doing discussed in the subsequent chapter (5.3.3.3). Such tariff-jumping investments appear even more beneficial if the often very high levels of un- or underemployment are taken into account. In this regard regionalism-induced FDI

can be a useful tool for preparing for globalization as foreign firms bring technology, modern corporate practice, export networks (fully one-third of world trade is intra-firm), and long term external finance (Devlin & Ffrench-Davis, 1998: 17).

However, questions about the sustainability of such investments arise as future global liberalisation steps may risk that particularly more footloose investments are repatriated. As discussed in the subsequent chapter, however, there are reasons to believe that this is not necessarily the case and there are measures to be taken that
increase the sustainability of such investments and future global liberalisation thus becomes an imperative rather than a threat.

Although the picture is somewhat clouded and not as straightforward as one would wish for, FDI and particularly tariff-jumping investments appear in our view to be one of the most vital positive effects that regionalism can achieve and that cannot be achieved by multilateralism (to such a degree). Even more surprising, this connection is rarely made in policy debates and even less so in concrete policy decisions during regional integration processes. If at all, investment is usually only eased on a regional basis, thus putting ROW in a more disadvantaged position rather than playing a facilitative role. An interesting exception to this tendency is the considerable role FDI is playing in North-South negotiations. For example the EPA negotiations also cover investment and would, if concluded, open up ACP economies to EU investments (and vice versa, though the latter probably with much less impact). However, as at the heart of the EPA negotiations trade is also liberalised, the potential for tariff-jumping investments is considerably curtailed. However, the resistance in the ACP countries against including investment provisions in the EPAs is even stronger than trade-related ones. As noted elsewhere in detail (Brücher, 2008) there is in fact also no real need to include such provisions in the EPAs as they are likely to crowd-out non-EU investments. Instead a unilateral or multilateral, in our view probably most expediently even a regionally agreed unilateral, solution would be a better alternative.

The only real advantage of an inclusion in a North-South agreement would be the argument that the EPAs might lend such provisions more credibility than if they had been agreed upon unilaterally by the integrating countries. The tariff-jumping argument also implies that possibly regionalism is producing too little trade diversion rather than too much as trade diversion (goods formally imported from ROW) rather than trade creation is likely to make up the lion’s share of ROW FDI in the production of more sophisticated, value-adding products, thus fostering

*a diversification of exports, towards output more connected to overall competitiveness of the economies concerned […] by enhancing nontraditional exports, differentiated products and products of more value added and intensive in knowledge, because the typical export basket to regional markets consists of these goods and services, which is distinct from that to developed economies with a much larger share of primary products (Kuwayama, 1999: 16)*.

Apart from this main argument focussing on FDI from ROW due to tariff-jumping considerations, regionalism may well also increase the intra-regional investment rate of the region. Liberalising regional trade may open up opportunities to invest in the partner country to supply this market, particularly if such investments are facilitated by far reaching reforms in the area of (regional) investment deregulation, protection or even promotion and incentives. However, particularly with regard to horizontal, market seeking investments with considerable economies of scale (and limited gains from variety), trade liberalisation might even have the opposite effect. The abolition of tariffs and NTBs can potentially lead to a situation where the supply of the partner country can now be more efficiently satisfied with trade from domestic production facilities so that not only no new intra-regional investments, but possibly also divestments could be the effect of a regional trade agreement (compare e.g. Yeyati, Stein & Daude, 2002). Conversely, both trade and other liberalisation and harmonisation steps are likely to increase regional FDI of the vertical, value chain and comparative advantage based type – albeit these might at least initially be less pronounced as they tend to be stronger among dissimilar countries rather than homogenous ones.
This notwithstanding, regional investors would of course be also covered by multilateral FDI liberalisation schemes and one might thus again be inclined to conclude that the overall investment rate in and into the region would be necessarily higher under a full, trade and investment covering multilateral liberalisation. However, as indicated above this is not necessarily the case. Particularly when focussing on the in our view more interesting horizontal investments, the important twist in this regard is to distinguish between trade and investment liberalisation. When trade and investment are liberalised multilaterally the prior (production and export) specialisation is likely to be reinforced – and that implies for most developing countries, at least in SSA, a focus on unprocessed primary commodities – in other words the dominant form of vertical integration at the bottom end. Such a specialisation pattern must be assessed from a structuralist and NIP / NEGT perspective as not very conducive to the future development of the economies. The alternative scenario of liberalising trade and FDI only regionally leaves some more room for venturing into non-traditional sectors with higher economies of scale, knowledge and technology content as the enlarged market may make some of the activities feasible for the first time. However, given bottlenecks in finance and knowledge the response is likely to be relatively weak. A third alternative is to liberalise trade regionally and FDI globally. This would have the effect that ROW investors are prompted to invest into one of the economies as the regional market is large enough to either reach the minimum level of production and / or to tilt the balance from exports towards local production if the enlarged market with lower artificial (tariffs, NTBs) and natural trading costs (e.g. by regional initiatives in infrastructure improvement) offsets the initially lower productivity levels in the host country compared to the previously exporting country. In the extreme case of very stringent trade protection and very liberal capital movement policies, such horizontal investments would according to the Stolper-Samuelson theorem in theory even fully displace trade in such goods given that the return of capital is increased in the protected country (Mundell, 1957) – in particular of course in case of labour abundant countries, such as almost all developing countries. Even without taking recourse to such an extreme case, the third scenario with (South-South) regional trade liberalisation coupled with global FDI liberalisation appears to be the most preferable one from a structuralist point of view.

5.3.3.3 Liberalisation and learning by doing: is there a case for infant industry protection?

Adding a NEGT perspective to the above discussion, increased regional FDI and even more so (tariff-jumping) FDI from ROW could lead to learning-by-doing and technology dispersion virtuous cycles that may lead to productivity gains as FDI often ‘carries with it advanced technologies and hence increases in productivity’ (Burfisher, Robinson & Thierfelder, 2004). In other words, ‘trade diversion can be positive under cost-reducing economies of scale and learning-by-doing’ (Kuwayama, 1999). Regional integration may thus be seen as being based on

strategic considerations arising from imperfect and incomplete markets at home and abroad, which handicap the spread of efficiency gains in certain sectors and the development of new productive patterns with progressively higher degrees of value added (Devlin & Ffrench-Davis, 1998: 15). Notably, Develin & Ffrench-Davis refer to market imperfections not only in developing countries that hamper investments and the adoption of up-to-date technology, but also
in ROW where e.g. information imperfections hamper the spread of capital and technology to developing countries. While in the short run some of the inefficiencies are thus potentially quickly reduced (and domestic consumer prices as well if oligopolistic price mark-ups do not impede this). In the longer run such learning-by-doing actually opens up the scope for future (multilateral) trade liberalisation without endangering the attracted investments and industries and, in the best case, may even act as a launching pad to extra-regional exports, this being

an important consideration since history has shown that developing countries can achieve new dynamic comparative advantage on the road of their long term convergence with industrialized countries (Devlin & Ffrench-Davis, 1998: 16).

In other words, the consideration of learning-by-doing is a powerful aspect to overcome a homeostatic view of the economy where policy measures have only temporary effects because apparently ‘automatic market forces inevitably […] restore a “natural” pattern of trade and specialization’ (Warsh, 2006: 181). However, a long-term localization or anchoring of investments that were artificially attracted by trade barriers is unfortunately anything but automatically guaranteed. Several policy measures may help to lock-in such investments and gains from technology and learning-by-doing. Firstly, as some investments are more likely to set such virtuous cycles in motion than others, countries or regions may consider putting efforts into attracting such sectors and activities specifically. As most economies exhibit in general very low investment rates, it appears more sensible to canvass and lure such industries in particular by providing incentives and premia rather than shutting out other investments that are perceived as less beneficial altogether.

Secondly, regions may work on incrementally improving the competitiveness of such nascent investments. Incentives and support measures may be introduced to facilitate such investments, e.g. by investing in infrastructure and thus reducing input prices for utilities and transport or by developing the value chain and thus decreasing input prices upstream and securing demand, uptake and further processing of products downstream. The improvement of skills and domestic technology production would be a decisive measure and it appears much more fruitful to invest in such measures in direct relation to an already executed or planned investment rather than investing unselectively in any knowledge production exercise without consideration of whether there will be uptake of such skills and technology in the future. The trade protection structure should also allow inputs (in general and for such investments in particular) to flow freely (or at least less costly) into the region than finished products (again in general and with regard to specific economic activities with expected gains from technology and learning-by-doing).

Thirdly (and although rigid multilateral and bilateral trade treaties sometimes make flexible implementation structures difficult and PE considerations are a serious threat in this regard), some authors rightly argue that from an industrial policy perspective there should be flexibility in the tariff structure of developing countries or regions in order to temporarily protect infant industries (see e.g. Asche, 2008). This implies that CET values for goods for which production has started (or is imminent) inside the region (irrespective of whether by domestic, regional or ROW investors) and CET values for inputs thereof may be lowered. At the same time, this also implies that such exceptions should be temporary and levels of protection need to be phased-out quickly enough in order to not overstrain consumers and to force firms to improve their competitiveness. In fact, such a procedure has actually taken place in some regions.
For example, in the EAC the CET is revised every five years, but the annual joint pre-budget hearings of the Ministers for Finance of all five partner states also receive tax proposals on specific tariff lines with requests for increases or decreases that can be either jointly or individually accepted by partner states. However, this measure appears to follow revenue considerations more strongly than strategic industrial policy perspectives.

Fourthly, FDI and regional exports attracted by regionalism should be compelled to compete globally as soon as learning-by-doing has led to efficiency gains and thus improved international competitiveness. This does not only prevent or at least minimise the threat of long-term efficiency losses by setting global competition and productivity as benchmark, but exporting itself ‘increases productivity by exposing producers to new technologies or through product quality upgrading’ (Trofimenko, 2005: ii). However, this effect appears to be heterogeneous across export markets with exports to developed countries leading to higher productivity gains than exports to developing countries (Trofimenko, 2005; Vacek, 2010). These investment and export induced positive externality effects appear to be empirically quite well substantiated. In several CGE analyses imports of intermediate and capital goods are directly linked to an improvement of sectoral TFP while exports are linked both to increases in TFP within the sector as well as to economy-wide efficiency gains to the return of capital (Burfisher, Robinson & Thierfelder, 2004).

It is important to note that of course knowledge can also be transferred without investments, for example through imports or other business links as knowledge can be embodied in goods that can be shipped around at a cost. When these goods are imported, they accelerate productivity growth in the recipient country (Bahar, Hausmann & Hidalgo, 2013: 3).

But due to its tacit nature knowledge diffusion [...] decays strongly with distance. [...] The probability that a product is added to a country’s export basket is, on average, 65% larger if a neighboring country is a successful exporter of that same product. For existing products, having a neighbor with comparative advantage in them is associated with a growth of exports that is higher by 1.5 percent per annum. While these results could be driven by a common third factor that escapes our controls, they are what would be expected from the localized character of knowledge diffusion (Bahar, Hausmann & Hidalgo, 2013: i).

This also implies that FDI with its stronger human interaction appears to be more likely to bring about technology transfers than purely trade-based interactions. Combining the tariff-jumping FDI and learning-by-doing arguments one feels inclined to observe that not only individual country policies, but particularly regionalism may be designed in a way that it leads to a possible superior dynamic sequence of trade and investment policies for a developing economy. Initially when a developing economy does not have much of manufacturing industries, a kind of import protection-cum-investment incentives may help it to become industrialized. But after domestic firms have learnt their trade and become more efficient through the spillover effect of foreign investment, the developing economy should liberalize trade to reduce the efficiency loss from tariff-jumping foreign investment (Xu, 2001: 2).

It is particularly with regard to this technology and knowledge perspective that regionalism may even have ‘permanent effects on the rate of economic growth through higher rates of transfer of technology and greater investment in R&D’ (Kuwayama, 1999: 17). This is mainly a result of demonstration effects, competition-induced
pressures to adjust as well as forward and backward linkages and related agglomeration effects. Following our logic of liberalising trade regionally and FDI globally, a South-South scheme again appears to be most conducive in this regard.

### 5.3.3.4 Protection and competition: is there a case for regional industrial policy?

Such measures to attract FDI and to promote diversification, sophistication, knowledge content, R&D, knowledge transfers and economies of scale as discussed in the previous two sub-chapters can be seen as part of a broader industrial policy (IP) effort that seeks to address market imperfections both with international and local dimensions. This begs the question whether a common regional industrial policy is something that regions could and should pursue and what such efforts could and should entail.

Some authors for example claim that regionalism is a potential alternative to industrial policy and possibly one with less risks, adverse effects and bottlenecks. In this line of reasoning, Moncarz, Olarreaga & Vaillant argue that at least for large countries regionalism may act as a substitute for industrial policy (Moncarz, Olarreaga & Vaillant, 2009). In our view, however, this is a completely unwarranted dichotomy. In contrast, we would claim that it is essential to accompany regionalism with industrial policy efforts and, conversely, to see regionalism as part and parcel of an overall IP strategy. This implies that it is imperative to design regionalism accordingly, simply because the just discussed dynamic, non-traditional effects are ‘potential developments rather than guaranteed outcomes [and] what happens in practice depends on the nature of policy implementation’ (Devlin & Ffrench-Davis, 1998: 17). This is particularly true with regard to productive capacities that according to a UNCTAD report ‘should be given as much attention by African policymakers as the elimination of trade barriers’ (UNCTAD, 2013a: 3).

While this explains the persistent or even increased need for industrial policy, it does not explain why industrial policy should suddenly be more successful than before. Industrial policy is – at least partially – rightly criticised for being prone to misallocations of funds due to lobby pressure, administrative incapacities, missing sunset clauses and information asymmetries amongst others reasons (see e.g. Pack & Saggi, 2006, Venables & Navaretti, 2013). Others have argued that such negative occurrences can be minimised by a more competitive, transparent, targeted and experimental design of industrial policy (see e.g. Asche, Neuerburg & Menegatti, 2012; DeCarlo, 2007; Rodrik, 2004, 2007b). However, there are several sensible arguments why regional integration may provide for a better environment for industrial policy as regional integration opens up new opportunities that make industrial policy more likely to succeed than in small, nationally confined and protected markets. This may be for example the case with regard to economies of scale that make domestic production of certain industries a viable option for the first time. The same may apply to tariff-jumping FDI and technology transfers as industrial policy can be designed in a way that it enables entrepreneurs to seize opportunities emanating from such foreign investments. In addition, the increased (regional) competition may provide just enough pressure to prevent locally contained and protected industries from overreliance on protection and government support. In other words, ‘a somewhat shielded, while large regional market is the ideal training ground for young industries, before going global. Born global players are rare in reality’ (Asche, Neuerburg & Menegatti, 2012: 19).
our view there is thus no major doubt that national industrial policy has to consider regionalism (along with multilateralism and global markets) as a major component and should aim at aiding the national industries to sufficiently take advantage of the regional opportunities. Particularly with regards to the mammoth task of growing a sizable manufacturing base, regionalism appears to be a very close comrade-in-arms of industrial policy as intra-regional trade in Africa and among other developing countries contains a much greater portion of manufactured products than extra-regional exports.

This leaves the question whether or not, in addition to national IP geared towards regional markets, some kind of genuinely regional IP is also expedient and viable. UNCTAD (2013a) for example promotes the concept of ‘developmental regionalism’ that ‘goes beyond the domain of trade per se by including cooperation in other, more ambitious areas, such as industrial policy’ (UNCTAD, 2013a: 97) as key to Africa’s development. Asche, Neuerburg & Menegatti (2012) argue somewhat more cautiously that African policy makers are faced with a strategic choice of either renouncing formalised, deep regional integration and industrial policy and to pursue shallow and functional integration or to tackle industrialisation and the related immense coordination failures proactively. If policy makers opt for shallow and functional integration instead, probably agriculture, tourism and extractive industries including the attraction of FDI in those areas may happen. In contrast, only an explicitly industrialisation focussed deep integration scheme holds potentials to unlock significant growth of the manufacturing sector:

As the empirical experience has shown, even with the investment climate massively improved in many African countries, manufacturing stagnates or regresses. National industrial policy is the first order instrument to deal with the challenge. But regional industrial policy may be the better solution for all African countries, even the large ones like Ethiopia, Nigeria, DRC or South Africa (Asche, Neuerburg & Menegatti, 2012: 19).

However, this still begs the question what such a regional industrial policy could look like and what the added advantage of hauling it up to the regional level could be. We can think of seven reasons why in fact a regional approach could be warranted as a supplement (rather than a substitute) to national industrial policy endeavours – and another one why multilateral and North-South approaches are much less likely to be a preferable option in this regard:

Firstly, in some few areas, such as development corridors or industrial and transport infrastructure (ports, major roads, railways, pipelines, utilities such as power generation, water etc.) with regional reach, the answer is simple. The main reason in this case is that externalities may be internalised by functional cooperation arrangements, leading to a better provision of such public goods (compare the more detailed discussion on regional public goods in chapter 5.3.4.5).

Secondly and somewhat less obvious, some efficiency gains might be won through joint institutions and organisations such as for example training providers on highly specialised industrial skills where only a limited number of trainees is required in each country. The same argument may apply for IP-specific support programmes that target only a limited number of beneficiaries and sectors and thus efficiency gains could be realised if programmes were jointly administered (compare again the general discussion in chapter 5.3.4.5).

Thirdly, if joint IP support programs were feasible to be agreed upon and jointly administered, joint adjudication committees would also increase competition for the
available resources. This holds the potential to reduce patronage and cronyism given the higher level of transparency (although for example the EU experience rather seems to have resulted in the opposite), thus potentially increasing the average quality of the supported projects.

Fourthly, coordination and information sharing about public and private investments in infrastructure and productive capacities may lead to a reduction of duplication of efforts and to more certainty about the availability of necessary up- or downstream investments in the region. However, particularly regional industrial policy appears to be quite strongly at risk to fall back to dirigiste and directive policies of the past. For example, in the EAC there are ongoing discussions on an (apparent) need to decide (based on existing comparative or competitive advantages) which ‘regional industries’ should be placed in which of the partner states – an approach that clearly disregards or blatantly misreads any insights from NIP:

*What regional industrial policy is NOT: a prescriptive policy mode, in the futile attempt to force domestic, let alone foreign investors to invest in one country and not in the other, in one industry and not in the other. What regional industrial policy IS: a systematic and coordinated encouragement of additional investment in otherwise neglected spaces, sectors and firm size-segments, which are flagged out as regional industries (Asche, Neuerburg & Menegatti, 2012: 20f).*

Fifthly, trade policies are as much an important part of industrial policy as vice versa. If countries have agreed on tariffs, particularly on a CET, they are intentionally or not actually already conducting some kind of common industrial policy. However, in absence of prior commonly agreed industrial policies, ‘the tariff bands and also the exceptions agreed within the REC have no rational economic foundation [...] and are just rules of thumb’ (Asche, Neuerburg & Menegatti, 2012: 19) rather than strategic decisions. In addition, the ability to bi- or unilaterally change tariffs for certain products at a later stage to cater for upcoming opportunities and threats is limited if not completely frustrated in a CU if no provisions for flexibility and IP considerations are included in the agreements. As discussed by Asche (2008) this is one of the main risks of the EPAs, but the same actually applies to CETs to almost the same extent. This stands, however, in stark contrast with the criticism by Bigsten, Kimuyu & Söderbom (2010), asserting that for example the EAC CET tariff escalation for final products as a measure to protect final stage producers in order to exact vertical integration at least at the assembling stage ‘is no longer a viable strategy to support manufacturing’ (Bigsten, Collier, Dercon, Fafchamps, Gauthier, Gunning et al., 2010: 247). While acknowledging the ‘relatively simple and transparent’ three-band CET, they find fault with the ‘extensive exception regime’, the introduction or increase of ‘several new tariffs [...] on specific items', and, in general, with the fact that ‘[t]he tariff policy is still used selectively to support specific industries’ (Bigsten, Collier, Dercon, Fafchamps, Gauthier, Gunning et al. 2010: 247). Instead of such a strategic trade policy approach the authors advise that Kenya

*should seek to become involved in global production chains, since it is this type of trade that is growing the fastest [...] and seek out its comparative advantages in the new structures of production along the whole production chain ( Bigsten, Collier, Dercon, Fafchamps, Gauthier, Gunning et al., 2010: 247).*

However, it remains unclear why and how strategic trade and industrial policy instruments such as a focus on sophisticated final stage products are not a viable option anymore and how and why they would prevent an integration in global markets. Thus, there may well be a scope for such final stage protection 'provided there are
realistic, time-bound projects of new final consumer industry concretely identified’ (Asche, Neuerburg & Menegatti, 2012: 20) in a proper industrial policy process.

Sixthly, a regionally set industrial policy may well help to coordinate regulations and incentives to prevent a race to the bottom (compare the general argument on harmonisation and minimum / maximum standards in chapter 5.3.4.4). For example, such endeavours may tackle situations in which export incentives (e.g. via an EPZ) incentivize companies to jump to the neighbouring country to qualify for a tax holiday while still (only or mainly) providing goods to the home market. For the same reason, it may be prevented that firms shop around for incentives and thus can apply for the same incentive repeatedly. Most importantly, investors from third countries may not be in a position to push the incentive requirements too far upwards by playing the potential locations against each other.

Seventhly, industrial policy can be utilised as a tool to counter diverging economic developments of partner states, the above and below discussed winners and losers problem. In the EU, for example, this actually appears to be the main decisive factor for the set-up of the Structural and Investment Funds and their allocation. However, such a use of IP also carries risks as their allocation may follow social and distributive considerations rather than those geared towards innovation and efficiency. The alternative, however, is even bleaker as in the absence of a concerted regional IP effort partner states of a regional bloc are even more likely to react with uncoordinated national IP measures once they feel on the losing side – whether rightly so or just perceived. On thus feels inclined to conclude that regional industrial policy is quintessential for the success if not the survival of African RECs, which otherwise will have to deal with growing imbalances at low overall levels of industrialisation and the usual erratic policy reactions to it (Asche, Neuerburg & Menegatti, 2012: 20).

However, while these points certainly strengthen the case for a regional approach it still needs to be cautioned that there are serious detriments to a successful implementation of regional industrial policy. Many industrial policy tools, particularly those betting on NEG and NEGT, are rather local in nature. For example, Woolfrey (2013) criticizes that ‘the logic of SEZs [Special Economic Zones] as industrial policy tools is not obviously aligned with the logic of regional integration’ (Woolfrey, 2013) and that the same applies to some extent for clusters and, all the more, for support to individual companies. Even more problematic, it appears to be questionable whether countries with very different endowments, needs and visions are able to arrive at an agreement. In this line, for example McCarthy argues that the endowments of the BLNS countries (Botswana, Lesotho, Namibia, Swaziland) are too dissimilar to those of South Africa to design a common industrial policy or even only aligning their respective policies or adopting similar ones. While he claims that these challenges are ‘intimately linked to the unique nature of SACU’ (McCarthy, 2013: 1) this is of course a problem that all regions face. This difficulty to strike compromises and reach agreements on common industrial policies certainly extends far beyond conflicting endowments and visions. Arguments on a common regional industrial policy assume that national governments in Africa support efforts to promote regional industrial development. While this may be true at the level of political rhetoric and where regional industrial development does not conflict with national interests, when it comes down to the actual politicking and trade-offs inherent in the making of industrial policy, it is not clear that governments would be willing to put the interests of the region ahead of those of their own state. In addition, industrial policy generally involves decisions about the allocation of resources, and it is not clear who would make these decisions in a regional context (Woolfrey, 2013).
This is a situation where the paper tiger problem becomes very visible again. Take for example the EAC where an industrial strategy, and industrial policy and a five-year action plan for their implementation exist (in addition, an ominous ‘industrialisation bill’ is currently under negotiation). The total budget of the five-year implementation plan amounts to more than one hundred million USD, excluding additional partner state co-financing that is anticipated. This figure contrast to an available budget inside the EAC secretariat of close to zero. As a result, only very few activities have been implemented so far (most of them exclusively with donor funding). Partner states appear to be reluctant to put more funds into these efforts themselves, either by submitting more (earmarked or general) contributions to the regional body or by simply taking on parts of the implementation in their respective economies. The EAC secretariat also does not play a decisive role in coordinating national efforts as there is little information on the respective efforts available, human resource capacities to fulfil such a role are very low, and interest by partner states to have someone meddling with their national policy efforts is extremely low. For example, the six selected and agreed upon strategic sectors are not reflected in the strategy choices of the partner states' policies. In general, little has been seen on the implementation side at a regional industrial policy level so far – save for the odd regional value chain study or other preparatory rather than implementation activities and of course the establishments of regional development banks in addition to the AfDB. However, most regional development banks only boast of very humble and not very strategic investment portfolios. The EADB for example has been for a long time better known for law-suits against it than for real industrial development success stories. However, the situation seems to have considerably improved with a court ruling in Tanzania that strengthened the bank’s supranational status and with the reduction of bad loans from originally above a quarter in 2010 to below 10 percent in recent years.

All these caveats and problems associated with a common industrial policy imply at the same time that a multilateral or North-South regional approaches towards IP is even far less feasible than a regional one. A common policy depends on close relations as well as sufficiently similar endowments, challenges and visions – making a multilateral agreement on IP or joint IP by a Northern and a Southern partner completely unrealistic. However, North-South regionalism such as the Economic Partnership Agreements (EPAs) are even more detrimental to a successful industrial policy implementation in the Southern Partners than the mere absence of cooperation on such matters. As particularly Asche (2008) highlights, a fixing of (low) tariffs towards the Northern partners restricts the industrial policy space as the Southern partners are robbed of the previous flexibility to use temporary tariff adjustments for industrial policy purposes. In other words, a strategy of increasing tariffs for short term infant industry protection reasons and (gradually) increasing them again to ensure that efficiency is increased, mark-ups are held low and chances for eventual world market integration are preserved, ceases to be an available option. This is particularly devastating as such policy measures (which generate public funds) stand much higher chances to be actually implemented, as many other incentives often turn out to be too costly for notoriously cash-constrained governments. In addition, some of the more active incentives are also more strongly constrained by the EPAs (e.g. export subsidies, preferential procurement and other matters related to the Singapore issues, see Brücher 2008) than they are already by WTO regulations that at least allow such measures for Least Developed Countries (LDCs).
Assuming that our conclusion is correct that trade policies and trade-related incentives are in fact essentially an integral part of industrial policy and that industrial policy is an essential policy for developing countries with rampant market failures (which prevent that they are sufficiently benefitting from liberalisation), the above discussion implies a simple conclusion. Regional integration is likely to offer better potentials than a purely global or North-South regional approach. We thus feel inclined to conclude that regional integration and industrial policy are not only mutually reinforcing and symbiotic, but in fact mutual prerequisites, particularly in regions that have not managed yet to get a foot into the door of global manufacturing trade and the related knowledge accumulation virtuous circle. In analogy to the bathtub statement on the minimum size for Keynesian-style countercyclical policies, one may well assume that proactive policies for eliciting a big push (Murphy, Shleifer & Vishny, 1989) in most instances also require a minimum market size that hardly any SSA economy (safe for maybe Nigeria and South Africa) boasts of.

5.3.3.5 Winners and losers: is there a case for regional compensation?

There is widespread criticism and fear that benefits from regional integration are asymmetrically distributed, benefitting some members and leaving others depending on trickle down effects that are by and large uncertain and ill-defined with regard to mode and time frame. As discussed in the second chapter, this clearly holds true for Vinerian welfare analysis with Venables' model giving good reasons to believe that inside a purely NC framework a divergence tendency is likely to occur for South-South regions while North-South regions tend to converge. For North-South schemes in contrast NC-based models predict neither convergence nor divergence between North and South, but convergence inside the Southern sub-region (as poorer countries benefit more strongly) and divergence inside the Northern sub-region (as richer countries benefit more strongly).

However, in a dynamic world with heterodox effects this simple axiom does not hold anymore. This does not imply that winners and losers do not exist or that regionalism in the South necessarily leads to convergence. Instead, there appear to be several tendencies that go in different directions and some of the components are idiosyncratic and can be influenced by policy choices. As dynamic effects are by definition mid- to long-term in nature, regionalism is still not unlikely to lead to divergence tendencies in the short run as the NC approach suggests. In addition, some dynamic aspects such as agglomeration, technology focus and investments are likely to lead to more concentration rather than less. While it is not axiomatic that this needs to be the initially strongest country, several theoretic arguments, above all those related to the New Economic Geography (NEG) complex, in fact hint into this direction – compare Venables’ comments in this regard in Venables 2003; similarly, Yeyati, Stein & Daude assert that ‘the biggest losers could in fact be medium-sized countries, since very small countries would have been supplied by trade anyway’ (Yeyati, Stein & Daude, 2002).

However, Venables as well as Yeyati, Stein & Daude leave important differences emanating from a dynamic perspective unconsidered. Firstly, as discussed above, challenge-response efficiency gains are highly likely to reduce the losses for diverted trade. Secondly, general efficiency gains and new production in higher value and knowledge content products are likely to lead to demand for skills, higher wages and
general growth and such gains can be partially, fully or even more than compensate any losses emanating from trade diversion related efficiency losses. Thirdly, in a dynamic world the axiomatic assumption that the initially least efficient regional partner will automatically take advantage of all or most of the opportunities offered by diverted exports does not hold anymore. Entrepreneurial and/or governmental decisions have a much greater bearing on future developments than past and current endowments. This assumption is in stark contrast to the NC framework where the decision space of entrepreneurs can be seen as close to zero as it is assumed that actors automatically invest in the most efficient economic activity which is given by current endowments (and supply and demand) of the economy. Path dependency still plays an important role, but in a dynamic world, this is predominately related to experiments with producing specific products and product groups rather than to endowment questions. Both, the product-specific path dependency and the entrepreneurial and governmental (support) leeway in decision making are much less clearly concentrated in one or the other partner state (and even less so automatically in the initially strongest country). This leads to a situation where theory actually can predict with great confidence that winners and losers will occur, but it cannot tell whether divergence or convergence will be the outcome.

As a short aside, adopting a dynamic and heterodox perspective implies that not only countries, but also geographic entities below and above the state as well as individuals, professions and skill groups in all likelihood experience asymmetric effects with winners and losers. While this is part and parcel of discussions in North-North schemes such as the EU and policies are thus designed to tackle this, most discussions on regionalism among developing countries usually fail to properly take this into account. For example, border regions may get a push by integration and regions at the periphery of the regional bodies are at risk of becoming even further marginalised. Likewise, urban areas that where largest prior to integration tend to grow more quickly through integration effects than do smaller ones. Most likely, this line of reasoning has to be extended even to professions, sectors, skills levels and other social and economic categories. Often only some occupations are initially liberalised in common market schemes – and usually those are the ones in the high-skill segments. Even in absence of explicit preferential treatment, such effects are likely to occur as the strengths of effects are determined by differences between pre-liberalisation and liberalisation barriers, mobility of factors and different factor intensities, production capacities and other parameters.

With regard to North-South agreements heterodox schools hint into a direction that may run squarely counter to the results of the Venables and Yeyati, Stein & Daude frameworks discussed above that saw such schemes as strongly preferable over South-South schemes from a distributional and cohesion perspective. While this divergence tendency or at least the risks for such a tendency are (partially rightly) criticised time and again for regionalism, it is often overlooked that the same is true for multilateralism and North-South schemes as well if heterodox perspectives are included in the analysis. In this regard it can even be argued that not only certain countries can benefit more strongly form such clustering and agglomeration (at least in initial stages of integration), but whole continents (in fact, this is what several NEG models appear to suggest). The ‘medium-sized countries’ that are referred to as the most likely biggest losers by Yeyati, Stein & Daude (2002) would then the bigger and
more industrialised African countries and other developing countries that are just in a process of starting or re-starting their modern industrial base.

Overall, it can thus be safely assumed that there will be winners and losers anyhow and the main issue to be addressed is how his situation can be dealt with rather than whether and how it can be prevented. Compensation mechanisms thus appear to be pivotal and some regional communities have in fact implemented them to varying degrees. One possibility is to award larger portions of the joint CET duty collection to less developed members of a bloc as in for example in the SACU Common Revenue Pool. Another option is to compensate member states for forgone duties due to liberalisation steps agreed upon by special levies on trade with third countries as for example implemented in ECOWAS and WAEMU (compare Walkenhorst, 2006). As just discussed above, regional IP efforts may take this dimension of winners and losers from liberalisation into account as well. While some other regional communities are still quite reluctant with initiatives in this direction, there is virtually no such consideration in the multilateral sphere. In negotiations on North-South regionalism, where the potential (but in our view also the need) for compensation and extraordinary support for the weaker (Southern) partners would be actually most pressing, such demands tend to be expressed by the Southern partners with some vigour. However, they are usually bluntly rejected by the Northern partners with reference to the everyone wins logic of the Vinerian static welfare analysis and to further dynamic effect without specifying to whom they will accrue. Thus, regionalism appears to be in a much better position to cater for the losers than multilateralism or North-South schemes are – but this responsibility has to be shouldered by the blocs if they do not want to risk divergence and eventual disintegration. In addition, there is another important reason why regionalism appears to be more suitable from an equality perspective even if compensatory policies are not or not sufficiently implemented. Regionalism is much more likely to take on deep forms including the liberalisation of labour migration and this venue appears to be a major levelling force to redistribute welfare at least among people from different countries.

5.3.3.6 Missing liberalization from the West in a dishonest debate: a case for tit-for-tat?

In direct connection with the just mentioned distributive force of liberalising labour migration, the general picture on who is in favour and who is against multilateral solutions also has to be called into question. It is commonly perceived and argued that mostly developed countries want to liberalise multilaterally while developing countries do not. Even when abstracting from, of course existing, ambiguous and heterogeneous positions on this question in the North (for example from unionist quarters), this appears not to be the case. Indeed, the North tends to be in favour of only certain liberalisation steps, in particular with regard to trade and investment and to some extent with regard to professional service and highly skilled labour. However, the position tends to be reversed with regard to the liberalisation of basic services and particularly low skilled labour migration (and at least until recently also with regard to agriculture). This preference is far from being accidental or irrational. Developed countries simply appear to be willing to liberalise globally only what appears easy and beneficial to them – and this in turn is simply defined by those factors in which the North is well endowed in, i.e. most manufactured goods, professional services and high skilled workers. At the same time, the North appears to oppose liberalisation in
areas that seems potentially detrimental to its welfare as it is less well-endowed in these factors. In other words, they oppose liberalisation of factors with which the South is so (overly) well-endowed that they may threaten to crowd out these factors in the North and thus drive down the remuneration of these factors. This applies particularly to workers, particularly unskilled and low-skilled ones as well as provision of basic services. Interestingly, developed countries rarely have to oppose such liberalisation steps openly and explicitly, as they are simply not even on the multilateral negotiation agenda. If demands into such a direction do pop up, they are usually rejected with recourse to arguments on how much more disruptive such liberalisation steps would be given cultural differences and other problems that are likely to arise from sudden mass migration. Although such caveats are certainly not to be easily dismissed, it still appears to be utterly strange to see how ardent pro-liberalisation, pro-multilateralism advocates persistently and across the board remain silent on this very important part of the economy that is globally almost not liberalised at all. In this sense, the debate on regionalism vs. multilateralism (and its little sister North-South integration) is in our view to a considerable extent dishonest in nature and only South-South (and North-North) regionalism appears to provide for a platform for a full-fledged liberalisation of involving developing countries. At the same time, this begs the question, whether developing countries should hand out the most important bargaining chip in their hands (liberalisation of trade in goods) without engaging in negotiations on liberalisation of labour in return.

5.3.3.7 Limits of liberalization and creating a flat world

Following up further on this dishonest debate and the pre-textual arguments on reluctant South and liberalisation-keen North, one feels compelled to concede that deep integration indeed faces greater problems and potential disruptions than shallow integration. It may thus be rightly claimed that there is not only a lack of political willingness to e.g. fully liberalise labour migration, but a sensible caution in view of the huge differences in developmental stages and related needs and capabilities of economic and particularly social policies and governance preferences. This implies, however, that in the area of dynamic effects many initiatives will be confined to the regional sphere. In addition, regionalism may particularly be of avail for future liberalisation in areas

that are too complex to be negotiated successfully in the WTO or too difficult to enforce in that setting [...] For instance, for activities that are at present highly protected (e.g., government procurement, anti-dumping measures, some services), liberalization in a regional context may be more feasible than through global liberalization. The same observation might apply to highly technical areas, such as industrial standards, where intensive negotiations are required. Once formed and implemented, regional arrangements in these areas might also serve as blueprints for future multilateral liberalization (Kuwayama, 1999).

This in turn might imply that regionalism is not antithetical or dangerous to multilateralism, but

there may be a perfectly natural and sensible reason why regionalism at the moment seems to be more user-friendly to the average small or medium sized nation-state (whether developing or developed). That reason lies in the reality that the multilateral system as presently constructed is functioning with an increasing degree of imperfection, uncertainty, inefficiency and ineffectiveness. Dominated as it is, and often distorted as it is, by faltering great powers, who can no longer exercise real leadership, and whose capacities are focused on obstructing rather than constructing, that system is no longer sufficiently well-structured, nor responsive, nor adaptable to the needs of a
changing world order; one in which old verities have given way to new uncertainties. The present multilateral system of global interaction and transactional governance thus looks weak and tired; its institutions are too rigid and unbending and its myths are as yet incapable of adapting to new global geopolitical realities (Mistry, 1995: 14f).

It is of course a matter of debate whether the reliance on regionalism for certain topics rather than on the multilateral sphere is indeed an experimental stepping stone for multilateral agreements in those areas. In our view, it is well possible that several areas will remain confined to regional agreements for considerable time to come.

More importantly, however, there is another, rarely discussed dimension of the 'limit of liberalisation'. Most NEG models rely on the assumption or observation that centripetal forces of agglomeration are strongest at intermediate levels of trade barrier. In other words, they are strongest when protection is too small to allow for localised protected production in the periphery but still too high to allow for a switch from the richer, agglomerated region (back) to developing countries in order to make use of lower labour costs or land costs and higher returns to capital. In many NEG discussions, it appears to be implicitly assumed, for some reason or the other, that the current status is near the turning point. Consequently,

given this initial position and these wage differences, further liberalisation then moves industry out of the large and developed region, to the less developed. The circumstances that are most conducive to South benefiting from a North-South agreement of this type are, therefore, low remaining barriers to the Northern market (secured, for example, by proximity, as in NAFTA or the European Union’s Southern regions and prospective Eastern regions), combined with low unit labour costs (Puga & Venables, 1998: 24).

What, however, if the current status of (combined natural and artificial) trade barriers is still quite far from the tipping point? Let us first review whether this is a sensible assumption. Particularly with regard to Africa it is perfectly legitimate to call into question whether tariffs alone (or tariffs plus some other improvements) drive down trade costs to a sufficient extent. Adding natural trade costs (given that none of the major developed market is really geographically close to most African countries), semi-natural costs (weak transport infrastructure, weakly developed business links, rarely frequented routes of shipment and associated price mark-ups and technological inefficiencies) as well as intended and unintended artificial barriers (NTBs and other restrictions on investments and migration, high transaction costs, political risks, crime (perception), corruption, cultural differences, missing information on different regulatory frameworks, language barriers etc., compare Ascani, Crescenzi & Iammarino, 2012: 18f) appear to sum up to a considerable amount. Hummels & Skiba (2002) for example demonstrate that for the same distance exporters from Cote d’Ivoire pay double the price for shipments to the US as do their equidistant Japanese counterparts. They calculate that every single day of additional shipment reduces the likelihood of exporting by one percent and for those who manage to export additional costs of 0.8 percent of the ad-valorem is additionally imposed per day. It is utterly difficult to proof whether all these obstacles taken together in fact amount to such a barrier that the country pair remains far away from the tipping point even after liberalisation. However, the answer to the question, what happens if this is the case, is very simple. In such a case, agglomeration in the already developed nation will rise rather than sink and the initially poorer region will experience an outflow of economic activity rather than an inflow. In this regard, it is at least perfectly possible that even a full-fledged tariff liberalisation of tariffs leaves the economy still on centripetal side – and a regional approach might thus be again more beneficial from such a perspective.
5.3.3.8 Trade costs vs. agglomeration: a case for regionalisation in the long run?

All seven arguments discussed so far deal with a short to medium term perspective, i.e. how regionalism might aid (or hinder) catching up of poorer economies. The last point already included some long term perspectives as it is virtually impossible that the world will become completely flat, whether through unilateral, regional or multilateral liberalisation and harmonisation or through advances in technology and private or public investments in infrastructure. It appears thus appropriate to think about whether an eventual regionalised and thus more dispersed setup of the world economy would be preferable over a globally very concentrated one - and, if so, whether or not regional integration is more likely to lead to such a setup. This is a NEG core question – but one that is surprisingly rarely explicitly dealt with. Whether an extremely localised, evenly distributed and thus non-specialised or a globally highly specialised and thus agglomerated and unevenly distributed economic setup – or a regional specialisation pattern between these two extremes – would bring about the most efficiency gains from a global perspective, rests chiefly on the respective strengths of gains from economies of scale and positive. This includes technological (rather than pecuniary) externalities on the one side and trade and transaction costs on the other side. Taking into account that both economies of scale and localised positive spillovers are likely to eventually run into diminishing factors such as for example congestion and diminishing returns when maximum sizes are reached, the following becomes obvious. Some kind of dispersion (into smaller firms and into other, less crowded localities) becomes not only economically viable, but even preferable from a pure agglomeration, technology and economies of scale perspective (disregarding any transport costs). This is in addition more likely to happen if and when technology and knowledge become ever more globally available and less tacit and localised. Transport and transaction costs will always be non-negligible – for most goods, although to very different degrees and probably decreasingly so. Thus it appears to be in the long run desirable to have those economic activities that can be efficiently spread to different localities to actually locate in different parts of the world – and in this case not from an equality-seeking perspective, but from a purely efficiency-based viewpoint. Regionalisation might thus simply be in several cases a sensible compromise between need for agglomeration and economies of scale and transport and transaction costs on the other – with the fact that world regions converge rather than diverge merely as an added advantage. An important caveat appears to be essential. The above applies particularly for the production side of the economy. For the R&D side the argument is admittedly much less pervasive and the introduction of technologies that allow for an ever more improved spatial dissection of conception (and also management/sale) of goods and the actual production thereof – the 3D printer methodology being probably a noticeable recent harbinger of this trend – will further weaken this point for R&D. In this regard, the need for dispersion may thus be much lower. In turn, the need for jumpstarting regional hubs of agglomeration and knowledge production in developing countries becomes even more imperative as otherwise global liberalisation is likely to foster agglomeration, knowledge accumulation and welfare increases in those areas that currently already have a head start in such areas. Given the potent virtuous and vicious circles connected with agglomeration, technology and knowledge, it can be assumed that regionalism is much more likely to bring about such an outcome – and at the very least considerably more quickly.
5.3.4 Governance effects: regionalism and governance/public spending

Finally, a last potentially very powerful, but again rather uncertain and somewhat vaguely specified group of effects of regionalism (and multilateralism) is discussed. It is often argued that either regionalism or multilateralism can be a tool to improve the governance and institutional quality, thus driving down transaction costs and increase efficiency in the public and private spheres. We propose to distinguish between five different groups of governance effects. Firstly, regional or global cooperation agreements may simply be utilised as a window of opportunity for political and administrative reforms (5.3.4.1). Secondly, both regional and multilateral agreements may be expedient to better signal the credibility of such reforms (5.3.4.2). Thirdly, regionalism may be a way of improving a country’s bargaining position, both towards other countries and regions as well as towards their own population (5.3.4.3). Fourthly and much more controversially than the first three aspects, regional (or global) harmonisation or at least approximation, coordination and mutual recognition of rules and regulations is discussed as a way to cut down transaction costs (5.3.4.4). Fifthly and only in parts directly related to the private sector, regional (or global) governance may be a tool to improve the efficiency of public administration and public spending and public good provision. This appears to be particularly feasible in the (rather rare) cases of regional public goods. As public spending may be subject to considerable fixed costs and thus economies of scale this argument may, however, also apply to other policy areas. There is a clear link from this public finance perspective to the private sector as regional public service provision to the business community may lead to quality improvements as well as cost reductions, in turn potentially translating into reducing the tax burden (5.3.4.5).

5.3.4.1 Regionalism as window of opportunity: does regionalism improve governance?

According to new institutionalist approaches, the quality of national institutions is of prime importance for the development of nations – and regionalism is one potential tool among others to achieve positive changes in this area. In contrast to the subsequent sections, this section deals with possible positive effects on the national institutional sphere rather than outright regional approaches. The main argument rests on the assumptions that countries engaging in deep regional integration will provide each other with promises on the improvement of their legislative climate, in particular to improve the treatment of union partners. Over and above such provisions that usually by extension also improve the legal situation of the nationals, regional agreements often abound with (at least lofty) promises of general steps towards good governance and the rule of law. In some cases, certain regulatory or deregulatory steps (in areas such as public procurement, company registration, intellectual property rights, competition, economic, industrial and monetary policy, taxation, sanitary and phytosanitary (SPS) measures and consumer and health protection, energy etc.) as well as minimum social standards (in areas such as justice, freedom, democracy, education, foreign and defence policy and social protection) are even a formal condition for accession. The prime example of such an admission ticket is the *acquis communitaire* of the EU that is a considerable hurdle to jump, particularly for the (less developed) latecomers, and thus a very good incentive for such reforms. Some of the
regulations, in particular on caps on public debts, anti-discrimination provisions, environmental protection as well as restraints from unfair support to national champions constitute standards that many of the original members appear to struggle with as well. Both naming and shaming as well as court cases are measures frequently employed to rectify such situation. In regional agreements among developing countries such standards are often similarly far-reaching, but much less detailed, not institutionalised, not sanctioned and, consequently, rarely implemented. Nonetheless, the peer pressure as well as the pressure from the public is certainly strengthened following such agreements. In addition, there are several more reasons why even in absence of such strong sanction powers improvements are feasible.

Firstly, a more direct comparison of the integrating countries, brought about by increased economic (and other) interaction as well as watchdog bodies may help to increase the pressure on governments to reform. Secondly, such peer pressure may be further strengthened by peer review mechanisms, cooperation on best practice and learning from social experiments of partner states. However, this is not an automatic outcome of integration but a feature that needs to be built into the making of a region (both on the public and on the private side) and the regional bodies, national governments, Non-Governmental Organisations (NGOs) and think tanks as well as Business Membership Organisations have to play a decisive role in this regard. Thirdly and maybe most importantly, regionalism also offers a rather unique window of opportunity for governments to pass some painful, yet necessary reforms. This may apply for reforms that are painful for large parts of the society (such as cutting down certain privileges and social benefits) as well as for steps that deprive cronies in the public and private sector of undue privileges (such as artificial monopolies through licensing, income from or access to the powerful through corruption, inefficient institutions such as many marketing boards etc.). To a certain extent, governments can use regionalism as a scapegoat as either the regional agreements are binding to do something or the new realities of the more dynamic and demanding enlarged regional markets require such reforms. Of course, such a strategy is somewhat risky as it may put the image of the regional endeavour into disregard – but referring to the partner states that are under the same pressure may alleviate such criticism to some extent. Although in theory the same effects might be an effect of North-South integration or even multilateralism, both appear to be rather unrealistic sources of these effects. The very deep levels of integration that are required and the degree of initial homogeneity in (political) culture and tradition as well as shared developmental challenges and endowments that appears to be essential, are not likely to characterise North-South schemes in the foreseeable future.

### 5.3.4.2 Signalling

Closely connected to this scapegoating and reference to external binding pressures, regional (or other) integration agreements appear to be well fit for signalling to both the economic agents from home and partner states as well as from ROW that the liberalisation steps promised will actually be implemented and that those implemented will not be reversed. This perceived threat of policy discretion to surprise the private sector with policy reversals, in particular after attracting companies with incentives and favourable policies and later *milking* them, has a considerable negative effect on the credibility perception of government policies (compare e.g. Prescott & Kydland, 1977).
Therefore, tying one’s hands openly in a regional agreement is a potential solution to this time inconsistency problem of reforms and reform reversal and thus regionalism may be seen as a ‘commitment device’ (see e.g. Waldkirch, 2003). However, the mechanisms to deal with such breaches must be well established and the ‘cost of exit from the RTA must be high enough to outweigh the gains from simply abrogating it and returning to the time-consistent policy’ (Fernandez, 1997: 14). This may be true for both, directly trade related reforms and other, largely domestic reform. It comes to no surprise that it is argued that such signalling is most valuable for ‘instable states, which face difficulties concerning credible commitment to investor- or donor-friendly policies’ (Krapohl, 2008: 5). However, it is not clear who is the best partner for such a state (or other, less instable developing countries for that matter). On the one hand it is argued that such a lock-in of policy reform commitments is most credible in ‘North-South agreements, anchored by a credible developed country market (Devlin & Ffrench-Davis, 1998: 14). On the other hand, again, both the required deep integration steps as well as an agreement on shared values, issues and standards appear to be more likely and practical in a South-South regional scheme.

5.3.4.3 Bargaining position

Other authors argue that regional integration can help members by improving their bargaining position within the WTO (see e.g. Mansfield & Reinhardt, 2003) and bilateral preferential trade agreement (see e.g. Hänggi, Roloff & Rüland, 2006) negotiations. Again, one might caution that most regions remain so small that their combined market power is still marginal. But even just speaking for a group of countries instead of one country might go a long way, particularly as the possible accusation of only following narrow particular interests can be better countered in such a setup. In addition, given serious capacity gaps with regard to trade analysis, trade legislation and trade negotiation, pooling resources in a joint negotiation approach (mainly human resources, but possibly also travel costs etc. to be better represented in trade talks) appears to be a sensible strategy. Of course, such a strategy would be followed by a strategic use of such a strengthened bargaining power – and that is barely visible at the moment. In addition, regionalism may be an appropriate strategy for experimenting with and learning from liberalisation. This is often understood in a distinctively NC and open regionalism perspective whereas countries can learn in a regional setup that liberalisation (apparently) carries only virtues and thus (irrational) fears towards globalisation and liberalisation will be abandoned (compare some of the PE arguments on juggernaut effects in chapter 4.1.1 and 4.1.3). This may apply for the perception of and resistance of the general public and civil advocacy groups, for politicians and administrators as well as for companies and their lobby organisation. As likewise discussed above particularly deep integration steps that appear too complex and far-reaching initially might be implemented in regional setups and later become ‘multilateralised’ (see particularly Baldwin, 2006). However, experimenting might also refer to more critical and balanced assessments from a heterodox rather than NC perspective:

A new development paradigm should recognise diversity of circumstances, provide space for policy experimentation, and validate learning as integral to development. Regionalism can be an important support strategy for such a paradigm. The rationale for regionalism in this context lies in its potential to strengthen the bargaining power of the regional grouping vis-à-vis the global system in order to bolster the claim for the
recognition of diversity and enhance the space for experimentation, while enriching the learning process through exchange of experience (Girvan, 2003).

5.3.4.4 Regionalism and harmonisation: transaction costs and levelling the playing field

Trade and other costs of doing business can be considerably reduced by the provision of public goods such as infrastructure (see subsequent chapter below). However, there is also considerable scope for reducing transaction costs such as search and information costs, costs of risks, bargaining costs, policing and enforcement costs and particularly costs of compliance by reducing differences in the national laws, rules and regulations. In addition, common or similar regulations can reduce races to the bottom and thus save costs for administration while ensuring a level playing field and fair competition. The latter applies particularly to industrial policy (see above in chapter 5.3.3.4) and other state aids to the business community, but even more so to the area of social policy and taxation (see a review of the debate on “fiscal federalism” in Inman & Rubinfeld, 1992). Very interestingly, this paper compares the case of a partially decentralising nation state (the US) with a partially centralising or harmonising region (the EU). This is again a strong sign that the region is like the nation state just another layer between the individual/local level and the global level (compare chapter 1.1 above). Justifications for attempts to reduce regulatory differences are thus not really different to the ones that are brought forward for maintaining the same set of rules and regulations in a nation state. This applies both to the case of fiscal federalism and taxation as well as to the whole debate on harmonisation and on most other governance effects. As in the case of a nation state, this is likely to relate to some aspects, but not to others as some aspects of life appear to be better regulated, administered and supported at a more decentralised level. Unlike most existing nation states and also unlike most historical situations in which nation states came into being, regional communities usually do not opt for a unification approach. The major problem in this regard is that

\[ \text{[when deciding on common rules, member states often face a coordination problem with distributive consequences ("Battle-of-the-Sexes"). They all prefer common rules to individual measures, but they disagree about the concrete form of these rules (Krapohl, 2008: 7).} \]

In consequence, it requires either extensive prior negotiations or a single powerful player that is able and willing to exercise his force and impose laws and regulations. Such a (benevolent) hegemon could provide the ‘club good’ integration to a ‘privileged group’ (Olson, 1965: 49), particularly if this hegemon is able and willing to compensate the smaller partners for their submission to the hegemon’s rules (Krapohl, 2008: 7). While in some areas such tendencies are visible (e.g. NAFTA, SACU), in most regions this is not the case. As already observed in the early 1980’s,

\[ \text{[in today’s world in highly competitive national markets and in the international economy with no one country any longer leading or dominant, there is risk of market failure in the sense of failure to adopt widely accepted standards in new goods, to keep old standards up to date [...] and especially to achieve the international public good of world standards (Kindleberger, 1983: 393).} \]

Instead of such a unitary approach, negotiations between governments, guided by joint institutions such as secretariats or commissions, commonly focus on harmonisation in order to ‘effect an approximation or co-ordination of different legal provisions or systems by eliminating major differences and creating minimum requirements or standards’ (Kamba, 1974: 501). In recent years the EU integration process produced
directives and regulations that also include maximum harmonisation clauses in addition to the minimum harmonisation ones in order to prevent national ‘gold plating’ and overregulation and related burdens of compliance (Kaeding, 2008). In cases where neither a hegemon nor strong formalised structures harmonise laws and regulations, sometimes informal institutions take over (part of) this role. For example, the Association of Southeast Asian Nations (ASEAN) is characterised by ‘informality, organisational minimalism, conflict avoidance, consultation and consensus building’ (Krapohl, 2008: 19, referring also to Ufen, 2005), although it appears questionable whether such regional integration light approaches will be viable in the long run:

If such informal institutions emerge within a certain region – or at least among the elites of the participating states –, this may as well indicate a credible commitment towards the adoption of common decisions and the implementation of these decisions. Nevertheless, the strength of such an informal commitment has yet to be proven (Krapohl, 2008: 8).

Thus, not only for a full-fledged unification, but also for more flexible harmonisation and approximation approaches regions appear to be only feasible when countries engage in serious deep integration. On the one side, certain harmonisation and liberalisation steps are likely to create demand for further harmonisation, so engaging in harmonisation is likely to produce snowball effects and countries engaging in harmonisation must thus be aware of that. Such self-reinforcing tendencies accrue as initial cooperation may not only change interests within the respective sector, but also within other policy areas. Such spill-over relies on the fact that integration of some policy areas has negative externalities for other areas. E.g. the establishment of a single market has deregulatory effects for freely traded goods, and this deregulation must be met with re-regulation at the regional level [...]. Thus, more demand for regional rules emerges, and the member states may delegate more competencies for regulatory policy-making to the upper level. In the end, both the change of interests within a policy area and the spill-over into other areas may lead to further steps of regional integration, and may consequently initiate an independent and self-supporting dynamic (Krapohl, 2008: 9).

In a similar vein, proponents of the ‘endogeneity of optimal currency area paradigm’ seem to suggest that almost any set of countries could enter into a CU and ‘just wait for the deeper integration to occur almost automatically and thereby inevitably reap net benefits from a single currency’ (as summarised by Mongelli, 2002: 6). On the other side, there are considerable challenges and problems related to harmonisation – and only deep integration appears to hold potential rescue for most of them. To begin with, the success of certain harmonisation policies strongly depends on other profound deep integration steps. For example, it has been observed that a monetary union requires very high levels of factor mobility and integrated production systems in order to successfully absorb asymmetric demand-side shocks (Mundell, 1961). Secondly, countries may frequently encounter incentives to defect and to free-ride. If the repeated nature of the game theoretic setting does not lead to sufficient trust and cooperation to prevent defections from the agreements in view of unusually high short-term gains, it may be necessary to stabilize the region by establishing ‘dispute settlement mechanisms, wherein court-like bodies decide about alleged defections of member states’ (Krapohl, 2008: 8). Again, this would require formalised common institutions and organisations. Thirdly, harmonisation itself and the necessary system of institutions and organisations to create and to safeguard such an approximation of laws and regulations is costly and in many cases the established common systems are far from perfect with regards to efficiency, transparency and direction. Commenting on
the probably most sizable, complex and successful regional undertaking of recent years, the European Union, Moscovici observes that

[The Community’s political system is not the most efficient. It is not capable of taking rapid, simple, and appropriate decisions, but gets bogged down in increasingly complex procedures, giving rise to selfish nationalistic positions. The system is no longer transparent. The debates held in the Commission, a hybrid, poorly known institution, are discreet, to say the least. The debates within the Council are held in secret, which favours the adoption of hardline positions less open to compromise, escaping as they do the control of public opinion. The European Parliament is a bewildering institution, which [...] at times is excessively technocratic. To sum up, the system as a whole does not enjoy full legitimacy (Moscovici, 2004: 110, qt and translated by UNECA/AU, 2006: 31f).]

Consequently, there must be a considerable political will and commitment to follow through with deep integration to accept such additional costs and efforts. Others observe that it is highly doubtful whether such a political commitment and willingness to cede authority can be relied upon. As joint decision-making in a loosely federated system implies de facto the inhibiting might of unanimous decisions that

systematically generate sub-optimal policy outcomes unless a ‘problem-solving’ (as opposed to a ‘bargaining’) style of decision making can be maintained [... resulting in] pathologies of public policy (Scharpf, 1988).

Fourthly, such national self-interests and resistances are not only politically motivated but may well in parts be due to conflicting needs and demands of dissimilar countries. Again, the large body of work on optimal currency areas can be made avail of in this regard. In this debate costs and risks are weighed against and expected benefits with optimality defined

in terms of the ability of an area to achieve both internal balance (full employment and low inflation) and external balance (payments equilibrium) in the least costly way, that is, without interference from monetary and fiscal policies (Mattli, 1999: 35).

While gains are seen as emanating from lower exchange rate risks and lower transaction costs, the loss of autonomy and control reduces the ability to react to shocks and structural problems that are particular to or more prevalent in a certain locality. In our view, the argument on CUs represents the general trade-off surrounding harmonisation of laws quite well. Ensuring flexibility and local alignment on the one side and easing doing business between different locations and thus allowing for economies of scale, agglomeration etc. on the other. But this trade-off between preference heterogeneity and gains from size is also well known outside the debate on currency unions, with first observations ranging back to Ancient Greek times (Aristotle qt Alesina, Spolaore & Wacziarg, 2005: 1501). This trade-off has, in our view, two important ramifications, one related to the sub-regional sphere and another one to the supra-regional one.

With regard to the sub-regional level, this trade-off clearly implies an imperative for striking a compromise by abstaining from overplaying the harmonisation process, allowing for flexibility and (minor) differences in areas where this appears to be necessary and / or not harmful and possibly even defining areas or levels in which the less aggregated levels remain autonomous. This has the added advantage that some degree of competition for the best policies remains, thus reducing the risk of institutional stagnation, restrictiveness and irresponsiveness. Some authors claim that harmonisation in itself (as opposed to unification) is already a compromise and thus should be seen as a tool to deal with this trade-off nature of regulations:
This is the appeal of harmonisation, it takes into account the local factors yet applies general principles to make a consistent framework of law. It generally incorporates local factors under a relatively unified framework (Hesselink, 2006).

With regard to the supra-regional level, this trade-off may simply be one of the most important reasons why many harmonisation steps, both in the area of business-related laws and beyond, are more easily and more suitably dealt with in regional arrangements rather than in the global sphere. There are of course several multilateral initiatives inside and closely related to the WTO, inside the UN system (United Nations Commission on International Trade Law, UNCITRAL) and other multilateral fora as well as bi-regional initiatives such as the EPAs that attempt to advance a global approach – but in our view the above is a quite plausible explanation why the record of success is moderate at best.

Finally, some more words of caution appear essential that put at least some question marks on the assortment that regionalism is a silver bullet in this regard. Firstly, the confinement of harmonisation to the regional sphere carries considerable risks with regards to the (eventual) better integration into world markets. As observed by Draper & Qobo (2007), it appears to be imperative for Africa to at least partially adopt standards of the developed world in order to overcome the prevalent lack of regulatory capacities and to qualify for integration on the world markets. This holds true despite the fact that such an adoption ‘runs counter to the political impulse to resist economic dependence on the developed world’ (Draper & Qobo, 2007) and although this frequently implies adopting standards that are less appropriate in the local/regional context. In most cases, standards are likely to be set higher than necessary, thus increasing costs of compliance and consequently consumer prices. This implies that it is essential to not only define areas that are better left for national (or subnational) legislation, but also to identify areas where regional standards and rules are directly aligned with globally established ones. Such case-by-case decisions appear to be the only way to strike the delicate balance ‘between African countries’ legitimate needs for policy space, the pressing need for them to upgrade their regulatory capacities, and the needs of the multilateral trading system’ (Draper & Qobo, 2007). Secondly, the experience of deeply integrated communities such as the EU has not only seen reductions in costs of transaction and compliance, but frequently fears and perceptions have been expressed that common regulations have made doing business regulations more complex and have thus added costs rather than reduced them. This appears to be particularly an issue for less developed partners. In general, this is a strong reminder that not only potential benefits, but also potential additional costs have to be kept in mind when identifying regulations that should be regulated regionally as well as when designing the concrete modalities of the regulations. Thirdly, while most (deep) integration efforts are likely to not only thrive and depend on some level of similarity, but also to intensify such homogenisation tendencies, there are some caveats to be considered that the opposite might hold true to some extent as well. To name just two examples, increasing intra-regional specialisation and in production and trade may lead to a decline in diversification and both, such a decline in diversification of trade and production patterns and agglomeration forces of a NEG nature are likely to reduce rather than foster income convergence and homogeneity of policy imperatives (Mongelli, 2002).
5.3.4.5 Regional public spending: regional public goods and economies of scale

Finally and in close relation to the above question of harmonisation and joint institutions and organisations, we discuss from a public finance and public spending perspective whether and how regionalism could also offer a potential for a better provision of public goods. The argument is divided into two main aspects. On the one hand, some public goods may have a regional outreach and thus spillovers and externalities may make it imperative to deal with such matters in a regional approach. On the other hand, drawing on literature on the size of nations, it is discussed whether even public goods that are not intrinsically regional in nature might be provided on a regional basis in order to reap economies of scale. In both cases, public goods may be thus provided either less costly and/or in a higher quality, both positively effecting not only the individual citizens, but also the economy at large. In the regionalism debate, the provision of public goods often runs under the headings functional cooperation or regional cooperation. However, in our view these notions often explicitly or implicitly connote a shallow and non-institutionalised integration approach, thus limiting the scope to only a part of the potential areas discussed in this section as several topics appear to require much deeper forms of integration and institutional setups to carry them.

(1) Regional public goods

With regard to public goods that are clearly regional in nature, the first aspect that certainly comes to mind is infrastructure. Interestingly, the weak regional infrastructure is almost always at the forefront of many explanations for the failure of African and other Southern regional schemes to sufficiently boost levels of intraregional trade. Being by and large remnants of the colonial period, the African infrastructure is in large parts rightly described as geared towards extraction of natural resources and evacuation to Europe and other non-African countries – either by rail and road towards the coast and further by ship or by direct air links (see e.g. Mistry, 2000). The missing links inside the continent are often bemoaned as a crucial impediment for the extra-African export potential of land-locked countries and sometimes even the hinterlands of countries with access to the sea. The same applies of course for intra-African trade. Pointing at this pivotal bottleneck is thus undisputedly of utmost importance and may well explain a large part of the fact that regionalism often does not deliver the expected and desired outcomes. Most South-South schemes in fact increasingly put a strong emphasis on jointly planned, financed and in some cases managed (e.g. common border points) infrastructure projects. Even more, for several land-locked countries exactly this opportunity for influencing the decisions on infrastructure development in the neighbouring countries ranks amongst the most important reasons why they are willing to take part in regional schemes even though they may hold the potential to further privilege their already more developed coastal partners. As a better access to the sea has to some extent a public good character, governments of neighbouring countries tend to insufficiently maintain and improve such links – and a regional agreement (including cost sharing) may be a promising way out of this quandary (Collier, 2007: 95, 167). In addition to directly transport- and trade-related infrastructure such as roads, railways, pipelines and border ports, cooperation appears to take place with regard to water sources that often naturally affects several countries to an increasing extent.
A second major regional public good are approaches to deal with conflicts and to promote peace. The overly economic perspective may be forgiven, but peace can be well described as a public good that has very strong regional interactions. Many regional communities have been set up with the (at least initially) primary goal of fostering peace, but also most other economic communities integrate peace and conflict resolution aspects in their treaties. The attempts in this relation are usually twofold. On the one side, it is simply assumed and hoped that the growing economic relations between countries reduce the risk of inter-state war. As observed already in the 18th century

[...] the natural effect of trade is to bring about peace. Two nations which trade together, render themselves reciprocally dependent; for if one has an interest in buying, the other has an interest in selling; and all unions are based upon mutual needs (Montesquieu, 1758).

In other words, the opportunity costs are simply too high and possibly also direct good relations make fighting less likely. While this aspect appears to be somewhat less important in Africa as most conflicts are domestic or cross-border rather than inter-state (the Ethiopian-Eritrean conflict being a noticeable exception), the argument appears to still have a considerable degree of validity in the African as many governments play a formal or informal role in such conflicts. Hettne (1994) further discusses regionalism as a viable alternative to the dismemberment of a State in face of ethnic conflict and secession movements:

The opposite of dismemberment is the integration of several States into regional formations, a process which also characterizes the current transformation of world order and may provide solutions to ethnic problems. Certain conflicts between States may be more easily solved within an appropriate regional framework. Ethnic conflicts often spill over into neighboring countries and are, therefore, perceived as threats to national security. A regional organization can often more easily fill the role of mediator than can the State. Furthermore, regionalism could be the relevant line of protection, the defensive bulwark, against the global forces of homogenization and ethnocide. It may constitute the international political framework for implementing the principle of cultural pluralism. From the perspective of a social group, cultural pluralism presupposes the right to speak its native language, to maintain traditional religious practices, to participate in the political process, and to exercise control over land and other resources (Hettne, 1994).

On the other side, regional communities thus frequently undertake attempts at solving violent tensions and conflicts among their members with active and proactive measures, ranging from mediation and negotiation to outright coercion and peacekeeping interventions. In Africa, this is heralded by the African Union (AU), but the regional economic communities play a major role in this New African Peace and Security Architecture that aims at taking some of the responsibility from the global/UN level to the African regional level:

Africa is currently experiencing a potentially significant transformation with regard to the norms and institutions governing multilateral relations on the continent. This gradual shift has the potential to transform the way the continent addresses the mutually constituted challenges of peace, security and development and is likely to change the nature of bilateral relations within Africa as well as its interaction with the international system (Engel & Porto, 2010).

This includes the Protocol Relating to the Establishment of the Peace and Security Council of the African Union, the Common African Defense and Security Policy and the Peace Fund. The design of this new architecture assigns a major role to the regional communities that are tasked to provide regional standby brigades and actively work on security diplomacy.
Other areas in which regional externalities (public and common goods) may play a significant role include (marine) fisheries, pandemic controls, natural disaster management and food security. In all these cases the effect on the economy is basically an internalisation of externalities in a joint regional approach that more easily lead to a proper provision of the public goods concerned while negative externalities such as depletion of resources or spreading of violent conflict are more likely to be prevented, both benefitting the economy in the long run.

(2) Scale economies in public goods and public administration

In addition to the regional public good debate and closely related to the discussion on economies of scale in production there are also arguments on the size of nations and the size of governments and their relation to growth. While a part of the debate directly deals with administration costs and thus mainly focuses on the (apparent) virtues on a lean government, other discussions also include a potentially more efficient provision of public goods. In contrast to the regional public goods argument above, cases are analysed where national or local public goods can be provided on a regional basis, but where public goods are not necessarily regionalised in nature themselves or, in other words, do not necessarily deal with regional (positive or negative) externalities. We do not attempt to dwell on the details of the debate on the lean state and the questions of whether lower levels of taxation are univocally good for growth and welfare, whether there appears to be reverse causation, whether a u-shaped relation comes closer to the truth (as at the bottom there appears to be a positive association between tax revenue as only states with a minimum level of economic development appear to be able to collect reasonable amounts of domestic taxes) and whether it all depends on the kind of taxation and the kind of spending (see e.g. Alesina, Spolaore & Wacziarg, 2005; Easterly & Rebelo, 1993). Instead, it appears rather uncontroversial to state that providing the same administration and the same public service with the same quality for a lower price would be beneficial. Such scale effects associated with government expenditures are likely to be related to nonconvexities in either the benefits or the costs of publicly provided goods and services. If a government service has the nonrival consumption property of a pure public good – defense is the classic example - then there is more incentive to provide it in a large scale economy. On the other hand, if there are high setup costs but low marginal costs to providing a particular public service, then the amount of spending per capita for a given per capita level of that service would fall with increased scale (Easterly & Rebelo, 1993: 435).

In all these cases, the effect on the economy is basically three-fold. Firstly, the realisation of economies of scale in activities with considerable fixed costs and limited or virtually non-existent marginal costs may lead to a reduction of the taxation burden. Secondly, at the same time or alternatively, the savings may be used for an improvement of service delivery. Thirdly, particularly in the case of very strong non-rivalry certain public goods may be provided for the first time. Interestingly, some authors see such endeavours as ‘non-economic’, claiming that such ‘political objectives can be important for RIAs – sometimes overwhelmingly so – but it is still desirable that they be achieved efficiently and that policymakers pay heed to their economic costs’ (Winters, 1996: 22) – in other words in this Vinerian line of thinking to trade diversion. In our view, both assessments by Winters are (potentially) faulty as dynamic effects are likely to outweigh negative effects of trade diversion and, as just
discussed, public finance aspects are of course not entirely 'non-economic' but have an important bearing on the economy.

(3) Implementation status, obstacles, limitations and opportunities

In the real world particularly the joint provision of public goods is, with a few exceptions, even less advanced in most regions than the harmonisation efforts. For example the EU with its numerous joint institutions have not succeeded in agreeing on a proper joint provision in many of the most obvious cases such as those indicated by Alesina, Spolaore & Wacziarg above. In most cases there is in fact cooperation (e.g. NATO, Schengen, the High Representative of the Union for Foreign Affairs and Security Policy for defence and diplomatic representation), but in all but very few cases these are additions rather than partial substitutes for the national players and institutions. In this regard, the idea of better (as coordinated) provision may be partially realised, but the cost-reduction aspect appears to be very limited at best. All indications rather suggest that the additional layer and coordination leads to higher costs, with the national institutions remaining unchanged – safe for an addition of offices and functions dealing with and mirroring the regional level. The same applies for example for the judicial system, infrastructure planning, policing, public health and, unfortunately to a very large extent despite all Paris declaration vows, also to foreign aid. (Partial) exceptions to this tendency appear to be obviously in the area of the monetary system and for example in the area of specialised, mainly technical and applied research and R&D. But even in cases that contain a (by and large) full transfer of sovereignty to the regional level such as in the case of the European Central Bank, still the national pendants have not been abandoned and exist although they are deprived of at least most of their duties.

In contrast to the EU, many regions in developing countries tend to be more advanced on functional cooperation than on harmonisation of rules. However and as indicated in the preceding discussions, most of this functional cooperation appears to be with a focus on regional public goods (water management, conflict prevention and early warning systems, infrastructure) or harmonisation (joint border posts), both with limited or no reference to an economies of scale character. Most of the (relatively) low hanging fruits described above (defence, diplomatic representation, specialised research and training, public health) are not even on the integration agenda. Particularly the first two aspects appear to require much more trust among partners than currently in place (and these fields appear to be also stronger infested by neopatrimonial considerations than other areas of the public service). Notable exceptions to this observation are (in addition to the common currency management in some regions) frequent initiatives on power pools and communication networks. In Latin America, also a joint initiative in the area of public health has been started, with joint negotiations on and procurement of pharmaceuticals (IDB, 2014), other regions such as the EAC also focus on public health (e.g. vaccinations, production of and legislation on generics). As discussed above, several countries also have joint industrial and agricultural (and other) policies, but in many cases there is no joint specialised body safe for the regional development banks in charge of implementation on the regional level.

Interestingly, many of the dismantled or dormant earlier initiatives at regional integration such as the original EAC and the CEPGL appear to have embraced the
idea of cost-saving public service provision much more than their contemporary counterparts and resurrections. The implementation of regional security setups is likewise lagging considerably behind in most regions, but to very varying degrees. For example, the AU-led initiative on multinational regional brigades is considerably hampered by the fact that they are not congruent with the many overlapping RECs (Vines, 2013: 101). In addition, these regional attempts at security appear to be only a first step towards overcoming

the ongoing proliferation of intergovernmental organisations and the resultant competition for national and international resources, political influence and institutional relevance [that] threatens the viability of a continental approach to peace and security by duplicating efforts and fragmenting support. […] the often uneasy coexistence of these organisations is symptomatic of the deep divisions, nationalist tendencies and regional imbalances underlying the multiple processes of regionalisation in Africa (Franke, 2007: 31).

Certainly, the move from the UN to the AU can be seen as following the same reasoning that the global level is too detached to properly respond to pressing issues for reasons of lacking information, lacking network and lacking interests. However, the security area is somewhat atypical as it appears that the AU currently plays a more important role than the – even closer – RECs. Possibly, the regional communities appear to be too much involved to assume the role of an independent and impartial mediator. For example, the EAC and IGAD initiatives in the wake of the Kenyan violent post-election clashes 2007 were, according to many observers, not only unsuccessful because regional and national bodies were unprepared, but also because the national players were seen as too much involved and thus too much partisan to one side of the conflict or the other. In effect, that left the mediator role to former UN secretary Annan under AU mandate (Khadiagala, 2009). Despite the establishment of a common justice system, experiences in SADC are marked with comradely non-intervention. The two communities primarily established for security purposes (IGAD and ICGLR) did have some limited success with diplomatic negotiations on Somalia and the DR Congo, but their endeavours are significantly curtailed by their non-interventionist mandates and the complete lack of any leverage as the communities have no trade- and other business-related impact. A notable exception to this is ECOWAS that is not only entrusted with using military coercion to prevent coup d’états but has in fact invoked these powers in the past (see e.g. Striebinger, 2012).

On a much more positive note, another very important aspect to be considered is the relationship between (supranational) regionalism and (subnational) decentralisation. Interestingly, Alesina & Spolaore (1995) derive the result that democratization as well as market integration might lead to secessions and thus ‘an inefficiently large number of countries’ (Alesina & Spolaore, 1995). Although the authors do not include the option of regionalism in their discussion, this might in fact be an interesting aspect that should be taken up in regional designs. If certain public goods are provided and considerable harmonisation takes place on the regional level, it might be also feasible to provide others increasingly on a more local level than the nation state, either by way of decentralisation, greater formal autonomy or even secessions. Hettne observes for the specific African situation:

*If the development of nation-states is really a necessary path to progress, the African people will have to pay a heavy price. Almost half of the internal wars raging in the world take place in Africa. Millions of people have been killed in uprisings, civil wars, and massacres. Yet, in spite of all this suffering, the African States do not seem to be on firmer ground today than when they emerged from decolonization, although experiments in “power sharing” have been started in a few States. The Westphalian*
logic, as expressed in both the colonial and postcolonial State, is confined to a small elite that applies it in a particularly brutal form. Hence the need exists for the development of a regional capacity for conflict resolution (Hettne, 1994).

5.4 Some attempts at empirical strategies for heterodox approaches

That much for theory. It will come as no surprise that it is virtually impossible to develop a lean strategy for analysing empirical effects of a dynamic kind, even when focussing on certain aspects only. As detailed above, even the utterly simple theoretical NC perspective on trade creation and diversion has produced a vast amount of literature and competing approaches – and we are still far from reaching a unanimous conclusion from this perspective. Adding the fact that dynamic aspects are much more complex, context specific, dependent on many variables and resting on multiple factors as well as internally diverse and conflicting, leaves one stunned in view of the task ahead. Krugman observed with particular reference to NEG that ‘too much of it involved making assumptions about how unmeasurable things affected other unmeasurable things’ (Krugman, 2013). Although this may be in fact most pronounced in the area of NEG and agglomeration effects, the same seems to apply to most other areas of heterodox theories to some extent as well. More precisely, the effects are in most cases not entirely unmeasurable, but in many cases currently not (or not sufficiently) measured, very difficult and expensive to measure and in several cases only traceable if quantitative data is enriched with qualitative data (e.g. on reasons for investing, migration, knowledge accumulation etc.).

Given these difficulties and the limited coverage that is feasible in the framework of this discussion peace at hand, we focus on three aspects. Firstly, we give a broad overview of the empirical secondary literature of several of the aspects discussed, (5.4.1). Secondly, we propose several approaches that focus primarily on trade data and show some results for our example, the EAC (5.4.2).

5.4.1 Literature review: heterodox empirical results and their discontents

Following the above proposed categorization into four groups of effects, we discuss these groups and their respective components separately. Depending on the explanatory power, internal differentiation and complexity of the setup as well as the availability of secondary literature the four parts are treated unequally with regards to depth and length of the analysis. Again, the agglomeration and location effects (5.4.1.3) take the leading role while effects in the areas of allocation (5.4.1.1), levelling (5.4.1.2), and governance (5.4.1.4) play a secondary role. In theory, there would be an elegant way out of the multitude of potential effects and their difficult measurement. As most of the effects discussed by heterodox schools are dynamic in nature, a singular positive effect or a combination of positive effects should translate into higher growth rates. However, most studies have failed to establish such a link, both for the Organisation for Economic Co-operation and Development (OECD) and the EU (see e.g. Badinger, 2001; Landau, 1995; Vanhoudt, 1999) as well as for Africa (see e.g. Te Velde, 2008). This is neither a surprise nor necessarily a refutation of the existence of dynamic effects of regionalism for several reasons. There are hardly any counterfactual scenarios and thus any cross-country econometric analysis cannot be based on a simple yes/no proxy, but has to rely on some kind of differentiation according to strengths of implementation of regionalism – something that is as
discussed above utterly difficult to determine. In addition, many of the discussed dynamic effects are dependent on extensive preconditions and auxiliary support measures. Even more, growth itself depends on a large range of factors of which only a number can be influenced by regionalism at all and others only in a limited way and only if such aspects are included in the regional agreements and adhered to by national authorities (compare Te Velde, 2008). Nonetheless, we attempt to follow several empirical strategies to get some indication on the empirical substantiation of dynamic effects.

5.4.1.1 Allocation effects: love for variety and producer rents

With regard to love for variety gains some empirical strategies have been developed. For example, Hummels & Klenow (2005) provide evidence that about 60 percent of the larger trade volumes of larger countries is explained by the extensive margin (i.e. more varieties of a good) and thus more than by the intensive margin (i.e. larger quantities of the same good). Nonetheless, estimates for implications on GDP and GDP growth are rather moderate. Calculations by Broda & Weinstein (2004) based on Feenstra’s (1994) import price index approach arrive at welfare gains of 2.6 percent for the US over a 29 year period and thus a contribution to the growth rate of just below 0.1 percent. Calibrating the more detailed calculations for the US on some other countries and assuming similar elasticities, the gains might even be as high as 25 percent, thus contributing almost 1 percent point to the annual GDP growth rates. More conservative estimations arrive at figures around seven to ten percent, thus contributing at least a quarter to a third of a percent point to the annual GDP growth rates. Therefore, the authors conclude that ‘increases in varieties may be one of the principal means through which liberalizing countries benefit from trade’ (Broda & Weinstein, 2004: 143). However, these sanguine results by Broda & Weinstein (2004) include only North American, European and East Asian countries as well as Brazil and Mexico, but no African or other countries at lower stages of development. Since Sauré’s (2012) result indicates that the number of varieties strongly correlates with per capita income, it may well be assumed that this growth channel is less pronounced in poor and stagnating economies. This would imply that it would only become effective once a growth path in real GDP terms is taking place and thus estimates for developing countries might have to be corrected downwards.

In addition, following a different approach based on cross-importer variation Ardelean (2006) shows that in general the effects of GDP may have to be reduced by as much as 40 percent. Even when employing another method of measurement and under the extreme assumption that all import variations are a result of the extensive margin the results strongly increase, but remain very modest with annual GDP growth rate contributions for the three different proposed specifications ranging from 0.03 and 0.07 percent to just below 0.2 percent only (Mohler, 2012). With regard to geographically clustered preferences, survey results indicate that at least with respect to some goods (in this case cars) preferences indeed appear to be biased towards varieties from the same countries / regions (Berry, Pakes & Levinsohn, 2004) – however, this does not necessarily imply that they need to be from the same region as the consumer. Thus, rather little can be said on empirical proof with a reasonable degree of certainty. This applies for the contribution of variety gains from liberalisation in general as well as to the difference between regional and global approaches. However, some results can be
still deduced with acceptable certainty levels. Firstly, gains in general are somewhat larger for both liberalisation approaches. Secondly, the gap between regional approaches and global approaches appears to be at least not considerably widened compared to the NC framework. Thirdly, the net contribution does not considerably alter the assessment of the NC framework that neither regionalism nor multilateralism is likely to uplift poor economies to a significant degree.

Measuring price mark-ups is likewise intrinsically difficult as is measuring the price as such, and changes thereof tell little about the mark-up as this additional charge cannot be distinguished from production costs. A decrease in a price may thus either signify a reduction of the mark-up or an efficiency gain (or both), a price increase may be a result of either a higher mark-up or rising production costs (or both) and even a constant price level may mask a mark-up increase coupled to an increased efficiency (or vice versa). In general, there are two basic approaches for overcoming this problem of measurement. Building on an approach proposed by Hall (1988) several authors estimate price mark-ups by dissecting the Solow residual into a technical change and an imperfect competition component and thus deducting a quantification of the price elasticity of demand. In the original Hall study price mark-ups are very diverse over sectors, with some below a ratio of 1.0 and others with mark-ups close to or above 100 percent. Roeger's (1995) more refined estimates of mark-up ratios indicate a range from 1.15 to 2.75, with most sectors in the 30 to 60 percent range. Adding intermediate inputs into the equation Oliveira Martins, Scarpetta & Pilat (1996) find much lower results for manufacturing goods inside the OECD, largely ranging from zero to 30, in most cases clustered slightly below 10 percent and with some few peaks up to 40 percent. The second approach relies on longitudinal sectoral and/or firm level production data (output prices and marginal costs). Roberts & Supina (1996) for example find for a set of 13 relatively homogenous products moderately large mark-ups around and below 10 percent – that are interestingly decreasing with plant size (and thus potentially implying a positive effect from liberalisation, though not necessarily trade diversion producing regional integration). Other studies focus on the effect of business cycles on the size of mark-ups (Bloch & Olive, 2001; Weiss, 2000) and the importance to take into account non-constant returns to scale (Kee, 2002 and Dobrinsky, Kőrösi, Markov & Halpern 2004). The latter study indicates for Bulgaria and Hungary a strong positive correlation between scale economies in production and price mark-ups (with overall moderate levels of mark-ups ranging from 16 to 80 percent for Bulgaria and 3 and 37 percent for Hungary). While the size of mark-ups can thus be seen as overall moderate, but sizable and some notable peaks with regards to goods such as electronics, machines and pharmaceuticals, measurements of effects of liberalisation are much rarer – and specific effects of regionalism could not be found at all. Some studies exist on the competitive effect of (national) competition policies that tell stories of only moderately strong success. For example, Konings, Van Cayseele & Warzynski (2001) show with an approach based on Hall (1988) that mark-ups in the Netherland, which has a less stringent competition policy setup than Belgium, are in fact considerably higher than in Belgium, but from a temporal perspective the strengthening of competition law in Belgium had no significant effect. More importantly for regionalism, Hoekman, Kee & Olarreaga (2001) establish with a regression method likewise based on the Hall (1988) approach and including among the 41 countries also several African countries that
Country size matters for the impact of both entry regulation and import penetration on markups. Economic size strengthens the impact on markups of entry regulation and dampens the impact of import penetration. [... Complex entry regulations are more likely to harm competition in large countries, whereas barriers to imports will be more damaging in small economies (Hoekman, Kee & Olarreaga, 2001).]

As regionalism can be seen as a larger country in this regard, this appears to support the existence of the first of the three potential effects described above. As indicated in the theoretical discussion above and in the Hoekman, Kee & Olarreaga results, the same should even more apply for multilateral / unilateral liberalisation. In fact, several empirical studies exist that find some empirical proof for the hypothesis that imports and liberalisation act as a market disciplining devise (see e.g. Grether, 1996; Harrison, 1994; and Levinsohn, 1993 for case studies on Mexico, Ivory Coast and Turkey respectively). Some authors go even further in suggesting that a small economy such as Hong Kong or Singapore could and in fact did use an extremely open trade regime in lieu of any form of active competition policy (Blackhurst, 1991). However, following the second approach based on direct observation of marginal costs and factory gate prices, De Loecker, Goldberg, Khandelwal & Pavcnik (2012) show for India that prices in fact are slightly reduced following trade liberalisation. However, they also show that these price reductions turned out to be very small compared to the reduction in marginal costs (mainly as a result of tariff reductions on inputs). In other words, external tariff reductions in this case led to an increase in mark-ups rather than a decrease, thus counterintuitively suggesting that producers benefitted more from tariff liberalisation than consumers. In addition, the authors also single out another dynamic effect that potentially also benefits consumers in the long-run as ‘firms with larger increases in mark-ups had a higher propensity to introduce new products during this period’ (De Loecker, Goldberg, Khandelwal & Pavcnik, 2012: 1)

To our knowledge, there are neither theoretical nor empirical studies on the second and third potential effect discussed in chapter 5.3.1.2 and we would claim that they would require very good data quality and comparability worldwide that appears to be simply not obtainable at present – and least so for developing countries. Nonetheless, given the theoretical ambiguity of the effects, their at least potentially non-negligible magnitude and the empirical scarcity of existing literature, it appears to be worthwhile to spend resources on both, the proper empirical analysis of mark-ups as well as policies to ensure that welfare is enhanced or at least not curtailed by such imperfect competition effects. Nonetheless, we would claim that similar to the case of love for variety effects the effect of regionalism on price mark-ups is unlikely to play the leading role in helping poor countries achieve a sustainable growth path.

### 5.4.1.2 Levelling effects and adjustment costs

With regard to levelling effects and shocks some empirical studies exist with particular focus on regional integration and / or liberalisation while adjustment costs are usually discussed in the realm of general liberalisation only. With regard to business cycles most studies suggest that in many cases some alignment takes place, but only for countries with a certain degree of similarity while for very dissimilar economies no strong causal link between business cycles and trade exists (see e.g. Kenen; 2000, Hughes-Hallett & Piscitelli, 1999 and Fiess, 2007). Likewise, it has been cautioned that production cycles tend to be more aligned than consumption cycles. While this does not rule out the connection via integrated value chains, the consumption smoothening
aspect appears to be lower than expected (Backus, Kehoe & Kydland, 1992). With regard to shocks (positive ones such as those of natural resource windfalls and negative ones such as armed conflicts) Collier & Goderis (2009) empirically analyse the effects of shocks on economic growth and arrive at an asymmetrical pattern: while negative shocks have a robust and substantial negative effect on subsequent growth, positive shocks tend to have no significant effects. This asymmetry appears to be logical:

*If the economy is normally close to its productive capacity then sudden large increases in export earnings cannot rapidly raise aggregate output. In contrast, sudden large decreases will reduce both export output and demand elsewhere in the economy, and these will rapidly lower aggregate output unless prices are highly flexible and resources swift to move (Collier & Goderis, 2009: 10).*

This implies that high volatility around the mean has a negative effect on growth as bust cycles reduce growth while boom cycles exert no positive influence. The short-run effects alone are computed as being around four percent on average, with some countries exhibiting values as large as 13 percent (Collier & Venables, 2008). Empirical effects of outright resource sharing agreements are not available for the simple reason that such arrangements have never been implemented yet.

With regard to adjustment costs quantifications are again intrinsically difficult and many of the studies rely on more or less properly CGE models. First estimates by Magee (1972) and Baldwin, Mutti & Richardson (1980) calculated adjustment costs at a value of around five percent of the long-run gains (taking into consideration discounted values for time). In more recent studies, the estimates were augmented to at least 10-15 percent of long-run benefits. Trefler for example finds a 15 percent decline in employment and a ten percent decline in output for selected Canadian (heavily protected, low-end manufacturing) industries following NAFTA implementation that were matched by a stunning 17 percent in (labour) productivity. However, as this latter effect has proven to be much longer term, this boils down to only one percent per year and thus the first years these sectors experience a net loss. Assuming training costs at a value of 15 months of an average high-tech worker’s wage in a small, previously strongly protected sector, the estimates are estimated between 30 and staggering 80 percent (Davidson & Matusz, 2010). This leads Bergstrand to pose the question whether politicians and union leaders may have been actually right after all in their criticism of too quick and too wholesale liberalisation and ‘trade economists [have] misguided the public?’ (Bergstrand, 2005).

5.4.1.3 Accumulation and location effects

The area of accumulation and location effects is so diverse that we can only review the aspects that appear most important, most relevant for regionalism and with a reasonably well developed empirical strategy. This implies a long exclusion list with regard to the potential effects developed in our theoretical discussion above. We do not review any empirical evidence on the alleged superiority of a regional approach towards industrial policy as this has simply not yet occurred to any sizable degree. We also do not present any evidence on the missing liberalisation of the non-developing countries as this is simply an observation and we are unaware of any ex ante calculation of the effects of a rapid and all-embracing multilateral liberalisation of e.g. labour migration (including unskilled labour). We also felt unable to find any consistent and robust evidence on the possible limits of liberalisation and creating a flat world as well as the potential benefits of regionalism in the long run, particularly as the evidence
on agglomeration effects is in our view almost entirely guesswork at this point in time. Lastly, the very important, but almost elusive question on winners and losers is not discussed in detail as empirical strategies are utterly difficult to implement and will not change the general observation that winners and losers will necessarily arise and that it is important to observe these occurrences and aim at alleviating the negative impacts. We will also not indulge in dissecting the vast and heterogeneous empirical literature on the increasing importance of technology and knowledge, focussing on R&D and capital intensity, skill premia, and creative destruction. For the purpose of this work only a very short review of the secondary literature is exercised, indicating that results are very diverse and context specific. The same applies for the trade-learning-productivity and trade-competition-productivity links as well as the links from FDI to technology transfer, learning, competition and eventually to employment and/or productivity. Likewise, evidence on sectoral heterogeneity is only referred to. Instead, the relatively scarce empirical evidence on specific effects of regionalism in these areas is reviewed. With regard to trade, exclusively the additional question of whether regional trade is more intensive in high potential goods and sectors is discussed. With regard to FDI, the question arises whether in fact regionalism leads to FDI jumping and/or increased intra-regional investment. In chapter 5.4.2 below, we add some additional evidence on the EAC with particular focus on exports and FDI as well, but likewise without attempting to trace the effects of both exports and FDI on knowledge accumulation, skill premia, learning, spillovers and the like as this appears well beyond the scope of this work.

(1) Setting the scene

There is widespread empirical evidence that creative destruction and innovation drive the world economy (see e.g. Aghion, Fedderke, Howitt, Kularatne & Viegi, 2013; Klimek, Hausmann & Thurner, 2012; Peilei, 2011; Fagerberg, 1994). Likewise, it appears evident that world production becomes more and more skill and R&D intensive and that in consequence skills reap wage premia as there are strong technology-skill complementarities, thus often leading to rising rather than shrinking wage inequalities (see e.g. Autor, Levy & Murnane, 2003; Berman, Bound & Machin, 1998; Goldin & Katz, 1998; Handel, 2000; Peilei, 2011).

In addition to the import-technology-productivity link (Coe, Helpman & Hoffmaister, 1997), the export-learning-productivity link has likewise been relatively well established in several studies (Aw, Roberts & Xu, 2011; Blalock & Gertler, 2004; De Loecker, 2013; Fafchamps, El Hamine & Zeufack, 2008; Salomon & Shaver, 2005). These effects appear to be even stronger in the small and less developed African markets than in saturated markets (Bigsten, Collier, Dercon, Fafchamps, Gauthier, Gunning et al., 2000; Van Biesebroeck, 2005). The only study that we are aware of that investigates such effects specifically in the context of regional integration has been conducted by Lileeva & Trefler (2010), indicating positive effects on productivity among Canadian firms following CUSFTA (though the responses appears to be quite heterogeneous across the economy).

The same applies to effects from FDI to local productivity and employment with both, FDI and transnational corporations (TNCs) as well as exporting firms often using superior technology, exhibiting higher TFPs and paying higher wages (see e.g. Fan & Hu, 2007; Pack & Saggi, 1997 on productivity and Kandilov, 2009; Martins, 2004;
Schank, Schnabel & Wagner, 2007 on wages and working conditions). For the African context, Te Velde & Morrissey show that wages (conditional on age, tenure and education) are 20-40 percent higher in foreign owned firms and still 8-23 percent higher if it taken into account that firms with FDI are on average larger and clustered in higher TFP and wage sectors (Te Velde & Morrissey, 2003). At the same time, several studies show that linkages to local companies doing business with the multinationals appear to exist as such companies often improve more rapidly in these dimensions than other firms (Liu, 2008; Smarzynska Javorcik, 2004). Similarly, localities attracting FDIs appear to be growing more strongly and creating more jobs than others and thus evidence some degree of agglomeration spillovers (see e.g. Greenstone, Hornbeck & Moretti, 2010 on effects in ‘winning’ counties in the contest for large scale investments in the US). However, although technology and knowledge appear to become more and more freely available in a globalised world, doubts are entertained whether developing countries have been sufficiently linked to this new knowledge economy and whether the absorptive capacity is sufficient (Archibugia & Pietrobelli, 2003; Berman & Machin, 2000). Likewise, several studies fail to show (strong) links between FDI or exports and productivity growth. In other instances, studies strongly call into question the directionality of causation, claiming that productive firms self-select into export markets rather than improve by exporting (see e.g. Clerides, Lach & Tybout, 1998; Delgado, Fariñas & Ruano, 2002 and the empirical review in Wagner, 2007). Others again highlight important preconditions such as absorptive capacity (Chudnovsky, Lopez & Rossi, 2008). Particularly with regard to spillovers to the domestic economy, some studies even indicate not only insignificant, but outright negative effects on either average sectoral productivity or at least the domestically owned part of it (Aitken & Harrison, 1999; Haddad & Harrison, 1993; Waldkirch & Ofosu, 2010). This implies that these effects appear to be not only very complex, but also extremely context specific and contingent on the kind and type of investments and exports, other factors and auxiliary (support or hindering) policies.

The superiority of certain goods and sectors over others and of the need for diversification is relatively well established as well (see e.g. Bahar, Hausmann & Hidalgo, 2013; Hausmann, Hwang & Rodrik, 2007; Imbs & Wacziarg, 2003; UNIDO, 2013). However, again critical voices cannot be ignored that show that a focus on such sectors does not necessarily and automatically bring about growth and prosperity (see e.g. Lederman & Maloney, 2012).

Despite these uncertainties, we would claim that at least the potential of such FDI and export effects and such a focus on manufactures and sophisticated goods is well established enough to take them as basis for our discussion on the empirical effects of regionalism on the attraction of FDI (in particular the occurrence of tariff-jumping investments) and on the composition of regional exports and related questions of a regional export-global export link below.

(2) FDI Jumping and intra-regional investment

For the integration process in Europe early studies indicated that a strong inflow from the US accrued particularly to the first EC members, suggesting that some US investments might have been diverted from other European countries to the EC members (Blomström & Kokko, 1997; Yannopoulos, 1990). The results for later stages appear to be mixed. While Dunning (1992) finds a considerable revitalization of US
FDI into the EU after the Single European Act in 1992, Lipsey only concedes room for very moderate additional location effects. Lipsey bases this assessment on the fact that US ‘firms are already well entrenched in the EC, and may even be better positioned to take advantage of the single market than most of their European rivals’ (Lipsey, 1990). Others find that both the threats and the opportunities created by European integration have led Japanese FDI to flow more strongly into the EU (Balasubramanyam & Greenaway, 1992; Nicolaides & Thomsen, 1991). Recent studies likewise find mixed results. Yeyati, Stein & Daude (2002) find on average a doubling of the FDI stocks in OECD countries joining a bloc and Pain & Landsbury (1996) present evidence of boosted FDI by EU integration, in particular a redirection / diversion of UK FDI from the US to continental Europe. Brenton, Di Mauro & Luecke (1998) also find evidence for FDI growth, but not for significant diversion. Mody & Srinivasan (1998) in contrast do not find significant increases in US or Japanese FDI to Europe. Blomström & Kokko (1997) find no robust and consistent evidence on a tariff-jumping FDI effect of CUSFTA on the FDI patterns in the US and Canada although the strongest external FDI inflow into Canada in fact took place in the years immediately following CUSFTA implementation. Interestingly, however, Canadian outward FDI changed away from the US to other countries, with the possible explanation given by Blomström & Kokko that the secured access to the US market freed FDI from Canada to other destinations. NAFTA, in contrast, seemed to have a much stronger impact on FDI inflows into Mexico with a steady increase from three to eight billion USD in annual inflows from 1989 to 1994. While the major US increases in FDI appear to have taken place in anticipation of the agreement, the strong increase after implementation is to a large extent a result of investments from ROW. The authors conclude that although some of the external inward FDI may have been a result of concomitant policy reforms in Mexico and other positive factors, ‘the investment flows are also likely to reflect some degree of investment diversion and investment creation’ (Blomström & Kokko, 1997: 22). A more recent study by Waldkirch (2003) suggests however that most of the FDI inflows into Mexico following this North-South agreement in fact came from the Northern partners rather than from ROW. Comparing FDI flows into Mexico in comparison to its middle American neighbours, Monge-Naranjo finds that the country seem to have profited compared to its poorer, non-included neighbouring countries, but that the likewise excluded Costa Rican economy still attracted sizable FDI, leading to the assumption that

*the difference is due to a NAFTA bias in the treatment of lower skill intensive exports. Costa Rica was able to attract massive FDI in higher-skill sectors for which NAFTA did not represent a bias in favor of Mexico* (Monge-Naranjo, 2002).

Likewise, the FDI inward stock into Brazil and particularly Argentina (and to a lesser extent to the smaller partners) already experienced strong growth in the wake of the implementation of the MERCOSUR customs union according to Blomström & Kokko (1997). From 1989 to 1993 annual FDI inflows to Argentina were increased from one to more than six billion and to Brazil from one to three billion, most of it stemming from the US (as aggregate data do not differentiated for locations, this is visible in the increase in US FDI stock invested in these countries). Updating the Blomström & Kokko data reveals that the figures for Argentina were subsequently corrected downwards for the year 1993, but that their assumption of an even stronger growth after 1993 held very true. For Argentina, Brazil and Paraguay there is a clearly visible hike in inward FDI from 1995 to 1999 (Argentina), 2000 (Brazil) and 1998 (Paraguay).
respectively. While the two latter appear to have experienced another boom from 2006 onwards that has probably been unrelated to regional integration efforts, this second growth is not detectable in the Argentine data. Only Uruguay appears to have been participating in this second boom without a clear-cut effect of MERCOSUR in the years following 1995 (as discussed below in the calculation of inward FDI for the EAC, this does, however, not take into account that globally FDI inflows increased on average as well). Taking this into consideration UNCTAD (2013b) shows that even when deflating with GDP figures, positive effects appear to have taken place in the 1990s and the first decade of the new millennium. An interesting survey study by Mirza & Giroud (2004) concluded for the case study of Vietnam that ASEAN integration was a vital part of the FDI attraction strategy. According to the authors, this allowed Vietnam to minimize the competitive pressure from China and India and their huge markets while at the same time profiting from access to their large consumer markets and stock of skilled labour, management capacities and innovation systems.

**Figure 11: FDI inflows in African regional grouping as percentage of GDP**

![Figure 11: FDI inflows in African regional grouping as percentage of GDP](source)

UNCTAD (2013b) likewise indicates some positive effects from ASEAN and Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) integration. For SADC, Goldstein (2004) finds that FDI flows and stocks are substantially smaller than in other world regions but that the levels are still substantial. In his view, the

trade opportunities opened by regional integration per se may be a less important motivation for investors than in countries such as Mexico or Hungary, for smaller SADC countries anchoring to the large emerging economy of South Africa signals a more liberal business environment in which foreign investors find it easier to operate (Goldstein, 2004).

Calculations by UNCTAD confirm that for most African regional grouping no clear-cut positive effect from signing a regional treaty on increased FDI inflows is detectable if inflows are normalised with GDP levels (see Figure 11).
Table 19: Extra-regional vs. intra-regional FDI projects in regional groupings

<table>
<thead>
<tr>
<th>Region</th>
<th>Period</th>
<th>Total (Billions of dollars)</th>
<th>Intra-regional</th>
<th>Extra-regional</th>
<th>Intra-regional %</th>
<th>Extra-regional %</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMESA</td>
<td>2003-2005</td>
<td>17.9</td>
<td>0.2</td>
<td>17.7</td>
<td>1</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>2009-2011</td>
<td>34.0</td>
<td>2.6</td>
<td>31.4</td>
<td>8</td>
<td>92</td>
</tr>
<tr>
<td>EAC</td>
<td>2003-2005</td>
<td>2.3</td>
<td>0.0</td>
<td>2.3</td>
<td>2</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>2009-2011</td>
<td>9.9</td>
<td>1.4</td>
<td>8.5</td>
<td>14</td>
<td>86</td>
</tr>
<tr>
<td>SADC</td>
<td>2003-2005</td>
<td>23.3</td>
<td>1.0</td>
<td>22.3</td>
<td>4</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>2009-2011</td>
<td>32.0</td>
<td>3.2</td>
<td>28.8</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>ASEAN</td>
<td>2003-2005</td>
<td>58.2</td>
<td>6.3</td>
<td>52.0</td>
<td>11</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>2009-2011</td>
<td>117.4</td>
<td>14.4</td>
<td>103.0</td>
<td>12</td>
<td>88</td>
</tr>
<tr>
<td>SAARC</td>
<td>2003-2005</td>
<td>39.7</td>
<td>0.8</td>
<td>38.9</td>
<td>2</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>2009-2011</td>
<td>71.6</td>
<td>2.0</td>
<td>69.6</td>
<td>3</td>
<td>97</td>
</tr>
<tr>
<td>GCC</td>
<td>2003-2005</td>
<td>43.9</td>
<td>7.0</td>
<td>36.9</td>
<td>16</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>2009-2011</td>
<td>47.9</td>
<td>11.2</td>
<td>36.7</td>
<td>23</td>
<td>77</td>
</tr>
<tr>
<td>MERCOSUR</td>
<td>2003-2005</td>
<td>42.1</td>
<td>1.6</td>
<td>40.5</td>
<td>4</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>2009-2011</td>
<td>71.3</td>
<td>1.5</td>
<td>69.8</td>
<td>2</td>
<td>98</td>
</tr>
<tr>
<td>CEFTA</td>
<td>2003-2005</td>
<td>4.1</td>
<td>0.0</td>
<td>4.1</td>
<td>1</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>2009-2011</td>
<td>4.4</td>
<td>0.1</td>
<td>4.3</td>
<td>2</td>
<td>98</td>
</tr>
<tr>
<td>APEC</td>
<td>2003-2005</td>
<td>425.8</td>
<td>258.7</td>
<td>167.1</td>
<td>61</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>2009-2011</td>
<td>596.4</td>
<td>344.2</td>
<td>252.2</td>
<td>58</td>
<td>42</td>
</tr>
<tr>
<td>EU</td>
<td>2003-2005</td>
<td>325.7</td>
<td>161.2</td>
<td>164.5</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>2009-2011</td>
<td>310.5</td>
<td>129.2</td>
<td>181.3</td>
<td>42</td>
<td>58</td>
</tr>
</tbody>
</table>

Notes: Billion USD and percentages.

However, following an econometric approach developed by Dee & Gali (2003) and focusing the analysis on UK and US investments (and thus including a variety of developing countries as hosts), Te Velde & Bezemer (2006) arrive at the conclusion that regional integration indeed holds potential for ROW investment. According to their finding, this is *inter alia* contingent on a proper investment climate, measured by the extent that investment provisions in the treaties are welcoming rather than shutting out external investments. According to the authors, the difference in the investment openness and climate is the main reason for why for some regional groupings show a robust positive effect of regionalism on external FDI while this is not the case in more FDI hostile regional groups in Africa (SADC and COMESA, although also MERCOSUR does not show a significant positive effect despite its relatively investor-friendly business climate). Similarly, Goldstein (2004) observes that SADC shows a rather high intensity in intra-regional FDI compared to many other regions (although the main sources are confined to South Africa and some investments from Mauritius and Zimbabwe). In fact, UNCTAD data confirm this, but mostly in comparison to other African and Latin American groupings only.

As Table 19 shows, four of the regional groupings increased their intra-regional share in total FDI by more than five percent (among them the three regional schemes COMESA, EAC, SADC), three showed small increases around one percent and only three a relative increase in external FDI. This indicates that tariff-jumping might in several cases be rather secondary to internal FDI opportunities (for a number of
possible reasons, ranging from low ROW tariffs, poor or poorly perceived investment climate and endowment with skilled workers and business networks to the small scale or weak implementation of agreements).

All these uncertainties and particularities notwithstanding, it appears that empirical results for both North-South and South-South integration lend some support to the tariff-jumping hypothesis – although this appears to be heavily contingent on auxiliary favourable policy reforms. In addition, the results suggest that the potentials of positive effects from intra-regional FDI should not be neglected. It appears, however, that there is a lot to be done to profoundly attach such developments to regionalism and to trace the positive spillovers from such FDI and export effects to other economic factors such as TFP, knowledge accumulation, employment and wages. The relatively weak empirical support for such effects may also be a strong imperative for focussing action on better attracting and supporting such intra-regional and extra-regional export and FDI endeavours.

(3) Knowledge content / sophistication of regional export platforms

Unfortunately, empirical studies on the knowledge content of regional exports and the ease or unease to move from regional to global exports is relatively poorly researched. With regard to the former for example Devlin & Ffrench-Davis (1998) report for Latin America that regional exports are in fact (and unsurprisingly so) more sophisticated and knowledge and manufacturing intensive. With regard to the latter, Kamuganga’s (2012) analysis focuses on HS 6 digit level data. It excludes the very large number of hit and run exporting where tariff lines are only in the export basket for a few years – thus indicating either unsuccessful export attempts or misclassified re-exports and other data problems. The extremely high number of 15 million observations was thus reduced to 1.6 million, thus indicating a high degree of volatility in trade patterns, data quality or both. The results show that deeper forms of integration (but not PTAs) in Africa create export diversification at the new-product and new-market margins and that thus apparently learning by exporting does take place. Almost all African countries show not only rising numbers of tariff lines for both African and ROW markets, but also consistently have more or less pronouncedly higher figures for the regional markets than for ROW. Nonetheless, it is in our view not really evident that these results support the regional export platform hypothesis as the added tariff lines may in theory be different for regional and ROW markets. Kamuganga (2012) also finds strong support for other potentially inhibiting factors that hamper growth at the extensive margin, among them chiefly poor infrastructure, NTBs and weak support export supporting institutions. Similar support for trade creation at the extensive margin is found by Foster-McGregor, Poeschl & Stehrer (2010) with Standard International Trade Classification (SITC) 4-digit data for a variety of PTAs with the extensive margin (new products) for particularly more recent years outpacing the intensive margin (more volumes of old products) both for intra-regional and ROW exports. However, the effect appears to be less pronounced for smaller (Weiss, 2000) exporters, PTAs and country pairs. Likewise focused on fairly aggregate levels and based on SITC 4 and 5 digit data Christodouloupolou (2010) provides evidence for similar effects on intra-regional and extra-regional exports for RTAs and WTO membership, but particularly the extensive margin vanishes once multilateral resistance is accounted for by including country pair fixed effects in the analyses. Brenton, Saborowski & Von Uexkull (2010)
show that learning effects from exporting to neighbouring countries are heterogeneous with regard to product groups and regions. Firstly, more differentiated manufacturing products appear to require such an approach more strongly than homogenous goods. Secondly, poorer countries appear to have to rely more strongly on such testing and learning on protected, proximate and better connected neighbouring countries than middle and high-income countries. Likewise, Eaton, Eslava, Kugler & Tybout (2007) find evidence for Columbia that regional exports often function as stepping stone for OECD markets while no reverse effect is detectable. In contrast, Baumann (2013) shows that an initial restriction to regional markets may hamper the export success in the long run. A selection of case studies show that the Brazil (and other Latin American countries) have opted to first export into more protected and less sophisticated neighbouring markets with only later attempts to conquer more competitive and quality demanding ROW markets. In stark contrast, the experiences of India and particularly China show that exports were from the beginning more strongly targeted on more demanding target markets with substantially higher GDP per capita figures than the Chinese and Indian source markets. According to Baumann’s calculations on a 5 digit level, the Brazilian trade remained to a large degree on the regional markets and learning by exporting did not translate into access to more sophisticated markets. In contrast, the Chinese export figures show an initial focus on developed countries with the share of exports to developing countries stagnant at two to four percent in the 1990s and strongly growing to almost ten percent over an eight-year period from 2002 to 2008 only.

5.4.1.4 Governance effects

With regard to governance and institutional quality, it appears difficult to specifically measure the first three effects discussed, namely window of opportunity for reforms, signalling and bargaining power. Several indicators and indices on governance quality do in fact indicate an improvement in most of the EAC countries, but it seems evasive to establish a clear-cut link to regionalism in this regard. For the argument on external discipline some evidence has been presented (see e.g. Collier & Toye, 1994). However, other studies have shown that often the national governments where still able to and in fact used this leeway to divert from agreements, even in cases where far-reaching agreements with partners inside and outside a region were reached such as in the case of the CFA monetary union (see e.g. Guillaume & Stasavage, 2000). Whether or not FDI was more strongly prompted by internal tariff cuts and thus tariff-jumping opportunities or by an improvement of governance and a better signalling thereof is likewise difficult to determine and to our knowledge no empirical studies exist that attempt to obtain evidence on this question in perception-based or direct investor-targeted surveys. However, the increased FDI figures for the EAC and other regions just discussed above at least hint at a potentially positive effect via signalling. As other PE-related questions, bargaining power can hardly be observed and only be somewhat deduced from results and media coverage on negotiations. We therefore focus on the two remaining effects, namely harmonisation and public spending, the latter with the two subcomponents of regional public goods and economies of scale.

The empirical literature on the effects of harmonisation and approximation of laws and administrative procedures is almost exclusively focused on the harmonisation of currencies, in other words monetary unions – however, this literature covers not
exclusively the easing effect of harmonisation, but also focuses on credibility and constraint effects of such arrangements. After a series of rather mixed results Rose (2000) found extremely large and statistically significant effects of currency unions on international trade volumes, indicating that bilateral trade may be tripled by a common currency. This appears to be the case even if the exchange rate volatility was modest (and currency volatility itself showed only a very limited negative effect, thus hinting at additional easing effects in addition to simple exchange rate certainty). Similar results are reported by Barro & Tenreyro (2007) and Baldwin & Di Nino (2006), the latter with particular focus on the extensive margin of trade. For Africa estimates of effects have been mixed with Carrère (2004) showing positive results on trade of the CFA regions while others have reported limited positive effects and have warned that those limited gains tend to be very unevenly distributed with some countries strongly losing. In some cases even overall losses for the region due to strong initial differences and missing convergence may take place (see e.g. Debrun, Pattillo & Masson, 2010). In other harmonization areas, most discussions focus on the costs of compliance while the benefits from harmonization are usually treated as forming part of the increased trade and the increased labour migration and the respective gains without attempting the difficult task of estimating the respective shares of liberalization and harmonization.

The economies of scale aspect of public spending is likewise rarely empirically analysed in direct relation to regionalism. One major reason for this might be that at least a casual analysis shows that in most regions administrative requirements increase rather than decrease as a result of regional integration schemes. However, the literature on the size of nations and administrative costs might be somewhat instrumental to at least estimate the potentials for such an effect. Empirical results show that smaller countries have in fact larger relative governments, i.e. a larger share of public consumption in total GDP (Alesina & Wacziarg, 1998). Alesina, Wacziarg & Spolaore (2005) observe in this regard that

\[
\text{If the per capita cost of many public goods is lower \ldots as more taxpayers pay for them,}\n\]

Think, for instance, of defense, a monetary and financial system, a judicial system, infrastructure for communications, police and crime prevention, public health, embassies, national parks, etc. In many cases, part of the cost of public goods is independent of the number of users or taxpayers, or grows less than proportionally, so that the per capita costs of many public goods is declining with the number of taxpayers (Alesina Wacziarg & Spolaore, 2005: 1503).

Empirical cross-country regressions also suggest that while the ‘ratio of social security contributions to total revenue’ are positively correlated to population size, the ‘share of public spending on capital formation, transport and communication, agriculture, and general public services falls with increased population size’ (Easterly & Rebelo, 1993: 434f). However and maybe counterintuitively, military spending per capita also appears to be positively correlated. However, it may be doubtful whether the much less well coordinated and often additive rather than substitutive regional policy endeavours are able to elicit the same kind of size-related efficiency gains. The greatest potential for such gains may thus rest in some highly specialised functional cooperation aspects rather than in generic administrative and governing tasks.

Finally and partially related to the economies of scale argument, empirical evidence on the provision of regional public goods in the stricter sense is shortly touched upon. As indicated in the theoretical discussion above, the best-researched aspect in this regard is security while other areas are rarely thoroughly applied to regionalism and even less so quantified. In relation to trade integration Martin, Mayer & Thoenig (2008)
empirically demonstrate that higher bilateral trade flows on average reduce the likelihood of conflicts between trading partners while
countries more open to global trade have a higher probability of war because multilateral trade openness decreases bilateral dependence to any given country and the cost of a bilateral conflict (Martin, Mayer & Thoenig, 2008: 865).

In our view, there is probably a considerable omitted variable bias as some part of the correlation might have to be explained with regards to the dominance of conflict-prone primary resource in those economies that are more strongly integrated into the world economy. In addition, some caveats have to be expressed as even increased regional trade and interdependence does not necessarily produce peace. Evidently, it holds not always true that ‘trade is economically beneficial [to all parties], military conflicts reduce trade, and leaders are rational’ (Martin, Mayer & Thoenig, 2008: 865) given the above discussed winners and losers effects, war-time business opportunities particularly for well-connected elites and imperfect information. The effects of active regional peacekeeping efforts are even more difficult to establish as is the relative strengths of regional and multilateral initiatives. However, the strong negative effects conflicts exert on growth and prosperity imply that any indirect and direct measure to uphold such a public good is extremely valuable.

5.4.2 Heterodox effect approximations for the EAC

Our application on the model case EAC is restricted to a small subset of the above discussed theoretical and empirical discussions. This decision follows several considerations, among them chiefly the unavailability or poor quality of data for the East African context as well as the dearth of suitable empirical strategies to sufficiently deal with unobservables and to differentiate effects of regionalism from other left hand variables. Other potential effects had to be excluded from the empirical strategy, as they are mere plans or even potential suggestions from our side or from third parties and have not been implemented. In addition, considerations on the limitations of scope and research effort have informed this decision so that we had to focus on an area that according to our priors offers the best potentials for positive heterodox effects. We thus have opted for certain aspects of the accumulation and location effects although some of the empirical results may also be interpreted in relation to the other discussed effects (e.g. export growth in relation to competition and mark-ups, FDI in relation to signalling etc.). The lion's share of the discussions centres on the more accessible and, despite the discussed severe flaws, still comparatively more reliable trade data. However, in contrast to above NC discussion, the focus is shifted from import to export data. This reliance on trade data also allows us to monitor the discussed effects more directly compared to effects on production systems, knowledge accumulation, labour migration and others that are largely secondary effects further down on the theory of change that are also more strongly than trade influenced by other aspects. In addition, however, we do include some data on FDI as well as production statistics taken from the UNIDO CIP.

As discussed above, NC perspectives only warrant a discussion of imports and import shares. Moving towards heterodox schools and dynamic effects, however, places much stronger emphasis on exports instead as they appear desirable from an imperfect competition and mark-up perspective, under internal and external economies of scale, learning by doing and knowledge accumulation as well as when non-clearing
labour markets and skills premia are considered. We thus in a first step analyse simple developments in the regional export growth and share of the region and individual countries (5.4.2.1). Subsequently, we pay a closer look at the direction of exports inside the region and its development and thus elicit some insights into the winners and losers from a heterodox and dynamic perspective (5.4.2.2). We then move on to apply five approaches that make distinctions with regard to the quality and kind of export (and to a lesser extent production) patterns. Initially we look at the development of the overall CIP rankings of the EAC members prior and after their integration process (5.4.2.3). The same analysis is then conducted for the directly trade related dimensions of the CIP only (5.4.2.4). As the CIP trade dimensions do not differentiate between intra- and extra-regional we also compute the manufacturing share in regional trade compared to ROW trade as well as the respective and relative developments thereof (5.4.2.5). As another alternative approach, we analyse the EAC countries’ performance, rankings and development thereof according to the complexity index (5.4.2.6). Finally, we compute 4-digit trade data with an aim to analyse the extensive margin of trade in order to find empirical evidence for or against the learning from (regional) exporting hypothesis (5.4.2.7). Moving away from trade data, FDI data are analysed in order to elicit some preliminary insights on the question of tariff-jumping (5.4.2.8). Likewise outside the realm of trade data, we conclude with a short, qualitative discussion on governance effects with a particular focus on a comparison of initiatives conducted on basis of protocols and the EAC secretariat and those based on functional cooperation inside the less institutionalised Northern Corridor framework (5.4.2.9).

### 5.4.2.1 Regional export growth and export share growth

Parallel to the exercise above we first report regional export growth rates for the EAC and the individual EAC countries. As indicated above, the level and development of extra-regional exports looks somewhat more positive for the EAC than the import data. Intra-regional data look of course exactly the same as the import data (with reversed roles of mirror and non-mirror statistics) and thus the already above reported growth rates between 29 to 54 percent apply for the four specifications respectively (compare chapter 3.8.2 above). In contrast to import data, exports to ROW grew somewhat less strongly, from slightly above two billion USD to between seven and eight billion USD depending on the specification chosen. Putting the astonishing EAC intra-regional growth in this context of general export growth of the EAC economies again certainly cautions against too strong enthusiasm. Focusing again on trade shares, however, shows that in fact for three of the four specifications the export share of the EAC is significantly larger than the ten percent rule-of-thumb alluded to by so many authors. For statistics including tariff line 27 the tendency must be primarily described as oscillating (between 16 and 23 percent) with a slight growth tendency from below to above 20 percent and around 15-16 to around 17-18 percent for direct and mirror statistics respectively. However, it is again sensible to exclude petroleum exports because of its huge influence on the total trade volume and because there is no production of petroleum inside the EAC (yet) and thus trade in petroleum is highly likely to consist of hidden re-exports. Such exclusion gives a much more positive picture for the relative growth of intra-regional exports as it appears to be growing from roughly 15 percent to almost 20 percent. Mirror statistics indicate a much lower level in
the initial stage of below 10 percent, but this share is likewise strongly growing to more than 15 percent. However and interestingly, the relative export share of EAC intraregional exports compared to other SSA exports slightly declined (see Figure 12).

**Figure 12: Regional export shares for the EAC**

![Graph showing regional export shares for the EAC](image)

Source: Author, data source Comtrade/WITS.
Notes: Volumes of total trade in thousand USD. Data marked “Mirror” are import data. Data marked ‘ex 27’ exclude HS 1996 two digit tariff line 27, i.e. petroleum and gas.

This tendency appears to have come to a hold in 2005/2006, possibly indicating that the implementation of the EAC scheme had in fact a positive influence on intra-regional exports. All this suggests that there is indeed strong growth in regional exports, but that a large part of this upward trend is simply a corollary of universal growth in trade. Nonetheless, according to most specifications chosen in our analysis the regional trade share is in fact also growing, particularly when excluding petroleum and gas from the calculations. As shortly mentioned in the NC discussion on import statistics above this might be seen as a good sign as possibly a general, unrelated tendency for rising ROW imports has been mitigated by rising exports inside the region. In other words, these data suggest that the intra-regional import share had significantly fallen if EAC tariff liberalisation had not taken place.

However, from a dynamic perspective this is not necessarily a good sign. It may well be argued that this suggests that the so much hoped for learning by doing involved in regional exports may not have taken place and new exports remained largely confined to the region as competition, economies of scale and learning have apparently not led to global competitiveness to enable ROW exports. A more sanguine interpretation would be that growth in regional exports may have been taken place in non-traditional
products that are more likely on a regional level – and the leap towards the global economy may still be to come and simply take more time. Some part of this question will be answered below when disaggregating trade according to product categories and sectors.

Focusing on individual partner countries reveals that, in contrast to the surprisingly low levels of Kenyan imports, the country’s influence on regional exports of the EAC can hardly be overestimated. Kenya’s regional exports make up a lion’s share of the intra-regional trade and thus the development of the intra-regional export share of Kenya almost directly translates to the respective development of EAC export shares overall (see the first two graphs in annex 5). While all countries again show growing regional exports in absolute terms, the relative export shares convey a considerably different trend than the import shares (see annex 5). Kenya’s significant growth in regional imports is not mirrored by likewise strong relative export growth, but by stagnant regional export shares with small gains or losses depending on the measure taken (Kenyan statistics show a volatile stagnancy for total trade and a slight gain for trade excluding tariff line 27. Mirror statistics show a decrease for total trade and an increase for trade excluding tariff line 27). This appears to corroborate the impression that Kenya has been on the losing side. However, increasing exports to ROW may partially explain this trend and would even portray Kenya as the most successful country that does not have to exclusively rely on the regional market anymore and has proven able to compete globally. However, this appears not to be the case as Kenyan ROW exports did not grow significantly stronger than those of its neighbours are. Another possible explanation for this decline is that less re-exports from Kenya are being mis-specified following integration and harmonization steps. Tanzania’s already initially considerable regional trade surplus of more than a billion USD and the intra-regional export share between three to seven percent have increased. While the development until 2009 appears to be quite consistent across the four specifications, Tanzanian statistics show a further increase to eleven to twelve percent in 2010 while mirror statistics indicate a decrease to seven to eight percent during the same period. Statistics for 2011 that are available for Tanzania, but not for all other EAC countries, reconcile this divergence with all four specifications locating the Tanzanian export share at roughly nine percent. Thus, there appears to be in fact a significant relative regional export growth for the Tanzanian economy, however from rather low initial levels. In contrast to the declining Ugandan import shares, intra-regional export shares grow from very low levels according to mirror statistics (four percent) and from moderately low levels according to Ugandan statistics (14 to 19 percent) significantly to 15 and 30 percent respectively. However, there is a surprising decline in the mirror statistics from 2008-2010 from 25 to 15 percent that does not match the continuous growth in the Ugandan statistics from 2006-2010. The Rwandan export statistics show a major inconsistency between original and mirror statistics with the former indicating very volatile and heavily inflated figures. In absolute terms, still all four specifications show an increase in regional exports, particularly the mirror statistics show that this has particularly taken place from 2005/2006 onwards. Due to in parallel rising ROW exports, the (probably inflated) Rwandan statistics show a major decline from an unrealistic 60-80 percent to below 30 percent. However, the in this case more reliable mirror statistics still show a marked relative increase from 2005/2006 onwards, increasing Rwanda’s regional export share from a midget level of around one percent to four percent, doubling in 2010 alone to even more than eight percent (a trend that is
however not confirmed with the currently available, yet incomplete 2011 data). Like in the case of Rwanda, Burundian export statistics seem to be very unreliable and overestimated when compared with mirror statistics. However, all four specifications consistently show a marked increase from 2005/2006 onwards, more than doubling the regional share from two to five and from six to over 15 percent respectively. In consequence, the trends in exports in general corroborate the picture on winners and losers from the NC analysis: Kenya appears to have lost some of its initial very strong dominance on the regional market. Tanzania and Uganda appear to be clear winners, while the Rwandan and Burundian weak position in the NC analysis appears to be somewhat mitigated by the steep increase in regional export shares of both countries in all specifications (safe for the very unrealistic export statistics that Rwanda has reported and that run counter to the in our view in this case more reliable mirror statistics).

5.4.2.2 Directions of trade in the EAC

Particularly in order to get an even better insight into the question of winners and losers we additionally compile some data on the direction of regional trade in order to show which countries gain in exports to which partner state. We calculate the percentage of total regional exports and indicate both origin and destination, again as 2000-2005 vs. 2006-2010 averages and with data for total and total ex 27 trade separately.

As a starting point, annex 5a depicts the balance of power in the regional bloc both prior to integration and post integration. In all four specifications, Kenya is initially the only country with a regional trade surplus with regional exports outmatching regional imports by 3.7 and 2.5 times for Kenyan statistics and by towering 17.9 and 9.7 times for mirror statistics (including and excluding tariff line 27 respectively). All four other countries show regional trade deficits in all four specifications, ranging from around a quarter for Uganda and Burundi to slightly below and slightly above a half for Tanzania and Rwanda in the total trade specification. When tariff line 27 is excluded, all four figures improve to more than a third for Burundi and Uganda and to 55 and almost 50 percent for Tanzania and Rwanda respectively. Mirror statistics show an even more skewed picture with particularly Rwandan and Burundian regional exports dropping to a mere 1.3 and 1.1 percent of its regional import levels. The Ugandan trade deficit is likewise strongly affected, more than halving regional exports compared to imports to one eighths while the figures for Tanzania only slightly shrink.

Although the exclusion of tariff line 27 again improves the figures for all four countries, only the Ugandan figures improve significantly to a level almost comparable to the non-mirror statistics. Despite these very inconsistent values across the four specifications, Tanzania and Uganda consistently show a positive development in its regional trade balance, significantly decreasing their regional trade deficits. Burundi likewise shows a positive trend from very low levels in three specifications with the ex-27 specification showing a steep increase of the deficit. For Kenya, the same specification is the odd one out indicating a slight trade surplus increase while in all three other specifications a significant decrease of the regional trade surplus has to be observed, although the figures remain high compared to the other countries due to Kenya’s significant head start. Rwanda shows an increase in its regional trade deficits for its own statistics and a stagnant tendency with small improvements for mirror
statistics. This seems to imply again that the by far leading economy in initial trade appears to have lost some of its unrivalled dominance during the EAC implementation while Uganda and Tanzania clearly have gained ground. The results for Burundi and Rwanda again appear to be somewhat less conclusive given the huge differences between own and mirror statistics and the resultant contradictory trends. Annex 5b-5e further illustrate between which countries the changes have mainly taken place. In absolute terms particularly Tanzanian trade to Kenya and Ugandan trade to Rwanda increased. To a lesser extent and not in all specifications, Tanzanian and Ugandan trade to all other three destinations also appears to have been on the winning side. The clearest reductions in absolute terms have to be noted for Kenyan trade to Uganda followed by Kenyan trade Tanzania and Burundi as well as Rwandan trade to Uganda and Kenya. In relative terms, trends are not as consistent across specifications, but Burundian, Tanzanian and Ugandan trade to all locations, as well as trade to Rwanda, Burundi and Kenya appears to be strongly represented on the plus side. The huge losses of Kenyan exports in absolute terms are considerably mitigated in this relative calculation, as the total levels are still very high.

5.4.2.3 Sectoral disaggregation (I): CIP rankings

The first attempt to get meaningful information on the dimensions of trade development with regards to dynamism, structural change and competitiveness that we follow is UNIDO’s CIP. In general, changes in the CIP are relatively rare, as countries’ competitiveness appears not to be changing overnight. From 2000 to 2011, only 16 countries won ten or more places while an equally large number, 17 lost more than 10 places. Another eleven countries won six to nine places and 26 were just so on the winner side with one to five upward movements. Despite their already very weak initial ranking, African countries are on average on the losing side with 19 of the 26 rated countries not progressing or losing and only seven countries on the winning side. The results for the four ranked EAC economies (Burundi has been excluded for reasons of data availability) are again quite eye opening and by and large conform with our results discussed above in this section (as well as the NC analysis).

Despite slightly improving its score and some better results in the early 2000, Kenya has lost ground, but only very slightly, moving from global rank 102-104 to 105. The same applies for Rwanda that also won slightly in the score, but moved up one place from 126 to 128 – albeit somewhat improving post 2006 from a hike to place 129. In both cases, the losses are a result of additional countries providing data after 2000, but both countries seem not to have successfully managed to improve in this regard. This is particularly surprising and somewhat alarming as Kenya thus apparently not only lost ground on the regional market, but also did not improve with regard to global competitiveness (and the loss in regional export shares thus appears to be part of a genuine reduction rather than a move from the regional to the global sphere. Tanzania and Uganda in contrast, have been much more successful. Starting off from very weak 2000-2005 rankings of 119-121 for Tanzania and 123/124 for Uganda, the former improved considerably and consistently to a 112/113 ranking immediately after EAC integration took off, the latter improved somewhat more moderately and only recently to a rank of 117. Both countries are thus among the top 5 African improvers (together with Nigeria, Mozambique and Congo) and even in a global comparison among the
best quarter of improvers. To achieve this, the Tanzanian CIP score more than doubled (226 percent) while the Ugandan more than tripled (352 percent).

Table 20: CIP rank gains and losses, global and African countries

<table>
<thead>
<tr>
<th>Ranks</th>
<th>Global</th>
<th>African countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-22</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>10-14</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>6-9</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>1-5</td>
<td>26</td>
<td>2</td>
</tr>
<tr>
<td>0-5</td>
<td>40</td>
<td>11</td>
</tr>
<tr>
<td>6-10</td>
<td>21</td>
<td>7</td>
</tr>
<tr>
<td>Over 10</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>26</td>
</tr>
</tbody>
</table>

Source: Author, data source UNIDO.
Notes: Rank gains from 2000 to 2011. For countries without CIP score for 2010 the oldest available data point after 2010 has been utilised in the calculations.

5.4.2.4 Sectoral disaggregation (II): Manufacturing exports and technology content

Being a multidimensional index to measure global competitiveness rather than effects of regionalism or other policies, the CIP index is somewhat biased towards large countries as two of its six or eight dimensions (the 'structural change' and 'industrial deepening' components are merged into composite indicators for the trade and production dimensions respectively) measure the impact of a nation's manufacturing (MVA) production and exports on the global manufacturing production and trade. In addition, it has a strong production side dimension that is only indirectly related to trade and thus integration – but with focus on dynamic effects of course of prime importance (see next section below on investment and productivity measures). Therefore, it appears to be worthwhile to have a look at selected indicators of the CIP separately, namely 'manufacturing exports per capita', ‘share of manufacturing exports in total exports’, ‘share of medium and high tech in total manufacturing exports’ as well as 'share of world manufacturing exports (see annex 6)'. In all four dimensions all four EAC economies for which the UNIDO CIP index provides data (Burundi is not included) unsurprisingly fare fairly poorly with ranks in the high two or even three digits (with only 134 countries in the CIP). However, some differences in the categories and particularly distinct differences in the developments from 2000 to 2011 of the individual partner states are quite interesting – and the overall trend appears to be surprisingly positive.

With regard to manufacturing exports per capita the position of all four economies is the weakest, with Kenya’s 117th rank in the year 2000 (median rank 115 for 2000-2005) still far ahead of the three other economies at the very bottom (ranks 126-131 of 134 for 2000 and 126-129 for 2000-2005 median ranks). However, particularly Uganda and Tanzania have improved moderately in the period following the EAC CU implementation in 2006, jumping five to seven ranks and thus placing in the best third or even the best fifth of the best improvers (depending on choice of median or year values). Kenya’s and Rwanda’s ranking in contrast have largely remained stagnant. This somewhat masks a remarkable growth of the actual value improvements as this growth has taken place in a dynamic global environment with all but a very few countries increasing their manufacturing exports per capita. Kenya shows a growth of
240 percent at median values (330 percent year to year) while Rwanda managed a cumulated growth of 330 percent at median values (with an outlier-related year-on-year growth of 1.850 percent). Tanzania again fare extremely well with accumulated growth of 510 and 730 percent for median values respectively and thus annual growth rates of 46 and 66 percent respectively, putting them into third and fifth place of the strongest relative value improvers.

Initial and final ranks and values for the share of manufacturing exports in total exports are somewhat better, indicating a relatively low level of overall exports. Tanzania, Uganda and Rwanda considerably improve with a jump of 20, 23 and 14 (17, 41 and 39 year-on-year) places respectively, thus all placing in the top-10 and top-20 for all specifications. In consequence Tanzania doubled and Uganda more than tripled (year-to-year even multiplied by six) their initial values. Rwanda has a surprisingly good initial position (safe for the year 2000) and results are therefore somewhat conflicting, but overall Rwandan data again suggest a very good development as well, placing it at par or even ahead of Kenya in recent years. Kenya again fares less well and largely stabilised its value, thereby marginally improving its overall ranking. Compared to the two dimensions discussed above, the East African economies performed less well with regard to the share of medium and high tech in total manufacturing exports. Particularly the median values only show slight rank jumps for Tanzania (9) and Kenya (5), stagnation for Rwanda and a surprising loss of Uganda of 20 ranks (while year-to-year values even show an outstanding 26 value gain). For value improvements Tanzania at least ranks 13th and Kenya 26th with 210 and 150 percent growth respectively. These weaker improvements appear to imply that while the East African economies have been successful in improving their manufacturing export share, they have largely not yet been able to also venture into more sophisticated products and sectors. Finally, the share in global manufacturing exports is a strong reminder that the East African manufacturing exports are despite these stunning developments absolutely peripheral. Even when adding the four economies into a joint EAC category they would only make up 0.02 percent in 2000 and, albeit the stunning growth of tripling or doubling the share (year-on-year and median values respectively), still less than 0.05 percent in 2011. Overall, Kenya appears to have a head start in all categories, but in most of them, the initial advantage is much less pronounced than could be expected. Although all countries show improvements in absolute terms and most also show relative increases and thus jumps in ranks, Kenya appears to be improve more slowly than particularly Tanzania and Uganda (and Rwanda, although again the figures are quite volatile). The initial gap thus closes considerably, in some dimensions Kenya is even overtaken by one or two of the other EAC economies. Some part of the very good performances in value and to a lesser extent also in rank improvements are certainly due to a base effect. However, even when considering these low initial levels, the improvements are quite noticeable and most other competitors in- and outside Africa who started at comparably weak initial positions appear to have been outperformed by Tanzania and Uganda. Kenya is still the most important and furthest developed industrialised economy in this regard, although particularly Tanzania is very important player now as well. While Kenya made up almost four fifth of manufacturing exports in 2010, this ration fell to below a half in 2010 with Tanzania almost doubling its share from one sixth to a third.

Instead of using the CIP and its components, product export value approach could be used. This approach has been introduced by Hausmann, Hwang & Rodrik (2007) and
attaches a value to every (6-digit) tariff line by calculating the average GDP per capita of a country that exports this specific product. However, such an approach appears to be problematic given the very volatile trade statistics of the countries under investigation. As manufacturing and high tech manufacturing are likely to contain significant parts of the product groups with high export values as classified by the Hausmann, Hwang & Rodrik methodology, it can confidently be assumed that the results would not have been very dissimilar for such an alternative approach.

5.4.2.5 Sectoral disaggregation (III): Manufacturing exports and intra-regional trade

However, not only because of these rather mixed results for the individual economies, but also because of attribution problems it is difficult to prove or to disproof that these in general positive tendencies are really (at least to some extent) a result of regional integration. Devlin & Ffrench-Davis argue with specific focus on Latin America that intra-regional exports among developing countries are more intensive in manufacturing and technology content than extra-regional exports (Devlin & Ffrench-Davis, 1998: 27ff; compare also Buitelaar, 1993). In the following, we test whether this is true for the EAC economies. In addition, we test whether or not the post-integration phase provides evidence of a disproportional growth in these areas.

As Table 21 indicates, intra-regional exports of all five individual EAC countries and the regional bloc as a whole are indeed quite noticeable. Save for some values for Rwanda and Burundi, the mirror statistics show levels consistently above 40 percent (direct export data are more volatile between 16 and 56 percent, see column A). In contrast, the values for global exports (including regional exports) reach up to a quarter only for Kenya, the remaining economies show values below or around ten percent across the board (column D). Consequently, with the exception of one out of the four specifications for Rwanda, intra-regional exports are more intensive in manufacturing than overall exports for all countries in all four specifications, in most cases ranging from 2 to almost 3, indicating that regional manufacturing is twice or three times as high as the global one (see column G).

With regard to the second question, whether or not regional integration and/or other factors have led to a further increase of this greater relative intensity, the answer is not as clear-cut as in the case of the first question. Again disregarding Rwanda and Burundi where volatile data hint in both directions, Kenya shows a moderate, yet consistent growth of its intra-regional manufacturing export intensity by 1.2-1.5 times, reaching levels of around two thirds in the 2006-2011 period. Tanzania and Uganda both show very strong growth of two to three hundred percent in the intensity for export statistics, but only moderate ones for mirror statistics (1.1-1.2 times the original levels).

As the mirror statistics were much higher than export statistics in the first phase, both values converge for both countries at levels around 50 percent for Tanzania and 40 to 50 percent for Uganda. The value for EAC thus rises significantly from 40 to 60 percent (see columns B & C).

However, manufacturing intensity for extra-regional exports also rises, albeit for most countries less steeply. Burundi and Rwanda arrive at levels of 10 percent while Kenya increases its 30 percent share by a further five percentage points. Tanzania shows a reduction in mirror statistics while export figures show a strong increase by 1.5-1.7 times the initial values, arriving at 14 and 17 percent for mirror and export statistics.
respectively. Uganda experiences the most significant growth in the global manufacturing intensity with increases by 1.9 to 3.4 times, lifting the initially very low levels at least to 13 to 24 percent.

Table 21: Share of manufacturing trade, regional vs. global

<table>
<thead>
<tr>
<th>Exporter</th>
<th>Share of manufacturing in intra-regional exports</th>
<th>Share of manufacturing in total exports</th>
<th>Relative intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-integration</td>
<td>Post-integration</td>
<td>Change (B/A)</td>
</tr>
<tr>
<td>Burundi</td>
<td>Export median</td>
<td>2.5%</td>
<td>18.1%</td>
</tr>
<tr>
<td></td>
<td>mean 4.6%</td>
<td>20.3%</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>Mirror median</td>
<td>30.6%</td>
<td>17.1%</td>
</tr>
<tr>
<td></td>
<td>mean 32.4%</td>
<td>20.8%</td>
<td>6.6</td>
</tr>
<tr>
<td>Kenya</td>
<td>Export median</td>
<td>52.7%</td>
<td>69.5%</td>
</tr>
<tr>
<td></td>
<td>mean 56.0%</td>
<td>69.2%</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>Mirror median</td>
<td>42.0%</td>
<td>64.1%</td>
</tr>
<tr>
<td></td>
<td>mean 41.7%</td>
<td>63.4%</td>
<td>1.5</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Export median</td>
<td>3.3%</td>
<td>5.9%</td>
</tr>
<tr>
<td></td>
<td>mean 13.8%</td>
<td>6.7%</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Mirror median</td>
<td>71.9%</td>
<td>40.6%</td>
</tr>
<tr>
<td></td>
<td>mean 69.2%</td>
<td>37.0%</td>
<td>0.5</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Export median</td>
<td>26.3%</td>
<td>58.5%</td>
</tr>
<tr>
<td></td>
<td>mean 26.6%</td>
<td>56.7%</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>Mirror median</td>
<td>43.2%</td>
<td>49.4%</td>
</tr>
<tr>
<td></td>
<td>mean 43.7%</td>
<td>47.7%</td>
<td>1.1</td>
</tr>
<tr>
<td>Uganda</td>
<td>Export median</td>
<td>13.1%</td>
<td>38.6%</td>
</tr>
<tr>
<td></td>
<td>mean 16.0%</td>
<td>38.6%</td>
<td>2.4</td>
</tr>
<tr>
<td></td>
<td>Mirror median</td>
<td>43.7%</td>
<td>53.8%</td>
</tr>
<tr>
<td></td>
<td>mean 41.4%</td>
<td>50.1%</td>
<td>1.2</td>
</tr>
<tr>
<td>EAC</td>
<td>Export median</td>
<td>45.6%</td>
<td>58.9%</td>
</tr>
<tr>
<td></td>
<td>mean 43.9%</td>
<td>57.7%</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>Mirror median</td>
<td>42.3%</td>
<td>59.7%</td>
</tr>
<tr>
<td></td>
<td>mean 42.0%</td>
<td>58.5%</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Source: Author, data source WITS.

In total, the EAC as a bloc thus slightly increases the global intensity to levels around 25 percent (export statistics slightly above, mirror statistics slightly below that value, see columns E & F). In consequence, all countries (safe for Rwanda mirror statistics) again show a higher intra-regional manufacturing export intensity than in the initial period (see column H).
However, the only pronounced regionalizer in respect to manufacturing exports appears to be Tanzania with higher relative growth rates for the region of around 30 percent. Burundi again shows a very unspecific and volatile pattern while for Rwanda and Uganda the growth of regional manufacturing exports appears to have been overshadowed by even stronger growing global manufacturing exports. For Kenya and, due to the Kenyan dominance also for the overall EAC figures, the export figures show a reduction due to strongly growing extra-regional exports, but for mirror statistics also a considerable regionalisation tendency is detectable (see column I).

When abstracting from the relative values and focussing on absolute manufacturing growth instead, the tendency towards a regionalisation in manufacturing trade appears less pronounced as both intra- and extra-regional manufacturing exports grow strongly (see Figure 13). This implies that the intra-regional manufacturing export share in total EAC exports did not experience such a clear growth tendency.

As Figure 14 shows, export data indicate a strong drop from more than 50 percent in 2000 to below 40 percent in 2006 but consistent recovery to almost again 50 percent following integration. Mirror statistics are much lower in the first period and show a slight drop from 35 to 30 percent until 2004 and likewise consistent and in fact even stronger growth thereafter, reaching approximately the same levels as exports statistics from 2006 onwards. However, these surprisingly positive relative figures should not belie the fact that the East African economies still only provide for a very insignificant part of its own manufacturing consumption. The strong values reported above are partially a result of the overall weak trade performance and particularly the above reported overall trade deficit. When comparing the ratio of intra-regional
manufacturing imports (instead of exports) to manufacturing imports worldwide, the regional percentage falls below the ten percent mark.

**Figure 14: EAC intra-regional manufacturing export share**

For import statistics the values oscillate between 4.5 and 6 percent without clear growth tendency in the past years (safe for a jump in 2008 that has however been lost again in 2010) while mirror statistics show considerable growth of the ratio from six percent in 2004 to nine percent in 2009/2010. This is on the one hand certainly a damper to high hopes that may be entertained given the strong absolute and relative manufacturing export growth discussed above. On the other hand, it clearly shows the huge untapped potential in this area for regional producers (see Figure 15).

**Figure 15: EAC intra-regional manufacturing import share**
5.4.2.6 Sectoral disaggregation (IV): ‘complexity’ and diversification

Although there are a considerable number of additional proxies, approaches and comparisons that could be utilised, we only focus on one last indication. As discussed above, diversification appears to be a very important aspect particularly for countries in earlier stages of development (Bahar, Hausmann & Hidalgo 2013; Imbs & Wacziarg, 2003) and specialisation in sophisticated goods that few countries are able to produce offers large potentials. Analysing the rankings and particularly the changes in ranking in the ‘atlas of economic complexity’ (Hausmann, Hidalgo, Bustos, Coscia, Chung, Jiminez, Simoes & Yildirimet, 2012) produces staggering results. The three East African countries that are included in the calculations of the Economic Complexity Index are at first glance in a rather disadvantaged position. In 2008, Kenya leads the pack on position 70 with Uganda and Tanzania following on positions 84 and 92 of 125 countries respectively. However, among their peer group of countries below 1,000 USD and 2,000 USD GDP per capita their rankings are among the top ranks. In addition, these positions are tremendous improvements compared to 2000 data. In a ranking of best improvers in value terms Kenya turns out at third place with Uganda and Tanzania following suit on ranks eleven and twelve with only Senegal being another African country in the top-10 (Senegal) and only another three in the top-30. With regard to rank improvements Kenya again scores a third place with Uganda and Tanzania in an even better position at rank nine and eleven respectively.

Even more startlingly, the three countries perform extremely well in the growth potential estimations that are estimated by ‘a country’s current level of aggregate output (GDP per capita) and their level of economic complexity’ (Hausmann, Hidalgo, Bustos, Coscia, et al., 2012), particularly when compared to their African peers. In general, two regions appear to be very well positioned in this regard, namely East Asia and Eastern Europe with the bottom occupied by many developing countries, among them African ones such as Sudan, Angola and Mauritania, where the complexity of their economies does not provide a basis for future economic growth, and, where changes in income are dominated by fluctuations in the price and volume of natural resource activities (Hausmann, Hidalgo, Bustos, Coscia, et al., 2012: 69).

It has to be borne in mind that the projection is based on the assumption that natural resource exports

will remain constant in real terms at the high level achieved in 2008. We believe this hypothesis is reasonable on average, as commodity prices were unusually high in 2008. To the extent that prices deviate from this assumption, so will growth. We do not include information regarding the changes in the extraction volumes of natural resource in the different countries, so we will tend to underestimate growth in countries where natural resource production is expanding faster than population and overestimating it where it is falling (Hausmann, Hidalgo, Bustos, Coscia, et al., 2012: 69).

Only coming second to the historically very diverse and for political reasons seriously underperforming Zimbabwean economy, Kenya’s estimate is the second best for Africa with a stunning annual projected GDP per capita growth rate of 3.46 percent from 2009-2020 (compared to meagre 0.9 percent from 1999-2009), thus occupying the 13th overall place in the world. Uganda boosts of a likewise promising third African and 24th global rank with an annual estimated GDP per capita growth rate of 3.29 percent (that even just falls short of the realised annual growth rate of 3.7 percent in
the first decade of the century). Tanzania’s figures are somewhat less sanguine but a fifth Asian rank and a 35th global position with an average GDP per capita growth rate of 2.93 percent (actually almost exactly continuing the growth rate realised in the previous decade) is still more than notable. For GDP values, the dominance of the African economies is even more stunning. Partially driven by their stronger population growth in comparison to other countries with diversified economies, but still relatively low GDP levels from East Asia and Eastern Europe, they occupy the first three ranks on a global scale, leading a group of mostly African countries with GDP growth values of 6.41 percent for Uganda, 6.1 percent for Kenya and 6.07 percent for Tanzania (compared to values of 6.41, 0.9 and 3.8 percent for the previous decade respectively). Although there are certainly many factors and obstacles that might come in the way of realising these potentials, the outlook appears to be quite rosy – particularly as in all likelihood additional gains from natural resource discoveries will have to be added in some or all of the countries.

5.4.2.7 Sectoral disaggregation (V): diversification and new trade

The for our purposes most important question remaining is whether or not regionalism has aided in reaching such an advantageous position or not. In our view, this would have to be visible in trade data. In other words, the question remains whether or not regional exports were instrumental in increasing the export portfolio in general (diversity) and to sophisticated products that fewer countries are able to export (ubiquity) in particular. This would be the case if tariff lines with previously zero export values were more frequently transformed into positive intra-regional than into ROW exports. A related question concerns the question whether such new intra-regional exports have consistently led to ROW exports, thus supporting the learning by doing and learning from exporting hypothesis. A major problem in this regard is again the in this work already often encountered volatility and poor quality of (African) trade statistics, in particular with regard to the failure to properly exclude re-exports from the export values. However, particularly the level of aggregation poses serious challenges. On the one hand, the volatility becomes larger the lower the level of aggregation gets. On the other hand, new products tend to be very specific and specialised and even the most disaggregated trade figures are likely to show only a small part of these processes, as too many product innovations must be assumed as falling into broader tariff line categories where exports already existed so that an increase in the previously exported goods cannot be distinguished from (local) product innovations.

Table 22: SITC chapter 7 tariff lines with intra-regional trade

<table>
<thead>
<tr>
<th>Year</th>
<th>&lt; 1k USD</th>
<th>1-10k USD</th>
<th>10-100k USD</th>
<th>100k-1 mio USD</th>
<th>&gt; 1 mio USD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>21</td>
<td>49</td>
<td>75</td>
<td>44</td>
<td>4</td>
<td>193</td>
</tr>
<tr>
<td>2010</td>
<td>13</td>
<td>26</td>
<td>68</td>
<td>59</td>
<td>29</td>
<td>195</td>
</tr>
<tr>
<td>(2001)</td>
<td>23</td>
<td>36</td>
<td>86</td>
<td>42</td>
<td>6</td>
<td>193</td>
</tr>
<tr>
<td>(2009)</td>
<td>15</td>
<td>29</td>
<td>61</td>
<td>77</td>
<td>28</td>
<td>210</td>
</tr>
</tbody>
</table>

Source: Author, data source WITS.
Notes: SITC. Rev. 3, 4-digit tariff lines of chapter 7 (manufactured products).

The same applies for the Hausmann, Hidalgo, Bustos, Coscia, et al. (2012) data and at least the improvements shown in their analysis should be possible to break up into
purely intra-regional, directly ROW and learning by exporting (first intra-regional, later ROW) effects. A short look at the data however confirms that such an analysis is unfeasible given the current data quality and/or aggregation levels. For example, of the 214 SITC (Rev. 3) 4-digit tariff lines in section 7 (machinery and transport equipment) traded worldwide in 2010, 212 are also traded into the EAC and 195 are according to the data traded in 2010.

Almost all of the very few tariff lines not traded in 2010 were traded intra-regionally some time or another between 2000 and 2010, for example the year 2009 alone shows 210 tariff lines with intra-regional trade. In consequence, only very few examples can be detected in which exports possibly began as a result of regional integration (and most of them are not even consistent when comparing export and mirror statistics). However, it must be assumed that many non-declared re-exports are hidden in these data. For example, a considerable proportion of the tariff lines shows intra-regional trade of below 10,000 USD per annum and is thus unlikely to be a genuine export industry of the respective countries given economies of scale requirements. However, even in the categories with higher trade volumes it must be assumed that sizable re-exports are hidden (see Table 22). Interestingly, this even seems to be the case for ROW exports as mirror statistics indicate that the EAC bloc exports 196 of the 214 tariff lines in 2010. Even when subtracting all SSA countries, the value is still unrealistically high at 171 tariff lines. Consequently, this also forecloses any analysis of upgrading exports from the region to ROW. When setting a minimum threshold for exports at 100,000 USD the number of chapter seven tariff lines with regional EAC exports is slightly reduced to 143 with just above 100 of them exported in the year 2010. However, of these 143 tariff lines less than 20 percent were not exported with values above 100,000 EUR prior to 2006 while they were at least in 2006. More than half of these 143 tariff lines were exported in such large quantities both prior to 2006 and in 2010, many of them however with a very volatile pattern. Interestingly, the number of tariff lines with previous exports above the threshold but with lower exports than the threshold in 2010 was greater than the new export category with almost 30 percent. Setting the threshold even higher at a minimum of exports of one million USD reduces the number of chapter seven tariff lines to 50. Of these, 30 percent were exported both prior to 2006 and in 2010, the majority of them again following an unsteady off-and-on pattern. Of the 28 percent that were exported in such a quantity before 2010 but not in 2010, two thirds were only exported after 2005 and thus could be seen as potential export attempts that turned out unsuccessful. Interestingly, safe for one tariff line all tariff lines in this category only reached the one million value in a single year (79 percent) or two years (14 percent). The one million threshold results in the strongest percentage of new exports post integration with 42 percent of the tariff lines ever reaching this value. However, this appears to be to a large extent a very recent phenomenon, as 40 percent only report such values for 2009 and 2010 and another 40 percent for only 2010. This may indicate that such attempts have been recently introduced, but it may also be due to reporting-related mistakes and one time hikes or simply growth at the intensive margin that just happened to surpass the threshold of our measurement of the extensive margin. We would claim that most likely the pervasiveness of undeclared re-exports is the major problem for such an analysis. Alternatively or in addition, the level of aggregation is also too high, but we believe that for many products the level appears to be actually appropriate. A third alternative explanation would be that simply the EAC is
already producing and exporting almost all manufactured goods and therefore no dynamism in such a regard can be expected – a claim that is in our view highly unrealistic. In other words, the introduction of new goods to the (regional or ROW) portfolio can in our view hardly be traced via trade data, at least given their current quality. This implies that it would be more feasible to rely on production data and/or case study approaches in this regard.

### 5.4.2.8 Foreign Direct Investment

Finally, a short look at FDI figures is attempted. Unfortunately, FDI data appear even less complete than trade data and in many databases the different source countries, in others the different sectors of FDI are not consistently differentiated. In addition and again in contrast to trade, it is difficult to predict whether intra- or extra-regional FDI should be expected to rise more strongly. The reasons for this ambiguity is that this depends on whether rules for investment are more strongly eased for the region or not, whether tariff-jumping plays an important role and whether other factors outside the realm of regionalism drive investments (such as for example new discoveries of natural resources). Nonetheless, both stronger external FDI growth and growth in non-primary (and non-service) sectors may be seen as hinting to tariff-jumping while regional investments may be seen inter alia as an indicator for preferential regional treatment, better promotion inside the region or missing trust in reforms, governance and economic prospects from investors outside the region. Independent of the source in- or outside the region any investment in non-primary sectors, particularly in manufacturing and services, may be seen as indicating market searching investments.

### Table 23: OECD FDI outflows into EAC as percentage of SSA, Africa & global

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>1.64%</td>
<td>0.61%</td>
<td>0.02%</td>
<td>0.002%</td>
</tr>
<tr>
<td>Kenya</td>
<td>68.93%</td>
<td>58.95%</td>
<td>0.70%</td>
<td>0.0071%</td>
</tr>
<tr>
<td>Kenya (until 2009)</td>
<td>65.69%</td>
<td>2.40%</td>
<td>1.18%</td>
<td>0.003%</td>
</tr>
<tr>
<td>Rwanda</td>
<td>0.62%</td>
<td>0.74%</td>
<td>0.01%</td>
<td>0.0001%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>16.19%</td>
<td>22.72%</td>
<td>0.17%</td>
<td>0.0017%</td>
</tr>
<tr>
<td>Uganda</td>
<td>12.12%</td>
<td>16.98%</td>
<td>0.12%</td>
<td>0.0013%</td>
</tr>
<tr>
<td>EAC</td>
<td>1.02%</td>
<td>3.02%</td>
<td>0.76%</td>
<td>0.0041%</td>
</tr>
<tr>
<td>EAC (until 2009)</td>
<td>3.66%</td>
<td>1.80%</td>
<td>0.30%</td>
<td>0.0309%</td>
</tr>
</tbody>
</table>

Source: Author, data source OECD.

Looking at the relatively well developed OECD outward investment flows and stocks shows that the EAC improved its worldwide share in OECD investments from a miniscule 0.01 percent to 0.025 percent (or even to 0.3 percent if the poor performance in 2010 is excluded that is due to a steep fall in investment into Kenya).

Similarly, the share in OECD investment into Africa was likewise doubled, from an again very low 0.76 percent to 1.42 percent (or 1.8 percent until 2009). The values for SSA are even a bit better with a tripling from 1 to 3 percent – but the figures are still extremely low with most investments going to South Africa (and to a lesser extent Mauritius and Nigeria. A comparison of the East African countries reveals that the initially extremely dominant investments into Kenya from almost 69 percent to 59 percent (66 percent if 2010 is excluded). The main winners are Uganda (12 to 17
percent) and particularly Tanzania (17 to 23 percent) while Rwandan values rose slightly and the Burundian were subject to a steep decline. Interestingly, a similar analysis of OECD FDI stocks shows stagnation for the share in global OECD investment and small declines in the share in OECD FDI into Africa and SSA, with losers and winners in the EAC as depicted above. Relying on UNCTAD data instead and thus extending the focus also to non-OECD investments shows a very strong growth of annual FDI inflows for all four countries but Burundi, particularly from 2005/2006 onwards and thus coinciding with the implementation of the CU, but not the CM (see Figure 16).

Uganda and Tanzania make up the lion’s share of these FDI inflows and particularly the consistently poor performance of Kenya is very noticeable, particularly when compared to the OECD data discussed above, indicating that underreporting is likely to have taken place here to a very large extent. However, these years mark at the same time a very strong growth period in global FDI as well as in FDI towards non-EAC SSA markets. Consequently, the developments of the relative shares of EAC countries in FDI flows to the world, Africa and SSA perform only moderately well. When compared to global FDI the strong additional boost in 2006/2007 is still clearly detectable with EAC-wide average values of between 0.1 and 0.15 percent increasing to 0.2 in 2009 and even 0.3 in 2012 (see Annex 7a). However, this seems to be largely a result of a general growth trend for African markets as the percentage of the EAC compared to the whole African market only slightly increases from 2010 onwards and the percentage of EAC inward FDI of the SSA market showing two peaks, one around the millennium and another one in recent years. When aggregating and averaging the FDI flows into three periods and thus smoothing the volatile data, the apparent relative success of the EAC becomes somewhat better visible (see Annex 7b).

Figure 16: FDI flows into EAC countries, African countries and global flows

Inward stock shows likewise an extremely steep increase for most countries from ca 1997 onwards and another boost in 2006/07 with particularly Tanzania and Uganda performing well. Rwanda and Kenya likewise display growth in their FDI stocks – but again the latter comes third in absolute terms with a huge shortfall compared to Uganda and Tanzania and the former attracts only small amounts in absolute terms (see Figure 17) due to its small size, despite very good relative figures.

When setting these growth patterns into perspective to other FDI stock developments in the world, the exceptionally strong growth of the EAC as a whole and of Uganda and Tanzania in particular becomes even more apparent. In relation to worldwide FDI a positive trend from 1997 onwards appears to be strengthened in 2007/08 but in relation to Africa and SSA the trend appears to be less clearly related to the CU implementation with most gains prior to that date, although particularly the years 2008, 2011 and 2012 show a very positive development as well. The FDI stocks in addition show that Kenya used to have a considerable head start with 60 percent of the total EAC inward FDI stock in 1990 that sharply decreased over the next eight years to a mere quarter. The downward trend continues until 2006 from when onwards the relative size seems to have stabilised, the values compared to global, African and SSA figures even appear to have slightly improved from the CU implementation onwards, possibly indicating that the CU implementation has played a role in stopping the previous downward trend in inward FDI to Kenya (see Annex 7c).

**Figure 17: Total EAC inward stock**

![Graph showing total EAC inward stock from 1990 to 2012](source: Author, data source UNCTAD WIR, retrieved 2014. Notes: Absolute FDI inward stock in EAC countries in million USD.)

Although stocks are naturally less volatile than flows, again an aggregation into three periods gives a clearer picture. EAC inward stocks have increased both, in the second and third period in comparison to world FDI stocks, but more strongly so in the post-
CU period. In comparison to SSA, both periods show a similar growth while in comparison to overall Africa the relative growth took mainly place during the pre-integration second period. Uganda seemed to have mainly gained in the first half of the millennium, reaching a dominant position of almost 60 percent, but slightly lost in the post-integration period particularly compared to Tanzania that gained around 10 percent of the regional FDI share in both periods. As discussed above Kenya lost from a strong position but this loss was contained in the post-integration period while the Burundian share continuously deteriorated from below two percent in 1990-1999 to just 0.8 percent in 2000-2005 and further down to practically zero (0.03 percent) in 2006-2012. Rwanda in contrast has experienced a halving of its stock from 2.6 to one percent in the millennial period, but shows an impressive recovery from this loss back to 2.5 percent in the post integration period (see Annex 7d). This begs the question how much of this investment is ROW investment (and thus potentially tariff-jumping) and how much is intra-regional investment (thus potentially showing results of common market regulations). Unfortunately, the FDI data do not differentiate for the origins of FDI.

However, FDI outflow data for the EAC countries shows that so far only Kenya is a credible investor (see Figure 18). Interestingly, the major Kenyan investments took in fact place between 2005 and 2009 and again in 2011 and 2012. Even when for safety reasons assuming that all Kenyan FDI was regional in nature, in no year this can have constituted more than four percent of the total FDI into the EAC and in 19 of the 23 years analysed the value is below 1.3 percent.

**Figure 18: EAC FDI outflows**

![Graph showing EAC FDI outflows](source: Author, data source UNCTAD WIR, retrieved 2014.
Notes: FDI outflows in million USD.

This implies that most investments were from outside the region. However, quite a large percentage may have been not market-searching or even tariff-jumping, but simply resource-based given large investments in particularly Uganda and Tanzania in mining and oil & gas exploration over the last years.
Although a quantification of the monetary gains (or losses) from governance effects appears not possible with the data available, it is interesting to look at the EAC region from a perspective that compares secretariat and protocol-led integration with functional cooperation.

In the EAC, most integration steps and programs are conducted in a very formalised and stringent way, starting with work assignments for the EAC secretariat, validation and by technical levels and later ministerial or even heads of state approval. While these processes take usually relatively long and involve several regional meetings, they rarely end up in a stalemate and most cases actually reach assent from all parties eventually. In addition to the relatively slow pace, three major problems stand out. Firstly, the individual work areas are often very poorly connected to each other. In many instances, programs are developed consecutively or in parallel that should be strongly linked, but due to a widespread mentality of containerized thinking and work implementation, the necessary links rarely take place. This is for example the case with regards to several documents on a regional trade policy, a regional export strategy, a regional AGOA strategy, a framework for trade negotiations and a regional industrial policy and strategy. Secondly, in many cases a clear link to and differentiation from the respective national programs and policies is missing, leading both to duplication and missing link-ups. However, the by far largest problem appears to be that agreements reached at secretariat level and signed by the relevant authorities in the partner states are subsequently not properly implemented at the national level. Harmonised standards are a case in point here: of the dozens of East African standards developed in painstakingly laborious meetings, only four were gazetted by all five Partner States as of 2015. The same can be said about NTBs where no mechanism exists to force the Partner States to abolish NTBs that have been notified and dealt with in the regional NTB monitoring system. While there are first attempts at the secretariat to allow for a legislation that would give the EAC secretariat powers to enforce regional agreements and, if necessary, punish Partner States in any cases of continued renitence, it appears questionable whether this can be achieved in the near future.

Partially as an answer to lacking commitment and slow implementation of agreed upon liberalisation and harmonisation steps, Uganda, Kenya and Rwanda have started ad hoc meetings on certain policy areas. Initially dubbed ‘coalition of the willing’, this grouping now trade under the name ‘Northern Corridor’ as it initially focussed on infrastructure projects and issues, chiefly renewed efforts to build a new standard gauge railway system and to reduce weighbridges as well as waiting times at the port and the border station. A ‘Central Corridor’ group exists as well in theory (comprising Tanzania, Rwanda and Burundi), but progress is quite slow and commitment much less pronounced. In the Northern Corridor, there are now signs of an institutionalization with the Northern Corridor Transit and Transport Coordination Authority (NCTTCA) established under the Northern Corridor Transit and Transport Agreement (NCTTA). Nonetheless, compared to the EAC secretariat procedures are still strongly along the lines of functional cooperation rather than protocols and secretariat-led negotiations. Instead, the projects are based on frequently held heads of state meetings and commitments from the heads of states themselves on certain policies to ease business. In wide areas such as road transport, aviation, (regional) work permits, a joint tourist visa, use of identification cards for accessing neighbouring countries as
well as roaming charges for mobile phone use. In these areas, strong reduction in fees, simplification of procedures and reduction of red tape were achieved in a surprisingly short time. Based on this success, Burundi and even the non-EAC countries DR Congo and South Sudan have officially joined this grouping (without actually taking part in the afore mentioned initiatives as of 2015 yet). While this approach certainly involves some difficulties with yet another integration attempt to add to the spaghetti bowl and certainly has its limits, particularly when it comes to issues with a bearing on third parties (such as the CET), still the surprisingly good progress in such a setup deserves further study and attention. In our view, it appears less the exclusion of the hesitant Tanzanian government from this block, but rather the full-hearted commitment from the heads of state of the other governments that make things happen. For any attempt at formal integration or functional cooperation this appears to imply that the support from the highest authority is crucial. Given the dominance of statehouse in the presidential systems of the region, any programs and integration steps without explicit backing from the highest authorities may be perfectly developed at technical levels, but will have little chances of success.

5.5 **Synopsis: are heterodox dynamic effects the saviours of regionalism?**

The NC and PE centred discussions suggest that regionalism holds little if any potential to lift economies out of poverty. Dynamic and heterodox effects appear thus to be the only possibility that regionalism may be in fact a sensible path to follow. Our extensive discussion has shown that highlighting and disentangling such effects and properly connecting them to the underlying theories is a daunting task and we certainly completed this exercise only to a minor extent. Nonetheless, even this very preliminary discussion has already elicited that regionalism holds in fact important potentials to be at least part of the solution to ignite meaningful growth. Even more, under certain conditions and assumptions – that admittedly require much more empirical substantiation than we are able to provide in this work – particularly South-South regionalism appears to be preferred to both, national and multilateral approaches at the same time. For several instances and effects this is admittedly simply true because the unilateral or multilateral approach and thus the golden calf of the NC framework is for almost all heterodox and dynamic aspects simply far outside the realm of the politically feasible.

As discussed the arguments can in our view be divided into general arguments that may make regionalism preferable in the long run and those that are particularly of interest for catching up for developing countries. The general arguments rest particularly on the limits of economies of scale and of driving down transport costs and the resultant trade-off between benefits from agglomeration and benefits from dispersion, leading to both potential efficiency and environmental gains. In addition, general arguments may apply in the area of governance where regionalism may be a sensible compromise in view of the trade-off between public sector economies of scale / regional public goods and other effects of good governance on the one hand and preference heterogeneity on the other. For the arguments that are particularly related to catching-up processes and thus mainly or exclusively apply to developing countries, the focus is partially shifted from trade to investments. These arguments mainly rest on structural change and sectoral differences, endogeneity of factors, embodiment of knowledge and knowledge accumulation as well as the resistance of industrialised
countries to agree to multilateral (or North-South regional) deep integration liberalisation steps that are likely to open up venues for such structural revolutions. In addition, there appear to be greater incentives and more feasible steps to compensate losers that will not only occur from an NC perspective, but at least as much when considering heterodox, dynamic effects. With regard to such catching-up processes, regionalism appears to potentially have the right compromise nature for aspects that entail compromises themselves, such as competition vs. protection in infant industry initiatives. In this regard and in view of the

serious restrictions on the expansion of production and trade in goods and services with relatively more knowledge content and longer learning curves, elements which are now recognized as key components of the growth process [...] [r]egional integration can be a strategic tool to partially overcome these obstacles by expanding market size to facilitate greater specialization and industrialization through economies of scale and possibilities to exploit economies associated with the agglomeration of production activity (Devlin & Ffrench-Davis, 1998: 16).

This implies that the most beneficial policy approach from a dynamic perspective would include the following components: duty free imports for ROW intermediaries (by setting a low or zero CET for such goods); duty free exports to regional markets (full intra-regional liberalisation); duty free entry to developed markets (through e.g. EBA, AGOA); an easy and secure investment climate (regionally set, but applicable to any investor with as little preferentialism for regional or national investors as possible); and the maintenance of a considerable CET on manufactured goods from the ROW. Interestingly, this is actually a setup that comes close to what several countries actually implement (or aim at implementing) at the moment.

Admittedly, however, empirical proof to substantiate such a claim as well as any of the discussed dynamic and heterogeneous effects is by and large missing. The potentially most direct approach of measuring this by looking at growth rates directly does not yield any substantial effects – and not surprisingly so given the lack of counterfactual scenarios. Reviewing the literature, we find some indication that allocation effects (mark-ups and love of variety) improve the assessment of regionalism, but it appears safe to claim that the magnitude is far from sufficient to overturn the bleak impression gained in the Vinerian framework of the third chapter. The same applies for levelling effects and adjustment costs where data and methodological problems appear in addition most pervasive. With regards to governance effects, only two subcomponents appear to be properly researched. Harmonisation of policies is, however, almost exclusively discussed with regard to Monetary Unions – but in this case, results suggest very strong positive effects, to an extent that they appear almost unrealistic. With regard to public sector economies of scale, we are only in a position to estimate effects of regional schemes by relying on existing studies on the size of nations. Such studies suggest in fact that smaller countries have more expensive governance and administration costs relative to their economic sizes. Finally, the in our view most interesting accumulation and location effects have likewise to rely on scant data and causality issues. At first sight, productivity and wage gains from FDI, learning from exporting and structuralist superiority of sophisticated products appear to be surprisingly well established empirically. A closer look reveals that such results are marred with severe causality problems. In addition, such discussions are usually entirely silent on regionalism as a potential source for attracting FDI, export learning and diversification.
To address this missing link, we have added some ideas for empirical approaches for testing the influence of regionalism in this regard, testing them with EAC data as far as possible. Looking at regional export growth and the direction of intra-regional trade shows again that particularly Uganda and Tanzania have won in exports and that Kenya had the lowest regional trade growth. However, compared to the NC discussion on imports in the third chapter the statistics suggest that for the whole region and for Kenya in particular a general, unrelated tendency for rising ROW imports has been mitigated by rising exports inside the region and thus the intra-regional import share had significantly fallen if EAC tariff liberalisation had not taken place. At the same time, export data suggest that learning from exporting has not taken place to an extent yet that has allowed the region to establish themselves on global markets. Focussing on structuralist considerations, we have analysed the CIP and its components as well as manufacturing trade in particular. Results suggest again that Uganda and Tanzania have been able to considerably improve – albeit from a very weak starting point – while Kenya’s position has deteriorated in absolute and relative terms. None of the countries seems to have been able to also successfully venture into medium and high tech industries. A look at the ‘complexity’ of the industrial base of the EAC countries reveals surprisingly positive results that are indeed a silver lining for the future. However, although in theory the effect of regionalism on these dimensions appears to be quite straightforward it is utterly difficult to draw any clear-cut empirical link from regionalism to CIP rankings, manufacturing trade and complexity indices as so many other aspects play a role for these developments as well. This link would have been to some extent provided if regionalism clearly showed that it works at the extensive margin, i.e. introduces new products to the trade and production portfolios. However, our analysis of the extensive margin is unable to establish this link. Lastly, our analysis of FDI again shows very strong growth for Uganda, Tanzania and Rwanda – not only in absolute terms but also when compared to SSA, African and even global FDI flow and stock developments. While Ugandan growth has mainly taken place around the millennium and thus prior to the renewed integration efforts, Tanzania and Rwanda show significant growth in the post-integration period. Kenya at least appears to have slowed down and eventually stabilised its previous steep relative downward trend in the post-integration period.

This are very moderately positive results at best. To a considerable extent this may be a result of data quality issues and the problem that important aspects and dimensions are not collected or not reported, such as sectoral distribution of FDI, sources of FDI inflows / inward stocks (or destinations of FDI outflows/outward stocks), labour migration, reasons for FDI (market or resource searching, tariff-jumping) and reasons for labour migration and non-migration, plant-level productivity data at etc. Certainly, more research such as investor and manpower studies with focus on productivity and innovation is necessary in this regard. However, such data are extremely difficult and costly to collect – particularly as panel approaches over a longer period of time are necessary for most analyses.

Even if all these data sets were available, the complexity and reciprocal dependency of many of these dynamic effects as well as the time needed for many of them to evolve is a very strong impediment to successfully track such changes. There is of course also another potential explanation. It certainly has to be at least considered whether such effects are simply not, not yet, or not to a sufficiently large extent taking place due to the lacking or poor implementation of real world regionalism or the general
inadequacy or insignificance of the concept of regionalism in the overall growth and development equation. In our view and at the risk of overgeneralising the matter, it would however not be farfetched to claim that in many instances the regional initiatives do not put a sufficient emphasis on all of the aspects important to structural change and development as discussed above. In other words, irrespective of any data problems, a reasonably well informed assessment of the dynamic impacts of regional economic integration for structural change and development appears anyhow only feasible if the respective policy actions have actually been agreed upon and implemented.
6. Conclusion

Given the complexities, trade-offs and idiosyncrasies involved in regionalism, it appears utterly difficult to arrive at a clear-cut verdict on whether regionalism delivers on what it promises or not. However, realising and highlighting that regionalism and its components are more complex and their assessment thus less straightforward than often assumed is already an important insight emanating from this work. Among the few other authors who highlight this complexity and the imperfections connected to the analysis of regionalism the assessment by Devlin and Ffrench-Davis particularly stands out:

Evaluating regional integration processes and their costs and benefits is no easy task. Part of the problem is the nature of the subject matter. First, regional integration is a complex general equilibrium phenomenon with dynamic processes, making it difficult to dissect for purposes of causal explanation. The process involves issues that link growth to technology, learning, externalities, political economy and politics, all of which economists have trouble grappling with at a national level not to mention among several countries simultaneously. A further complication [...] is that the integration processes are an integral part of the profound structural reforms that have touched all levels of the economy and create big changes. Moreover, initial conditions, and the phases and sequencing of these reforms, are usually quite different among the partner countries. Second, regional integration is a medium/long term process. When successful, one expects to see initial costs compensated by benefits that play out over the medium and long term. Third, regional integration is very much a second best world where generic prescriptions can be especially dangerous. Fourth, regional integration is typically evaluated in light of what would have happened in its absence. Moreover economists are interested in measuring changes in welfare; given the complications of defining this for a particular subregion they often use a proxy expressed in a summary statistic reflecting growth or trade [...] These characteristics place great burdens on analysts. [...]In addition the empirical bottlenecks to understanding [...] integration should not be underestimated. Even basic data such as the evolution of preferences, rules of origin, non-tariff measures, intraregional investment flows, firms cost structures, etc., are unavailable or incomplete (Devlin & Ffrench-Davis, 1998: 19f).

With regards to its imperfections, we have detailed the problems with implementation levels of regional integration, among them chiefly the spaghetti bowl phenomenon, political resistance at national levels, administrative bottlenecks and underfunding. We have also highlighted the general pervasiveness of the informal economy in Africa that significantly dilutes the potential vigour of regionalism. It appears essential to keep the weak implementation levels and the marked differences in implementation levels in mind when analysing the success of regionalism. As such levels are difficult to observe, this certainly hampers the ease of analysing the effects of regionalism. At the same time, such weakly implemented agreements also cast a serious shadow on the sincerity of regional endeavours. Nonetheless, this phenomenon can in our view also give rise to optimism, as the relatively weak empirical effects that tend to be observed,
may to a considerable degree be a result of the paper tiger status of so many real world regional schemes rather than empirical proof for the ineffectiveness of regionalism per se. In other words, a real empirical check of the failure or success of regionalism among developing countries would only be fully feasible once it is actually properly implemented.

Another dimension that makes the analysis of regionalism and particularly attempts to arrive at universally valid conclusions painstakingly difficult is its extremely polymorphic shape. All too often, regionalism is a catch-all term that can be used in almost any policy direction. This can entail the utmost protectionism as far reaching unilateral or otherwise non-preferential liberalisation. It can either be based on joint institution building or complete reliance on national authorities and decision making. And some schemes focus entirely on selective functional cooperation while others opt for far reaching joint policy making and implementation. Bearing this in mind, one can imagine that regionalism can have absolutely devastating as well as outstandingly positive effects depending on its shape (and the respective scientific views of the respective beholder).

While it is of utmost importance to keep this polymorphic nature of regionalism in mind, such an elusive conclusion would of course be an evasion of a conclusion rather than an honest attempt at bushwhacking one’s way through the intricacies involved. We have approached this issue by opting for a very holistic approach, reviewing as many potential effects as possible. To this end, we have classified effects into five categories, namely allocation effects, accumulation effects, location effects, levelling effects, and governance effects, the first three taken from Baldwin & Venables (1995), the two latter added from our side. Interestingly, the dominant scientific approaches in the analysis of regionalism, the neo-classical Vinerian welfare analysis and the game-theoretic PE approaches, only cover a very small fraction of this effect space, namely only parts of the allocation effects. Unfortunately, the other groups of effects stem from various scientific schools and the level of sophistication of the empirical strategies is for several reasons much less well developed than the NC approach.

It is against this background of its theoretical complexity, its polymorphic and idiosyncratic nature, its imperfect implementation status and the resultant empirical challenges that are aggravated by attribution issues and a weak data basis, that we attempt to make general statements on the potential and actual developmental impact of regionalism. It may thus even come as a surprise that actually quite a number of sufficiently robust and concrete findings can be drawn from our analysis.

6.1 Insights from and debunking of the NC framework

NC framework empirical methodologies and results lack robustness and the choice of methodologies is arbitrary to some extent.

Our extensive discussion of the dominant Vinerian analysis of regionalism inside the NC framework has turned out to be to a large extent a debunking exercise. The neoclassical Vinerian theoretical setup is astonishingly simple – and this seems to be part of the reason why it is (still) so popular despite its obvious shortcomings and blind spots. Despite its theoretical simplicity, however, the Vinerian approach accommodates a multitude of empirical approaches, most of them in itself relatively
straightforward – particularly when compared to the heterodox approaches. Despite this relative robustness, even minor changes in the model parameters, the empirical strategy or the data source lead to strongly diverging results. This is particularly true for model approaches such as CGE models that are in our view too fragile to base any policy decision upon, given that the underlying elasticities are generally not empirically substantiated enough and certainly not well enough adjusted to developing country contexts.

**Empirically trade creation tends to dominate trade diversion.**

When abstracting from these divergences in empirical results for a moment, the average empirical results on the trade creation versus trade diversion are actually considerably less bleak as the theoretical arguments suggest. The negative effects of trade diversion in fact do not overshadow the positive ones of trade creation in most of the cases. This applies both for the lion’s share of secondary literature discussed in this work as well as for the computations for the East African Community computed by the authors. Therefore, the first of the three criticisms brought forward inside the NC framework, the possibility of absolute losses to the region due to the dominance of trade diversion can be quite strongly refuted by a proper analysis inside the NC framework itself.

**Winners and losers are not necessarily pre-determined by initial economic power.**

Empirical results for winners and losers are less axiomatic than assumed by NC theory. For example, the EAC case studied in this work shows that actually at least two or three of the latecomers appear to be benefiting more strongly from regionalism than the country with an initial head-start (at least when limiting the analysis to trade and the NC framework and when disregarding other, non-integration related factors). Therefore, the second criticism put forward in NC-based analyses should at least be called into question when relying on NC-based computations. This implies that although potential occurrences of losing countries, regions and sectors still need to be closely monitored, this argument appears to be far from being a red line for the implementation of regionalism.

**The axiomatic inferiority of regionalism to multilateral liberalisation and (most) North-South setups remains intact if the analysis is restricted to the NC framework – thus raising the question why countries would opt for the former rather than for the latter.**

While outright empirical substantiations are difficult in absence of counterfactual scenarios, it remains incontrovertible that regionalism is in almost any instance inferior to an alternative multilateral liberalisation effort and to most North-South schemes – as long as the framework remains Vinerian and thus only compares trade creation and trade diversion. This implies that the third criticism, the inferiority of regionalism when compared to multilateralism, cannot be refuted inside the framework itself.
The blatant insignificance of trade creation by both regional and multilateral initiatives raises more questions about the NC framework than about regionalism.

However, there is another, fundamental result of the analysis inside the NC approach that is rarely discussed. A closer look at the respective estimates reveals that even the most optimistic potential effects emanating from either a regional approach or a concerted and complete multilateral liberalisation effort (as measured by the NC framework) mounts up to a one-off benefit of only an extremely humble size. In other words, realising efficiency gains through trade creation thus must be seen as almost negligible in view of the growth and poverty challenges faced by developing countries. This implies that either the concept of regionalism cannot be seen as an important component of a growth strategy or the NC approach must be challenged as having serious flaws and gaps. If the latter is the case — and our discussions on alternative approaches suggest this interpretation — any policy decision (exclusively) based on the Vinerian NC approach is likely to have devastating results for the growth prospects of the countries involved. For example, if a well-designed regional strategy in fact can help realising sizable dynamic gains, a decision to reap the limited welfare gains from an immediate global liberalisation before initiating any structural changes in the economy would risk maintaining and reinforcing disadvantageous and development-adverse specialisation patterns in production and trade structures. Such a multilateral strategy may thus turn out to be penny wise, but dollar foolish.

This insignificance of the NC approach for a proper analysis of regionalism begs the question, why it receives that much attention in the scientific discussions. Similar to many other areas of economics, the main problem appears not to be that authors are unaware or unregenerate of the fact that these analyses simulate and represent reality to only a very unsatisfactory degree. It appears that the economists’ profession simply prefers such an unrealistic, yet elegant and mathematically sophisticate approach that at least apparently delivers quantifiable and unambiguous results — and not a method that is still in its infancy, for which necessary data are unavailable on for which uncertainties can hardly ever be entirely overcome given the complexities involved.

6.2 Insights from and debunking of the political economy framework

Lobbies may have a significant influence, but neither models nor empirical proof properly predict whether this is the case and if so, whether this helps or hinders regional and multilateral liberalisation.

PE approaches can be read as a warning against forgetting that not all policies necessarily have the interest of the general public at heart and that the decision for a policy usually implies an explicit or implicit decision against alternative ones. Otherwise, the game-theoretic models do not carry any strong practical guidance for policy: their underlying welfare-economic assumptions of the Vinerian analysis have been largely debunked in our previous analysis, their results are completely conflicting and any empirical substantiation of such models is anyhow absolutely elusive.
6.3 Insights from and current limitations of the heterodox framework

Heterodox / dynamic effects are complex and diverse.
Unfortunately, this theoretical space is very complex and empirically much less well developed and both theoretical and empirical links to regionalism are scarce. We have dissected a number of potential positive effects out of the unstructured conglomerate dubbed dynamic effects of regionalism. We propose to structure these effects into four classes, namely:

- **Allocation effects** (outside the NC framework), mainly dealing with increased competition and the resultant reduction of price mark-ups or their transfer from outside the region into the hands of regional rather than ROW producers.
- **Levelling effects and adjustment costs**, mainly highlighting that regionalism may be a tool for reducing efficiency losses from boom and bust cycles and related phenomena as well as to keep adjustment costs affordable.
- **Location and accumulation effects**, a large group of potential effects focussing on cumulative causation and NEG-related agglomeration issues with regard to learning-by-doing, economies of scale, FDI attraction and clustering of economic activity, transport costs, labour migration and pecuniary effects of agglomeration and an increased consumer market, and questions of un- and underemployment of the workforce.
- **Governance effects**, again a large group of effects, covering the use of regionalism as a tool to improve the perception and actual quality of national policy making through signalling, peer-learning, peer-pressure and a window of opportunity for (un-popular) policy decisions, harmonisation and thus reduction of transaction costs and unfair treatment of competitors as well as rationalisation of public expenditure by way of joint spending on regional public goods and other specialised or economies of scale bearing public services and activities.

This list of potential positive dynamic / heterodox effects is a first compilation and may have to be completed over time.

Some heterodox arguments only slightly adjust the NC results or indicate advantages and disadvantages for both regional and multilateral approaches.

- **Love-for-variety gains** are likely to be (slightly) stronger for multilateral schemes.
- **Competition enhancement and resulting challenge-response efficiency gains** may be greater when multilateral and not regional liberalisation takes place – but if the gap turns out to be too large, the local producers may actually go out of business altogether.
- **Overall adjustment cost** may be smaller if an instant multilateral (or in lieu of this a North-South setup) is chosen over a more gradual, regional approach that requires re-investments and re-specialisations over a longer period. However, such approaches would raise questions on the affordability of a large lump-sum adjustment cost at a given point in time and the constant need for experimentalism and re-investment further questions the superiority of a large-scale, once-off adjustment cost approach.
While some governance effects are often highlighted as being particularly a trace of North-South agreement as committing to ‘Northern’ standards appears to be more binding and thus more strongly signalling positive policy change, history shows that countries did not feel more bound by North-South or multilateral agreements than intra-regional ones – if at all, the reverse may be rather true. It appears also questionable whether attempts to attempt to leapfrog to policy arrangements developed over decades in the North rather than working on best practices that are more adjusted to the local conditions in the South.

Several heterodox / dynamic effects are unique to regionalism or at least a particular property of regionalism (and not or to a lesser extent part of multilateralism or North-South regionalism), some of them with a potential to actually turn NC arguments completely on their head.

- Producer rent reduction and particularly the transfer of rents into the region are a unique property of regionalism (although the total size of this effect appears to be limited).

- Levelling of economic boom and bust cycles is likely to have a positive effect only if countries are sufficiently similar, otherwise levelling may actual hurt the economies involved, particularly those with less economic weight and thus a smaller influence on the total economic development outcome and the choice of policies to react. Particularly when it comes to natural resource sharing in this regard, only regional setups appear to be politically feasible (and even the political feasibility in such a case is somewhat doubtful). Again, however, it is difficult to determine the magnitude of these effects.

- Considering structuralist perspectives coupled with learning curves, it appears worthwhile to clearly separate the discussions on trade liberalisation and investment liberalisation. In other words, allowing for partial protection on a regional basis for trade while opening up for investments from anywhere in the world (at least with regards to investments in modern and sophisticated economic activities), could facilitate tariff jumping investments. This could imply very strong gains in the long run that overshadow the potentials from trade creation by several magnitudes, although a quantification of this effect is utterly difficult given current empirical strategies and data at hand. Likewise, industrial policy appears in this regard only feasible on a regional basis and, despite some serious issues and questions on the implementation setup and the willingness to cooperate in such sensitive areas, we have actually presented several substantive arguments why it may be more effective than the current national approaches. One may in this regard even question whether we actually see too little rather than too much trade diversion in regional schemes as trade diversion implies a new or at least increased production activity inside the region that tends to be not among those traditional products that had a static comparative advantage. Given the prevalent un- and underemployment in countries of the South clearly underlines further this need for investments and job creation.

- ‘Losers’ are still likely to occur and in fact such an occurrence of an uneven distribution of gains appears to become even more likely when considering dynamic effects than when the analysis is limited to the NC framework. Particularly when focussing on NEG-style agglomeration aspects, economies with a head start
may well turn out benefitting more than their initially less developed neighbours, thus potentially leading to diversion rather than conversion. However, this tendency is far from axiomatic. As for example the EAC case shows, at least three countries with stronger growing intra-regional exports and stronger growing and in fact much higher absolute figures of FDI than the initial powerhouse Kenya. It appears also important to note that such winner and loser patterns are likely to be an outcome of both, regional and multilateral (or North-South) setups. Cushioning such negative effects for some of the integrating countries, regions or sectors appears to be significantly easier in regional setups, either through labour migration or through explicit countervailing policies such as compensation efforts or cohesion policies.

- The discussion from a NEG-inspired perspective also exposes that the WTO-led liberalisation mantra is actually dishonest to a very strong degree. While focussing on trade and increasingly also on other aspects such as investment, trade in services, competition, procurement rules etc., there is one important aspect conspicuously missing throughout the debates: the liberalisation of labour migration, in particular of unskilled labour (as some, usually high-skilled labour is part of the discussions on trade in services and investments). In contrast, (South-South and North-North) regional integration indeed explicitly do not exclude labour migration liberalisation, although such processes are often faced with serious opposition and drawbacks. While such issues surrounding large-scale labour migration – ranging from culture-clash- and integration-related fears to job loss and wage depressions for particularly blue-collar workers – may well be part of the reason why liberalisation of labour migration is usually completely avoided in multilateral and North-South integration schemes, this may not be the whole explanation. If you look at the situation from a simple endowment perspective, industrialised countries are well endowed with high skilled labour, technology and capital while developing countries are mostly well endowed with cheap, low-skilled labour (and some with natural resources and arable land). This appears to imply that it would be in the interest of the developing countries that migration of low-skilled labour is liberalised alongside with trade in agriculture while high-skilled labour, service liberalisation, investment liberalisation and liberalisation of trade in high-tech products is more beneficial for industrialised countries. And from such a perspective the sluggish termination of barriers to trade in (some) agricultural goods – be it through duties, quotas, utilisation of standards as NTBs or domestic agricultural subsidies – and the complete exclusion of labour migration from the Northern side of the negotiation table must at least look suspicious.

- Such heterodox perspectives also open the view beyond questions of growth and catching up. Consider that despite technological advancements the direct transport costs and indirect environmental costs of transports set a barrier to creating a completely ‘flat’ world with zero transport costs. Likewise, consider that following dynamic comparative advantage arguments important inputs in the productivity equation are not cast in stone and can be changed through investments in skills and the surrounding business environment and structure. This implies that it is worthwhile considering whether in the future some part of industrial production will take place more localised rather than globalised. Some trends in individualising consumer preferences and digitalized, connected and on-demand production systems already hint into this direction. As scale economies are still important (though capped at a certain plant / production size) for a considerable number of
products, a regional production setup is not unlikely to be an increasingly important production dimension.

- Among the governance effects, a number of possible gains stand out that are simply not politically feasible for multilateral or North-South agreements for a long time to come. This applies for example to harmonisation of many rules, regulations and policies. This is an area that some regional blocs in the South actually follow with considerable zeal. The EAC is certainly a case in point in this regard, including drawbacks in some thematic areas and with some countries moving ahead with a higher speed, but recent developments have shown that in many cases the laggards actually tend to follow suit once successes become evident in the leading partner states. However, exploitation of the potential of providing public goods on a regional basis and to save money and / or to improve quality and quantity of other public services by joint public spending is so far almost completely absent.

**The empirical analysis of dynamic effects is very poorly developed.**

Although there appear to be a multitude of potential positive effects of regionalism on top of the simple Vinerian trade creation story, the current capacity to empirically substantiate or even quantify such additional heterodox dynamic effects is unfortunately a far cry from being well-developed and authoritative. While we have been able to give some indications on empirical strategies, this requires considerably more research – and in some cases a prior proper implementation of the respective aspects by the policy makers. Despite the considerable weaknesses in the empirical foundation of dynamic effects though, the empirical approximations and ‘models of dynamics are sufficiently specified to suggest that the benefits behind the dynamics of integration are potentially large’ (Devlin & Ffrench-Davis, 1998: 20).

**The complexity of heterodox effects implies that intricate policy tool box choices have to be executed by regional policy makers.**

If we accept despite this weak empirical substantiation that the Vinerian analysis necessarily covers only a part – and most probably only a very minor part – of the story, regionalism and its non-traditional and dynamic effects may well regain its place in the policy tool box for development. However, it needs to be caveated that regionalism may hold potentials for such dynamic effects, but that these effects cannot be seen as an automatism. It is the intricate specific design of regionalism and its focus and sincerity of implementation that determine whether regionalism can be of assistance in unleashing dynamic effects or not. In addition, the role and potency of regionalism in the overall policy tool box of a country has to be strongly qualified. Many other factors on national, sub-national and international levels play extremely important roles and they can either reinforce or completely frustrate any effects that regionalism may in theory set in motion. This can range from public sector responsibilities like providing a conducive business environment, security, infrastructure, schools and universities for skills and incentives for investments to market forces such as such as specialisation patterns and demand developments.

The success of regionalism appears to hinge inter alia on the following preconditions:
 The design of regionalism and related national policies is geared towards structural
change and knowledge accumulation with a view that the eventual goal of
regionalism is a successful integration into global markets.
 The implementation of deep integration is not effectively frustrated by
administrative weaknesses and national political resistances to cede authorities to
the regional level. It appears more important that the highest authority of the
respective countries whole-heartedly support the initiatives rather than how they
are institutionalised (formalised and protocol based or ad-hoc and functional
cooperation based).
 The private sector is sufficiently incentivised and supported to seize the newly
generated opportunities.
 Appropriate mechanisms are introduced to cater for undoubtedly emerging losers
to prevent eventual disintegration.
Paraphrasing Rodrik’s (2008) comments on industrial policy, the question should thus
in our view not be whether or not regionalism is a smart policy choice, but rather how
it should be designed to successfully give developmental impulses.

231


Annex 1a: Intra-regional imports for individual EAC member states
Source: Author, data source Comtrade/WITS.
Notes: Volumes of total trade in thousand USD. Data marked ‘Mirror’ are export data. Data marked ‘ex 27’ exclude HS 1996 two digit tariff line 27, i.e. petroleum and gas.
Annex 1b: Intra-regional import shares for individual EAC member states
Source: Author, data source Comtrade/WITS.
Notes: Volumes of total trade in thousand USD. Mirror data are export data of World and EAC. Data marked 'ex 27' exclude HS 1996 two digit tariff line 27, i.e. petroleum and gas.
### Annex 2a: ARCA values of Top-20 two-digit tariff lines

<table>
<thead>
<tr>
<th>Rank</th>
<th>HS 1</th>
<th>ARCA</th>
<th>Δ ROI</th>
<th>HS 1</th>
<th>ARCA</th>
<th>ROIi - ROIk</th>
<th>HS 1</th>
<th>ARCA</th>
<th>absol. growth EAC</th>
<th>HS 1</th>
<th>ARCA</th>
<th>rel. growth EAC</th>
<th>HS 1</th>
<th>ARCA</th>
<th>reg. share post-REC / pre-REC</th>
<th>HS 1</th>
<th>ARCA</th>
<th>reg. share post-REC - REC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13</td>
<td>0.0038</td>
<td>10.807</td>
<td>59</td>
<td>-0.0021</td>
<td>15.118</td>
<td>25</td>
<td>0.0132</td>
<td>89.223</td>
<td>26</td>
<td>0.0245</td>
<td>34.8</td>
<td>26</td>
<td>0.0245</td>
<td>15.39</td>
<td>12</td>
<td>0.0047</td>
<td>0.3743</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>0.0203</td>
<td>4.027</td>
<td>67</td>
<td>-0.0001</td>
<td>4.947</td>
<td>72</td>
<td>-0.0163</td>
<td>59.499</td>
<td>51</td>
<td>-0.0013</td>
<td>23.5</td>
<td>93</td>
<td>-0.0007</td>
<td>13.32</td>
<td>04</td>
<td>-0.0050</td>
<td>0.3562</td>
</tr>
<tr>
<td>3</td>
<td>54</td>
<td>-0.0047</td>
<td>3.809</td>
<td>25</td>
<td>0.0132</td>
<td>4.945</td>
<td>15</td>
<td>0.0039</td>
<td>40.039</td>
<td>03</td>
<td>0.0715</td>
<td>15.3</td>
<td>47</td>
<td>-0.0034</td>
<td>11.66</td>
<td>09</td>
<td>0.2589</td>
<td>0.2378</td>
</tr>
<tr>
<td>4</td>
<td>50</td>
<td>-0.0004</td>
<td>3.494</td>
<td>54</td>
<td>-0.0047</td>
<td>4.406</td>
<td>48</td>
<td>-0.0118</td>
<td>38.335</td>
<td>12</td>
<td>0.0047</td>
<td>13.4</td>
<td>45</td>
<td>-0.0002</td>
<td>5.74</td>
<td>02</td>
<td>-0.0070</td>
<td>0.2301</td>
</tr>
<tr>
<td>5</td>
<td>45</td>
<td>-0.0002</td>
<td>3.406</td>
<td>56</td>
<td>0.0003</td>
<td>4.172</td>
<td>22</td>
<td>-0.0058</td>
<td>37.066</td>
<td>08</td>
<td>0.0246</td>
<td>11.8</td>
<td>36</td>
<td>-0.0003</td>
<td>5.62</td>
<td>03</td>
<td>0.0715</td>
<td>0.2244</td>
</tr>
<tr>
<td>6</td>
<td>67</td>
<td>-0.0001</td>
<td>3.103</td>
<td>70</td>
<td>-0.0032</td>
<td>3.961</td>
<td>12</td>
<td>0.0047</td>
<td>35.282</td>
<td>45</td>
<td>-0.0002</td>
<td>11.7</td>
<td>03</td>
<td>0.0715</td>
<td>5.28</td>
<td>05</td>
<td>0.0023</td>
<td>0.2117</td>
</tr>
<tr>
<td>7</td>
<td>93</td>
<td>-0.0007</td>
<td>3.021</td>
<td>35</td>
<td>-0.0019</td>
<td>3.159</td>
<td>87</td>
<td>-0.1088</td>
<td>33.406</td>
<td>13</td>
<td>0.0038</td>
<td>11.0</td>
<td>04</td>
<td>-0.0050</td>
<td>4.52</td>
<td>23</td>
<td>-0.0027</td>
<td>0.2069</td>
</tr>
<tr>
<td>8</td>
<td>60</td>
<td>-0.0018</td>
<td>2.981</td>
<td>60</td>
<td>-0.0018</td>
<td>2.941</td>
<td>84</td>
<td>-0.1609</td>
<td>31.953</td>
<td>69</td>
<td>-0.0035</td>
<td>10.4</td>
<td>09</td>
<td>0.2589</td>
<td>3.75</td>
<td>26</td>
<td>0.0245</td>
<td>0.1926</td>
</tr>
<tr>
<td>9</td>
<td>59</td>
<td>-0.0021</td>
<td>2.851</td>
<td>47</td>
<td>-0.0034</td>
<td>2.284</td>
<td>10</td>
<td>-0.0019</td>
<td>30.714</td>
<td>47</td>
<td>-0.0034</td>
<td>9.5</td>
<td>13</td>
<td>0.0038</td>
<td>3.73</td>
<td>07</td>
<td>0.0497</td>
<td>0.1768</td>
</tr>
<tr>
<td>10</td>
<td>56</td>
<td>0.0003</td>
<td>2.828</td>
<td>45</td>
<td>-0.0002</td>
<td>1.961</td>
<td>39</td>
<td>-0.0326</td>
<td>29.442</td>
<td>93</td>
<td>-0.0007</td>
<td>9.1</td>
<td>66</td>
<td>-0.0001</td>
<td>3.67</td>
<td>22</td>
<td>-0.0058</td>
<td>0.1680</td>
</tr>
<tr>
<td>11</td>
<td>53</td>
<td>0.0059</td>
<td>2.790</td>
<td>50</td>
<td>-0.0004</td>
<td>1.917</td>
<td>24</td>
<td>0.0427</td>
<td>29.249</td>
<td>04</td>
<td>0.0050</td>
<td>8.9</td>
<td>12</td>
<td>0.0047</td>
<td>3.45</td>
<td>01</td>
<td>-0.0010</td>
<td>0.1558</td>
</tr>
<tr>
<td>12</td>
<td>49</td>
<td>0.0051</td>
<td>2.569</td>
<td>32</td>
<td>-0.0048</td>
<td>1.915</td>
<td>30</td>
<td>-0.0228</td>
<td>25.553</td>
<td>22</td>
<td>-0.0058</td>
<td>8.9</td>
<td>08</td>
<td>0.0246</td>
<td>3.44</td>
<td>24</td>
<td>0.0427</td>
<td>0.1433</td>
</tr>
<tr>
<td>13</td>
<td>07</td>
<td>0.0497</td>
<td>2.544</td>
<td>10</td>
<td>-0.0019</td>
<td>1.748</td>
<td>63</td>
<td>0.0021</td>
<td>24.173</td>
<td>41</td>
<td>0.0103</td>
<td>8.7</td>
<td>49</td>
<td>0.0051</td>
<td>3.26</td>
<td>47</td>
<td>-0.0034</td>
<td>0.1296</td>
</tr>
<tr>
<td>14</td>
<td>47</td>
<td>-0.0034</td>
<td>2.384</td>
<td>04</td>
<td>-0.0050</td>
<td>1.699</td>
<td>73</td>
<td>-0.0151</td>
<td>22.951</td>
<td>36</td>
<td>-0.0003</td>
<td>8.4</td>
<td>57</td>
<td>-0.0014</td>
<td>3.17</td>
<td>08</td>
<td>0.0246</td>
<td>0.1256</td>
</tr>
<tr>
<td>15</td>
<td>25</td>
<td>0.0132</td>
<td>2.298</td>
<td>23</td>
<td>-0.0027</td>
<td>1.237</td>
<td>34</td>
<td>0.0029</td>
<td>22.791</td>
<td>20</td>
<td>0.0203</td>
<td>8.4</td>
<td>69</td>
<td>-0.0035</td>
<td>2.95</td>
<td>93</td>
<td>-0.0007</td>
<td>0.1023</td>
</tr>
<tr>
<td>16</td>
<td>08</td>
<td>0.0246</td>
<td>2.237</td>
<td>65</td>
<td>-0.0004</td>
<td>1.209</td>
<td>31</td>
<td>-0.0018</td>
<td>22.601</td>
<td>57</td>
<td>-0.0014</td>
<td>7.5</td>
<td>51</td>
<td>-0.0013</td>
<td>2.69</td>
<td>45</td>
<td>-0.0002</td>
<td>0.0872</td>
</tr>
<tr>
<td>17</td>
<td>95</td>
<td>-0.0055</td>
<td>2.188</td>
<td>01</td>
<td>-0.0010</td>
<td>1.144</td>
<td>17</td>
<td>0.0068</td>
<td>22.408</td>
<td>66</td>
<td>-0.0001</td>
<td>7.2</td>
<td>71</td>
<td>0.1475</td>
<td>2.54</td>
<td>20</td>
<td>0.0203</td>
<td>0.0829</td>
</tr>
<tr>
<td>18</td>
<td>79</td>
<td>-0.0007</td>
<td>1.975</td>
<td>44</td>
<td>-0.0076</td>
<td>0.974</td>
<td>85</td>
<td>-0.1533</td>
<td>22.141</td>
<td>81</td>
<td>-0.0012</td>
<td>7.1</td>
<td>31</td>
<td>-0.0018</td>
<td>2.48</td>
<td>13</td>
<td>0.0038</td>
<td>0.0680</td>
</tr>
<tr>
<td>19</td>
<td>06</td>
<td>0.0764</td>
<td>1.961</td>
<td>49</td>
<td>0.0051</td>
<td>0.856</td>
<td>76</td>
<td>-0.0086</td>
<td>16.301</td>
<td>09</td>
<td>0.2589</td>
<td>7.1</td>
<td>81</td>
<td>-0.0012</td>
<td>2.39</td>
<td>49</td>
<td>0.0051</td>
<td>0.0680</td>
</tr>
<tr>
<td>20</td>
<td>24</td>
<td>0.0427</td>
<td>1.959</td>
<td>17</td>
<td>0.0068</td>
<td>0.713</td>
<td>70</td>
<td>-0.0032</td>
<td>13.000</td>
<td>80</td>
<td>-0.0003</td>
<td>7.1</td>
<td>20</td>
<td>0.0203</td>
<td>2.24</td>
<td>69</td>
<td>-0.0035</td>
<td>0.0677</td>
</tr>
</tbody>
</table>

3 of first 10 1 of first 10 3 of first 10 5 of first 10 4 of first 10 6 of first 10 10 of first 20 4 of first 20 7 of first 20 8 of first 20 9 of first 20 11 of first 20

Source: Own calculations with COMTRADE data accessed through WITS, excluding tariff line 27 (petroleum).
Annex 2b: ARCA values according to deciles

Positive ARCA's according to ranking of $\Delta$ ROI

<table>
<thead>
<tr>
<th></th>
<th>0-10</th>
<th>10-20</th>
<th>20-30</th>
<th>30-40</th>
<th>40-50</th>
<th>50-60</th>
<th>60-70</th>
<th>70-80</th>
<th>80-90</th>
<th>90-95</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
<td>7</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>12%</td>
<td>64%</td>
<td>28%</td>
<td>0%</td>
<td>20%</td>
<td>4%</td>
<td>8%</td>
<td>4%</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Positive ARCA's according to ranking of $\Delta$ ROI

<table>
<thead>
<tr>
<th></th>
<th>0-10</th>
<th>10-20</th>
<th>20-30</th>
<th>30-40</th>
<th>40-50</th>
<th>50-60</th>
<th>60-70</th>
<th>70-80</th>
<th>80-90</th>
<th>90-95</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>8%</td>
<td>8%</td>
<td>20%</td>
<td>24%</td>
<td>20%</td>
<td>12%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
<td>4%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Positive ARCA's according to ranking of ROI - ROI

<table>
<thead>
<tr>
<th></th>
<th>0-10</th>
<th>10-20</th>
<th>20-30</th>
<th>30-40</th>
<th>40-50</th>
<th>50-60</th>
<th>60-70</th>
<th>70-80</th>
<th>80-90</th>
<th>90-95</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>15</td>
<td>60%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Positive ARCA's according to ranking of absolute trade value gains of EAC

<table>
<thead>
<tr>
<th></th>
<th>0-10</th>
<th>10-20</th>
<th>20-30</th>
<th>30-40</th>
<th>40-50</th>
<th>50-60</th>
<th>60-70</th>
<th>70-80</th>
<th>80-90</th>
<th>90-95</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>12%</td>
<td>16%</td>
<td>12%</td>
<td>12%</td>
<td>16%</td>
<td>8%</td>
<td>8%</td>
<td>12%</td>
<td>0%</td>
<td>4%</td>
<td>68%</td>
</tr>
</tbody>
</table>

Positive ARCA's according to ranking of relative trade value gains of EAC (to original EAC values)

<table>
<thead>
<tr>
<th></th>
<th>0-10</th>
<th>10-20</th>
<th>20-30</th>
<th>30-40</th>
<th>40-50</th>
<th>50-60</th>
<th>60-70</th>
<th>70-80</th>
<th>80-90</th>
<th>90-95</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>20%</td>
<td>12%</td>
<td>16%</td>
<td>20%</td>
<td>4%</td>
<td>8%</td>
<td>4%</td>
<td>0%</td>
<td>12%</td>
<td>4%</td>
<td>28%</td>
</tr>
</tbody>
</table>

Positive ARCA's according to ranking of change in percentage of EAC imports of total imports (post/original)

<table>
<thead>
<tr>
<th></th>
<th>0-10</th>
<th>10-20</th>
<th>20-30</th>
<th>30-40</th>
<th>40-50</th>
<th>50-60</th>
<th>60-70</th>
<th>70-80</th>
<th>80-90</th>
<th>90-95</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>24%</td>
<td>20%</td>
<td>12%</td>
<td>8%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
<td>8%</td>
<td>12%</td>
<td>12%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Source: Own calculations with COMTRADE data accessed through WITS, excluding tariff line 27.
### Annex 3a: Trade volume development according to initial levels

| | Changes by trade volumes (tariff line times percentage of tariff line) with positive change according to initial percentage levels |
|---|---|---|---|---|
| | 0-10% | 10-40% | 40-60% | 60-100% |
| Positive > 0% | 46,90 | 5,31 | 0,39 | 0,01 |
| Positive > 0%, ex 27 | 61,66 | 6,98 | 0,52 | 0,02 |
| Positive > 1% | 18,05 | 3,04 | 0,39 | 0,01 |
| Positive > 1%, ex 27 | 23,73 | 3,99 | 0,52 | 0,02 |
| Positive > 5% | 4,40 | 1,66 | 0,03 | 0,01 |
| Positive > 5%, ex 27 | 5,79 | 2,18 | 0,04 | 0,02 |

| | Changes by trade volumes (tariff line times percentage of tariff line) with stagnant tendency according to initial percentage levels |
|---|---|---|---|---|
| | 0-10% | 10-40% | 40-60% | 60-100% |
| N.a. | - | - | - | - |
| N.a. | - | - | - | - |
| Stagnant > -1% < 1% | 49,73 | 2,27 | 0,00 | 0,00 |
| Stagnant > -1% < 1%, ex 27 | 65,38 | 2,99 | 0,00 | 0,00 |
| Stagnant > -5% < 5% | 63,64 | 4,01 | 0,36 | 0,00 |
| Stagnant > -5% < 5%, ex 27 | 83,67 | 5,28 | 0,48 | 0,00 |

| | Changes by trade volumes (tariff line times percentage of tariff line) with negative change according to initial percentage levels |
|---|---|---|---|---|
| | 0-10% | 10-40% | 40-60% | 60-100% |
| Negative < 0% | 21,14 | 24,93 | 1,29 | 0,02 |
| Negative < 0%, ex 27 | 27,80 | 1,30 | 1,70 | 0,02 |
| Negative < 1% | 0,27 | 24,93 | 1,29 | 0,02 |
| Negative < 1%, ex 27 | 0,35 | 1,30 | 1,70 | 0,02 |
| Negative < 5% | 0,00 | 24,57 | 1,29 | 0,02 |
| Negative < 5%, ex 27 | 0,00 | 0,82 | 1,70 | 0,02 |

Source: Author, data source Comtrade/WITS.
Annex 3b: Import volume developments for EAC countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Pos.</th>
<th>Neg.</th>
<th>0-10%</th>
<th>10-40%</th>
<th>40-60%</th>
<th>60-100%</th>
<th>Changes by trade volumes (tariff line times percentage of tariff line) with positive change according to initial percentage levels</th>
<th>Changes by trade volumes (tariff line times percentage of tariff line) with negative change according to initial percentage levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kenya</td>
<td>69.11</td>
<td>30.89</td>
<td>68.11</td>
<td>0.96</td>
<td>0.00</td>
<td>0.04</td>
<td>29.93</td>
<td>0.91</td>
</tr>
<tr>
<td>Kenya ex 27</td>
<td>59.63</td>
<td>40.37</td>
<td>58.32</td>
<td>1.26</td>
<td>0.00</td>
<td>0.05</td>
<td>39.12</td>
<td>1.19</td>
</tr>
<tr>
<td>Tanzania</td>
<td>32.97</td>
<td>67.03</td>
<td>31.51</td>
<td>1.41</td>
<td>0.04</td>
<td>0.00</td>
<td>33.02</td>
<td>33.62</td>
</tr>
<tr>
<td>Tanzania ex 27</td>
<td>46.00</td>
<td>54.00</td>
<td>43.97</td>
<td>1.97</td>
<td>0.06</td>
<td>0.00</td>
<td>46.07</td>
<td>7.38</td>
</tr>
<tr>
<td>Uganda</td>
<td>8.71</td>
<td>91.29</td>
<td>3.61</td>
<td>3.35</td>
<td>0.36</td>
<td>1.38</td>
<td>38.95</td>
<td>25.21</td>
</tr>
<tr>
<td>Uganda ex 27</td>
<td>10.91</td>
<td>89.09</td>
<td>4.53</td>
<td>4.20</td>
<td>0.46</td>
<td>1.73</td>
<td>48.82</td>
<td>31.60</td>
</tr>
<tr>
<td>Rwanda</td>
<td>70.28</td>
<td>29.72</td>
<td>29.73</td>
<td>22.93</td>
<td>10.91</td>
<td>6.71</td>
<td>12.24</td>
<td>12.38</td>
</tr>
<tr>
<td>Rwanda ex 27</td>
<td>67.63</td>
<td>32.37</td>
<td>32.37</td>
<td>16.07</td>
<td>11.88</td>
<td>7.30</td>
<td>13.33</td>
<td>13.48</td>
</tr>
<tr>
<td>Burundi</td>
<td>61.48</td>
<td>38.52</td>
<td>42.68</td>
<td>17.37</td>
<td>0.41</td>
<td>1.02</td>
<td>4.88</td>
<td>8.67</td>
</tr>
<tr>
<td>Burundi ex 27</td>
<td>73.48</td>
<td>26.52</td>
<td>51.01</td>
<td>20.76</td>
<td>0.49</td>
<td>1.21</td>
<td>5.83</td>
<td>10.36</td>
</tr>
</tbody>
</table>

Source: Author, data source Comtrade/WITS, HS 1997, two digit level.
### Annex 3c: Significant changes of EAC trade volumes (2 digit tariff lines)

<table>
<thead>
<tr>
<th></th>
<th>Number of tariff lines, change in percentage</th>
<th>Number of tariff lines with strong positive change (&gt;5%) according to initial percentage levels</th>
<th>Number of tariff lines with stagnant tendency (change between -5% and 5%) according to initial percentage levels</th>
<th>Number of tariff lines with strong negative change (&lt;-5%) according to initial percentage levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive (&gt;5%)</td>
<td>Stagnant (-5% to 5%)</td>
<td>0-10% 10-40% 40-60% 60-100% 0-10% 10-40% 40-60% 60-100% 0-10% 10-40% 40-60% 60-100% 0-10% 10-40% 40-60% 60-100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAC</td>
<td>26</td>
<td>63 7 15 8 2 1 54 8 1 0 0 5 1 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>18</td>
<td>75 2 14 3 0 1 74 1 0 0 1 1 0 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>17</td>
<td>68 11 12 4 1 0 56 11 1 0 0 9 2 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>16</td>
<td>52 28 5 8 1 2 29 15 3 5 1 18 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>48</td>
<td>28 20 24 13 7 4 12 9 3 4 0 9 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burundi</td>
<td>43</td>
<td>34 19 29 11 2 1 22 7 3 2 1 2 8 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of tariff lines, change in percentage</td>
<td>Number of tariff lines with significant positive change (&gt;1%) according to initial percentage levels</td>
<td>Number of tariff lines with stagnant tendency (change between -1% and 1%) according to initial percentage levels</td>
<td>Number of tariff lines with significant negative change (&lt;-1%) according to initial percentage levels</td>
</tr>
<tr>
<td>Positive (&gt;1%)</td>
<td>Stagnant (-1% to 1%)</td>
<td>0-10% 10-40% 40-60% 60-100% 0-10% 10-40% 40-60% 60-100% 0-10% 10-40% 40-60% 60-100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EAC</td>
<td>47</td>
<td>35 14 32 11 3 1 32 3 0 0 5 7 1 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>25</td>
<td>62 9 21 3 0 1 62 0 0 0 6 2 0 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>32</td>
<td>30 34 23 8 1 0 28 1 1 0 17 15 2 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>27</td>
<td>14 55 11 11 3 2 10 0 1 3 14 30 4 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>58</td>
<td>8 30 28 15 9 6 7 1 0 0 1 15 6 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burundi</td>
<td>57</td>
<td>11 28 40 12 3 2 8 2 1 0 4 6 9 9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author, data source Comtrade/WITS, HS 1997, two digit level.

## Annex 3d: Significant changes of EAC trade volumes (five percent)

<table>
<thead>
<tr>
<th></th>
<th>Changes by trade volumes (tariff line times percentage of tariff line)</th>
<th>Changes by trade volumes (tariff line times percentage of tariff line) with strong positive change (&gt;5%) according to initial percentage levels</th>
<th>Changes by trade volumes (tariff line times percentage of tariff line) with stagnant tendency (change between -5% and 5%) according to initial percentage levels</th>
<th>Changes by trade volumes (tariff line times percentage of tariff line) with strong negative change (&lt;-5%) according to initial percentage levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive (&gt;5%)</td>
<td>Stagnant (-5% to 5%)</td>
<td>Negative (&lt;-5%)</td>
<td>0-10%</td>
</tr>
<tr>
<td>EAC</td>
<td>6.05</td>
<td>68.21</td>
<td>25.73</td>
<td>4.37</td>
</tr>
<tr>
<td>EAC ex 27</td>
<td>7.94</td>
<td>89.53</td>
<td>2.53</td>
<td>5.74</td>
</tr>
<tr>
<td>Kenya</td>
<td>5.84</td>
<td>94.05</td>
<td>0.11</td>
<td>4.84</td>
</tr>
<tr>
<td>Kenya ex 27</td>
<td>7.63</td>
<td>92.22</td>
<td>0.14</td>
<td>6.32</td>
</tr>
<tr>
<td>Tanzania</td>
<td>1.80</td>
<td>68.03</td>
<td>30.16</td>
<td>1.65</td>
</tr>
<tr>
<td>Tanzania ex 27</td>
<td>2.52</td>
<td>94.92</td>
<td>2.56</td>
<td>2.30</td>
</tr>
<tr>
<td>Uganda</td>
<td>1.51</td>
<td>60.87</td>
<td>37.62</td>
<td>0.17</td>
</tr>
<tr>
<td>Uganda ex 27</td>
<td>1.90</td>
<td>76.28</td>
<td>21.83</td>
<td>0.22</td>
</tr>
<tr>
<td>Rwanda</td>
<td>31.59</td>
<td>58.34</td>
<td>10.07</td>
<td>3.80</td>
</tr>
<tr>
<td>Rwanda ex 27</td>
<td>25.50</td>
<td>63.53</td>
<td>10.97</td>
<td>4.14</td>
</tr>
<tr>
<td>Burundi</td>
<td>23.91</td>
<td>49.12</td>
<td>26.97</td>
<td>6.51</td>
</tr>
<tr>
<td>Burundi ex 27</td>
<td>28.57</td>
<td>58.71</td>
<td>12.72</td>
<td>7.78</td>
</tr>
</tbody>
</table>

Source: Author, data source Comtrade/WITS, HS 1997, two digit level.

### Annex 3e: Significant changes of EAC trade volumes (one percent)

<table>
<thead>
<tr>
<th></th>
<th>Changes by trade volumes (tariff line times percentage of tariff line)</th>
<th>Changes by trade volumes (tariff line times percentage of tariff line) with significant positive change (&gt;1%) according to initial percentage levels</th>
<th>Changes by trade volumes (tariff line times percentage of tariff line) with stagnant tendency (change between -1% and 1%) according to initial percentage levels</th>
<th>Changes by trade volumes (tariff line times percentage of tariff line) with strong negative change (&lt; -1%) according to initial percentage levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive (&gt;1%)</td>
<td>Stagnant (-1% to 1%)</td>
<td>Negative (&lt;-1%)</td>
<td>0-10%</td>
</tr>
<tr>
<td>EAC</td>
<td>41.59</td>
<td>33.67</td>
<td>24.74</td>
<td>23.07</td>
</tr>
<tr>
<td>EAC ex 27</td>
<td>47.75</td>
<td>38.66</td>
<td>13.59</td>
<td>26.49</td>
</tr>
<tr>
<td>Kenya</td>
<td>12.72</td>
<td>85.62</td>
<td>1.66</td>
<td>11.72</td>
</tr>
<tr>
<td>Kenya ex 27</td>
<td>16.63</td>
<td>81.21</td>
<td>2.16</td>
<td>15.32</td>
</tr>
<tr>
<td>Tanzania</td>
<td>16.46</td>
<td>38.34</td>
<td>45.20</td>
<td>15.02</td>
</tr>
<tr>
<td>Tanzania ex 27</td>
<td>22.96</td>
<td>53.49</td>
<td>23.55</td>
<td>20.96</td>
</tr>
<tr>
<td>Uganda</td>
<td>6.03</td>
<td>18.11</td>
<td>75.86</td>
<td>2.02</td>
</tr>
<tr>
<td>Uganda ex 27</td>
<td>7.56</td>
<td>22.69</td>
<td>69.75</td>
<td>2.54</td>
</tr>
<tr>
<td>Rwanda</td>
<td>53.07</td>
<td>30.52</td>
<td>14.79</td>
<td>12.52</td>
</tr>
<tr>
<td>Rwanda ex 27</td>
<td>48.89</td>
<td>33.23</td>
<td>17.87</td>
<td>13.64</td>
</tr>
<tr>
<td>Burundi</td>
<td>43.43</td>
<td>22.01</td>
<td>34.56</td>
<td>24.67</td>
</tr>
<tr>
<td>Burundi ex 27</td>
<td>51.91</td>
<td>26.31</td>
<td>21.78</td>
<td>29.48</td>
</tr>
</tbody>
</table>

Source: Author, data source Comtrade/WITS, HS 1997, two digit level.

Annex 4: Regional export shares for the individual EAC economies

- Percentage Kenya
- Percentage Kenya ex 27
- Percentage Kenya mirror
- Percentage Kenya mirror ex 27

- Percentage Tanzania
- Percentage Tanzania ex 27
- Percentage Tanzania mirror
- Percentage Tanzania mirror ex 27

- Percentage Uganda
- Percentage Uganda ex 27
- Percentage Uganda mirror
- Percentage Uganda mirror ex 27
Source: Author, data source Comtrade/WITS.
Notes: Volumes of total trade in thousand USD. Data marked “Mirror” are import data. Data marked ‘ex 27’ exclude HS 1996 two digit tariff line 27, i.e. petroleum and gas.
Annex 5a: Origins and destinations of intra-regional exports

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Burundi</td>
<td>Kenya</td>
<td>Rwanda</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Reg exports</td>
<td>1.15%</td>
<td>71.76%</td>
<td>4.94%</td>
<td>10.37%</td>
</tr>
<tr>
<td>Reg imports</td>
<td>4.53%</td>
<td>19.63%</td>
<td>8.94%</td>
<td>22.43%</td>
</tr>
<tr>
<td>Exp-Imp</td>
<td>-3.38%</td>
<td>52.14%</td>
<td>-4.00%</td>
<td>-12.06%</td>
</tr>
<tr>
<td>Exp/Imp</td>
<td>25.4%</td>
<td>365.6%</td>
<td>55.3%</td>
<td>46.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2006-2010</th>
<th></th>
<th>2006-2010 (mirror statistics)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Burundi</td>
<td>Kenya</td>
<td>Rwanda</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Reg exports</td>
<td>1.28%</td>
<td>61.69%</td>
<td>3.03%</td>
<td>17.37%</td>
</tr>
<tr>
<td>Reg imports</td>
<td>7.09%</td>
<td>22.25%</td>
<td>13.52%</td>
<td>22.57%</td>
</tr>
<tr>
<td>Exp-Imp</td>
<td>-5.80%</td>
<td>39.45%</td>
<td>-10.49%</td>
<td>-5.20%</td>
</tr>
<tr>
<td>Exp/Imp</td>
<td>18.1%</td>
<td>277.3%</td>
<td>22.4%</td>
<td>77.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Burundi</td>
<td>Kenya</td>
<td>Rwanda</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Reg exports</td>
<td>1.56%</td>
<td>63.83%</td>
<td>6.78%</td>
<td>14.08%</td>
</tr>
<tr>
<td>Reg imports</td>
<td>4.24%</td>
<td>25.04%</td>
<td>7.59%</td>
<td>25.01%</td>
</tr>
<tr>
<td>Exp-Imp</td>
<td>-2.68%</td>
<td>38.79%</td>
<td>-0.81%</td>
<td>-10.93%</td>
</tr>
<tr>
<td>Exp/Imp</td>
<td>36.9%</td>
<td>254.9%</td>
<td>89.3%</td>
<td>56.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2006-2010 (ex27)</th>
<th></th>
<th>2006-2010 (mirror statistics, ex 27)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Burundi</td>
<td>Kenya</td>
<td>Rwanda</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Reg exports</td>
<td>1.38%</td>
<td>60.64%</td>
<td>3.27%</td>
<td>17.43%</td>
</tr>
<tr>
<td>Reg imports</td>
<td>7.44%</td>
<td>22.49%</td>
<td>13.64%</td>
<td>22.93%</td>
</tr>
<tr>
<td>Exp-Imp</td>
<td>-6.06%</td>
<td>38.14%</td>
<td>-10.37%</td>
<td>-5.50%</td>
</tr>
<tr>
<td>Exp/Imp</td>
<td>18.6%</td>
<td>269.6%</td>
<td>24.0%</td>
<td>76.0%</td>
</tr>
</tbody>
</table>

### Annex 5b: Origins and destinations of intra-regional exports

#### 2000-2005

<table>
<thead>
<tr>
<th></th>
<th>Exporters</th>
<th></th>
<th>Exporters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Burundi</td>
<td>Kenya</td>
<td>Rwanda</td>
</tr>
<tr>
<td></td>
<td>3.01%</td>
<td>0.05%</td>
<td>0.84%</td>
</tr>
<tr>
<td>Importers</td>
<td>Kenya</td>
<td>0.46%</td>
<td>2.87%</td>
</tr>
<tr>
<td></td>
<td>Rwanda</td>
<td>0.51%</td>
<td>6.40%</td>
</tr>
<tr>
<td></td>
<td>Tanzania</td>
<td>0.03%</td>
<td>20.86%</td>
</tr>
<tr>
<td></td>
<td>Uganda</td>
<td>0.15%</td>
<td>41.50%</td>
</tr>
<tr>
<td></td>
<td>Sum</td>
<td>1.15%</td>
<td>71.76%</td>
</tr>
</tbody>
</table>

#### 2006-2010

<table>
<thead>
<tr>
<th></th>
<th>Exporters</th>
<th></th>
<th>Exporters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Burundi</td>
<td>Kenya</td>
<td>Rwanda</td>
</tr>
<tr>
<td></td>
<td>2.86%</td>
<td>0.22%</td>
<td>2.01%</td>
</tr>
<tr>
<td>Importers</td>
<td>Kenya</td>
<td>0.57%</td>
<td>2.54%</td>
</tr>
<tr>
<td></td>
<td>Rwanda</td>
<td>0.31%</td>
<td>6.14%</td>
</tr>
<tr>
<td></td>
<td>Tanzania</td>
<td>0.19%</td>
<td>20.93%</td>
</tr>
<tr>
<td></td>
<td>Uganda</td>
<td>0.21%</td>
<td>31.77%</td>
</tr>
<tr>
<td></td>
<td>Sum</td>
<td>1.28%</td>
<td>61.69%</td>
</tr>
</tbody>
</table>

### Annex 5c: Origins and destinations of intra-regional exports (ex 27)

#### 2000-2005 (ex 27)

<table>
<thead>
<tr>
<th>Exporters</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>2.17%</td>
<td>0.07%</td>
<td>1.14%</td>
<td>0.86%</td>
<td>4.24%</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>0.63%</td>
<td>3.93%</td>
<td>10.65%</td>
<td>9.83%</td>
<td>25.04%</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>0.70%</td>
<td>4.26%</td>
<td>0.51%</td>
<td>2.12%</td>
<td>7.59%</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>0.03%</td>
<td>23.28%</td>
<td>0.75%</td>
<td>0.94%</td>
<td>25.01%</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>0.21%</td>
<td>34.11%</td>
<td>2.02%</td>
<td>1.78%</td>
<td>38.12%</td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>1.56%</td>
<td>63.83%</td>
<td>6.78%</td>
<td>14.08%</td>
<td>13.75%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Importers</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>3.03%</td>
<td>0.20%</td>
<td>1.80%</td>
<td>2.62%</td>
<td>7.65%</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>0.02%</td>
<td>0.09%</td>
<td>5.05%</td>
<td>2.77%</td>
<td>7.93%</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>0.10%</td>
<td>8.64%</td>
<td>1.30%</td>
<td>4.91%</td>
<td>14.95%</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>0.02%</td>
<td>21.57%</td>
<td>0.06%</td>
<td>1.22%</td>
<td>22.86%</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>0.01%</td>
<td>43.52%</td>
<td>0.14%</td>
<td>2.94%</td>
<td>46.61%</td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>0.14%</td>
<td>76.76%</td>
<td>0.49%</td>
<td>11.08%</td>
<td>11.52%</td>
<td></td>
</tr>
</tbody>
</table>

#### 2006-2010 (ex 27)

<table>
<thead>
<tr>
<th>Exporters</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>2.90%</td>
<td>0.23%</td>
<td>2.15%</td>
<td>2.16%</td>
<td>7.44%</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>0.62%</td>
<td>2.74%</td>
<td>11.10%</td>
<td>8.03%</td>
<td>22.49%</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>0.33%</td>
<td>5.80%</td>
<td>1.68%</td>
<td>5.83%</td>
<td>13.64%</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>0.21%</td>
<td>21.41%</td>
<td>0.06%</td>
<td>1.26%</td>
<td>22.93%</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>0.22%</td>
<td>30.54%</td>
<td>0.24%</td>
<td>2.50%</td>
<td>33.50%</td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>1.38%</td>
<td>60.64%</td>
<td>3.27%</td>
<td>17.43%</td>
<td>17.28%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Importers</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>2.51%</td>
<td>0.19%</td>
<td>1.26%</td>
<td>2.62%</td>
<td>6.58%</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>0.14%</td>
<td>0.23%</td>
<td>8.54%</td>
<td>6.27%</td>
<td>15.19%</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>0.21%</td>
<td>7.73%</td>
<td>2.25%</td>
<td>10.01%</td>
<td>20.21%</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>0.02%</td>
<td>19.31%</td>
<td>0.03%</td>
<td>1.00%</td>
<td>20.36%</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>0.06%</td>
<td>34.31%</td>
<td>0.24%</td>
<td>3.06%</td>
<td>37.66%</td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>0.43%</td>
<td>63.87%</td>
<td>0.69%</td>
<td>15.10%</td>
<td>19.91%</td>
<td></td>
</tr>
</tbody>
</table>

### Annex 5d: Absolute changes of origins and destinations of intra-regional exports

#### Absolute change 2000-2005 vs. 2006-2010

<table>
<thead>
<tr>
<th>Exporters</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>-0.15%</td>
<td>0.16%</td>
<td>1.17%</td>
<td>1.38%</td>
<td>2.56%</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>0.11%</td>
<td>-0.33%</td>
<td>3.52%</td>
<td>-0.69%</td>
<td>2.62%</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>-0.20%</td>
<td>-0.26%</td>
<td>1.28%</td>
<td>3.77%</td>
<td>4.59%</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>0.17%</td>
<td>0.07%</td>
<td>-0.50%</td>
<td>0.39%</td>
<td>0.13%</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>0.06%</td>
<td>-9.72%</td>
<td>-1.25%</td>
<td>1.02%</td>
<td>-9.90%</td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>0.13%</td>
<td>-10.07%</td>
<td>-1.91%</td>
<td>7.00%</td>
<td>4.85%</td>
<td></td>
</tr>
</tbody>
</table>

#### Absolute change 2000-2005 vs. 2006-2010 (mirror statistics)

<table>
<thead>
<tr>
<th>Exporters</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>-1.88%</td>
<td>0.05%</td>
<td>-1.37%</td>
<td>0.74%</td>
<td>-2.46%</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>0.16%</td>
<td>0.15%</td>
<td>4.73%</td>
<td>3.74%</td>
<td>8.78%</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>0.12%</td>
<td>2.24%</td>
<td>1.23%</td>
<td>5.80%</td>
<td>9.41%</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>0.00%</td>
<td>1.98%</td>
<td>-0.01%</td>
<td>0.19%</td>
<td>1.78%</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>0.04%</td>
<td>-19.11%</td>
<td>0.16%</td>
<td>1.40%</td>
<td>17.50%</td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>0.33%</td>
<td>-16.76%</td>
<td>0.34%</td>
<td>5.99%</td>
<td>10.09%</td>
<td></td>
</tr>
</tbody>
</table>

#### Absolute change 2000-2005 vs. 2006-2010 (ex 27)

<table>
<thead>
<tr>
<th>Exporters</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>0.73%</td>
<td>0.16%</td>
<td>1.01%</td>
<td>1.30%</td>
<td>3.20%</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>-0.01%</td>
<td>-1.19%</td>
<td>0.45%</td>
<td>-1.79%</td>
<td>-2.55%</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>-0.37%</td>
<td>1.54%</td>
<td>1.17%</td>
<td>3.71%</td>
<td>6.05%</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>0.18%</td>
<td>-1.88%</td>
<td>-0.70%</td>
<td>0.31%</td>
<td>-2.08%</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>0.02%</td>
<td>-3.58%</td>
<td>-1.78%</td>
<td>0.72%</td>
<td>-4.62%</td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>-0.18%</td>
<td>-3.19%</td>
<td>-3.50%</td>
<td>3.35%</td>
<td>3.53%</td>
<td></td>
</tr>
</tbody>
</table>

#### Absolute change 2000-2005 vs. 2006-2010 (mirror statistics, ex 27)

<table>
<thead>
<tr>
<th>Exporters</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>-0.52%</td>
<td>-0.02%</td>
<td>-0.54%</td>
<td>0.01%</td>
<td>-1.07%</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>0.12%</td>
<td>0.14%</td>
<td>3.49%</td>
<td>3.51%</td>
<td>7.26%</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>0.11%</td>
<td>-0.91%</td>
<td>0.95%</td>
<td>5.10%</td>
<td>5.26%</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>0.01%</td>
<td>-2.25%</td>
<td>-0.03%</td>
<td>0.95%</td>
<td>-2.33%</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>0.05%</td>
<td>-9.21%</td>
<td>0.10%</td>
<td>0.12%</td>
<td>-8.94%</td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>0.29%</td>
<td>-12.89%</td>
<td>0.20%</td>
<td>4.02%</td>
<td>8.39%</td>
<td></td>
</tr>
</tbody>
</table>

### Annex 5e: Relative changes of origins and destinations of intra-regional exports

#### Relative change 2000-2005 vs. 2006-2010

<table>
<thead>
<tr>
<th>Exporters</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>0.95</td>
<td>4.12</td>
<td>2.40</td>
<td>3.20</td>
<td>1.57</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>1.24</td>
<td>0.89</td>
<td>1.45</td>
<td>0.92</td>
<td>1.13</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>0.60</td>
<td>0.96</td>
<td>4.44</td>
<td>3.27</td>
<td>1.51</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>6.63</td>
<td>1.00</td>
<td>0.10</td>
<td>1.40</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>1.37</td>
<td>0.77</td>
<td>0.15</td>
<td>1.75</td>
<td>0.78</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1.12</td>
<td>0.86</td>
<td>0.61</td>
<td>1.67</td>
<td>1.41</td>
<td></td>
</tr>
</tbody>
</table>

#### Relative change 2000-2005 vs. 2006-2010 (mirror statistics)

<table>
<thead>
<tr>
<th>Exporters</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>0.56</td>
<td>1.40</td>
<td>0.44</td>
<td>1.48</td>
<td>0.71</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>14.56</td>
<td>3.73</td>
<td>2.58</td>
<td>3.24</td>
<td>2.86</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>3.18</td>
<td>1.40</td>
<td>2.61</td>
<td>3.01</td>
<td>2.01</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>0.98</td>
<td>1.11</td>
<td>0.79</td>
<td>0.83</td>
<td>1.09</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>10.74</td>
<td>0.66</td>
<td>2.87</td>
<td>1.76</td>
<td>0.70</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.46</td>
<td>0.80</td>
<td>2.19</td>
<td>1.74</td>
<td>2.40</td>
<td></td>
</tr>
</tbody>
</table>

#### Relative change 2000-2005 vs. 2006-2010 (ex 27)

<table>
<thead>
<tr>
<th>Exporters</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>1.33</td>
<td>3.27</td>
<td>1.88</td>
<td>2.52</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>0.98</td>
<td>0.70</td>
<td>1.04</td>
<td>0.82</td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>0.47</td>
<td>1.36</td>
<td>3.31</td>
<td>2.75</td>
<td>1.80</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>7.69</td>
<td>0.92</td>
<td>0.08</td>
<td>1.33</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>1.08</td>
<td>0.90</td>
<td>0.12</td>
<td>1.40</td>
<td>0.88</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.89</td>
<td>0.95</td>
<td>0.48</td>
<td>1.24</td>
<td>1.26</td>
<td></td>
</tr>
</tbody>
</table>

#### Relative change 2000-2005 vs. 2006-2010 (mirror statistics, ex 27)

<table>
<thead>
<tr>
<th>Exporters</th>
<th>Burundi</th>
<th>Kenya</th>
<th>Rwanda</th>
<th>Tanzania</th>
<th>Uganda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>0.83</td>
<td>0.92</td>
<td>0.70</td>
<td>1.00</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>7.01</td>
<td>2.58</td>
<td>1.69</td>
<td>2.27</td>
<td>1.92</td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>2.15</td>
<td>0.90</td>
<td>1.73</td>
<td>2.04</td>
<td>1.35</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>1.38</td>
<td>0.90</td>
<td>0.53</td>
<td>0.82</td>
<td>0.89</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>7.28</td>
<td>0.79</td>
<td>1.67</td>
<td>1.04</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3.03</td>
<td>0.83</td>
<td>1.40</td>
<td>1.36</td>
<td>1.73</td>
<td></td>
</tr>
</tbody>
</table>

### Annex 6: CIP trade-related dimensions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kenya</strong></td>
<td>117 / 17</td>
<td>0 / 60</td>
<td>115 / 113</td>
<td>-2 / 54</td>
<td>3.3 / 57</td>
<td>2.4 / 41</td>
</tr>
<tr>
<td><strong>Rwanda</strong></td>
<td>131 / 27</td>
<td>-4 / 41</td>
<td>129 / 129</td>
<td>0 / 72</td>
<td>18.5 / 4</td>
<td>3.3 / 16</td>
</tr>
<tr>
<td><strong>Tanzania</strong></td>
<td>126 / 121</td>
<td>-5 / 39</td>
<td>126 / 119</td>
<td>-7 / 25</td>
<td>11.4 / 5</td>
<td>5 / 5.1</td>
</tr>
<tr>
<td><strong>Uganda</strong></td>
<td>130 / 124</td>
<td>-6 / 30</td>
<td>132 / 127</td>
<td>-5 / 34</td>
<td>25.6 / 3</td>
<td>7.3 / 3</td>
</tr>
</tbody>
</table>

#### Manufacturing exports per capita

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kenya</strong></td>
<td>101 / 89</td>
<td>-12 / 23</td>
<td>90 / 88</td>
<td>-2 / 49</td>
<td>1.3 / 22</td>
<td>1 / 44</td>
<td></td>
</tr>
<tr>
<td><strong>Rwanda</strong></td>
<td>123 / 84</td>
<td>-39 / 5</td>
<td>103 / 89</td>
<td>-14 / 12</td>
<td>4.1 / 6</td>
<td>1.4 / 12</td>
<td></td>
</tr>
<tr>
<td><strong>Tanzania</strong></td>
<td>114 / 97</td>
<td>-17 / 16</td>
<td>118 / 98</td>
<td>-20 / 9</td>
<td>2.1 / 12</td>
<td>2.1 / 8</td>
<td></td>
</tr>
<tr>
<td><strong>Uganda</strong></td>
<td>128 / 87</td>
<td>-41 / 4</td>
<td>129 / 106</td>
<td>-23 / 6</td>
<td>6.3 / 4</td>
<td>3.5 / 2</td>
<td></td>
</tr>
</tbody>
</table>

#### Share of manufacturing exports in total exports

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kenya</strong></td>
<td>88 / 80</td>
<td>-8 / 41</td>
<td>91 / 86</td>
<td>-5 / 45</td>
<td>1.7 / 32</td>
<td>1.5 / 26</td>
<td></td>
</tr>
<tr>
<td><strong>Rwanda</strong></td>
<td>123 / 122</td>
<td>-1 / 65</td>
<td>118 / 118</td>
<td>0 / 68</td>
<td>1.7 / 33</td>
<td>1.1 / 64</td>
<td></td>
</tr>
<tr>
<td><strong>Tanzania</strong></td>
<td>106 / 96</td>
<td>-10 / 38</td>
<td>109 / 100</td>
<td>-9 / 31</td>
<td>2.3 / 15</td>
<td>2.1 / 13</td>
<td></td>
</tr>
<tr>
<td><strong>Uganda</strong></td>
<td>92 / 66</td>
<td>-26 / 10</td>
<td>72 / 92</td>
<td>20 / 124</td>
<td>2.5 / 14</td>
<td>0.7 / 124</td>
<td></td>
</tr>
</tbody>
</table>

#### Share of medium and high tech in total manufacturing exports

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kenya</strong></td>
<td>91 / 89</td>
<td>-2 / 48</td>
<td>90 / 89</td>
<td>-1 / 50</td>
<td>1.9 / 38</td>
<td>1.5 / 33</td>
<td></td>
</tr>
<tr>
<td><strong>Rwanda</strong></td>
<td>129 / 124</td>
<td>-5 / 34</td>
<td>127 / 128</td>
<td>1 / 66</td>
<td>9.4 / 5</td>
<td>1.9 / 13</td>
<td></td>
</tr>
<tr>
<td><strong>Tanzania</strong></td>
<td>114 / 93</td>
<td>-21 / 4</td>
<td>126 / 96</td>
<td>-30 / 3</td>
<td>6.0 / 8</td>
<td>3.4 / 6</td>
<td></td>
</tr>
<tr>
<td><strong>Uganda</strong></td>
<td>125 / 106</td>
<td>-19 / 7</td>
<td>126 / 114</td>
<td>-12 / 6</td>
<td>14.2 / 3</td>
<td>4.6 / 2</td>
<td></td>
</tr>
</tbody>
</table>

#### Share of world manufacturing exports

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kenya</strong></td>
<td>91 / 89</td>
<td>-2 / 48</td>
<td>90 / 89</td>
<td>-1 / 50</td>
<td>1.9 / 38</td>
<td>1.5 / 33</td>
<td></td>
</tr>
<tr>
<td><strong>Rwanda</strong></td>
<td>129 / 124</td>
<td>-5 / 34</td>
<td>127 / 128</td>
<td>1 / 66</td>
<td>9.4 / 5</td>
<td>1.9 / 13</td>
<td></td>
</tr>
<tr>
<td><strong>Tanzania</strong></td>
<td>114 / 93</td>
<td>-21 / 4</td>
<td>126 / 96</td>
<td>-30 / 3</td>
<td>6.0 / 8</td>
<td>3.4 / 6</td>
<td></td>
</tr>
<tr>
<td><strong>Uganda</strong></td>
<td>125 / 106</td>
<td>-19 / 7</td>
<td>126 / 114</td>
<td>-12 / 6</td>
<td>14.2 / 3</td>
<td>4.6 / 2</td>
<td></td>
</tr>
<tr>
<td><strong>EAC</strong></td>
<td>87 / 78</td>
<td>-9 / 86</td>
<td>79 / 79</td>
<td>-7 / 32</td>
<td>3.2 / 17</td>
<td>2.0 / 13</td>
<td></td>
</tr>
</tbody>
</table>

% Kenyan / EAC: 77.7 / 46.8
% Tanzanian / EAC: 17.1 / 32.1

Source: Author, data source UNIDO.

Notes: For countries without CIP score for 2010 the oldest available data point after 2010 has been utilised in the calculations.
Annex 7a: Percentage of EAC FDI inflows of global, African & SSA inflows

Source: Author, data source UNCTAD WIR.
Notes: First graph percentage of EAC and individual EAC economies in global FDI inflows, second graph percentage of EAC and individual EAC economies in inflows to Africa, third graph percentage of EAC and individual EAC economies in inflows to SSA, fourth graph EAC member's share in FDI inflows.
Annex 7b: Percentage of EAC FDI inflows of global, African & SSA inflows / period

Source: Author, data source UNCTAD WIR.
Notes: Simple mean averages. First graph percentage of EAC and individual EAC economies in global FDI inflows, second graph percentage of EAC and individual EAC economies in inflows to Africa, third graph percentage of EAC and individual EAC economies in inflows to SSA, fourth graph EAC individual member's share in FDI inflows.
Annex 7c: EAC FDI inward stock of global, African & SSA stock

Source: Author, data source UNCTAD WIR.
Notes: First table absolute FDI inward stock in EAC countries in million USD. Second table percentage of EAC in global FDI inward stocks, third table percentage of EAC of FDI inward stocks in Africa, fourth table percentage of EAC of FDI inward stocks in SSA, fifth table EAC member's share in FDI inward stocks.
Annex 7d: Percentage of EAC FDI inward stock of global, African & SSA / period

Source: Author, data source UNCTAD WIR.
Notes: First table percentage of EAC in global FDI inward stocks, second table percentage of EAC of FDI inward stocks in Africa, third graph percentage of EAC of FDI inward stocks in SSA, fourth graph EAC member’s share in FDI inward stocks.


Berman, E. & Machin, S. 2000. Skill-Biased Technology Transfer: Evidence of Factor Biased Technological Change in Developing Countries. *Boston University and University College London*.


264


Limão, N. 2007. *Are Preferential Trade Agreements With Non-Trade Objectives a Stumbling Block for Multilateral Liberalization?* University of Maryland and CEPR.


