



United Nations
Economic Commission for Africa

TRACKING PROGRESS ON
MACROECONOMIC AND SOCIAL
DEVELOPMENTS IN THE EASTERN
AFRICA REGION 2012-13

Towards High Quality Growth and Structural Transformation in the Eastern Africa Region



TRACKING PROGRESS ON MACROECONOMIC
AND SOCIAL DEVELOPMENTS IN THE EASTERN
AFRICA REGION 2012-13

**Towards High Quality Growth
and Structural Transformation
in the Eastern Africa Region**



United Nations
Economic Commission for Africa

Copyright ©2013
United Nations Economic Commission for Africa
www.uneca.org

All rights reserved.

The text and data in this publication may be reproduced as long as the source is cited. Reproduction for commercial purposes is forbidden.

Disclaimer

This report is the result of the analysis of a study commissioned by the United Nations Economic Commission for Africa, Eastern Africa Sub-region Office (ECA/ SRO-EA) . However, the report does not purport to represent the views or the official policy of the institution or of any SRO-EA member country.

TABLE OF CONTENTS

Figures	8
Tables	10
Boxes	11
Acknowledgements	12
Acronyms	13

EXECUTIVE SUMMARY 16

CHAPTER 1. MACROECONOMIC DEVELOPMENTS 23

1.1	Growth performance in the region – An overview	24
1.2	Is there room for expansionary Fiscal Policy?	29
1.3	Government debt	31
1.4	Monetary policy and easing inflationary pressures	34
1.5	Foreign exchange rates	35
1.6	Trends in commodity prices and exports in the region	36
1.7	Current account developments and international reserves	42
1.8	Overseas development aid – Confronting aid cuts in the region	45
1.9	Foreign direct investment (FDI) and private sector investments	47
1.10	Conclusion	48

CHAPTER 2. THE STRUCTURAL CHARACTERISTICS OF GROWTH IN THE EASTERN AFRICAN REGION 53

2.1	Introduction	54
2.2	Poverty reduction and growth	54
	2.2.1 Poverty reduction elasticities for the Eastern Africa region	54
	2.2.2 Has growth been accompanied by a concomitant improvement in living standards?	55
2.3	Inequality and growth	61
	2.3.1 The extent and impact of inequality in Eastern Africa	61
	2.3.2 Policy measures to mitigate inequalities	65
2.4	Employment and Growth	66

2.4.1	The nature of job markets in the Eastern African region	66
2.4.2	Where will the jobs come from?	68
2.5	Structural Change and Growth – What the debate means for Eastern Africa	71
2.5.1	A booming field of research – with some important implications for sectoral policies	71
2.5.2	Avoiding the ‘benign’ neglect of the Agricultural Sector	73
2.5.3	Targeted industrial policies – towards a new industrial policy’?	75
2.6	Conclusions and Policy recommendations	79
2.7	Annex: Consumption and income growth GNI per capita (constant 2000 USD)	81

CHAPTER 3. AN ANALYSIS OF THE GROWTH DYNAMICS IN THE EASTERN AFRICA REGION 87

3.1	Introduction	88
3.2	The patterns of growth in Eastern Africa – An overview	88
3.3	A demand-decomposition perspective on economic growth in the Eastern African Region	90
3.4	Supply-side analysis- A total factor productivity analysis	94
3.5	Econometric analysis of regional growth performance 1980-2011	97
3.5.1	The importance of domestic savings for growth	97
3.5.2	Econometric analysis of the sources of growth in Eastern Africa	100
3.6	Conclusions and policy recommendations	104
3.7	Annex	106
3.7.1	Annex i: Fastest growing sectors, 2001-2010	106
3.7.2	Annex ii: Sectoral contribution to growth: 2001-2010	107

CHAPTER 4. ADDRESSING EDUCATIONAL DEFICITS IN EASTERN AFRICA – THE CHALLENGE OF EDUCATIONAL ‘DEEPENING’ 111

4.1	Introduction	112
4.2	Increased political and financial prioritization of education as a necessary but not sufficient condition for educational deepening	113
4.3	Outcome indicators	116

4.3.1	Improvements in enrolment rates	116
4.3.2	Progress through the educational system	119
4.3.3	Primary completion rate	119
4.3.4	Disappointing outcomes	120
4.4	Importance of educational inputs	122
4.4.1	Changes in pupil to teacher ratio	112
4.4.2	Role of school fees	125
4.5	Constraints to improving the education sector of the region	127
4.5.1	Economic and geographical factors	127
4.5.2	Teachers	127
4.5.3	Teacher incentives	128
4.6	Transition through the Education System	129
4.6.1	Strengthening Tertiary Education	130
4.6.2	Technical, vocational education and training	134
4.6.3	Investment in early childhood development programmes	135
4.7	CONCLUSIONS	137
4.8	REFERENCES	138

FIGURES

Figure 1.1:	Average GDP Growth Rates	25
Figure 1.2:	Nominal GDP of Eastern Africa Region (USD billions) 2012	26
Figure 1.3:	Nominal Per Capita GDP of Eastern Africa (USD) 2012	26
Figure 1.4:	Government Debt, Per cent of GDP 2012 vs. 2011	32
Figure 1.5:	CPI year-on-year in Four High (<20 percent) Inflation Countries (Percent Change), Jan 2012- May 2013	34
Figure 1.6:	Nominal Exchange Rate, Local Currency vs. US Dollar	35
Figure 1.7:	Real Effective Exchange Rates Index (2007=100)	36
Figure 1.8:	Indices of World Market Prices for Select Commodities, 2009–2012	37
Figure 1.9:	Oil and Food Price Indices	37
Figure 1.10:	Regional Exports and Imports (USD, Billions)	38
Figure 1.11:	Weighted GDP Growth(2008-2012)	41
Figure 1.12:	Weighted Inflation Rates (2008-2012)	41
Figure 1.13:	Average Intra Regional Exports, Percentage by Destination	41
Figure 1.14:	Terms of Trade Shifts, 2011-2012	42
Figure 1.15:	Current Account Deficits across Eastern Africa 2012	43
Figure 1.16:	The Impact of Oil Import Bills on Current Account Balance in Eastern Africa.	44
Figure 1.17:	Reserves in Months of Imports of Goods and Services, 2012	45
Figure 2.1:	Poverty Reduction Elasticities, 2000s	55
Figure 2.2:	Annual Percentage Growth in Mobile Phone Ownership per Household, 2000s	57
Figure 2.3:	Average Annual Growth Rates of GNI per Capita and Household Ownership of Selected Assets, 2000s	57
Figure 2.4:	Deviation of Household Ownership of a Selection of Assets from Growth in per Capita GNI.	59
Figure 2.5:	Gini Coefficient, Eastern Africa, Latest Available Year	61
Figure 2.6:	Consumption Shares by Richest and Poorest Decile, Latest Available Year	62
Figure 2.7:	Informality and Unemployment Rates, Latest Year	67
Figure 2.8:	Employment-Growth Elasticities	67

Figure 2.9:	Growth and Employment Creation in Africa, 2002-2010	68
Figure 3.1:	Fastest Growing Sectors, EAR-13, 2001-2010	89
Figure 3.2:	Sectoral Contribution to Growth, 2001-2010	90
Figure 3.3:	Growth, Export and Private Consumption Performance, Classified by the Major Source of Growth: Average 1999-2011	94
Figure 3.4:	Comparison of Mean Savings Rates (as per cent of GDP)	98
Figure 3.5:	Gross Savings and Real Interest Rates in Kenya 2000-2011	99
Figure 4.1:	Expenditure on Education as a % of GDP	114
Figure 4.2:	Educational Expenditure in Primary as % of Total Educational Expenditure	114
Figure 4.3:	Amount of Overseas Development Aid for Education to the East African Region (Millions of Dollars)	115
Figure 4.4:	Share of DAC ODA Spending on Education to the Different Levels of Provision, 2002 and 2010	115
Figure 4.5:	Meeting Net Enrolment Targets	117
Figure 4.6:	Percent of Male Population Having Completed Primary School, by Income Quintile	118
Figure 4.7:	Primary School Completion	118
Figure 4.8:	Post-Secondary School	118
Figure 4.9:	Completion Rate to Last Grade of Primary	119
Figure 4.10:	Test Pass Rates for Children Enrolled in 3rd Grade, All Eastern Africa	121
Figure 4.11:	Pass Rates for Children 10-16 by Country	121
Figure 4.12:	Percentage of Children Scoring Zero on Reading Comprehension	122
Figure 4.13:	Pupil to Textbook Ratio in the Region	124
Figure 4.14:	Teacher Needs in the Region to Meet UPE by 2015	128
Figure 4.15:	Effective Transition Rates from Primary to Secondary Education from 2008 to 2009 and the Gross Enrolment Rate for Secondary School in 2010	129
Figure 4.16:	Lack of Skills versus Skills Mismatching	133
Figure 4.17:	Percentage of Population Who Reads a Newspaper at least Once a Week	134

TABLES

Table 1.1:	National Rates of GDP Growth, Eastern Africa, 2008-2013	24
Table 1.2:	Macroeconomic Impacts of Aid Suspension	27
Table 1.3:	Overall Budget Balance, (Per cent of GDP)	30
Table 1.4:	Debt Sustainability Analysis	33
Table 1.5:	External Debt to Official Creditors, Per cent of GDP	33
Table 1.6:	Eastern Africa Export Shares by Destinations (Per cent, 2007-2011)	39
Table 1.7:	Eastern Africa Import Shares by Source (per cent), 2007-2011	39
Table 1.8:	Trade Balance (USD millions)	40
Table 1.9:	Trends in Current Account (per cent of GDP)	42
Table 1.10:	Development Assistance Committee ODA to Eastern Africa;	46
Table 1.11:	Official Aid Flows from China, millions USD	46
Table 1.12:	FDI Inflows, in Eastern Africa (millions USD), 2007-2012	47
Table 2.1:	Consumption Poverty, as a Per cent of Population, 2000/1 to 2010/11	63
Table 2.2:	Evolution of Inequality in Rwanda, Gini coefficient, 2000/2 to 2010/11	64
Table 2.3:	Payroll to Population Employment Rates for 2011	67
Table 2.4:	Employment Creation Elasticities by Industry, Rwanda 2006-2010	69
Table 2.5:	Manufacturing Value Added in Eastern Africa and Selected African Countries (Per cent of Total GDP)	71
Table 2.6:	Structural Transformation: Output shares of Agriculture, Mining, Manufacturing, Construction, and the Tertiary sector, 1995-2010	74
Table 3.1:	Growth Decomposition 1999-2012	93
Table 3.2:	Growth Decomposition for Six Regional Economies, 1990s and 2000s	96
Table 3.3:	Savings to Consumption Ratios, 2000, 2005 and 2010	100
Table 3.4:	Econometric Analysis of the Determinants of Growth in the Eastern African Region	103
Table 4.1:	Change in Pupil-Teacher Ratio over Time	123
Table 4.2:	Benchmarking the Quality of Schooling in the Seychelles	125
Table 4.3:	What do Students Study? University Graduation Per centage Rates in Africa and the World (2008-2010)	132

BOXES

Box 1.1:	The Impact of Aid Suspension on Economic Performance of Rwanda and Uganda	27
Box 1.2:	The Roller-Coaster Growth Performance of South Sudan in 2011-2012	28
Box 1.3:	Comparative Analysis of Macroeconomic Performance of Africa's RECs	40
Box 1.4:	Impact of Higher Oil Import Bills on Current Account Balances in Eastern Africa	44
Box 2.1:	Reductions in Inequality and Poverty Reduction- The Rwandan Story	63
Box 2.2:	ICT Impact on the Labour Market in Eastern Africa	69
Box 2.3:	The Role of Government in the Development of the Textile Industry: Lessons from Bangladesh	77
Box 3.1:	UNECA's Support to Technological Upgrading – The Case of the Rwanda Innovation Endowment Fund (RIEF)	105
Box 4.1 :	A Snapshot of Education Across the Region: What Can be Gleaned from the DHS Surveys?	117
Box 4.2:	Learning the Lessons from The Seychelles – A Regional High-Performer	124
Box 4.3:	Impact of the Brain Drain on Ethiopia's Universities.	131
Box 4.4 :	Towards a Reading Culture?	134
Box 4.5 :	Applying New Technologies to Enhance Educational Systems.	136

ACKNOWLEDGEMENTS

The document 'Tracking Progress on Macroeconomic and Social Developments in the Eastern Africa Region: 2012/2013 Edition' was prepared under the overall supervision of Antonio Pedro, Director of the UNECA-SRO-EA, by a team consisting of Andrew Mold (team leader and Head of the Macroeconomic and Social Policy Cluster), Emelang Leteane, Rodgers Mukwaya, Farzana Sharmin, Severin Lubke and Jee Eun Chung. An earlier draft of the report benefited from comments and feedback received during a peer review workshop held in Nairobi on 13th December 2012 at the National Economic and Social Council (NESC) of Kenya. We would like to thank Dr Juluis Muia (Secretary, NESC) and Leonard Kimani (Director, Economic Sector) for organizing the workshop. Detailed comments on specific chapters were received at that workshop from Nyanjom Othieno, Dickson Khainga, Elda Onsomu and Paul Kamau. Valuable feedback was also received on the draft report at the 17th Session of the Intergovernmental Committee of Experts (ICE) of the SRO-EA, which took place in Kampala, from 18-22 February 2013. Hugh Delaney (UNICEF, Rwanda), kindly provided written comments on a draft version of Chapter 4. A number of other colleagues at UNECA SRO-EA provided additional material and advice, among them: Mactar Seck, Yohannes Hailu and Geoffrey Manyara. Rosemary Bagiza provided research support and Mulugeta Saare edited the final text.

The overall layout and desktop publishing was done by Image Matters (Kenya).

ACRONYMS

AEO	African Economic Outlook
AfDB	African Development Bank
AGOA	African Growth and Opportunity Act
APP	African Progress Panel
ATEC	Appui Technologique aux Édicateurs et Communautés / Support Technology for Educators and Parents (STEP)
AU	African Union
BPO	Business Process Outsourcing
BRICS	Brazil, Russia, India, China and South Africa
CAADP	Comprehensive Africa Agriculture Development Programme
CEN-SAD	Community of Sahel-Saharan States / Communauté des Etats Sahélo-Sahariens
CKWs	Community Knowledge Workers
COBET	Complementary Basic Education in Tanzania
COMESA	Common Market for Eastern and Southern Africa
CPI	Consumer Price Index
DAC	Development Assistance Committee
DFID	Department for International Development
DHS	Demographic and Health Surveys
DRC	Democratic Republic of Congo
EAC	East African Community
EAR	Eastern Africa Region
ECCAS	Economic Community of Central African States
ECD	Early Childhood Development
ECDVU	Early Childhood Development Virtual University
ECOWAS	Economic Community of West African States
EFA	Education for All (a UNESCO Global Monitoring Report)
EFFORT	Endowment Fund for the Rehabilitation of Tigray
EICV	Enquête Intégrale sur les Conditions de Vie des ménages/ Integrated Household Living Conditions Survey
EIU	Economist Intelligence Unit
EPDRS	Economic Development and Poverty Reduction Strategy
EPZs	Export Processing Zones
ERA	Economic Report on Africa
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GER	Gross Enrolment Rate
GNI	Gross National Income
GPE	Global Partnership for Education
ICAI	Independent Commission for Aid Impact
ICO	International Coffee Organisation
ICT	Information and Communications Technology
IGAD	Intergovernmental Authority on Development
IMF	International Monetary Fund
IPAR	Institute of Policy Analysis and Research (Rwanda)
IRIN	Integrated Regional Information Networks
IUCEA	Inter-University Council for East Africa
LDCs	Least Developed Countries
MDGs	Millennium Development Goals

MFA	Multi Fibre Arrangement
MINECOFIN	Ministry of Finance and Economic Planning (Rwanda)
MINEDUC	Ministry of Education (Rwanda)
MININFRA	Ministry of Infrastructure (Rwanda)
MOE	Ministry of Education
NEPAD	New Partnership for Africa's Development
NER	Net Enrolment Rate
NGO	Non-Governmental Organisation
NISR	National Institute of Statistics Rwanda
ODA	Overseas Development Aid
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
PSLE	Primary School Leaving Exams
PTR	Pupil - Teacher Ratio
PWT	Penn World Tables
RECs	Regional Economic Communities
REO	Regional Economic Outlook
REPOA	Research on Poverty Alleviation
RIEF	Rwanda Innovation Endowment Fund
RTN	Rwanda Telecentre Network
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SADC	Southern African Development Community
SID	Society for Information Display
SNNPRS	Southern Nations, Nationalities and Peoples' Regional State (Ethiopia)
SOEs	State-Owned Enterprises
SSA	Sub-Saharan Africa
TFP	Total Factor Productivity
TVET	Technical and Vocational Education and Training
UAE	United Arab Emirates
UIS	UNESCO Institute for Statistics
UK	United Kingdom
UMA	Union du Maghreb Arabe
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNIDO	United Nations Industrial Development Organisation
UPE	Universal Primary Education
USAID	United States Agency for International Development
USD	United States Dollar
VAT	Value Added Tax
WDI	World Bank Development Indicators
WEO	World Economic Outlook
WFP	World Food Programme
WIR	World Investment Report

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Introduction

Given the difficult global context, the continued resilience of economic growth in the Eastern Africa region has been quite remarkable. But this strong performance has increasingly been accompanied by growing (and sometimes quite vocal) concerns over the quality of the growth – particularly the extent to which growth has been conducive to broad-based poverty reduction and employment creation. Across the region, there is evidence to support the idea that, despite a much improved economic performance in the 2000s after two decades of economic stagnation, a lot of social and economic aspirations have still not been fulfilled. One example of this is that, although USD 1.25-a-day poverty has been reduced in relative terms in the region (from 65 per cent of the population in 2000 to 54 per cent of the population in 2011), the absolute number of citizens living below the international poverty line has actually increased, from 155 million to 166 million over the same period.ⁱ

This report explores why this has been the case, focusing particularly on the issue of insufficient ‘structural transformation’, meaning a shift towards high income generating activities, and away from a traditional dependence on the production of commodities and unprocessed goods. In policy circles, discussion about the importance of achieving ‘structural transformation’ has become commonplace. A number of studies have emerged in recent years looking into the reasons for the lack of structural diversification across African economies.

Some of the explanations put forward are particularly pertinent to the Eastern Africa region – e.g. the failure in natural resource industries to develop upstream and downstream activities, the stagnation of the manufacturing sector, a lack of diversification in exports, and economies which struggle with high levels of informality. Simultaneously, in the Eastern Africa region, countries are confronting a number of major economic challenges – accelerating processes of urbanisation, population pressures, and high degrees of income inequality. With a combination of original analytical research and a review of the available empirical evidence, this report attempts to clarify some of the nature of these challenges and suggest why the region needs to put ‘quality first’ across the whole panoply of development policies.

“Despite a much improved economic performance in the 2000s after two decades of economic stagnation, a lot of social and economic aspirations have still not been fulfilled”

Chapter 1

Macroeconomic Developments

Although the economy of Eastern Africa is still performing strongly by international standards, regional growth declined by 0.7 per cent to 6.2 per cent in 2012, down from 6.9 per cent in 2011. This was largely attributable to the continued sluggishness of the global economy, which grew at 2.4 per cent in 2012, down from 2.8 per cent in 2011. Real GDP growth for Eastern Africa is forecast to strengthen again in 2013, rising to 7.4 per cent in 2013. Growth is being driven principally by the service, construction and transport sectors. With few exceptions, agricultural performance remains lacklustre. Global economic growth slowed to 2.4 per cent in 2012, largely due to the Euro-zone crisis and the remaining effects of the global financial crisis, and is expected to remain at 2.4 per cent in 2013. According to UNDESA (2013), although several new policy initiatives in major developed economies have reduced systemic risks and helped stabilise consumer, business and investor confidence, global growth will only start to recover slowly, rising to 3.2 per cent in 2014.

There are a number of downside risks to growth in the Eastern Africa region going forward. Firstly, the slowdown in global economic growth is no longer confined to high income countries – it is also evident in some major emerging market economies (particularly in Brazil and India, though also evident in South Africa and China). With the exception of Brazil, all of these countries have become important trading, investment and development partners to the region. Ethiopia and Tanzania are particularly exposed to a China/India growth slow-down.

Secondly, a number of ongoing events have caused uncertainty which could ultimately impact on growth in the region. Among these we could mention: a highly-contested election process in Madagascar; political changes in Ethiopia in the wake of the sudden passing away of Prime Minister Meles Zenawi in August 2012; a souring of donor-recipient relations in both Rwanda and Uganda; major instability in the Eastern Provinces of the Congo D. R.; and further unrest in South Sudan due to a contested referendum in the oil rich region of Abyei. Finally, an additional element of uncertainty has been introduced by a new wave of terrorism, notably with strikes in Nairobi and Mogadishu in September 2013. This poses a potential, if limited, threat to economic stability, particularly through the channels of reduced income through tourism and by creating a negative impression about the business environment. In short, although our forecast is that the regional growth performance will again surpass 7 per cent growth in 2013, there are still considerable downside risks.

Macroeconomic stability improved in 2012 and 2013, as inflation declined across the region after the sharp acceleration of inflation in 2011. A number of countries in the region reacted to the inflationary spike by raising interest rates and restricting domestic credit growth, though monetary policy was eased in the second half of 2012. Inflation rates in the region have subsequently declined with average inflation in the region falling to 8 per cent by the end of 2012. To avoid choking off economic growth, some countries in the region should now explore ways of reducing interest rates to increase the availability of domestic credit while monitoring inflation rates and domestic credit market conditions closely.

Fiscal policies in the region should aim at supporting and maintaining the growth momentum. In countries with limited financial constraints and output below potential, fiscal deficits may need to be maintained and countercyclical fiscal measures should be put in place to boost output. Most countries in the region can still use public finance buffers to absorb shocks from the global economy. Median debt as a percentage of GDP is down to 40 per cent in 2012 from 44.7 per cent in 2011 and 64.2 per cent for the 2004-2008 period.

In the medium-term, fiscal policy should be directed at growth and development objectives, through increased spending on infrastructure and human capital development (health and education). Measures to underpin the structural transformation of the region should be prioritised. In addition, this report argues that a particularly strong case can be made for expanding government support to the agricultural sector in the region.

“Although USD 1.25-a-day poverty has been reduced in relative terms in the region (from 65 percent in 2000 to 54 percent of the population in 2011), the absolute number of citizens living below the international poverty line has actually increased, from 155 million to 166 million over the same period.”

Although the economy of Eastern Africa is still performing strongly by international standards, regional growth declined by 0.7 per cent to 6.2 per cent in 2012, down from 6.9 per cent in 2011.

Chapter 2

The Structural Characteristics of Growth in the Eastern African Region

The region's economic growth over the last decade can be characterised by several structural features which are interrelated and have handicapped the poverty-reduction efforts:

1. Low elasticities of poverty reduction to growth – meaning that growth does not translate to proportional reductions in poverty;
2. Low elasticities of employment creation to growth – implying that the growth does not create sufficient new jobs to keep pace with population pressures; and
3. High – and rising - levels of inequality in most countries of the region.

Together with a lack of structural transformation, these stylised facts imply that the pattern of growth in the region has not been sufficiently conducive to broad-based development. This chapter explores both the empirical regularities that explain this situation, and discusses the corresponding policy options.

The failings of the job market are particularly difficult to address, given the combination of an extremely high level of informality and the large-scale entry of young people into the job market, product of demographic pressures. Nonetheless, there are a number of areas where governments in the region could act more decisively to enhance the poverty-reducing potential of growth. Firstly, inequality in the region needs to be more openly acknowledged as a problem which undermines the pro-poor nature of growth. Traditionally, the attitude that little can be done about inequality has prevailed. In this chapter, it is argued that it is a problem that governments can address, principally through a combination of fiscal policies and opening up educational opportunities. Proof of this is to be found in Latin America, where in the 2000s many countries successfully reduced income inequality. In Africa, regrettably, there are so far few examples of good practices to draw on in terms of reducing inequalities. The first country in the region to do so robustly will clearly win accolades and would deserve to be emulated.

Secondly, the lacklustre performance in terms of poverty reduction is also fundamentally attributable to the underperformance of the manufacturing sector as well as the relative neglect of agriculture. Both these issues need addressing. The first should be addressed by using targeted sectoral policies more efficiently and effectively. The second, by avoiding the neglect of agriculture through more financial resources and government support. Historical experience suggests that strong sectoral diversification cannot be built on the back of a sluggish agricultural performance. Governments should abide by the commitments of the *Comprehensive Agricultural Development Programme* (CAADP), whereby participating countries are committed to allocating at least 10 per cent of the national budget to the agricultural sector and to achieving an annual agricultural growth rate of 6 per cent.

This chapter also argues that governments need to keep an open minded approach regarding the sectors to promote or support, and not overlook key drivers of employment creation outside the manufacturing sector. Building on existing comparative advantages in natural resources seems to be a sensible policy option.

“In Africa, regrettably, there are so far few examples of good practices to draw on in terms of reducing inequalities. The first country in the region to do so robustly will clearly win accolades and would deserve to be emulated.”

Finally, it is important to explicitly recognise weaknesses in the private sector in certain sectors and countries in the region. In cases where private capital is not forthcoming, governments may need to take more direct action to promote structural transformation. To be sure, such interventions are not exempt of controversy. SOEs, for instance, have often become embroiled in accusations of corruption, favouritism, and rent-seeking activities. But particularly in the context of low income countries, assuming that the market alone can deliver the required degree of structural transformation is not warranted.

Chapter 3

An Analysis of the Growth Dynamics in the Eastern Africa Region

In the analytical section, the report looks at the challenges of structural transformation from several perspectives. The Chapter starts with an analysis of the leading growth sectors across the region. Construction, transport, mining and utilities, and the wholesale and retail sectors have been among the fastest growing in the 2000s. In contrast, across the region the lagging sectors have been agriculture and manufacturing, something which does not bode well in regards to fulfilling ambitions to accelerate 'structural transformation'. Nevertheless, in terms of their absolute contributions to growth (rather than simply their growth rates), the major sectors contributing to economic growth continue to be the public sector, finance, wholesale and retail, tourism, and agriculture.

In section 2 of the Chapter, we analyse growth in the region from the perspective of demand. Contrary to the contemporary policy emphasis on improving external competitiveness, it is found that the domestic demand component is usually far more important for overall economic growth and poverty-reduction. This does not imply that the external sector is unimportant – on the contrary, in a region afflicted by quite large current account deficits, an improved export performance is a necessary (but not sufficient) condition for more resilient growth. Productivity growth in tradeable goods provides an important spur to economic progress and development. But it is also necessary to get a correct sense of perspective regarding the relative importance of tradeable and non-tradeable sectors for growth, poverty reduction and employment creation.

In section 3, this chapter looks at growth from the traditional growth-accounting perspective - a supply side focus. We analyse the improvements in total factor productivity (TFP) – the part of economic growth that is not accounted for by increased inputs, and that economists usually attribute to technological progress or a better allocation of resources. An overwhelming majority of economists agree that technological acquisition and constant technological upgrading is fundamental to achieving sustainable growth. According to our analysis of TFP in the 1990s and 2000s, growth since 2000 was driven in part by a faster growing TFP residual, indicative of greater technological effort and efficiency in production. Pointedly, however, in Eastern Africa improvements in TFP have not been regional-wide– and in two of the largest economies in the region (Kenya, Uganda), as well as in Burundi, TFP actually continued to decline in the 2000s. In contrast, physical and human capital per worker increased for most countries over the whole period from 1991 and 2010, implying that growth has been mainly driven by gains from capital accumulation as opposed to productivity gains. In other words, growth in the region has principally been through *'perspiration rather than inspiration.'* Over the long run, this is unlikely to be sustainable, and more efforts are required regionally to catalyse technological progress.

“In cases where private capital is not forthcoming, governments may need to take more direct action to promote structural transformation.”

“Growth in the region has principally been through ‘perspiration rather than inspiration.’ Over the long run, this is unlikely to be sustainable, and more efforts are required regionally to catalyse technological progress,”

“Given the dearth of skills in certain sectors of the economy, and the need to align educational systems better to the needs of the jobs market, vocational training has also moved high up the policy agenda.”

Finally, we econometrically estimate a simple growth model for the region, focusing particularly on the role of domestic savings and investment, the current account balance, the role of ODA, population growth and some other control variables. Our findings here suggest that maintaining both high levels of domestic investment and savings is required if growth is to prove sustainable. Removing constraints to savings is urgent – negative real interest rates, large spreads between deposit and savings rates (indicative of a highly profitable but inefficient banking sector) – would go a long way in addressing some of these problems. In addition, measures to encourage financial inclusion, particularly in rural areas, are required. Finally, as pointed out in ‘Tracking Progress 2012’, demographic pressures in the region are among the highest in the world. Yet there is a high correlation between low savings rates and a rapidly expanding population. Measures to reinforce effective family planning are, therefore, needed to help raise domestic savings.

Chapter 4

Addressing Educational Deficits in Eastern Africa - The Challenge of Educational ‘Deepening’

It is widely acknowledged that quality education is a necessary but not sufficient condition for Eastern African countries to reach middle-income status to which they aspire. The demands of the modern economy and of the labour market are such that without the necessary highly qualified labour force, the structural transformation of regional economies will not be forthcoming.

Over the last decade, in line with Objective II of the Millennium Development Goals, Eastern African countries have achieved an impressive expansion of primary education. Yet doubts have lingered regarding both the quality of the education provided, and also about the degree to which governments have simultaneously been able to expand educational opportunities at higher levels of provision – secondary and tertiary. Given the dearth of skills in certain sectors of the economy, and the need to align educational systems better to the needs of the jobs market, vocational training has also moved high up the policy agenda.

For policymakers and governments, providing greater educational opportunities is a particularly difficult challenge. For one thing, there is an enormous time-consistency problem, in the sense that improved educational performance takes many years before its positive impact is felt. The rewards from greater investments in education today will typically not bear fruit for at least two decades. In other words, educational reform requires vision and a long-term political commitment.

Secondly, inadequate attention has been given to the quality of education, including basic factors affecting pupils’ opportunity to learn. These include pupil attendance and teacher effectiveness: both are key determinants of learning outcomes and value for money. Leakages from the education sector also represent a serious challenge to improving educational quality. For instance, in Tanzania, a 2010 public expenditure tracking survey in education (Impact Assessment: Green-Amber) found that 30 per cent of initial budget allocations to primary schools were not received. In such circumstances, it is not surprising that external assessments have generally been quite sceptical about the capacity of countries in Sub-Saharan Africa to achieve ‘educational deepening’.

The term 'educational deepening' refers to both an extension of government priorities towards secondary, tertiary and vocational training, and also - quite crucially - a single-minded focus on improving the quality of educational provision. We argue that this constitutes one of the most pressing challenges for countries in the region if sustainable growth is to be achieved. Although it has become fashionable to look only at educational 'outputs' (e.g. enrolment rates, literacy rates, etc.), we look at both educational 'inputs' (e.g. indicators of class size, availability of textbooks, etc) and 'outputs', in the belief that the two are inextricably linked. Crowded classrooms, poorly paid and demotivated teachers, and crumbling schools are unlikely to be conducive to raising educational standards.

In budgetary terms, in most countries in the region education has received a fairly generous share of total public sector spending. We do not thus argue in favour of a major upscaling of expenditures, rather a more efficient use of the existing expenditures. 'Quality first' needs to be the lemma adopted by regional governments in dealing with their educational challenges. Part of the challenge is to reduce the numerous 'leakages' in the system. There are some interesting initiatives in the region which attempt to tackle this problem head-on. In Tanzania, for example, the NGO Twaweza has mobilised the community to monitor the declining level of public funding reaching the primary school level. Although governments are largely responsible for improving the efficiency of resources in the education sector, public pressure - particularly from parents and civil society - is the ultimate incentive to producing better outcomes.

This said, there are clearly some countries where spending is totally inadequate. The Congo, D.R. is a case in point, where the whole educational budget does not amount to more than 2 per cent of GDP. In recent years, the donor community has been making up some of the short-fall, but for a country with 75 million people, the total budget is still inadequate for the scale of the challenges. Similarly, Somalia's long-running political and humanitarian crises highlight the plight of three generations deprived of schooling since the education system collapsed in the mid-1980s. With the growing stabilisation of the country, the education system is slowly being reconstructed. In these cases, however, more resources are clearly a priority.

Finally, in this Chapter we argue for renewed efforts to promote adult literacy, which is probably the Cinderella (i.e. not given due attention) of educational policy in the region. Adults are often overlooked within educational systems. Yet building a literate society requires tackling educational deficits across all age groups; therefore, the region has to compensate for years of (benign or otherwise) neglect of their educational sectors, caused by civil conflicts or simply policy failure. To focus solely on the children and youth in such circumstances is probably a mistaken emphasis.

“Adult literacy is probably the Cinderella of educational policy in the region. Adults are often overlooked within educational systems. Yet building a literate society requires tackling educational deficits across all age groups”





CHAPTER 1

MACROECONOMIC DEVELOPMENTS

1.1 GROWTH PERFORMANCE IN THE REGION – AN OVERVIEW

Although the economy in Eastern Africa continues to perform strongly by global standards, economic growth declined by 0.7 per cent to 6.2 per cent in 2012, down from 6.9 per cent in 2011 (Table 1.1). This was largely attributable to the slowdown in the global economy. Real GDP growth for Eastern Africa is estimated to have accelerated in 2013, rising to 7.4 per cent. Global economic growth slowed to 2.4 per cent in 2012, principally due to the Euro-zone crisis and the remaining effects of the global financial crisis (UNDESA, 2013). The slowdown has also been evident in emerging economies such as Brazil, India and China in 2012 and 2013. It is expected to remain subdued in the coming two years, with forecasted growth of 2.4 per cent in 2013 and 3.2 per cent in 2014 respectively (UNDESA, 2013).

Table 1.1: National Rates and Regional of GDP Growth, Eastern Africa, 2008-2014 (% Annual Change) (as of 25th November 2013)

	2008	2009	2010	2011	2012	2013*	2014**	Average Growth Rate (2008-13)
Ethiopia	11.2	9.9	10.4	11.5	8.8	11.4	10.8	10.5
Rwanda	11.1	6.2	7.2	8.2	8.0	6.6	7.6	7.9
Tanzania	7.4	6.0	7.0	6.5	6.9	7.0	7.3	6.8
Congo D. R.	6.2	2.8	7.1	6.9	7.2	8.0	8.0	6.4
Uganda	10.4	4.2	6.1	4.1	3.2	5.8	6.6	5.6
Burundi	13.6	3.5	3.9	4.2	4.0	4.4	4.6	5.6
Djibouti	5.8	5.0	3.5	4.4	4.8	5.3	5.8	4.8
Kenya	1.5	2.6	5.6	4.3	4.6	4.8	5.5	3.9
Seychelles	-2.1	-1.1	5.9	7.9	2.8	3.7	4.0	2.9
Eritrea	-9.8	3.9	2.2	8.7	5.5	6.0	6.6	2.8
Somalia	2.6	2.6	2.6	2.6	2.0	2.0	n.a.	2.4
Comoros	1.0	1.8	2.0	2.2	2.5	3.4	3.8	2.1
Madagascar	7.1	-4.2	0.4	1.6	1.9	2.6	3.6	1.6
South Sudan	n.a.	4.3	4.2	1.9	-47.6	24.7	n.a.	-2.5
<i>Regional Growth Rates</i>								
EAR-11	7.4	5.1	7.0	6.9	6.2	7.4	7.7	6.7
World	1.5	-2.1	4.0	2.8	2.4	2.4	3.2	1.8
Africa	5.2	2.7	4.7	1.0	5.4	4.0	4.9	3.8
EU-28	0.4	-4.5	2.0	1.7	-0.4	-0.1	1.4	-0.2
US	-0.3	-2.8	2.5	1.8	2.8	1.5	2.5	0.9
BRICs	7.3	4.4	8.6	7.1	5.6	5.6	5.7	6.4

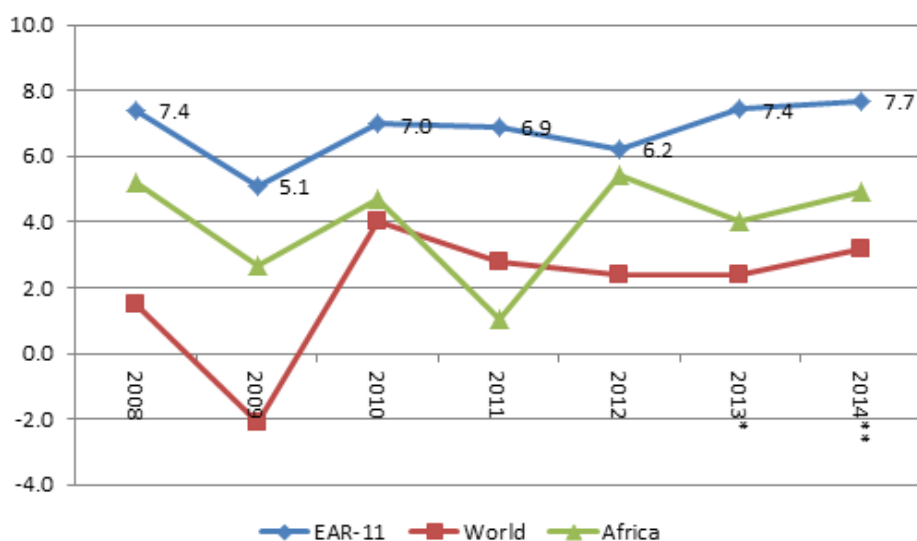
Source: UNECA SRO-EA calculations on the basis of national data (DRC, Kenya, Madagascar, Rwanda, South Sudan, Tanzania and Uganda), and UNDESA. Sources for Ethiopia 2008-2011 Central Bank's Economic and Social Indicators data; 2012 is the Central Bank Governor's Note; and 2013 and 2014 are from Ministry of Finance and Economic Development (MOFED). South Sudan for 2012 and 2013 are IMF estimates. Seychelles – national data except for 2013 and 2014, where EIU data is used.

*Estimate ** Forecast

*** EAR 11 excludes The Seychelles, South Sudan and Somalia, and is calculated on the basis of a weighted average, using GDP PPP estimates from the IMF

While the Eastern Africa region has impressively continued to out-perform global growth (Figure 1.1), many countries in the region remain vulnerable to the slowdown in the global economy, through both direct channels such as a decline in the demand for their exports and the availability of development finance (overseas development aid, private investment, remittances), and through indirect channels such as the softening of commodity prices.

Figure 1.1: Average GDP Growth Rates (% Annual Change)



Source: UNECA calculations, on the basis of national and UNDESA data.

The degree to which the economies of the region are vulnerable to the current global shocks varies according to their levels of exposure (determined by certain economic characteristics such as their dependence on commodity exports or ODA) and resilience (their ability to cope with and respond to the shock determined by such factors as the level of foreign exchange reserves, the state of public finances, etc.). A recent study by the Overseas Development Institute (2012) reveals that both Ethiopia and Tanzania are highly vulnerable to both the current macro-financial and energy price shocks and appear to be particularly exposed to a China/India growth slow-down. Kenya is exposed to any further deterioration of the Euro-zone, both through the export and financial channels.

There are a number of downside risks to growth in the Eastern Africa region going forward. Firstly, the slowdown in global economic growth is no longer confined to high income countries – it is also evident in some major emerging market economies (particularly in Brazil and India, but also evident in South Africa and China). With the exception of Brazil, all of these countries have become important trading, investment and development partners to the region. Ethiopia and Tanzania are particularly exposed to a China/India growth slow-down.

Secondly, a number of ongoing events have caused uncertainty which could ultimately impact on growth in the region. Among these we could mention: a highly-contested election process in Madagascar; political changes in Ethiopia in the wake of the sudden passing away of Prime Minister Meles Zenawi in August 2012; a souring of donor-recipient relations in both Rwanda and Uganda (see Box 1.1); major instability in the Eastern Provinces of the Congo D. R.; and further unrest in South Sudan due to a contested referendum in the oil rich region of Abyei (Box 1.2). Finally, an additional element of uncertainty has been introduced by a new wave of terrorism, notably

“An additional element of uncertainty has been introduced by a new wave of terrorism, notably with strikes in Nairobi and Mogadishu in September 2013”

with strikes in Nairobi and Mogadishu in September 2013. This poses a potential, if limited, threat to economic stability, particularly through the channels of reduced income through tourism and by creating a negative impression about the business environment. In short, although our forecast is that the regional growth performance will surpass 7 per cent growth in 2013, there are still considerable downside risks.

On a country-by-country basis, Ethiopia grew at an estimated 8.8 per cent in 2012, down from 11.5 per cent a year earlier. Despite the slowdown in economic growth, there were a number of favourable macroeconomic trends in terms of declining inflation, and a recovery in agricultural production in 2012 after the drought of 2011. The country is still vulnerable to external fluctuations, however, and the foreign exchange reserves, at under two months of imports, do not represent a strong buffer against external turbulence.

“Growth in Rwanda weakened in the first half of 2013 due to weaker growth in the services sector - a knock-on effect from cutbacks in government expenditure due to donor aid suspension. Growth is estimated at 6.6 percent for 2013, down 1.4 percent for 2012.”

Rwanda, the second fastest growing economy in the region, grew at 8.0 per cent in 2012, partly driven by a strong performance in the services and industry sectors, with registered growth, of 12.2 per cent and 7.3 per cent respectively. Agriculture, on the other hand, grew at only 3 per cent partly due to unfavourable weather conditions prevailing in the last quarter of 2011 and the first half of 2012.ⁱⁱ Donor aid cuts to Rwanda constrained government spending in 2012/13 fiscal year (Box 1.1). “Growth in Rwanda weakened in the first half of 2013 due to weaker growth in the services sector - a knock-on effect from cutbacks in government expenditure due to donor aid suspension. Growth is estimated at 6.6 percent for 2013, down 1.4 percent for 2012.”

Tanzania was estimated to have grown at 6.9 per cent in 2012, mainly driven by favourable international gold prices. In the second quarter of 2012 the Tanzanian economy grew by 6.9 per cent, down marginally from 7 per cent in the same period in 2011. This is mainly due to the decline in mining which grew by 1.2 per cent in the second quarter of 2012 compared to 5.6 per cent in same quarter in 2011. In 2013/14, the Tanzanian government is expected to spend Tsh18 249 billion (USD 11.4 billion) and maintain the deficit at 5 per cent of GDP. Growth in 2013 is estimated to have strengthened slightly to 7.0 per cent.

Figure 1.2: Nominal GDP of Eastern Africa Region (billions USD) 2012

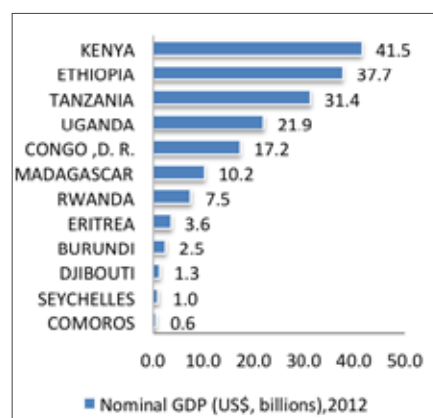
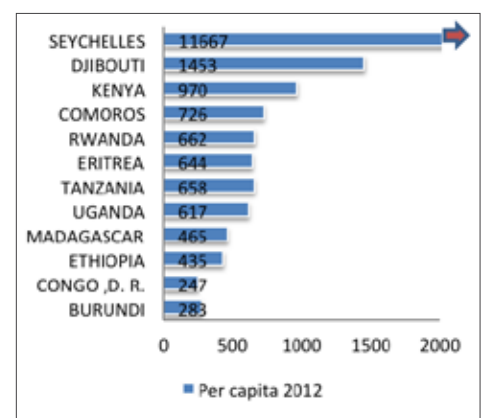


Figure 1.3: Nominal Per Capita GDP of Eastern Africa (USD) 2012



Source: EIU, 2013, and UNECA estimatesⁱⁱⁱ

Kenya, the largest economy in the region, was estimated to have grown at 4.6 per cent in 2012, moderately up from 4.3 per cent in 2011. Despite delayed long rains and a weakened Kenya shilling at the beginning of 2012, growth was notable in agriculture (3.5 per cent), construction (4.8 per cent), wholesale and retail trade (6.4 per cent), and transport and communication (4 per cent), though there was some slowing in the manufacturing sector (down to 3.1 per cent, from 3.4 per cent in 2011). Like other

countries in the region, Kenya faces the risk of slowing growth in demand in key export markets (especially in Europe). For example, price of coffee dropped to USD 140 per 50 kg bag in October 2012, down from USD 320 in January 2012, partly due to depressed demand in the Euro zone (something which is also impacting negatively on other coffee exporters in the region).^{iv} Tourism was similarly negatively affected by the slowdown in the global economy, especially the Eurozone, with international visitor arrivals decreasing by 6.1 per cent from 1.8 million in 2011 to 1.7 million in 2012. Moreover, security concerns are likely to cause a further deterioration in visitor numbers in 2013.

Box 1.1: The Impact of Aid Suspension on the Economic Performance of Rwanda and Uganda

In 2012, there were unwelcome developments regarding two aid recipients in the region – Uganda and Rwanda. In the case of Rwanda, disbursements of aid were suspended by a number of donors (among them, the UK and the World Bank) in the second semester of 2012 due to alleged support given to the M-23 rebel movement in Eastern DR Congo. Despite efforts to reduce aid dependence, grants still contribute around 45 per cent of the budget. The aid affected by the suspension amounted to around 3.7 per cent of GDP, or around 12 per cent of government spending. Because of the knock-on effects in the rest of the economy, such as the associated shortage of foreign exchange, the impact on the economy is likely to have been more marked.

In the case of Uganda, in December 2012 the alleged misappropriation of donor funds led to the suspension of aid by a number of donors. The EU, the United Kingdom, the World Bank, Austria, Belgium, Germany, Ireland and Sweden suspended USD 282 million (equivalent to 1.3 per cent of GDP) promised in budgetary support each year. The government tried to accommodate the shortfall in budget resources by a combination of expenditure cuts and additional domestic financing. The IMF estimates that the economic growth impact for the 2012/2013 financial year would be a reduction of 0.7 per cent of GDP, revising the growth forecast downward from 5 per cent to 4.3 per cent.

Table 1.2: Macroeconomic Impacts of Aid Suspension (In Per cent of GDP Unless Otherwise Noted)

	2011/12	2012/13	
	Actual	Without Aid Suspension	With Aid Suspension
Real sector			
Real GDP (per cent change)	3.4	5.0	4.3
Average CPI (per cent change)	23.5	6.2	6.2
External Sector			
Gross reserves (months of imports)	4.0	3.9	3.7
Net donor inflows	3.6	3.8	2.6
Fiscal Sector			
Revenue	13.3	14.6	14.5
Grants	2.3	2.2	1.9
Total expenditure and net lending	18.6	20.5	19.9
Domestic financing	0.1	0.9	1.6
External financing	2.4	2.8	1.8
Total debt stock	33.3	35.2	35.7
Monetary Sector			
Private sector credit (per cent change)	11.1	15.1	13.1

Source: Ugandan authorities and IMF staff projections

Source: UNECA Elaboration and IMF (2013)

“Tourism in Kenya was similarly negatively affected by the slowdown in the global economy, especially the Eurozone, with international visitor arrivals decreasing by 6.1 per cent from 1.8 million in 2011 to 1.7 million in 2012. Moreover, security concerns are likely to cause a further deterioration in visitor numbers in 2013.”

Uganda was estimated to have grown by just 2.8 per cent in 2012, but is estimated to have accelerated significantly in 2013, growing at 5.8 per cent. This improvement for 2013 is, however, partly contingent on resolving the current dispute with the donor community (Box 1.1). After experiencing high inflation in 2011, inflation has come down to 3.4 per cent in February 2013, partly thanks to tighter monetary policy (Bank of Uganda, 2013). But both weak domestic and external demand have dampened economic performance. The economy is quite exposed to a decline in both exports to Europe and remittance flows (According to the World Bank (2012), Uganda was the largest recipient of remittances in the region in 2011). Although the Central Bank started easing monetary policy in February 2012, only recently has there been evidence of an expansion of bank lending to the private sector, and private sector investment spending remains relatively weak. Consequently, aggregate demand is expected to remain subdued throughout most of 2012/13 (IMF, 2013a).

Box 1.2: The Roller-Coaster Growth Performance of South Sudan in 2011-2012

Following the decision of the government of the Republic of South Sudan to halt oil production in response to the Republic of Sudan fees on the oil pipeline and transit, an economic crisis hit both countries. In South Sudan, fuel and food prices hit record high at 80 per cent in May 2012. The IMF's World Economic Outlook (October 2013) is currently estimating that the economy contracted by 47.6 percent in 2012, but has rebound back to register an estimated positive growth of 24.7 percent in 2013. However, high hopes of economic recovery were looming as the two countries were scheduled to meet for negotiations. Growth in South Sudan is estimates; a complete rebound from the 2012's crisis on the basis of oil production resumption in 2013.

The economic and political pressure brought the two parties to the negotiation table at the Africa Union summit at the end of January 2013, but they were not able to agree on the implementation of the agreements signed the previous year in September. An agreement was finally reached in April 2013. However, continued unrest and a disputed referendum in the oil-rich region of Abyei still cast a shadow on a lasting settlement. This has serious economic and humanitarian implications for both countries especially for South Sudan which has embarked on an ambitious nation state building and economic growth since its independence in July 2011. Oil constitutes 98 percent of public sector revenues, which is also equivalent to almost all foreign exchange earnings. The government recognises the importance of oil revenue as well as the difficulty of macroeconomic and fiscal management emanating from the vulnerability to oil prices and production levels. While its short-term goal is to benefit from oil resources, its mid-to-long term strategy includes diversification of economic production and reduction of dependence on oil revenue.

Sources: Reuters (2012), WEO (2012)

The Seychelles, with the highest per capita income in the region (Figure 1.3) is estimated to have grown at 2.8 per cent in 2012. Economic growth in Seychelles is highly dependent on the tourism industry. Tourism arrivals were 6.9 per cent above 2011 levels after 40 weeks into 2012, much better than expected given the economic turmoil in the Euro zone. Despite slightly shorter average stays, the sector was estimated to have grown by about 3 per cent in real terms (IMF, 2012a). The country is increasingly targeting tourists from non-EU countries, such as the UAE and Russia (EIU, 2012). Growth is expected to have strengthened to 3.7 per cent in 2013, reflecting rising tourism arrivals.

Growth in the Democratic Republic of Congo has remained robust, at an estimated 7.2 per cent for 2012 and is forecast by the government to rise to 8.0 per cent in 2013, driven principally by the mining sector.^v Prospects for growth have also been buoyed

“Anecdotal evidence suggests a remarkable recovery in parts of the Somali economy – particularly in the capital Mogadishu.”

by major new oil finds, even though there are ongoing negotiations with Angola regarding the rights to exploit these deposits.^{vi} Macroeconomic stability has improved significantly over the course of 2012 and into 2013 – in a country with a history of strong inflationary pressures, inflation moderated markedly in 2012, standing at just 5.7 per cent by the end of year, and declining even further in the first 8 months of 2013, to around 2 per cent at an annualised rate. Interest rates have also moderated, with commercial bank rates declining from more than 41 per cent in December 2011 to 22.9 per cent in December 2012 (Banque Centrale du Congo, 2013).

Finally, although data is thin on the ground, anecdotal evidence suggests a remarkable recovery in parts of the Somali economy – particularly in the capital Mogadishu. The famine triggered by the drought in 2011 ended in February 2012, and Somalia has seen increased stabilisation over the last year, as AMISON, the African Union's 17 000 strong military contingent, successfully defeated Al-Shabaab militants in their last major stronghold, Kismayu in October 2012. Over the course of 2012, the return of diaspora Somalis has gained pace, with many qualified people with financial resources destined for the setting up of new businesses or for reconstruction. Remittances from the Somali diaspora are currently estimated to amount to around USD1 billion per year and are expected to increase in 2013 (EIU, 2013b). In view of all these positive developments, the Somali government is reportedly now talking about economic growth reaching 10 per cent for 2013 (Jeune Afrique, 9-15 June 2013). Regular flights to Mogadishu have been reestablished with Nairobi and Istanbul. Foreign investors have also been expressing renewed interest. Turkey, for instance, has opened up new trade and aid ties.

“Macroeconomic stability in the Democratic Republic of Congo has improved significantly over the course of 2012 and into 2013 – in a country with a history of strong inflationary pressures, inflation moderated markedly in 2012, standing at just 5.7 per cent by the end of year, and declining even further in the first 8 months of 2013, to around 2 per cent at an annualised rate”

1.2 IS THERE ROOM FOR EXPANSIONARY FISCAL POLICY?

Slowing global growth will make fiscal consolidation in the region economically and politically difficult to sustain. Fiscal deficits are expected to rise in a number of countries in the region (Congo D.R., Ethiopia, Rwanda and Uganda) because of slowing global demand having a negative impact on growth and consequently on tax revenues in the region.

In Ethiopia, government spending increased in the fiscal year 2012/13 to USD 7 billion, up from the USD 5.6 billion budget adopted the previous year. In addition, spending is anticipated to reach 159.4 billion Birr (USD 8.5 billion) in the 2013/2014 fiscal year, with 21 per cent of the budget funded externally. About one third of the budget will be allocated to road construction. The budget deficit for the year ending July 7, 2014 is expected to reach 3.3 per cent of GDP.^{vii} About USD 2 billion of the budget was allocated to subsidise regional states while USD 1.2 billion was earmarked for supporting the activities carried out to achieve the Millennium Development Goals. The government had to confront some challenges to finance some of the megaprojects, particularly the Grand Renaissance Dam, estimated to cost USD 4.1 billion. The government declared its intention to finance this project fully itself, chiefly via the issuance of government bonds, but also through both voluntary and mandatory payments from civil servants and requests for voluntary payments from the sizeable Ethiopian Diaspora. The domestic revenue performance (which declined as a per centage of GDP from more than 20 per cent in 2003/04 to less than 17 per cent in 2011/12) was forecast to improve as the national revenue agency, the Ethiopian Revenues and Customs Authority, implemented measures to broaden the tax base, improve compliance and reduce evasion (EIU, 2012).

In Kenya, the budget for the 2013/ 2014 fiscal year was USD 19.4 billion, up from USD 17.2 billion in the previous fiscal year with the overall fiscal deficit expected to reach USD 3.9 billion. It will be funded through Ksh 223 billion (USD 2.63 billion) from foreign borrowing and Ksh 106.7 billion (USD 1.26 billion) in local debt. The

government intends to continue spending on rebuilding infrastructure in Kenya. The country has set aside Ksh 22 billion (USD 258 million) towards the construction of a standard gauge railway track between Mombasa and Kisumu, which is expected to be completed in the next three years.^{viii}

Table 1.3: Overall Budget Balance, (Per cent of GDP)

Country	2011	2012*	2013**
Tanzania	-6	-9.1	-3.9
Burundi	-8.4	-8	-8.7
Congo, D. R.	-0.4	-6.2	-5.2
Kenya	-4.5	-4.7	-3.5
Madagascar	-1.7	-3.1	-3
Uganda	-3.6	-3	-4.9
Comoros	-1.8	-2.3	-3
Djibouti	-0.1	-2	-2
Rwanda	-2.4	-1.9	-1.4
Ethiopia	-1.6	0.2	0.8
Seychelles	2.5	2.6	0.3

Source: AEO, 2013, ** projections, * estimates

In Uganda, the Ministry of Finance announced a 19.3 per cent increase in government spending for the fiscal year to USD 5.03 billion from USD 4.1 billion in the previous year. Donors withdrew 93 per cent of the USD 289 million initially promised in direct budget support. The government plans to bridge the resulting gap by turning to “non-traditional financing sources,” such as “limited non-concessional borrowing and contractor facilitated finance or suppliers’ credit,” as well as external and domestic debt market.^{ix}

The government in the Democratic Republic of Congo is expected to concentrate on boosting domestic revenue while seeking to improve the administration of a recently introduced value-added tax (VAT), which has been poorly implemented thus far. The government’s formal policy has been to rationalise tax exemptions, streamline duties and taxes, modernise customs and tax revenue, and increase the contribution of the mining sector by strengthening the *Large Taxpayers Office* within the Tax Department and passing a new mining code. The government has plans to expand developmental expenditures, but fiscal controls and the capacity to execute budgets are weak. Many of the country’s main infrastructure projects are currently being financed by a multi-billion dollar loan from China’s Export-Import Bank, under terms which are not public (The Africa Report, 2012). It is expected that the fiscal deficit will widen from -1.8 per cent in 2012 to -2.6 per cent of GDP in 2013.

In Rwanda, total expenditure for the fiscal year 2013/ 2014 is projected at RWF 1575.8 billion (29.2 per cent of GDP) an increase from RWF 1425.1 billion (30.5 per cent of GDP) in the revised 2012/2013 budget. The budget deficit for 2013/2014 is projected at RWF 297.7 billion (5.5 per cent of GDP) compared to RWF 283.6 billion (6.1 per cent of GDP) in the revised 2012/2013 budget.^x As part of its efforts to mobilise domestic resources, the government launched the Agaciro Development Fund in 2012, and in April 2013 issued a USD 400 million 10 year Eurobond to help close the budget deficit and finance development.

In 2013/14, the Tanzanian government is expected to spend Tsh 18 249 billion (USD 11.4 billion). Development expenditures are estimated at Tsh 5 674 billion (USD 3.5 billion) with Tsh 2 982 billion (USD 1.8 billion) being financed from domestic sources.^{xi} In August 2013, the Tanzanian government asked the International Monetary Fund to significantly lift its debt ceiling to increase its commercial debt ceiling for the fiscal year 2013-14 by nearly 45 per cent so that it can launch a maiden USD 1 billion sovereign bond – potentially one of the biggest issues seen in Sub-Saharan Africa^{xii}

In Burundi, expenditure in 2013 is projected to increase by 4.5 per cent to Burundi francs 1290.9 billion, with the budget deficit forecast of 1.7 per cent of GDP. Total government revenue and expenditure is estimated at 29.5 per cent of GDP and 31.2 per cent of GDP respectively, due to improved expenditure controls and improved revenue collection.^{xiii} In contrast, the fiscal deficit in South Sudan is expected to decline during the fiscal year 2013 because of the resumption of oil production. Export of oil amounts to 71 per cent of GDP and oil revenue accounts for almost 98 per cent of the total government revenue.^{xiv} The country's oil production resumed after nearly a year of suspension over a bitter dispute with its northern neighbour Sudan regarding fees for exporting the crude oil through the North's pipelines (Box 1.2).

In the Seychelles, the government posted a budget surplus of 1.8 per cent of GDP in 2012. Increased government spending is expected as the government continues to subsidise Air Seychelles and fund a domestic price Stabilisation Fund (SF) – aimed at shielding households from the impact of international price shocks.^{xv} Increased spending on infrastructure will be financed by a new value-added tax (15 per cent), which was introduced in January 2013 and a 0.5 per cent tax on business turn-over above USD 83 000. The budget surplus is expected to remain at 1.7 per cent of GDP in 2013- 14.^{xvi}

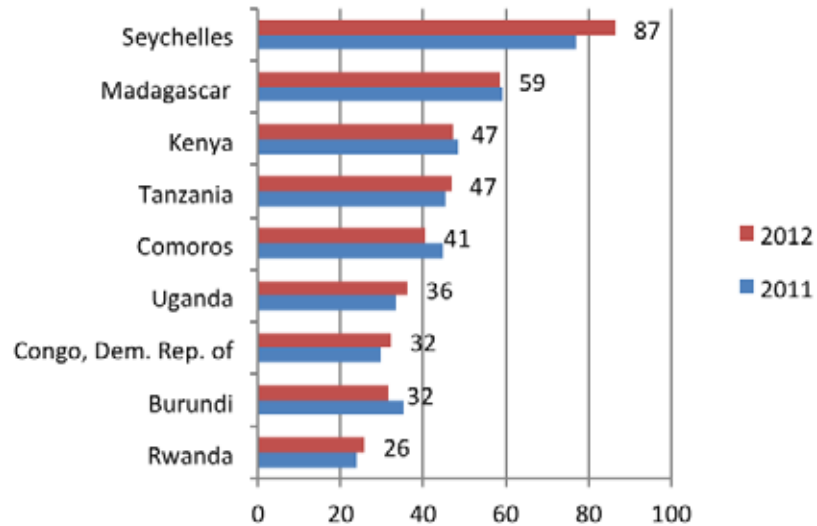
1.3 GOVERNMENT DEBT

Government debt in the region remained relatively stable for most countries in 2012, and at very moderate levels compared to those currently prevalent in high-income European countries, the United States and Japan. In the Seychelles and Madagascar, debt levels, estimated at 87 per cent and 59 per cent of GDP, respectively, are higher than the regional average. However, relative to 2009 (205 per cent of GDP), debt levels in the Seychelles have improved significantly, due principally to the 2009-10 Paris Club write-offs of 45 per cent of the country's obligations to the group, and the conversion of commercial debt (about 60 per cent of the total) into new discount notes in early 2010 (EIU, 2012).

Countries in the region have begun resorting more to both international and national capital markets to finance many of their investment programmes. At a time of extremely low interest rates globally, a rising number of countries in the region (e.g. Tanzania, Rwanda, and Kenya) have been exploring the ways of tapping into international finance. In 2012, Kenya secured a syndicated medium-term loan facility of USD 600 million to foster development activities such as infrastructure projects as well as constitution implementation costs. A diverse group of 13 international and regional lenders joined the facility in syndication. The facility was for a two year tenure and carries a margin of Libor+4.75 per cent per annum.^{xvii} As mentioned earlier, in August 2013, Tanzania announced its intention to pursue the issue of up to USD 1 billion in the form of Eurobond issue, reflecting the confidence of the government in being able to leverage its newfound natural resource discoveries.

“At a time of extremely low interest rates globally, a rising number of countries in the region (e.g. Tanzania, Rwanda, and Kenya) have been exploring the ways of tapping into international finance.”

Figure 1.4: Government Debt, Per cent of GDP 2012 vs. 2011



Source: IMF (2013)

“Public debt in the region increased after the 2008 financial crisis as governments increased spending to stimulate growth in the wake of decreased global demand.”

Public debt in the region increased after the 2008 financial crisis as governments increased spending to stimulate growth in the wake of decreased global demand. Whether the levels at which debt currently stand is of concern has been much debated regionally.^{xviii} A study by Reinhart and Rogoff (2010) found a negative correlation between increased public debt and GDP growth (although the direction of causation is not established) for both developed and emerging countries. They also found a positive correlation between increased levels of public debt and increased inflation rates in emerging markets. Nevertheless, the threshold on which effects became pernicious was estimated by Reinhart and Rogoff at around 90 per cent – well above the kind of debt levels that are evident in the Eastern Africa region. In addition, after the publication of the Reinhart and Rogoff study, considerable controversy arose regarding the accuracy of their calculations regarding the threshold values (Herndon et al, 2013).^{xix} As things stand, it would seem that debt levels for a majority of countries in the region are well within manageable levels.

Debt sustainability analysis by the IMF for countries in the region, based on low income country debt-to-GDP thresholds, rates Ethiopia, Kenya, Tanzania, and Uganda as low-risk countries, with the burdens well below threshold levels for low-income countries (Table 1.4). Rwanda carries a moderate risk because stress tests indicated that threshold levels would be breached in the face of external shocks (terms of trade and aid shocks). Burundi and Djibouti were rated as high-risk since the debt burden indicators exceeded threshold levels under the baseline scenarios (based on a set of macroeconomic projections that articulate government intended policies).

Table 1.4: Debt Sustainability Analysis

Country	Date of IMF, DSA Publication	Risk of Debt Distress	Present Value of External Public Debt to GDP Ratio, %	Present Value of External Public Debt to Exports Ratio, %
Burundi	Feb-12	High	14	162
Djibouti	Jan-12	High	51	139
Ethiopia	Aug-12	Low	13.6	95
Kenya	Jan-12	Low	18.7	65.3
Rwanda	Jun-12	Moderate	14	111
Tanzania	Jun-12	Low	28	88
Uganda	May-12	Low	13	64

Source: IMF debt sustainability analysis, 2012

Table 1.5: External Debt to Official Creditors, Per cent of GDP

Country	2009	2010	2011	2012*	2013 *
Burundi	21.6	22.5	21.2	21.9	21.8
Congo, D. R.	123.4	34.8	30.1	31.6	33.5
Eritrea	49.1	45.8	35.8	29.0	25.0
Ethiopia	12.8	18.1	20.9	18.2	19.0
Kenya	22.3	23.3	24.6	22.8	21.8
Madagascar	29.4	28.7	25.9	25.7	25.3
Rwanda	14.1	13.9	15.9	16.4	15.8
Seychelles	30.0	24.9	25.6	29.3	28.4
Tanzania	25.5	27.7	30.0	28.8	30.1
Uganda	13.8	14.9	18.0	19.0	21.1

Source: IMF, 2012b; *Forecast

While countries in the region are mainly dependent on multilateral sources of concessional funding, some countries are turning to international bond markets for additional sources of finance. Tanzania issued a USD 600 million seven year amortising Eurobond in March 2013^{xx}, and Rwanda issued a USD 400 million 10 year Eurobond in April. Plans are under way for Kenya to issue USD 1 billion Eurobond in September 2013.^{xxi} Such strategies for raising capital seem attractive as long as global interest rates remain low. The decision by the US Federal Reserve Bank in September 2013 to continue with its monetary stimulus plan means that conditions for East African countries planning to issue bonds on the international market remain relatively favourable over the medium-term. However, given the fact that such borrowing is considerably more expensive than concessional finance, governments of the region need to put certain limits on such borrowing. As Stiglitz (2013) has recently warned,

“To ensure that their sovereign-bond issues do not turn into a financial disaster, these countries should put in place a sound, forward-looking, and comprehensive debt-management structure. They need not only to invest the proceeds in the right type of high-return projects, but also to ensure that they do not have to borrow further to service their debt.”

“Given the fact that borrowing from international bond markets is considerably more expensive than concessional finance, governments of the region need to put certain limits on such borrowing.”

1.4 MONETARY POLICY AND EASING INFLATIONARY PRESSURES

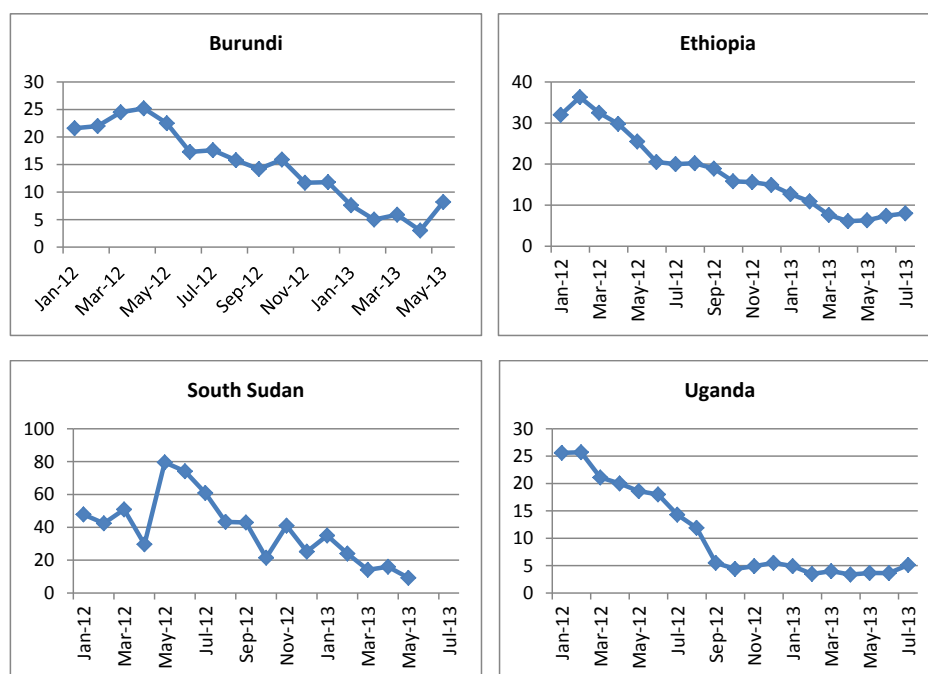
Eastern African countries experienced a notable spike in inflation in 2011. For instance, the inflation rate in Ethiopia peaked at 40 per cent (in October, 2011) and in Uganda it peaked at 30.4 per cent. According to analysis by the African Development Bank (2012), the acceleration of inflation in different countries had different causes - in Ethiopia and Uganda, an increase in money supply was responsible for 40 per cent and 33 per cent of inflation respectively. In Kenya and Tanzania, exogenous price rises accounted for 20 and 26 per cent of inflationary pressures, in addition to money growth, respectively. Inflation in Ethiopia was a result of the Central Bank financing the fiscal deficit with seigniorage; while growth in private sector credit was the main source of broad money growth in Uganda and Kenya. Increasing food prices also had an effect on inflation in the region, with effects ranging from 9 per cent in Tanzania to 13 per cent in Ethiopia and Uganda.^{xxii}

In 2012, however, inflation declined across the region, with the decline being particularly marked in countries sustaining high rates of inflation in 2011 (Burundi, Ethiopia, South Sudan and Uganda) (Figure 1.5). The decline was a result of a combination of tighter monetary policies in the region, as well as an improvement in the food component of the Consumer Price Index (CPI). Those trends continued into the first half of 2013 (UBOS, 2013; National Bank Ethiopia, 2013; SSNBS, 2013; EIU, 2013a).

Countries that made progress on tackling inflation have already begun to loosen their previously tight monetary policy. Kenya and Uganda have been among the most aggressive in cutting policy rates. However, credit growth in these two economies remained constrained for the greater part of 2012 – partly because of lags in the transmission of monetary policy and because interest rates, though declining, remained high (between 11-23 per centage points) (Global Economic Prospects, 2013).^{xxiii}

“In 2012, inflation declined across the region, with the decline being particularly marked in countries sustaining high rates of inflation in 2011 (Burundi, Ethiopia, South Sudan and Uganda)”

Figure 1.5: CPI year-on-year in Four High (<20 per cent) Inflation Countries (Per cent Change), Jan 2012- May 2013



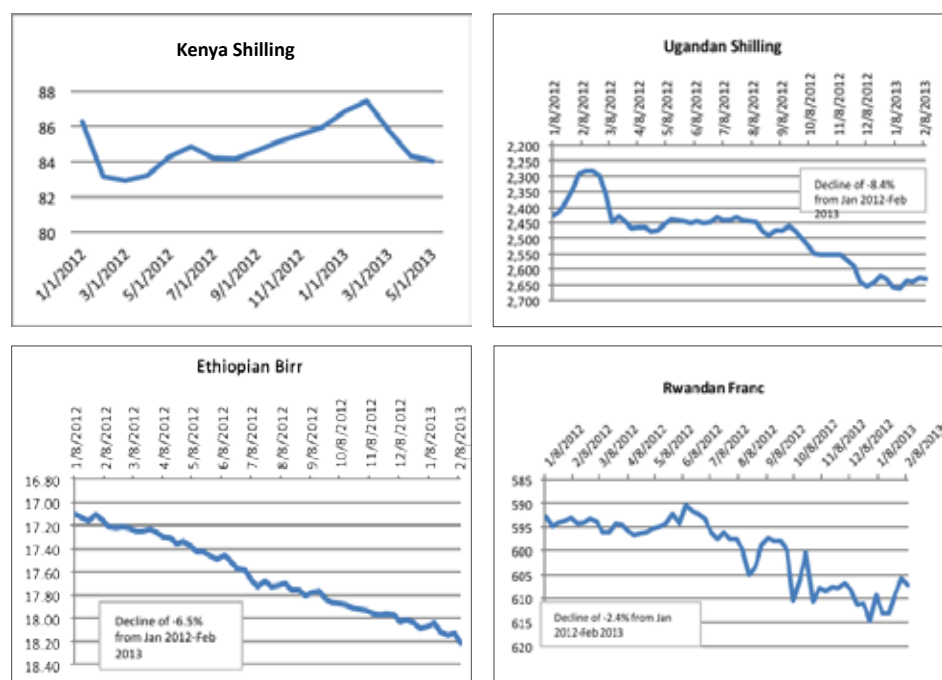
Source: National Sources

The Central Bank of Uganda raised the central bank rate from 13 per cent in July 2011 to 23 per cent in December 2011 and subsequently reduced the rates to 12.5 per cent in November 2012 and 12 per cent in January 2013. Kenya's central bank lowered its rates to 11 per cent in November 2012 from 18 per cent in December 2011. In Tanzania, the annual growth of money supply (M3) decelerated to 13.1 per cent in December 2012, down from 18.2 per cent recorded in December 2011 and the annual inflation rates declined to 9.4 per cent in April 2013, down from 18.7 per cent in April 2012. In contrast, Rwanda, which is one of the best performing countries in the region in terms of inflation, experienced a slight increase in inflation in the first half of 2012, partly due to an increase in money supply driven by private sector domestic credit which increased by 18.1 per cent against 8.9 per cent initially projected. In response, the National Bank of Rwanda increased the central bank policy rate in May 2012 from 7 per cent to 7.5 per cent^{xxiv}. Inflation moderated in the second half of the year, however, down to under 5 per cent by November 2012 and stood at 4.37 per cent by April 2013.

1.5 FOREIGN EXCHANGE RATES

A number of regional currencies devalued against the US dollar in 2012 (Figure 1.6). For countries in the region which confronted aid cuts like Uganda and Rwanda in 2012 and 2013, the local currencies depreciated against the US dollar and other international currencies. The Kenyan shilling depreciated against the US dollar in the run-up to the March elections partly because markets were nervous about possible political instability, similar to the post-election violence of 2007. However following a peaceful outcome to the elections, the shilling re-gained value against the dollar.

Figure 1.6: Nominal Exchange Rate, Local Currency vs. US Dollar

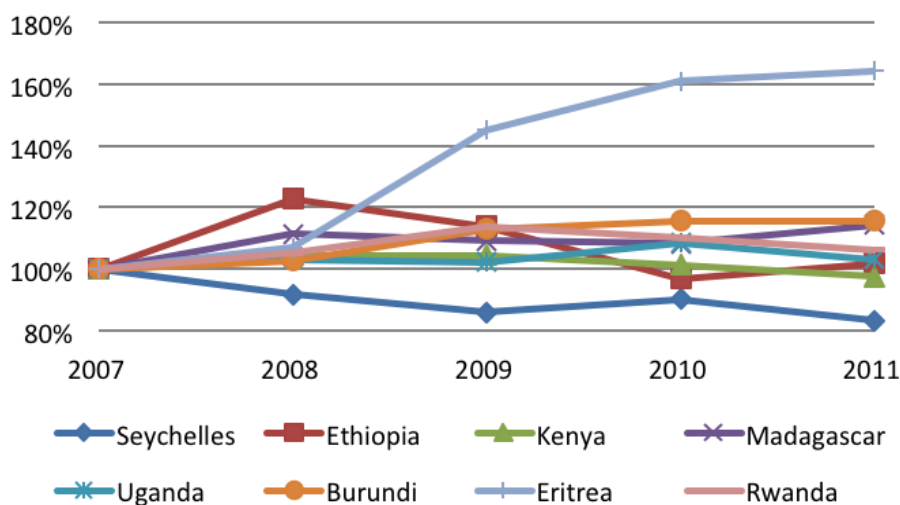


Source: Central banks

“The Kenyan shilling depreciated against the US dollar in the run-up to the March elections partly because markets were nervous about possible political instability, similar to the post-election violence of 2007. However following a peaceful outcome to the elections, the shilling re-gained value against the dollar.”

Figure 1.7 shows the trends in the *real effective exchange rates* for some countries in the region between 2007 and 2011. Only the Seychelles experienced a significant drop in the real exchange rate between 2007 and 2011. The exchange rate market in the Seychelles was liberalised in 2008 as part of the country's economic reforms supported by the IMF. The subsequent fall in the value of the Seychelles' rupee was a result of realigning market forces (IMF, 2009). In Eritrea, the real exchange rate (the nominal exchange rate is fixed) appreciated by 60 per cent between 2007 and 2011, driven by rising gold prices.

Figure 1.7: Real Effective Exchange Rates Index (2007=100)



** Increase in index implies an appreciation of real exchange rate

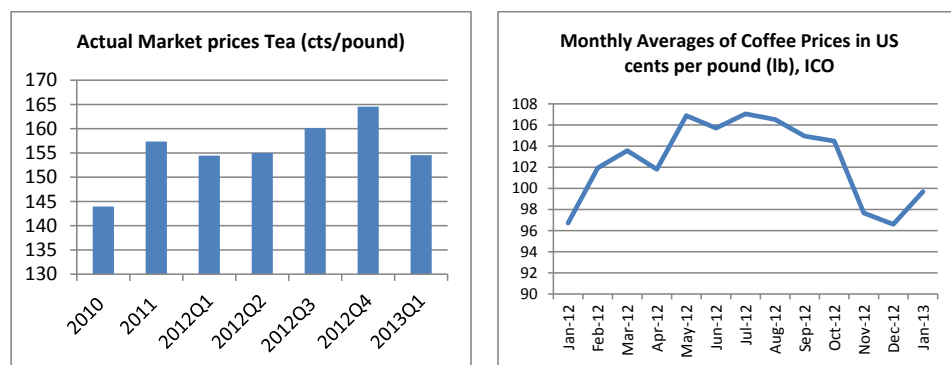
Source: IMF, 2012 Regional Economic Outlook Sub-Saharan Africa

“Countries in the region have been vulnerable over the course of 2013 to downward price trends in both hard commodities and agricultural commodities.”

1.6 TRENDS IN COMMODITY PRICES AND EXPORTS IN THE REGION

The Eastern Africa region is heavily dependent on primary commodities for its export revenues. Coffee and tea are some of the most important exports from the region, with half of the region dependent on these two commodities for a significant share of export revenues. In the first half of 2012 coffee prices increased by 10 per cent boosting export revenues. However, in the second half of 2012 coffee prices fell, while tea prices increased from the first quarter of 2012 to the fourth quarter of 2012 (Figure 1.8). In 2013 prices of agricultural commodities have been facing downward pressures as global supplies improve. In contrast overall prices of metals and minerals are projected to rise slightly because of increased global industrial activity in 2013. However, prices of copper and gold (key exports of the region) are not expected to increase because of previously high inventories. Countries in the region have thus been, vulnerable over the course of 2013 to downward price trends in both hard commodities (e.g. Tanzania and Eritrea for gold, Congo D.R. for copper, etc.) and agricultural commodities.^{xxv}

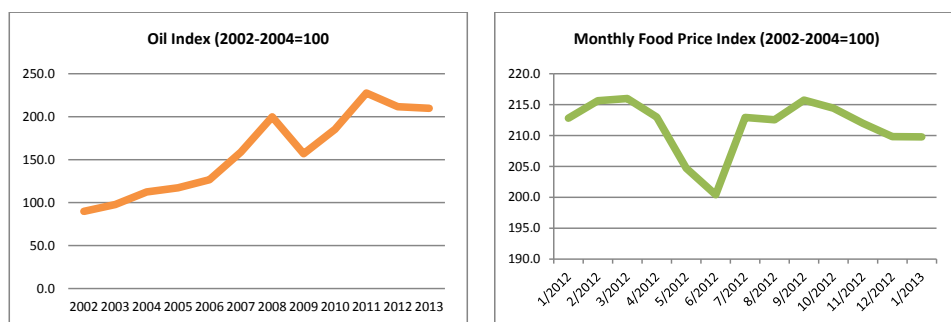
Figure 1.8: Indices of World Market Prices for Select Commodities, 2009–2012



Source: ICO and IMF Indices of Primary Commodity Prices, 2003-2013

Oil and food imports constitute major imports for the region. Oil prices declined in 2012 while food prices declined in the first half of 2012 but climbed back to beginning-of-year price levels in the second half.

Figure 1.9: Oil and Food Price Indices

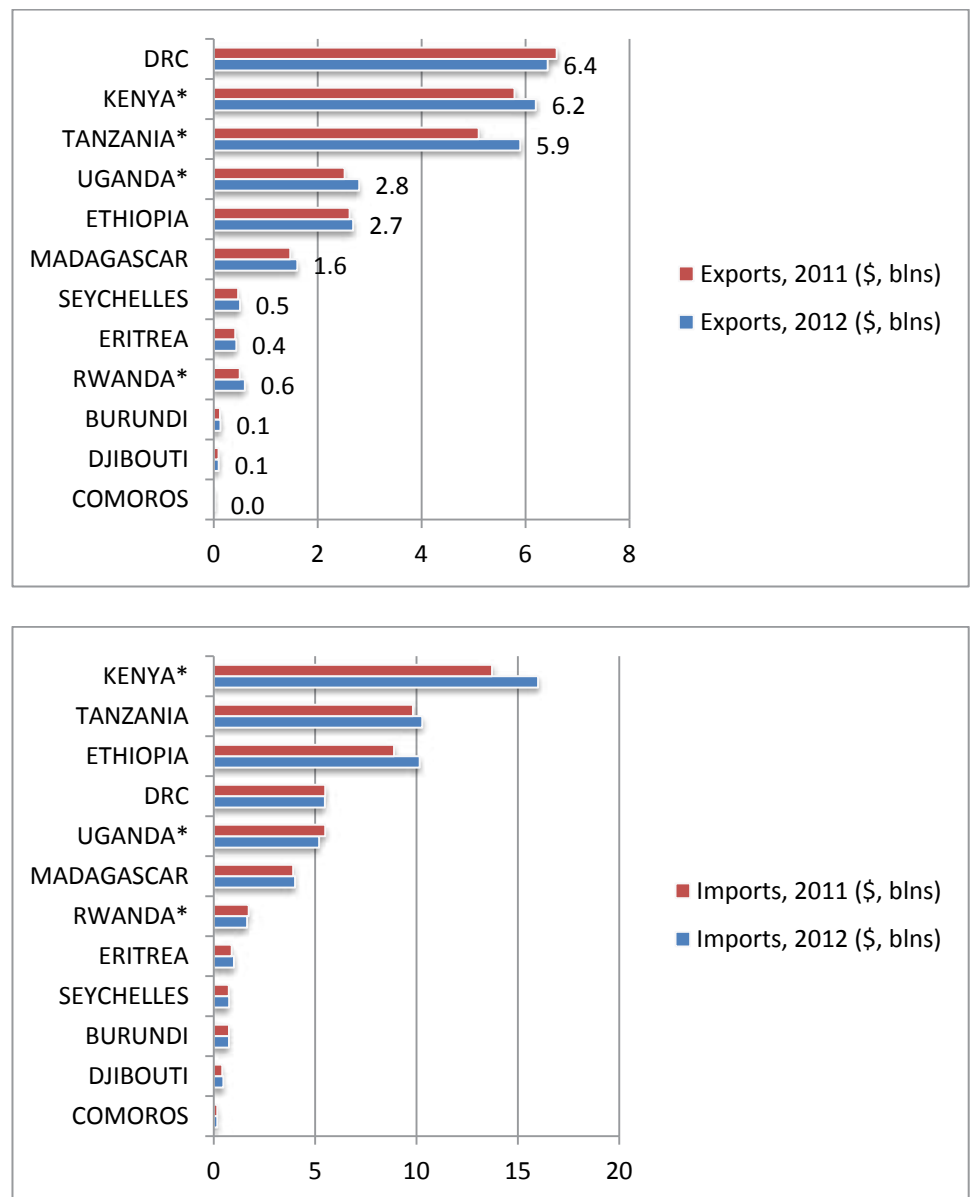


Sources: FAO 2013

Regional trade remained robust in 2012, with both exports and imports improving slightly. Total exports increased to USD 27.2 billion in 2012 up from USD 25.6 billion in 2011, and total imports increased from USD 52.1 billion in 2011 to USD 56 billion in 2012.

“Oil and food imports constitute major imports for the region. Oil prices declined in 2012 while food prices declined in the first half of 2012 but climbed back to beginning-of-year price levels in the second half.”

Figure 1.10: Regional Exports and Imports (USD, Billions)



Source: National sources* & EIU, National data used for Kenya, Rwanda, Tanzania and Uganda

Tanzania recorded a 17.3 per cent increase in exports for the year ending in December 2012. Exports in December 2012 were reported at USD 5.9 billion, up from USD 5.1 billion in December 2011. The increase in export revenues was mainly driven by revenues from gold (USD 2.1 billion), manufactured products (USD 1.1 billion) and traditional exports (USD 1 billion).^{xxvi} Kenya's exports increased by 5.5 per cent from USD 5.9 billion in January 2012 to USD 6.2 billion in January 2013. Growth in export revenues was driven by coffee (18.9 per cent increase to USD 264 million), tea (5.4 per cent increase to USD 1.2 billion), and horticulture products (5.5 per cent increase to USD 703 million). However revenues from manufactured products declined by 6.3 per cent to USD 694 million.^{xxvii} Uganda reported exports of USD 2.8 billion for the year 2012 driven by coffee revenues (USD 372.5 million), fish exports (USD 159 million) and cement exports (USD 107 million).^{xxviii} Rwanda reported a 27.3 per cent increase in export earnings in year ending 2012. The leading exports - tea and coffee - earned USD 65.7 million and USD 60.9 million respectively.^{xxix}

Table 1.6 shows that, despite the rise in importance of emerging market trading partners (as documented in 'Tracking Progress 2012'), Europe continues to be the most important market for the region's exports, followed by Asia, Africa and America respectively. The regional export share to Europe, Asia, the rest of Africa, and America were 35.1 per cent, 29.6 per cent, 23.6 per cent and America 7.0 per cent respectively. In contrast, Asia is the biggest source of imports (average import share of 45.2 per cent) followed by Europe and Africa (Table 1.7).

Table 1.6: Eastern Africa Export Shares by Destinations (Per cent, 2007-2011)

Country	Africa	Developed Europe	Developed America	Developing Asia
Burundi	20.8	48.7	2.7	25.4
Comoros	1.0	35.9	2.6	59.5
Congo D.R.	15.4	23.9	10.4	47.6
Djibouti	40.4	9.2	2.5	46.0
Eritrea	13.8	29.5	20.9	25.9
Ethiopia	19.4	38.5	6.1	29.4
Kenya	42.6	30.8	7.0	15.0
Madagascar	6.0	55.4	18.8	17.9
Rwanda	43.3	19.8	5.9	28.7
Seychelles	10.1	65.7	2.0	10.3
Uganda	44.5	35.1	2.7	15.2
Tanzania	26.0	28.9	2.3	34.3
Average	23.6	35.1	7.0	29.6

Source: UNCTADstat database, 2013

Table 1.7: Eastern Africa Import Shares by Source (Per cent, 2007-2011)

Country	Africa	Developed Europe	Developed America	Developing Asia
Burundi	35.4	26.9	3.5	30.5
Comoros	20.8	29.5	0.4	47.0
Congo D.R.	51.4	28.3	3.7	12.6
Djibouti	6.3	12.3	6.3	68.2
Eritrea	18.6	21.8	2.6	48.4
Ethiopia	4.7	17.9	5.5	61.4
Kenya	12.9	18.4	5.4	53.8
Madagascar	12.9	23.7	5.5	53.6
Rwanda	46.5	23.2	4.7	22.5
Seychelles	10.8	32.3	1.6	51.3
Uganda	25.8	20.9	3.6	40.4
Tanzania	16.8	18.9	3.4	52.5
Average	21.9	22.8	3.9	45.2

Source: UNCTADstat database, 2013

“despite the rise in importance of emerging market trading partners, Europe continues to be the most important market for the region's exports, followed by Asia, Africa and America respectively.”

“The long-term structural imbalances between exports and imports in manufactured commodities and, for many countries in the region, food imports, remain a key concern for policymakers, and makes the diversification of exports all the more urgent.”

“Between 2008 and 2012, the Western Africa (ECOWAS) and Eastern Africa (EAC and IGAD) regions recorded the highest growth rates in Africa while the Southern Africa region (SADC) and the MAGHREB regions recorded the slowest growth rates.”

The trade imbalance increased for most countries in the Eastern Africa region in 2012. The average deficit increased from USD 2.0 billion in 2011 to USD 2.1 billion in 2012. Trade deficits in the region are partly driven by oil imports and, therefore, the mid-term outlook for the trade balance looks more positive as oil prices soften.^{xxx} Countries with a high dependence on oil imports like Rwanda, Ethiopia and Kenya stand to benefit particularly from lower oil prices. Over the long term, prospects are bolstered as a number of countries in the region (e.g. Congo D. R., Kenya, Madagascar, Tanzania, Uganda) start to produce (and refine) their own oil and natural gas. Nonetheless the long-term structural imbalances between exports and imports in manufactured commodities and, for many countries in the region, food imports, remain a key concern for policymakers, and makes the diversification of exports all the more urgent.

Table 1.8: Trade Balance (USD millions)

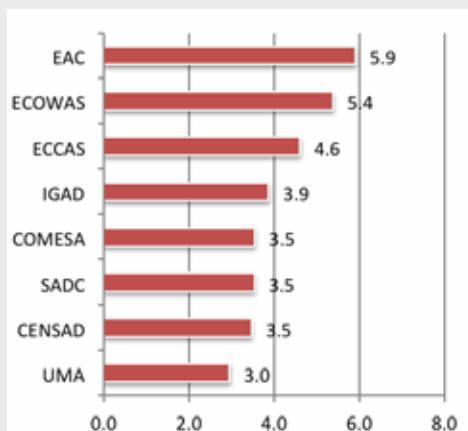
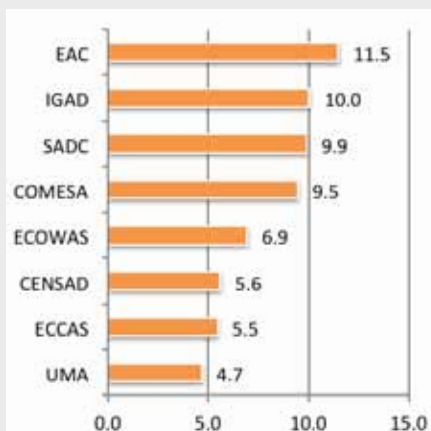
Country	2011	2012	2013 (p)
Burundi	-428	-453	-487
Comoros	-176	-192	-210
Congo D. R.	497	1275	831
Djibouti	-411	-446	-505
Eritrea	-415	-269	-146
Ethiopia	-5506	-6314	-7338
Kenya	-5979	-7862	-8508
Madagascar	-941	-1129	-1064
Rwanda	-1100	-1134	-1490
Seychelles	-416	-390	-437
Tanzania	-3565	-4139	-4832
Uganda	-2514	-2384	-4095
Average	-1950	-2069	-2647

Source: AEO and National sources, 2013; for 2012 national sources used for Rwanda and Uganda

Box 1.3: Comparative Analysis of Macroeconomic Performance of Africa's RECs

Regional integration is a priority objective, both at the level of the African Union, and individual countries. But rarely is the performance of the different Regional Economic Communities (RECs) compared across the continent. In this section, we compare the performance of the 8 RECs of Africa to determine their relative performance on three main macroeconomic criteria – growth, inflation, and trade.

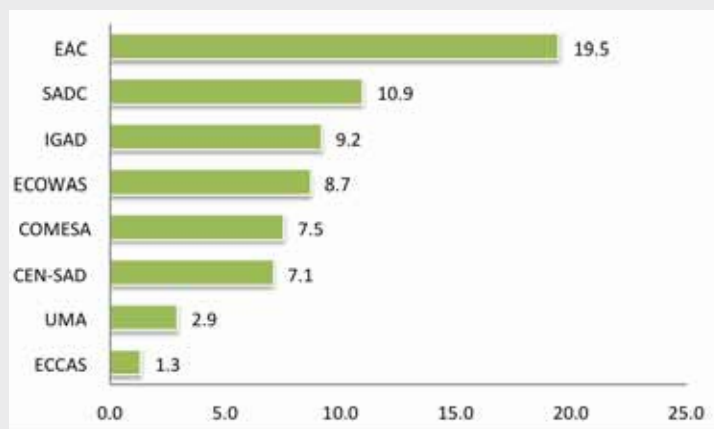
Economic growth across the different RECs in Africa is not evenly distributed. Between 2008 and 2012, the Western Africa (ECOWAS) and Eastern Africa (EAC and IGAD) regions recorded the highest growth rates in Africa while the Southern Africa region (SADC) and the MAGHREB regions recorded the slowest growth rates (Figure 1.11). Given the fact that we are dealing with weighted averages, the different growth rates of the RECs are often driven by growth trends of the major economy in each region. For example, in West Africa (ECOWAS), Nigeria is the biggest economy contributing about 13.2 per cent of the growth on a PPP basis. Similarly, Kenya is the dominant economy in Eastern Africa (EAC) and South Africa in Southern Africa (SADC), contributing approximately, 26.6 per cent and 12.5 per cent of the regional growth, respectively.

Figure 1.11: Weighted GDP Growth(2008-2012)**Figure 1.12: Weighted Inflation Rates (2008-2012)**

Source: UNECA Calculations

Inflation rates across the continent have also shown wide variation (Figure 1.12) with inflation rates being the lowest in the Maghreb (UMA) and the highest in Eastern Africa (EAC). The differences in inflation rates across the region reflect, in part, differences in monetary policy across Africa. For instance, the CFA franc is pegged to the euro currency (and the inflation rate in Europe), and so inflation has been relatively moderate, while the countries in Eastern Africa do not operate a currency pegging system and therefore carry out their own independent monetary policy.

Regarding trade, regional markets have become increasingly important as African countries seek to diversify away from traditional markets and find new market opportunities for their products. Figure 1.13 shows the share of intra-regional exports in Africa between 2004 and 2011. It is here that the East African Community comes into its own - trade between countries was highest in the East African community (EAC) at 19.5 per cent between 2008 and 2011 and lowest in the Economic Community of Central African States (ECCAS) at 1.3 per cent. It is a sobering reflection on the state of regional integration in Africa that only 3 out of 13 regional economic communities have shares of intra-regional trade above 10 per cent.

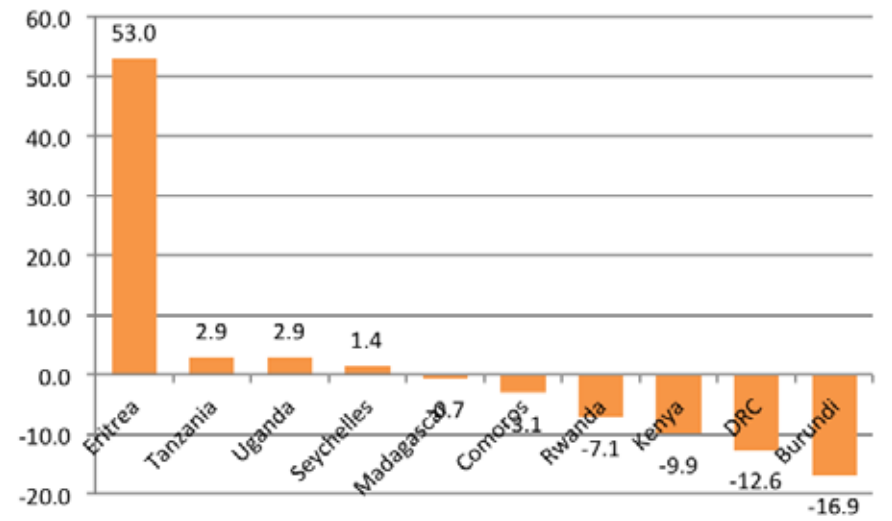
Figure 1.13: Average Intra Regional Exports, Per centage by Destination

Source: UNECA calculations from, UNCTAD stat Data

“It is a sobering reflection on the state of regional integration in Africa that only 3 out of 13 regional economic communities have shares of intra-regional trade above 10 per cent.”

In 2012, terms of trade shifts (Figure 1.14) were unevenly distributed across the region, with Eritrea having benefited from the largest increase in the relative price of exports (driven by gold prices in 2012) vis-a-vis import prices, while Burundi and Congo D. R. showing the largest declines in their terms of trade. This pattern highlights the extent to which terms of trade trends are largely commodity-specific, with prices of some commodities such as gold having increased strongly in 2012, while others like copper (the principal commodity of Congo D. R.) have been weak over the same period.

Figure 1.14: Terms of Trade Shifts, 2011-2012



Source: IMF, 2013

“In half of the countries of the region, the current account deteriorated in 2012.”

1.7 CURRENT ACCOUNT DEVELOPMENTS AND INTERNATIONAL RESERVES

In half of the countries of the region, the current account deteriorated in 2012. In South Sudan, the current account experienced a remarkable deterioration equivalent to more than 30 per cent of GDP, due to the interruption of oil exports. In Rwanda, despite fast-growing exports, imports surged, and in the context of a weakening currency, because of booming imports, the current account deteriorated to reach nearly 10.5 per cent of GDP.

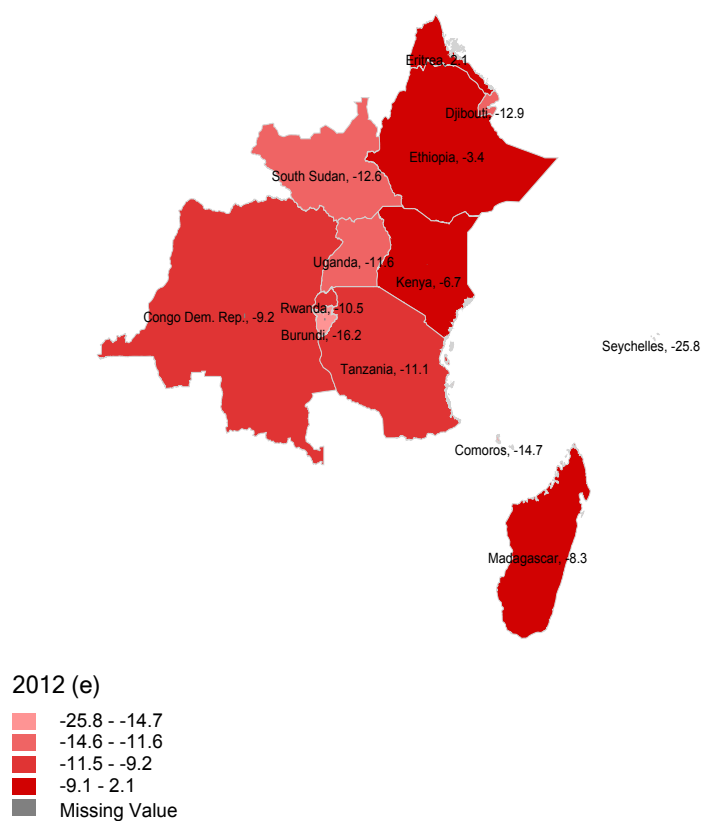
Table 1.9: Trends in Current Account (Per cent of GDP)

Country	2011	2012 (e)	2013 (p)
Burundi	-12	-16.2	-16.2
Comoros	-13.6	-14.7	-15.8
Congo D. R.	-11.5	-9.2	-14.5
Djibouti	-12.6	-12.9	-14.8
Eritrea	0.5	2.1	2
Ethiopia	-0.9	-3.4	-5.5

Country	2011	2012 (e)	2013 (p)
Kenya	-5.5	-6.7	-6.1
Madagascar	-6.9	-8.3	-7.6
Rwanda	-8.5	-10.5	-10.2
Seychelles	-22.6	-25.8	-28.4
South Sudan	21.6	-12.6	...
Tanzania	-11.9	-11.1	-11.9
Uganda	-10.9	-11.6	-13.3

Source: AEO, 2013

Figure 1.15: Current Account Deficits across Eastern Africa 2012



Note: The boundaries and names shown and the designations used on these maps do not imply official endorsement or acceptance by the United Nations

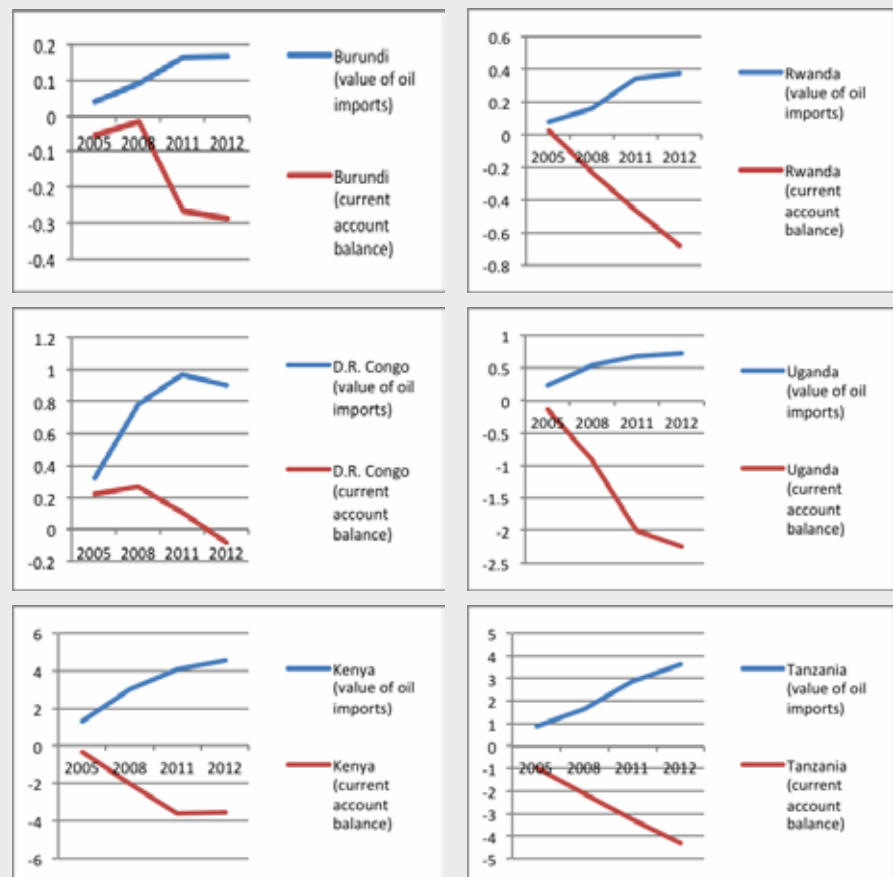
Source: AEO, 2013

Box 1.4: Impact of Higher Oil Import Bills on Current Account Balances in Eastern Africa

Globally, volatile oil prices can cause macroeconomic instability, and higher prices increase the risk of a recession. In the Eastern Africa sub-region, oil prices since 2005 have had a distinctly negative impact on current account balances. As shown in Figure 1.16, with the exception of Eritrea (where growth in the mining sector has mitigated such impacts), the rest of the countries have largely witnessed a deterioration in their balance of payment; a position which mirrors quite closely their energy import bills. Energy security challenges, particularly high exposure to unmitigated global oil market volatility, as well as both regional (such as piracy, infrastructure, policy, etc) and domestic (such as energy security policy, existence of strategic reserves, efficient stock procurements, infrastructure, etc) risks continue to expose the sub-regional economies to greater macroeconomic instability. With the rise of global demand for hydrocarbons, growing population and income, particularly in BRICS, growing sub-regional demand and income levels are likely to continue to drive oil demand higher, potentially leading to expanded exposure to energy risks. While discoveries of oil in Kenya and Uganda are promising, and the gas industry is booming in Tanzania, and oil production has now resumed in South Sudan, the impact on mitigating the sub-regional energy insecurity, and its resultant economic impacts, will depend on the capacity to divert oil and gas resources to sub-regional markets. For instance, the intention of Uganda to establish a refinery with large-scale capacity offers a potential mitigation option.

“In the Eastern Africa sub-region, oil prices since 2005 have had a distinctly negative impact on current account balances.”

Figure 1.16: The Impact of Oil Import Bills on the Current Account Balance in Eastern Africa (in billions U\$)

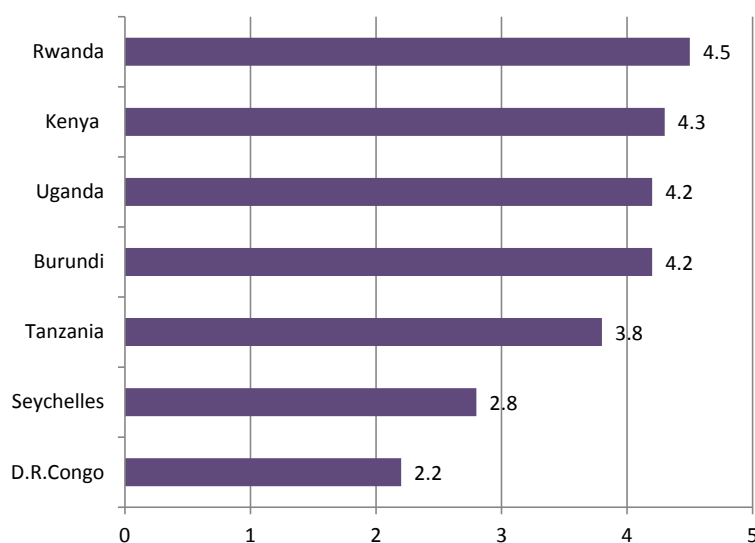


Source: UNECA, on the basis of data from IMF, 2012 World Economic Outlook data.

International reserves for most countries in the region were at relatively high levels in 2012. The 2008 global financial crisis affected the level of reserves in several countries including countries in the Eastern African region though policy makers have managed to replenish the reserves up to the 2008 levels. Figure 1.17 shows the distribution of foreign reserves in the region. Most countries in the region had foreign reserves that would cover imports for the recommended traditional target of three months, with the exceptions of Congo D. R., and the Seychelles. Reserves are still above the critical level needed to maintain confidence (the import coverage ratio recommend at the traditional target of three months of imports). In Tanzania reserves in December 2012 stood at USD 4.1 billion up from USD 3.8 billion in December 2011, sufficient to cover 4 months of imports of goods and services.^{xxxi} Bank of Uganda reported increased reserves from USD 2.8 billion in August 2012 to 3.0 billion in March 2013 due to increased exports and decreasing import demand resulting from a 6 per cent real depreciation against the US dollar. The Seychelles' central bank reported reserves of USD 307 million in December 2012, an import cover of 2.8 months compared to USD 279 million in December 2011.

“International reserves for most countries in the region were at relatively high levels in 2012.”

Figure 1.17: Reserves in Months of Imports of Goods and Services, 2012



Source: National Central Banks.

1.8 OVERSEAS DEVELOPMENT AID – CONFRONTING AID CUTS IN THE REGION

Overseas Development Aid (ODA) to the region is expected to have decreased in 2012/13, following aid cuts to Uganda and Rwanda. ODA from the Development Aid committee (DAC) donors of the OECD has always made up a significant proportion of aid to the region (Table 1.10). Total ODA from DAC to the region increased by 17 per cent in 2011 from 16.4 billion USD in 2010 to 19.3 billion USD in 2011.

The European Union, World Bank and other European countries suspended up to USD 300 million budget support to the government of Uganda because of alleged corruption scandals in the Prime Minister's office.^{xxxii} The United Kingdom and other Western donors also suspended aid to Rwanda amid controversies surrounding the conflict in Congo D. R., stopping the payment of pounds sterling (GBP) 21 million due for release in November 2012.^{xxxiii} These cuts have had a negative effect on government spending and possibly leading to an increase in debt as governments resorted to capital markets to finance the deficits.

Table 1.10: Development Assistance Committee ODA to Eastern Africa;

USD million, 2010 Prices and Exchange Rates,

Country	2009	2010	2011
Congo D. R.	2 366	3 543	5 216
Ethiopia	3 847	3 525	3 364
Kenya	1 790	1 629	2 342
Tanzania	2 971	2 958	2 294
Uganda	1 795	1 723	1 489
Rwanda	932	1 032	1 204
South Sudan			1 041
Somalia	666	498	1 022
Burundi	558	630	541
Madagascar	441	470	384
Eritrea	145	161	153
Djibouti	166	132	133
Comoros	49	67	48
Seychelles	23	56	20
Total	15 749	16 424	19 251

Source: OECD, 2013

“Total Chinese aid to the region was USD 2.7 billion in 2011, with Ethiopia as the largest recipient.”

At the same time, China has become a major source of aid to the region (Table 1.11). New data from the China.aiddata.org project (the project tracks flows using a media-based data collection (MBDC) methodology to systematically collect open-source information about development finance flows) showed that total Chinese aid to the region was USD 2.7 billion in 2011, with Ethiopia as the largest recipient (over 50 per cent of the total to the region). Given the nature of Chinese development cooperation, which often mixes soft-loans, outright commercial ventures and ODA (in the sense understood by OECD DAC guidelines), these figures are likely to underestimate the true value of their contribution.

Table 1.11: Official Aid Flows from China 2011, millions USD

Country	
Ethiopia	1 566
Congo D. R.	375
Uganda	350
Kenya	150
Tanzania	81
Seychelles	61
South Sudan	32
Somalia	16
Rwanda	15
Burundi	1
Madagascar	1
Comoros	0
Eritrea	NA
Total	2 648

Source china.aiddata.org (2013)

1.9 FOREIGN DIRECT INVESTMENT (FDI) AND PRIVATE SECTOR INVESTMENTS

Global trends in FDI in 2012 were not encouraging. Total FDI inflows declined by 18 per cent in 2012, to an estimated USD 1.3 trillion – a level close to the trough reached in 2009 – due mainly to macroeconomic fragility and policy uncertainty for investors (UNCTAD, 2013).^{xxxiv} However, FDI flows to developing economies, for the first time ever, actually exceeded those to developed countries. Inflows of FDI to Africa increased by 5.5 per cent in 2012, rising from USD 43.4 billion in 2011 to an estimated USD 45.8 billion in 2012.

Table 1.12: FDI Inflows, in Eastern Africa (millions USD), 2007-2012

Country	2007	2008	2009	2010	2011	2012
Congo D. R.	1 808	1 727	664	2 939	1 687	3 312
Uganda	792	729	842	544	894	1 721
Tanzania	582	1 383	953	1 813	1 229	1 706
Ethiopia	222	109	221	288	627	970
Madagascar	773	1 169	1 066	808	810	895
Kenya	729	96	115	178	335	259
Rwanda	82	103	119	42	106	160
Seychelles	239	130	118	160	144	114
Somalia	141	87	108	112	102	107
Djibouti	195	229	100	27	78	100
Eritrea	7	39	91	91	39	74
Comoros	8	5	14	8	23	17
Burundi	1	4	0	1	3	1
Total	5 579	5 810	4 411	7 011	6 077	9 436

Source: WIR, UNCTAD, 2013

Total FDI flows to the region were USD 9.4 billion in 2012, up from USD 6.1 billion in 2011. The geographic distribution of FDI flows is heavily skewed, however, with 71 per cent (USD 6.7 billion) of the flows to the region going to Congo D. R., Uganda and Tanzania (Table 1.12). FDI flows to these countries were mainly driven by high mineral commodity prices, oil and natural gas discoveries, with future flows to the region expected to follow a similar trend. Oil discoveries in Kenya in 2012 imply expected increases of FDI flows to the sector. Tullow Oil also announced its plan to invest USD 2.0 billion to establish an oil refinery in Uganda. In Madagascar, UK-based Madagascar Oil expects to start test production at its Tsimiroro onshore heavy oil project in early 2013 while Canada's Sherritt International is expected to start the production of nickel, in Madagascar, at one of the world's largest nickel mines.

1.10 CONCLUSION

Although the economy of Eastern Africa is still performing strongly by international standards, regional growth declined in 2012 to 6.2 per cent, down from 6.8 percent in 2011. This slow down was due to both domestic and external factors. On the domestic front, while fiscal policy has remained mainly expansionary in the region as governments continued to spend on infrastructure, monetary policy was tightened for countries that had experienced high inflation in 2011. Monetary contraction led to increased interest rates, decreased domestic credit and a possible negative effect on output in the region. Externally, the continued slow down of the global economy (both in developed and emerging economies) also had a negative effect on regional growth. Finally, FDI to the region experienced a major upswing in 2012, increasing by over 50 per cent with respect to 2011, indicative principally (although not exclusively) of continued international interest in the natural resource sector.

Going forward, a number of ongoing events within the region have caused uncertainty which could ultimately impact on growth (e.g. terrorist activity, political tensions, conflict in the Great Lakes region). Although our forecast is that the regional growth performance will surpass 7 percent in 2013, there are still considerable downside risks.

“Total FDI flows to the region were USD 9.4 billion in 2012, up from USD 6.1 billion in 2011.”

Footnotes

ⁱ These figures are UNECA estimates, based on the international poverty line numbers available for 10 countries in the EAR (Burundi, Comoros, DRC, Djibouti, Ethiopia, Kenya, Madagascar, Rwanda, Tanzania and Uganda). Figures are approximate because of the different dates of the assessments of the percentage of the population living under USD1.25 a day.

ⁱⁱ Monetary Policy and Financial Stability Statement, Amb. Gatete Claver, National Bank of Rwanda, 15th February 2013.

ⁱⁱⁱ Nominal GDP data from EIU and GDP per capita calculated with population data from UNCTAD

^{iv} The East African; <http://www.theeastafrican.co.ke/business/Tough-year-for-coffee-farmers-as-Euro-crisis-lowers-prices/-/2560/1616852/-/11nfr7ez/-/index.html>

^v According to government figures (Banque Centrale de Congo, 2013), copper production more than doubled between 2009 and 2012, reaching 635,561 tonnes, and provisional figures suggesting a large increase in 2013.

^{vi} See The Africa Report, August-September 2013, No. 53, 'Congo at a Crossroads', by Gregory Mthembu-Salter.

^{vii} Bloomberg News July 4th 2013, Ethiopian Lawmakers Approve 12.4% Budget Increase. <http://www.bloomberg.com/news/print/2013-07-04/ethiopian-lawmakers-approve-12-4-budget-increase.html>

^{viii} The East African, June 15th 2013 Kenya in tax measures to build infrastructure, cushion old and poor. <http://www.theeastafrican.co.ke/news/Kenya+in+tax+measures+to+build+infrastructure/-/2558/1883932/-/view/printVersion/-/13sbi7s/-/index.html>

^{ix} The East African, June 15th 2013 ;Uganda breaks from donor funded budget <http://www.theeastafrican.co.ke/news/Uganda+breaks+from+donor+funded+budget/-/2558/1883914/-/view/printVersion/-/rxtiyoz/-/index.html>

^x Ministry of Finance and Economic Planning, Government of Rwanda: Budget Frame work paper 2013/14-2015/16, April 2013 http://www.minecofin.gov.rw/fileadmin/General/NationalBudget/DRAFT_BFP_2013-16-P1.pdf

^{xi} The East African, June, 2013; <http://mobile.theeastafrican.co.ke/News/MPs-ensure-additional-33m-in-Tanzania-budget/-/433842/1883930/-/format/xhtml/-/14oc9in/-/index.html>

^{xii} "Tanzania seeks IMF debt ceiling lift for 1bn bond issue" by Katrina Manson and Javier Blas, Financial Times online, 28th August 2013, <http://www.ft.com/cms/s/0/4c058612-0f18-11e3-8e58-00144feabd00.html#axzz2dcgHbP00>

^{xiii} IMF 2013, Burundi letter of intent, Memorandum of Economic and Financial policies, and technical memorandum of understanding

^{xiv} National Bureau of statistics, south Sudan <http://ssnbs.org/>, accessed 06/20/2013.

^{xv} AEO (2013).

^{xvi} Economist Intelligence Unit (2013)

^{xvii} East African Business Week: August 20-26 "Record Loan for Kenya: USD 600 million is the biggest loan ever extended to an East African State" By Leonard Magumba

^{xviii} See, for instance, "Economists sound the Alarm over East Africa's Rising Public Debt", by Christine Mungai and Bernard Busullwa, The East African, August 24, <http://www.theeastafrican.co.ke/business/Economists+sound+the+alarm+over+EA+rising+public+debt+/-/2560/1966408/-/12g1119/-/index.html>

^{xix} The relationship between public debt and GDP growth varies significantly by time period and country.

Their evidence contradicts Reinhart and Rogoff's claim to have identified an important stylised fact, that public debt loads greater than 90 percent of GDP consistently reduce GDP growth.

^{xx} On 27th February 2013, Tanzania placed USD 600m in bonds, maturing in 2020. The bond was priced at 100%. <http://allafrica.com/stories/201303120099.html>

^{xxi} Kenya to issue USD 1 bln debut Eurobond after peaceful vote. <http://www.reuters.com/article/2013/03/11/kenya-eurobond-idUSL6N0C35QS20130311>

^{xxii} African Development Bank(2012); inflation dynamics in selected East African countries: Ethiopia, Kenya, Tanzania and Uganda

^{xxiii} <http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1322593305595/8287139-1358278153255/GEP13aSSARRegionalAnnex.pdf>

^{xxiv} National Bank of Rwanda; monetary policy and financial stability statement August 2012

^{xxv} World Economic Situation and Prospects 2013, Update as of mid-2013 ; United Nations New York

^{xxvi} Tanzania Central Bank (2012).

^{xxvii} Kenya Central Bank (2012).

^{xxviii} Uganda Central Bank (2012).

^{xxix} National Bank of Rwanda, 2013 ; Balance of Payments 1998-2012 <http://www.bnr.rw/index.php?id=171>

^{xxx} World Economic Situation and Prospects 2013, Update as of mid-2013 ; United Nations New York

^{xxxi} Bank of Tanzania; Monthly Economic Review January 2013

^{xxxii} <http://www.monitor.co.ug/News/National/Donors--cut--all-direct-aid--government--until-2015/-/688334/1635792/-/tc4u1pz/-/index.html>

^{xxxiii} <http://www.bbc.co.uk/news/uk-politics-20553872>

^{xxxiv} Total FDI inflows declined by 18 per cent in 2012, to an estimated USD 1.3 trillion – a level close to the trough reached in 2009 – due mainly to macroeconomic fragility and policy uncertainty for investors (UNCTAD, 2013).





CHAPTER 2

THE STRUCTURAL
CHARACTERISTICS
OF GROWTH IN THE
EASTERN AFRICAN
REGION

2.1 INTRODUCTION

In Chapter 1 of this report, the continued resilience of economic growth in the Eastern Africa region was noted. But this strong economic performance has increasingly been accompanied by growing (and sometimes quite vocal) concerns about the quality of the growth – particularly the extent to which growth has been conducive to broad-based poverty reduction and employment creation. This Chapter, as well as the next, will look at some of the related policy challenges and dilemmas facing the Eastern African region, focusing particularly on sectors which are likely to have greater impact in terms of improving the quality of growth in the region.

Across the region, there is evidence to support the idea that, despite a much improved economic performance in the 2000s after two decades of economic stagnation, many social and economic aspirations have still not been fulfilled. For instance, in their study of Uganda, Ssewanyana and Younger (2008) observe that rapid economic growth has not always translated into marked improvements of other indicators of social well-being, such as infant and child mortality rates. For example, according to DHS data, Uganda's under-five mortality rate was still 144 deaths per 1000 live births in 2006, having reduced only marginally over the previous decade.ⁱ Similarly, Tanzania has been one of the world's fastest-growing economies over the last decade. Yet according to household surveys from 2000 to 2007 income poverty fell only from 35 to 33 percent. Taking into account population growth, this amounts to an additional one million Tanzanians living below the poverty line. With one or two notable exceptions,ⁱⁱ the story has been similar in other countries in the region. As the African Progress Panel Report (2012:16) puts it, *"Economic growth reduced poverty in Africa, but less than might have been anticipated, with Africa's poor receiving too small a slice of the expanding wealth cake."*

These stylised characteristics of growth across the region imply that growth is not translating into broad-based and inclusive development that policymakers and citizens alike would have hoped for. This Chapter explores why this has been the case, by focusing particularly on the issue of insufficient 'structural transformation'. The Chapter portrays some of the 'stylised facts' of economic growth in the region over the last decade - along with its underperformance with regard to both poverty reduction and employment creation, the nature of income inequality across the region, and a discussion of the structural patterns of growth.

2.2 POVERTY REDUCTION AND GROWTH

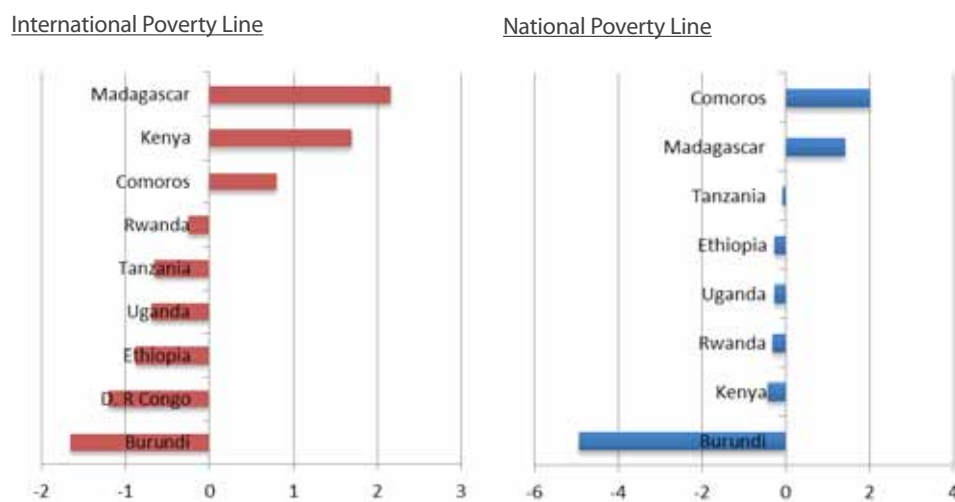
2.2.1 Poverty Reduction Elasticities for the Eastern Africa Region

In Africa empirical studies show that the poverty reduction elasticity of growth (the extent to which economic growth is transformed into poverty reduction) tends to be lower than in other regions of the world (Berardi and Marzo, 2009). Shaohua and Ravallion (2004) note that, in 2001, the elasticity of the "poverty gap" with respect to growth in mean income was only one third in Sub-Saharan Africa than that in South Asia. Even more alarmingly, they noted that over time it decreased in absolute value in Sub-Saharan Africa, while increasing on average in developing countries. Fosu (2009) noted that the gap between the elasticity of poverty with respect to growth in Sub-Saharan Africa and the rest of the developing world varies with the considered poverty measure, the differential being the largest (2.6 times) when one considers the headcount poverty index.

Despite achieving very respectable rates of economic growth in Eastern Africa (in some cases at rates not witnessed since the 1960s), poverty reduction elasticities have remained quite low (Figure 2.1).

"Growth is not translating into broad-based and inclusive development that policymakers and citizens alike would have hoped for."

Figure 2.1: Poverty Reduction Elasticities, 2000s



Source: UNECA elaboration, on the basis of POVCAL and national data

In the case of three countries in the sub-region (Comoros, Kenya, and Madagascar), the elasticities have even been positive - that is to say, economic growth has been accompanied by a rise in poverty levels.ⁱⁱⁱ The key question is: What is causing these poverty reduction elasticities to be so low compared to other regions?. The answer to this question is rather complex, but in essence it is related to the structural nature of the growth itself that has been prevalent in the region – growth that is accompanied by quite high inequalities and with a relatively poor capacity to generate strong employment opportunities. As documented in 'Tracking Progress 2012' (UNECA, 2012), these difficulties are compounded by demographic pressures which, although trending downwards, are still amongst the highest in the world. As a consequence, the demands made on the job market, particularly as young people look for gainful employment, are enormous.

“Difficulties in reducing poverty in the region are compounded by demographic pressures which, although trending downwards, are still amongst the highest in the world.”

2.2.2 Has Growth been Accompanied by a Concomitant Improvement in Living Standards?

The calculation of economy-wide poverty reduction elasticities can be highly sensitive to both the calculation of the numbers living in poverty and also the variability and accuracy in the calculation of growth rates. An alternative approach is to look at the extent to which growth translates directly into improvements in living standards. A number of economists have recently expressed differing – and at times quite contradictory - views regarding the relationship between growth rate and living standards in Africa over the past decade (e.g. Young (2012), Jerven (2009) Harttgen et. al. (2012)). Some argue that African living standards are growing at a much faster rate than the rate reported in the national accounts data, while others (considering the poor data quality and structural problems) think that the real rate of improvement in living standards is probably lower than that revealed by national accounts data.

Young (2012) deduced that real household consumption in sub-Saharan Africa has been growing at between 3.4 and 3.7 percent per annum over the period 1990 to 2006. This in turn implies that the rate is three and a half to four times higher than the growth rate reported in international data sources. Young used measures of real household consumption derived from readily available data published in Demographic and Health Surveys (DHS).^{iv} Such data includes, among others, trends in the ownership of

lasting goods, the quality of housing and the number of years of education of youth. Young uses the available data for the period 1990 to 2006 to estimate the level and growth of real consumption of a set of household assets in 29 Sub-Saharan as well as 27 other developing countries outside the region. He found that, since 1990, real material consumption in sub-Saharan Africa is growing at a rate three and half to four times greater than recorded by international data sources. The rate of improvement in living standards is therefore at par with what is taking place in other developing regions of the world. In this sense, then, Young argues that the 'African growth miracle' is validated and there is no cause for 'Afro-pessimism'.

Nonetheless, Young's approach and methodology for examining the evidence of an "African growth miracle" has provoked widespread academic debate. Harttgen et. al. (2012) raised the following objections and caveats regarding Young's approach:

"Using DHS data, Young (2012) found that, since 1990, real material consumption in sub-Saharan Africa is growing at a rate three and half to four times greater than recorded by international data sources. In this sense, then, Young argues that the 'African growth miracle' is validated and there is no cause for 'Afro-pessimism'."

1. There is a need to take into account the fact that preferences for certain assets might rise over time as those assets become more prevalent and part of "normal" living conditions. This is particularly true of assets such as media and telecommunications equipment (e.g. TVs and mobile phones).
2. Changing relative prices can lead to a demand shift favouring some assets at the expense of other household expenditures.
3. The DHS surveys do not record the age and depreciation of assets and thus might overestimate the value of assets built up through accumulation over a life time.
4. Some assets included in Young's analysis, such as access to piped water and electricity, are often provided by governments at highly subsidised rates. Thus Harttgen et. al (op.cit.) argue that the ownership of these assets should not be considered as part of real household consumption.^v

In light of these issues, the authors question the existence of an 'African growth miracle' and, after carrying out their own analysis of the trends in living standards, come to the conclusion that official or traditional estimates of income and consumption growth may be more accurate than Young suggests.

In fact, however, there is a further weakness in the approaches of both studies. Both the analysis made by Young (2012) and by Harttgen et al (2012) were based on an *asset index* comprising of different assets which have a significant impact on the overall living standard. The asset index was constructed at a highly aggregated level, with the concomitant risk of mixing 'apples and pears'. This approach may fail to give a clear picture of comparative growth rate between real GDP and the ownership of those assets.

To address this issue, the approach adopted in this report is to provide a comparative analysis of the growth rate of real GNI and trends in the ownership of eleven separate asset categories from the available regional DHS surveys. DHS surveys are currently available for six countries of the Eastern Africa region. It is to be noted that, unlike Young (2012) and Harttgen et al (2012) who used real GDP per capita from Penn World Tables (PWT), the analysis made in this report relies on real GNI per capita at constant 2000 USD data retrieved from the World Bank.

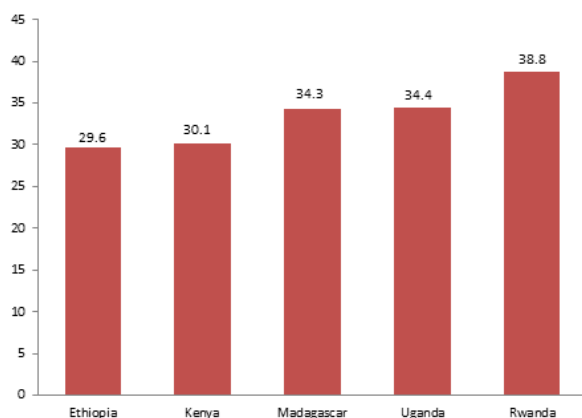
Both Young (2012) and Harttgen et al (2012) used PPP converted GDP per capita at 2005 constant prices from Penn World Tables (PWT) to measure the real GDP growth rate. But arguably it is more appropriate to use Gross National Income (GNI) as a proxy for per capita income growth, as GNI reflects the income that is accruable to nationals, rather than measuring the value of all economic activity taking place on national territory. Thus, for instance, the absolute value of gold mining in Tanzania may be very large, but few of the rents are captured by Tanzanian nationals. Jerven (2009) has shown that real

GDP growth rate using PWT varies significantly (and has a higher volatility) from the growth rate stipulated by the national sources. It is not, therefore, a necessarily reliable source for the growth of incomes. For similar reasons, we do not utilise the 'consumption per capita' estimates provided by Penn World Tables utilised in the analysis of Young (2012) and Harttgen et. al. (2012). World Bank, rather than national, data sources were used with the aim of having a single directly comparable source across countries.^{vi} Average annual growth rates of eleven indicators have been calculated (Figure 2.3) and subsequently, deviation graphs were produced to demonstrate relative growth rates of these assets with respect to the real growth rate of GNI per capita (Figure 2.4).

The results of our analysis are rather mixed. The percentage growth rate of most household assets is positive over the period, although the patterns of growth vary quite considerably from one country to another. Across countries, however, one asset has experienced a more dynamic growth performance in the 2000s than any other – mobile telephones (Figure 2.2). Growth in this asset category has been phenomenal, far outstripping the annual rates of growth in both income per capita and ownership of other household assets, averaging an annual growth rate of phone ownership ranging from around 30% to 39% over the sample years of DHS survey for all five countries where there is data (for this reason the variable is plotted separately). Clearly, the mobile phone has become a necessity rather than a luxury item. The rapid rise of mobile phone ownership also illustrates perfectly the importance of taking into account shifting patterns of consumption over time when analysing the extent to which living standards have improved. It also reflects the low level of penetration of land telephony in the region.

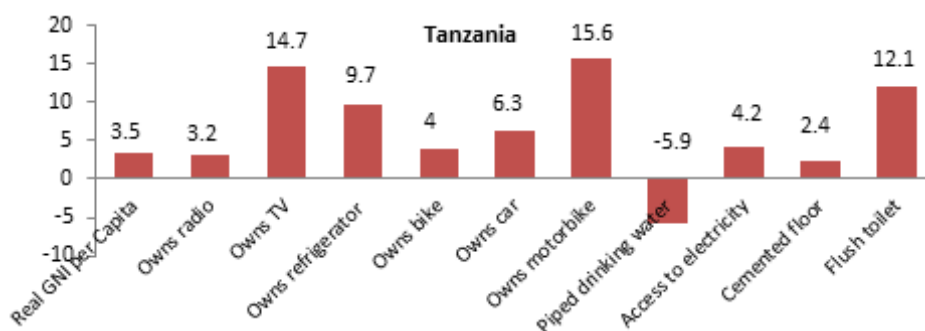
“Across countries, one asset has experienced a more dynamic growth performance in the 2000s than any other – mobile telephones. Growth in this asset category has been phenomenal,, averaging an annual growth rate of phone ownership ranging from around 30% to 39%”

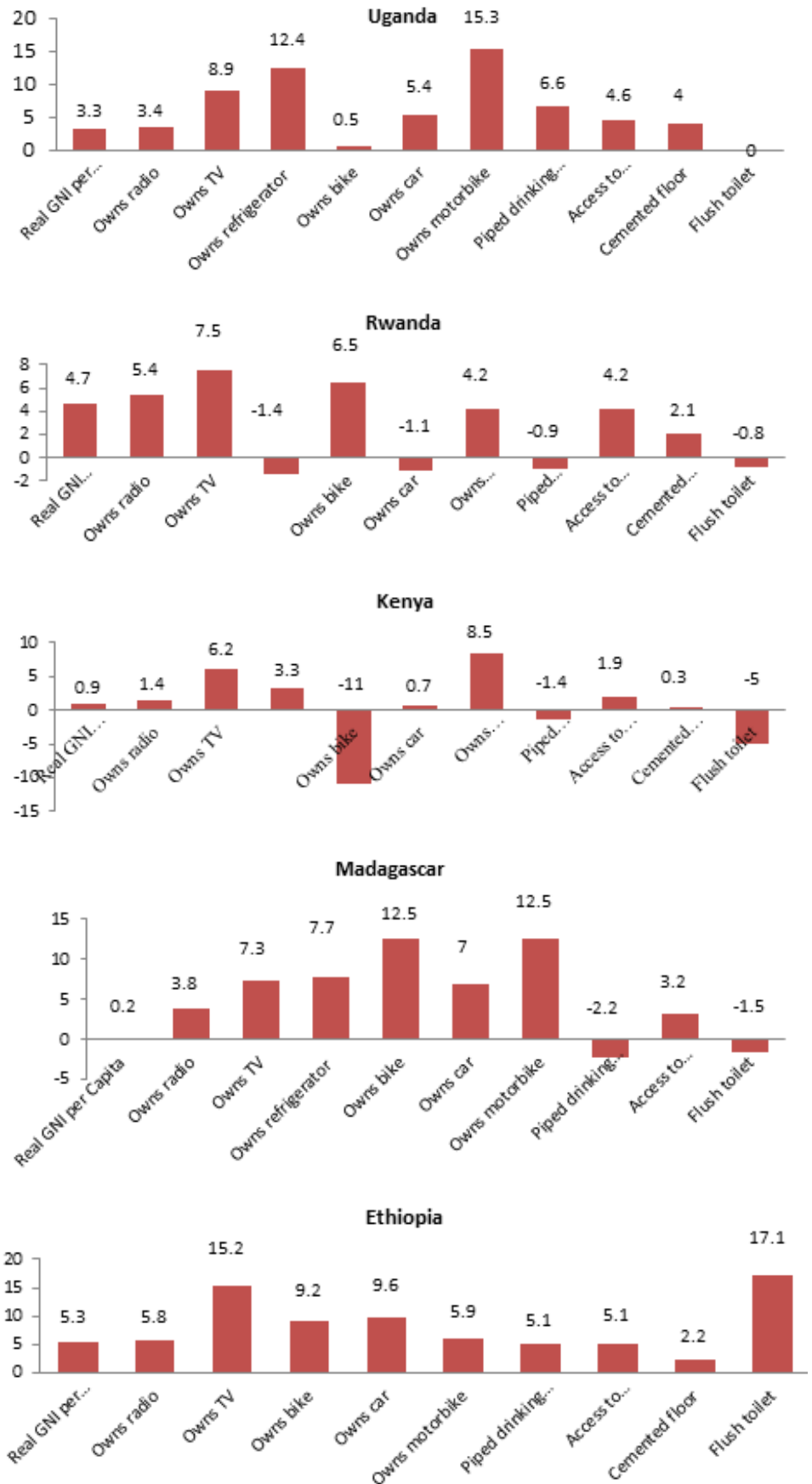
Figure 2.2: Annual Percentage Growth in Mobile Phone Ownership per Household, 2000s



Source: UNECA calculations on the basis of DHS data

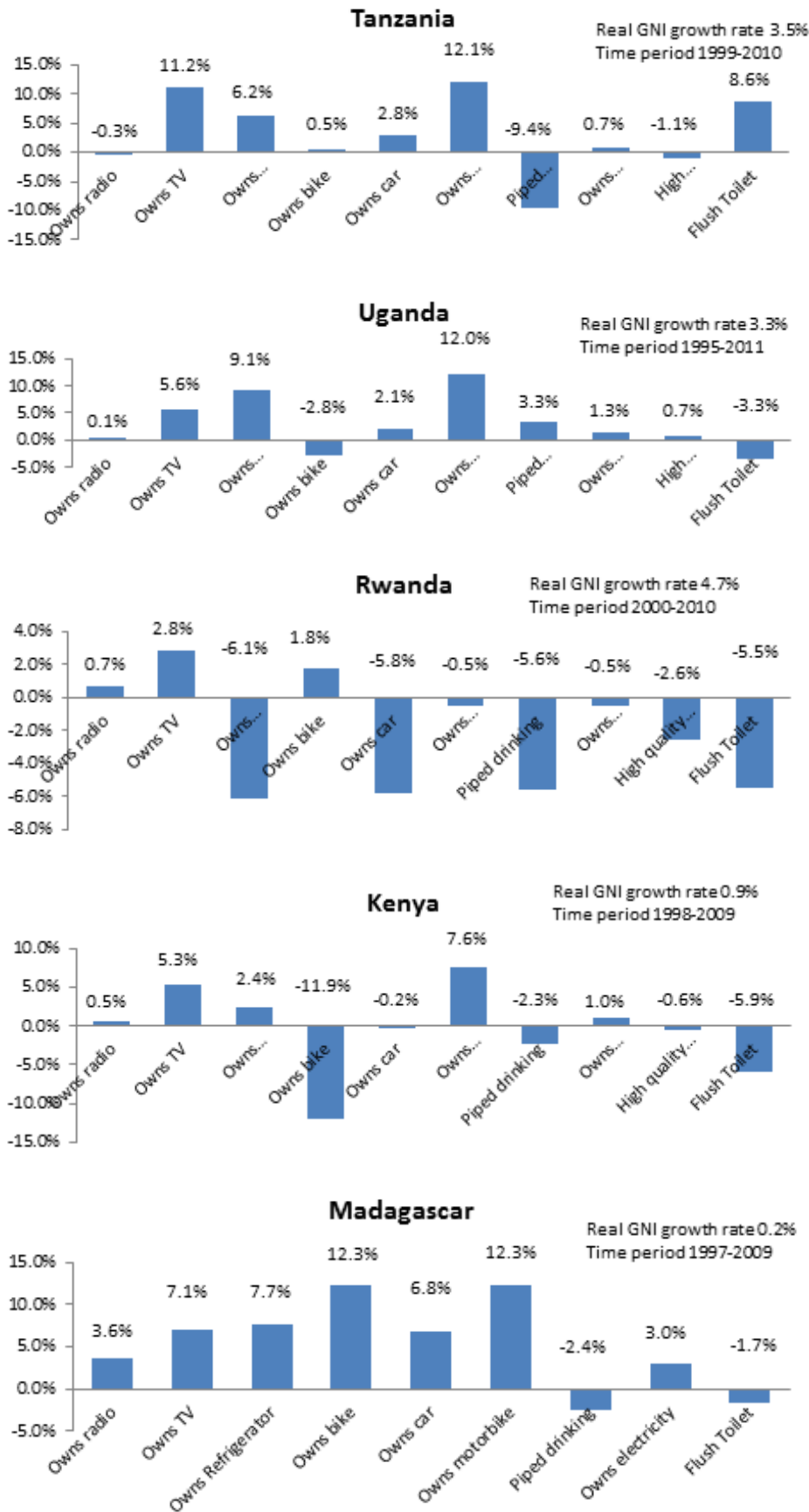
Figure 2.3: Average Annual Growth Rates of GNI per Capita and Household Ownership of Selected Assets, 2000s

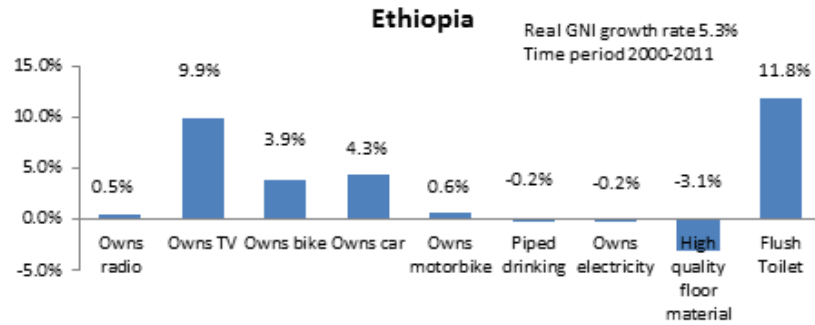




Source: UNECA calculations on the basis of DHS data

Figure 2.4: Deviation of Household Ownership of a Selection of Assets from Growth in per Capita GNI.





Source: UNECA calculations on the basis of DHS data

“In some cases, improvements in living standards are evident even in the absence of significant economic growth, suggesting a more complicated relationship between income growth and development than hitherto suspected.”

In contrast, one apparent anomaly of the DHS data is the slow (and in some cases negative) growth of both piped drinking water and flush toilets, assets which are crucial for improved living standards: Kenya, Madagascar, and Rwanda all experienced a negative average annual growth rate for both piped drinking water and flush toilets. Tanzania too has experienced a negative growth rate for piped drinking water. The finding is rather surprising, as according to both national data and Oxford University’s *Poverty and Human Development Initiative (2012)*, both Rwanda and Tanzania have achieved improved access to sanitation and piped drinking water. These discrepancies may in part be explained by different methodologies in accounting for improved access (MININFRA, 2010:7)^{vii}

An alternative way of visually representing the data is to use graphs which reflect the deviation in growth rates of the household assets from the calculated growth rate of GNI per capita. On the whole, countries in the region have performed well in terms of experiencing a rate of growth in the different asset categories which either has kept pace with, or grown faster, than the rate of growth of their per capita income. However, most of the progress is focused on the possession of consumer durables such as cars, bicycles, motorbikes and cars. The results are less impressive for Rwanda and Kenya (where seven and four different assets respectively are growing slower than the growth rate of real GNI per capita). In the former case (Rwanda), however, this evaluation has to be mitigated by the fact that the country has achieved a high rate of real GNI per capita growth (the second highest out of the six countries). In Ethiopia, although the per capita growth rate has been as high as 5.3 percent, the country still manages an impressive performance in terms of the expansion of asset ownership, with six out of nine different assets growing faster than the rate of real GNI per capita.

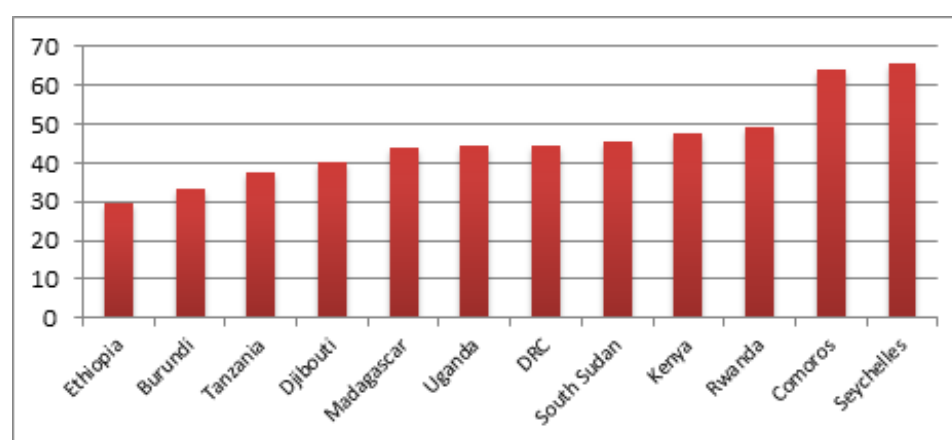
Why the often large disparity between income growth (proxied by the GNI growth rate) and household asset growth? This exercise does indicate that the high real GNI growth rate has not automatically led to the expected enhancement of living standards within the region. In some cases (Madagascar stands out and, to a lesser extent, Kenya), however, improvements in living standards are *evident even in the absence of significant economic growth*, suggesting a more complicated relationship between income growth and development than hitherto suspected.^{viii} One plausible explanation of this mismatch, in cases where asset growth has been slower than income growth, is that the high degree of inequality and poor job creation which have been prevalent in the region have impeded translating gains in income into broader improvements in living standards. We will say more on these characteristics of growth in the region in the following section.

2.3 INEQUALITY AND GROWTH

2.3.1 The Extent and Impact of Inequality in Eastern Africa

Although often not acknowledged, Africa's income disparities are among the largest in the world, and a number of Eastern African countries are especially badly afflicted by growing levels of inequality. One widely used measure of income inequality, the Gini index, captures the concentration of household income or expenditure (the higher the index, the greater the inequality, with a maximum of 1 and minimum of 0). Figure 2.5 shows the most recent data available from household surveys regarding the depth of inequalities in the region while Figure 2.6 shows income inequalities from the perspective of consumption of the upper versus the lower deciles.

Figure 2.5: Gini Coefficient, Eastern Africa, Latest Available Year

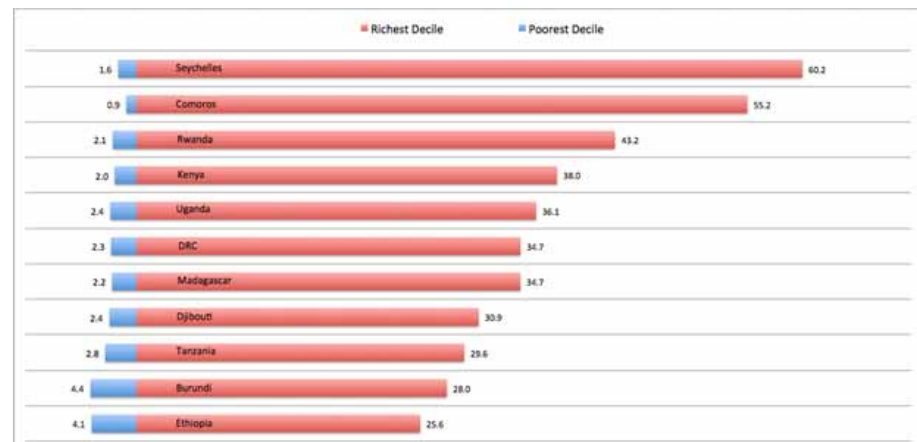


Source: POVCAL data plus national sources

By way of comparison, in China, where the Gini index currently stands at 0.42, political leaders have identified rising inequality as a threat to social stability and future growth. Yet, there are 24 countries in Africa with higher inequality scores than China (APP, 2012:16) and in the Eastern Africa region approximately half the countries in the region have greater income inequality than China. If this is a major political issue in China, it begs the question why the issue does not receive more priority in Eastern Africa. In the cases of Comoros and Seychelles, these two countries are among the top three countries in the world in terms of the degree of inequality. The egalitarian legacies of socialism in Ethiopia and Tanzania have led these two countries to have the lowest income inequality in Eastern Africa, but even in these two cases, the available evidence suggests that inequalities are sharply on the rise.

“In the Eastern Africa region approximately half the countries in the region have greater income inequality than China. If this is a major political issue in China, it begs the question why the issue does not receive more priority in Eastern Africa”

Figure 2.6: Consumption Shares by Richest and Poorest Decile, Latest Available Year



Source: Povcal

“Inequalities undermine the capacity of countries to develop effective policies of industrial support and targeting.”

Traditionally, many economists have been rather ambivalent to these trends. They tended to believe that there is a ‘Kuznet’s curve’ effect- that early on in the development process, a sharp rise in inequalities was to be expected. Some economists have even seen this effect as beneficial, as it has been linked to increased savings (the propensity to save being much higher for high income groups). Supporters of this position advise governments to invest in growth as a first priority, believing that the benefits will eventually “trickle down” to the poor (Cummins and Ortiz, 2011).

In recent years, however, there has been a growing recognition that the negative impacts of high levels of or rising inequality can be serious. Various econometric studies, Alesina and Rodrick (1994), Birdsall (2008), Cummins and Ortiz (2011) and Berg and Ostry (2011) among others, all find that developing countries with high inequality tend to grow more slowly (UNCTAD, 2012a). Particularly relevant to the current situation in the Eastern Africa region is a recent study by Berg and Ostry (2011), who look at the sustainability of growth spells in a cross-country econometric analysis. Their analysis comes to the rather commonsensical conclusion that increasing the length of growth spells, rather than just getting growth going, is critical to achieving income gains over the long term, of the kind articulated in the various development plans across the region to attain middle-income status. Pointedly, however, Berg and Ostry find that countries with more unequal income distributions tend to have significantly shorter growth spells – in other words, inequality jeopardises the sustainability of economic growth.

Of course, attention to inequality may be warranted for social reasons, regardless of its effects on growth per se (Wilkinson and Pickett, 2009). There is, for instance, a growing acknowledgement that inequality can undermine social cohesion (OECD, 2011). But this line of reasoning also has considerable bearing on the growth story, as growth in the presence of social strife may in any case be difficult to sustain, as the recent experience in North Africa testifies.^{ix}

Another powerful, though less widely-cited argument in favour of greater income equality has been put forward by Amsden (2001), and it has a lot to do with the capacity of countries in the region to successfully orchestrate and catalyse the kind of structural transformation that governments in the region desire. Amsden notes that developing countries that have invested heavily in national firms and national skills – e.g. China, India, South Korea and China Taipei – all had relatively equal income distributions when they first entered into a period of accelerated growth. By way of explanation, Amsden argues that the greater income inequality is (by social class, race, religion, or region),

the more fractured a society is, and the more difficult it can be to mobilise support for national business enterprises and firm-specific national skills (Amsden, 2001: 18).^x As a consequence, inequalities undermine the capacity of countries to develop effective policies of industrial support and targeting.

There is also plenty of evidence that show high levels of inequality undermine the capacity to translate growth into rapid poverty reduction. In a cross-country study, Fosu (2011) finds that, on average, income growth has been the key driver of poverty reduction – albeit with significant regional and country variations. Nonetheless, he also argues that in many cases high levels of inequality have limited the effectiveness of growth in reducing poverty.^{xi} Within the Eastern Africa region, a number of studies have highlighted the extent to which growing inequalities have sometimes undermined poverty-reduction. In a study on growth and poverty reduction in Ethiopia between 1994-97, Bigsten et. al (2003) used a decomposition of the changes in poverty into growth and redistribution components. They found that the potential poverty reduction due to growth in real per capita income has been, to some extent, counteracted by worsening income distribution (cited by Atkinson and Lugo, 2010). The implication is that a reduction in inequalities would enhance the capacity of countries to reduce poverty. The recent record of Rwanda, in terms of growth and poverty reduction, is illustrative of how sensitive poverty-reduction performance can be to changes in inequality.

Box 2.1: Reductions in Inequality and Poverty Reduction- The Rwandan Story

In a story which is familiar in many fast growing poor countries, up until 2005, Rwanda's growth process was accompanied by rising inequalities. Between 2001-2006, while the economy was growing at an average rate of 6.4 percent per year, inequality widened from 0.47 percent to 0.51 percent as measured by the Gini-coefficient in the same period (MINECOFIN, 2012: 8). Poverty declined, but by only 2.1 percentage points.

Table 2.1: Consumption Poverty, as a Percentage of Population, 2000/1 to 2010/11

Province	2000/01 Percent	2005/06 Percent	2010/11 Percent
Kigali City	22.7	20.8	16.8
Southern Province	65.5	66.7	56.5
Western Province	62.3	60.4	48.4
Northern Province	64.2	60.5	42.8
Eastern Province	59.3	52.1	42.6
Urban		28.5	22.1
Rural		61.9	48.7
Total	58.9	56.7	44.9

Source: NISR, 2012

“high levels of inequality undermine the capacity to translate growth into rapid poverty reduction.”

Table 2.2: Evolution of Inequality in Rwanda, Gini coefficient, 2000/2 to 2010/11

Province	2000/01	2005/06	2010/11
Kigali City	0.559	0.586	0.559
Southern Province	0.425	0.446	0.373
Western Province	0.445	0.492	0.395
Northern Province	0.457	0.431	0.438
Eastern Province	0.403	0.436	0.362
National	0.507	0.522	0.490
Ratio of 90 th to 10 th percentile	7.066	7.100	6.36

Source: NISR, 2012

However, from 2005-2011, there was quite a remarkable improvement in the poverty-reduction elasticity – and poverty fell from 56.7 percent to 44.9 percent, an 11.8 percent decrease. Part of this is attributed by the Rwandan government to a decrease in inequality over the same period. At the national level, the recorded Gini coefficient declined from 0.52 to 0.49 over the same period. According to the government, “Successes in increasing non-farm wage opportunities and in increasing production and sales in agriculture are likely to have been important factors here. It may be that some poor people have also been able to undertake non-farm work, though this cannot be confirmed in the absence of panel data.” The government’s objective, under the EDPRS-II, is to reduce the poverty rate to 30 percent by 2015. To achieve this goal, it would appear that further measures to reduce inequality would contribute considerably to accelerating the pace of poverty reduction.

Source: UNECA, elaborated from data from the National Institute of Statistics, 2012 “The Evolution of Poverty in Rwanda from 2000 to 2011: Results from the Household Surveys (EICV)”

2.3.2 Policy Measures to Mitigate Inequalities

How can policymakers mitigate these trends and actively reduce inequalities? The policy advice in terms of how to tackle the inequality problem tends to focus on increasing the propensity for pro-poor growth, and has been low on specifics about how to tackle excessive income concentration in the upper quintiles. The question is, of course, highly political, and attempts to reduce inequality need significant political backing and support if they are to be successful. This is particularly so for distributional policies to address income inequality.

In high income countries, fiscal policy is usually one of the principal levers utilised to redistribute income and reduce inequalities. But the redistributive impact of fiscal policy in the region is limited by lower overall levels of both taxes and transfers. While average tax ratios for advanced economies exceed 30 percent of GDP, ratios in developing economies generally fall in the range of 15–20 percent of GDP (Bastagli et. al, 2012). In the Eastern Africa region, in a number of countries (e.g. Rwanda, Burundi, DR Congo) it is even lower than this. As a result, spending is also substantially lower in the Eastern Africa region, with low transfer spending explaining much of the difference. This substantially reduces the redistributive potential of fiscal policy.

In this sense, it is worth asking whether many governments in the region have been playing ‘one clubbed golf’, in the sense of pinning hopes on the materialization of ‘pro-poor’ or ‘trickle-down’ growth for the lowest quintile of the population, without fully considering other options to actively redistribute incomes from higher income groups towards less favoured ones. Among the range of policies which could be contemplated are the following:

- **Indirect Taxes:** Consumption or indirect taxes are not often thought to be very progressive, and are considered to impact more negatively on the poorest members of society. Yet, if well designed, this need not be the case. Taxes on imports, which continue to be important in low-income economies, often appear to be quite regressive, while in contrast, excise taxes—on items such as fuel, alcohol, and tobacco—tend to be more progressive (Bastagli et. al. 2012). In some cases, it is simply a question of selecting goods consumed principally by middle-to-high income quintiles (e.g. luxury consumption goods), while not imposing any taxes on items or goods consumed principally by the poorest (e.g. basic food stuffs).^{xii} There is also strong evidence that the exemption of small businesses (including agriculture and the informal sector) can result in a more progressive incidence (Jenkins, Jenkins, and Kuo, 2006).
- **Direct taxes:** Although personal income and property taxes in developing economies are progressive, high levels of tax noncompliance combined with a narrow tax base tend to reduce the power of direct taxes to reduce income (Bastagli et. al. 2012). In contrast, resource taxation can be progressive as well as efficient, though it is applied mostly to foreign incomes. Part of the challenge is to enhance the transparency with regard to which quintiles of the population are paying the most tax.^{xiii}
- **Expenditures:** Although transfer programmes and pension schemes have been expanding in the region,^{xiv} low spending limits the redistributive capacity of transfer programmes. The existence of a large informal sector further complicates the development of such programmes and, therefore, participation in social insurance and pension schemes tends to be restricted to high-income workers in the formal sector and to public sector employees (Bastagli et. al. 2012). Moves to expand such programmes on a universal basis will clearly help mitigate the concentration of benefits in higher income groups.
- **Measures to Enhance the Equality of Opportunities.** It is now fashionable to stress equality of opportunity as one of the surest ways to address inequality, particularly through the educational system. Greater equality of opportunity can certainly make for both more equal and more efficient social outcomes (OECD, 2012). For instance, investments in training and more formal education, of the kind discussed in Chapter 3, could strengthen the capacity of the labour force to cope with new technologies (which may have contributed to more inequality), and thereby not only reduce inequality but also help sustain growth (Berg and Ostry, 2011). The expansion of secondary education, in particular, seems to be an effective way of reducing what economists call ‘the skills-premium’ – in other words, a disproportionate share of income going to higher-skilled workers in countries where there is a scarcity of such skills in the labour market (see, inter alia, Cornia, 2012).

“It is worth asking whether many governments in the region have been playing ‘one clubbed golf’, in the sense of pinning hopes on the materialisation of ‘pro-poor’ or ‘trickle-down’ growth for the lowest quintile of the population, without fully considering other options to actively redistribute incomes from higher income groups towards less favoured ones.”

Finally, Eastern African governments might also look to the rich international experience about how to reduce inequalities. One country which has met with considerable success on this front since 2000 is Brazil, where success was built on a combination of strong growth and improved income distribution (APP, 2012: 17). Though still at very high levels, judging by international standards, the success of the Brazilian government in mitigating inequalities was built on two pillars – a rapid expansion of cash-transfer

programmes, such as *Bolsa familia*, and simultaneously (albeit less widely recognised) the enforcement of minimum wage legislation across states. The story is a more generalisable one in Latin America. Whereas in Latin America many countries in the 2000s successfully reduced income inequality (Cornia, 2012), in Africa, regrettably, there are so far few examples of good practices to draw on in terms of reducing inequalities. The first country to do so robustly will clearly win accolades and will deserve to be emulated.

2.4 EMPLOYMENT AND GROWTH

2.4.1 The Nature of Job Markets in the Eastern African Region

Ever since the region's economic fortunes began to improve dramatically at the beginning of the 2000s, *jobless growth* – the feeling that growth was not translating into sufficient job creation – has been a constant concern for policymakers, governments and citizens (Gallup, 2012a).^{xvi} Such fears are compounded by the demographic pressures in the region. As reported in 'Tracking Progress 2012', the rate of demographic expansion in the Eastern Africa region is one of the highest in the world, with particular hotspots like Uganda and Congo D. R. As a consequence, the number of new entrants into the labour force (economically active adults aged 15 and over) represents an enormous challenge to policymakers. SID (2012) estimates that the number of economically active adults in the Greater Horn of Eastern Africa will increase by another 68 million in the next 10 years. The labour force will grow by 3.2 million people every year between 2010 and 2015, and this will accelerate to 3.6 million people each year between 2015 and 2020.

These challenges also need to be framed within the context of the need for structural change. As the World Bank (Country Assistance Strategy, 2010: paragraph 36) observed in the case of Uganda:

"The country's uninterrupted growth since 1987 has been a noteworthy achievement. However, the weak point of economic performance has been the limited shift from a low productivity, primary-based economy to a high-productivity economy based on industry and services. The country's high population growth rate makes structural transformation particularly urgent to create non-agricultural and higher-productivity jobs for one of the fastest growing labour forces in the world."

Similarly, as part of its strategy for structural transformation, in Rwanda, one of its Vision 2020's principal goals is to decrease the population dependent on agricultural activities from the current 85 percent to 50 percent by the year 2020. But taking current population growth into account, this would mean creating 2.2 million new jobs in the off-farm sector by 2020 (Ronnas, 2010). The scale of the challenges is, therefore, immense.

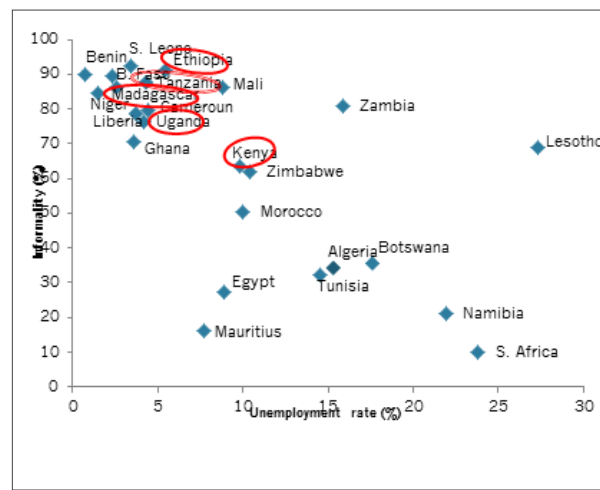
Moreover, the Eastern Africa region has some peculiarities in the characteristics of its job market – characteristics that employment policies need to take fully into account. One is the high degree of informality (Hart, 1973).^{xvii} Even though unemployment rates are formally quite low, the amount of people in formal wage employment is also exceedingly low in most countries in the region (Figure 2.7 and Table 2.3).

"In Africa, regrettably, there are so far few examples of good practices to draw on in terms of reducing inequalities. The first country to do so robustly will clearly win accolades and would deserve to be emulated."

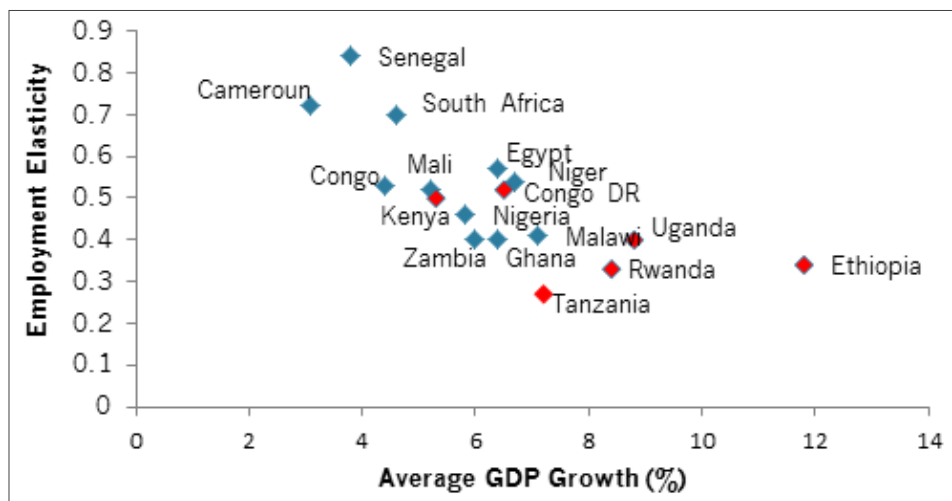
Table 2.3: Payroll to Population Employment Rates for 2011

Country	%
Uganda	15
Rwanda	12
Somaliland Region	12
Burundi	11
Djibouti	11
Comoros	10
Madagascar	9
DRC	7
Memo: US	41
Germany	32
China	28

Source: Gallup (2012b) and AfDB (2012)

Figure 2.7: Informality and Unemployment Rates, Latest Year

Simultaneously, the available evidence would also seem to suggest that the region is afflicted by low employment to growth elasticities (that is to say, a given unit of economic growth is accompanied by a lower rate of employment creation). Thus, despite attaining high rates of economic growth in Tanzania, Rwanda, Uganda and Ethiopia over the last decade, job creation in the informal sector has been relatively disappointing.^{xviii}

Figure 2.8: Employment-Growth Elasticities

Source: AfDB (2012)

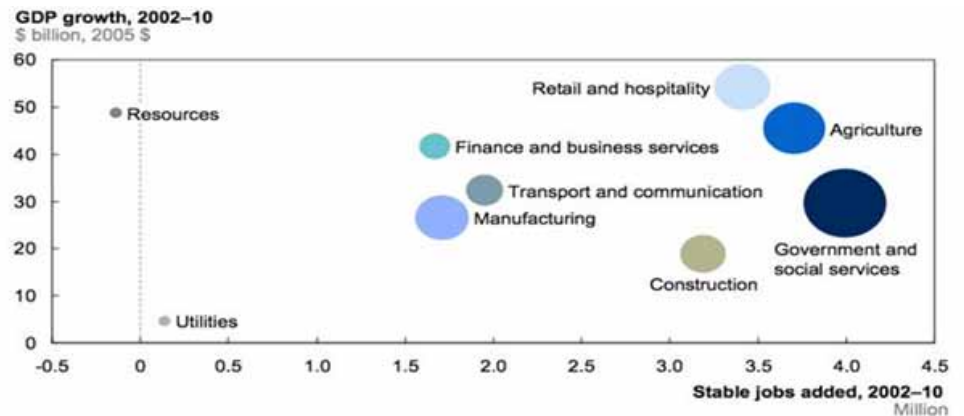
Moreover, there is evidence suggesting that these elasticities have been declining over time. For instance, in Tanzania growth elasticities of employment declined from 1.04 in the period 1992–96 to 0.27 in the period 2004–08. Similar trends have been reported for Ethiopia (World Bank, 2012: 88).

“Despite attaining high rates of economic growth in Tanzania, Rwanda, Uganda and Ethiopia over the last decade, job creation in the formal sector has been relatively disappointing.”

2.4.2 Where Will the Jobs Come from?

If the key developmental challenge in the region is to change the pattern of growth so that there is a greater intensity in employment creation and poverty reduction, the analysis of which sectors are most likely to create the greatest job opportunities is fundamental. In an African-wide study based on statistics for ten African countries, McKinsey (2012) find that there are certain sectors within African economies that have contributed to increasing stable job growth since 2002 (Figure 2.9).

Figure 2.9: Growth and Employment Creation in Africa, 2002-2010



Source: McKinsey (2012)

“Although the natural resource sectors have contributed a lot to economic growth, their employment creation has been negligible”

The size of the bubble in Figure 2.9 estimates the number of stable jobs that are added to the economy while the vertical axis shows the sector’s contribution to economic growth. It may seem surprising, but in fact the government and agricultural sectors have been the most important sources of employment creation over the period. These are followed by retail and hospitality, and by manufacturing and construction. By contrast, although the natural resource sectors have contributed a lot to economic growth, their employment creation has been negligible (indeed, in net terms it would seem that the resource sector has actually had a negative impact on job creation).^{xix} Utilities, another sector upon which many hopes are pinned as a future source of growth, is similarly capital intensive and contributes hardly any new stable jobs.

Another way of analysing the job creation potential of different sectors is to calculate, on a country-by-country basis, the employment growth elasticities by sector. In

Table 2.4, we have calculated these elasticities on available data from Rwanda. High job creation elasticities are to be found in mining and utilities, precisely the two sectors that the McKinsey study found had made negligible contributions to employment creation.

Table 2.4: Employment Creation Elasticities by Industry, Rwanda 2006-2010

Sector	Employment	GDP Per Worker (RWF)	Sector Growth%	Employment Growth%	Employment Elasticity
Agriculture	3 596 000	340 000	5.3	1.2	0.23
Mining and Quarrying	48 000	1 000 000	5.0	21.4	4.28
Manufacturing	112 000	2 250 000	5.3	6.9	1.30
Utilities	10 000	800 000	12.8%	22.4	1.75
Construction	146 000	2 170 000	15.0	17.4%	1.16
Trade	444 000	1 110 000	11.3	8.4	0.74
Transport & ICT	91 000	3 160 000	12.3	10.3	0.84
Financial Services	20 000	5 450 000	10.2	8.9	0.87
Government	211 000	1 490 000	11.1	8.4	0.76
Other Services	228 000	1 940 000	5.5	2.5	0.45
All Rwanda	4 960 000	772 000	8.2	2.9	0.35

Source: National Data (2011)

The apparent paradox is easily explained by looking at the absolute levels of employment in these sectors, which is very low (48 000 in the case of mining and quarrying, and 10 000 in utilities). It is also important to note that the mining sector in Rwanda is small-scale and labour intensive, contrary to the pattern of large-scale mining predominant in other parts of Africa. The lowest job creation elasticity is to be found in agriculture; though it is also, by far, the largest contributor to employment in absolute terms. Likewise, the trade and government sectors' job-creation elasticities are modest, but the absolute impact of the number of jobs they create is fundamental. Similarly, notwithstanding its importance regionally as a new growth pole, the ICT sector, singled out by the Rwandan government as one of its priority areas, appears to have very low employment creation elasticity (for a more general discussion of the impact of ICT development on the labour market, see Box 2.2). In line with our analysis in Chapter 3 about the leading sectors in value-added terms, the construction industry is also an important employment creator.

“ICT has a strong potential to create economic growth through positive impacts on the labour market.”

Box 2.2: ICT Impact on the Labour Market in Eastern Africa

The ICT revolution is dramatically changing the nature of structural change, creating a global marketplace where intellectual capital rather than natural resources is the key to future economic growth. Moreover, it delivers wider social effects, making the citizenry better informed about their opportunities and helping government deliver better services.

According to studies conducted by experts in the sector, ICT has a strong potential to create economic growth through positive impacts on the labour market. Another of the most apparent consequences of the African mobile phone revolution is the mushrooming of local phone businesses and services in cities and rural centres. Shops selling and repairing mobiles are to be found on every busy street corner and market, and street vendors offering SIM cards and air-time vouchers are ubiquitous in street life. Internet cafés have, similarly, become important social institutions across the continent. Studies conclude that ICTs create employment and generate incomes particularly in rural, remote and disadvantaged communities, notably among women, youth and persons with disabilities.

The ICT revolution has had a major impact on the Eastern African job market. For example:

- In Uganda there is the Community Knowledge Worker (CKW) initiative, involving poor farmers (half of whom live on less than USD 1.25 per day). Target farmers are chosen by their peers and use smartphones connected to specially designed databases to provide others in their remote communities with up-to-date, accurate information - including weather reports, caring for animals, planting crops, treating pests and diseases, and getting fair market prices for what they produce. The Community Knowledge Workers operate on a "mini-franchise" basis, operating as their own small businesses. It helps them improve their crop outputs and stimulating the growth of beans and wheat are key economic objectives. There are 800 community knowledge workers in 20 districts throughout Uganda. They reach 70 000 registered households, a total of around 350 000 people. The ambition is to reach 1 million people.
- Kenya Mobile Payment: M-Pesa: Introduced five years ago as a value-add service, M-Pesa is an innovative solution that enables customers to transfer money by phone in Kenya. With more than 14 million subscribers, M-Pesa has transformed into one of the mobile operator's most popular products locking in customers in a highly competitive market. M-Pesa, which now directly employs 50 000 people, is a key driver of Kenya's revenue. It is estimated that M-Pesa reports more than 2 million transactions per day and 30 percent of the Kenyan GDP is conducted via M-PESA by way of SMS.
- Telecentres Network in Rwanda: Telecentres are reportedly acting as service delivery centres in a cost-effective manner; fostering entrepreneurship and creating jobs; improving producers' access to markets, and creating demand for goods and service. While it is estimated that at present only around 400 people are directly employed by telecentres in Rwanda, it is planned to create 1000 telecentres across the countries. It is hoped that as many as 3000 jobs could be created by 2015 through the Rwanda Telecentre Network (RTN) project. Furthermore, the centres demand other goods/services that can be supplied by local entrepreneurs. They also increase producers' access to market information, allowing more business to be done outside of urban areas. Basic ICT training is to be provided at these centres, which equip citizens with the pre-requisite skills, tools and knowledge, thereby increasing their capacity to meaningfully participate in a knowledge-based economy.

Source: UNECA elaboration

The conclusion to be drawn from this analysis is that it would be wrong to draw excessively proscriptive policy advice on the basis of sector-specific employment creation elasticities alone. Even if more slowly growing in dynamic terms, the absolute importance of some sectors (like agriculture) is simply too important to ignore.

To foster industries that produce wide-scale employment remains a key concern for many governments across the region. In the following sections and in Chapter 3, we select a number of key sectors which are commonly cited in the literature as potentially important job creators. Given space constraints, this analysis is by no means exhaustive. But some of the sectors most frequently mentioned among policy circles are briefly discussed.

2.5 STRUCTURAL CHANGE AND GROWTH – WHAT THE DEBATE MEANS FOR EASTERN AFRICA

2.5.1 A Booming Field of Research – with some Important Implications for Sectoral Policies

To fully understand their causes, low poverty-reduction elasticities and low employment-creation elasticities need to be considered in the context of contemporary debates on structural change. In recent years, economists and policymakers across Africa have begun to focus attention on issues associated with structural transformation. A number of regional leaders have been at the forefront of these reflections (Zenawi, 2012).^{xx} It is now increasingly recognised that, without structural change, the growth experienced in the region since the early 2000s is unlikely to withstand the test of time. In a new twist on some old economic theories^{xxi}, it has also recently become part of the mainstream wisdom that countries with more diversified production and export structures have higher incomes per capita (Imbs and Wacziarg, 2003), and that countries that produce and export more sophisticated products—those that are primarily manufactured by countries at higher income levels—tend to grow faster (Hausmann et al., 2007; UNIDO, 2009, Page, 2012).

Yet most African countries are still heavily reliant on agriculture and natural resource exports for growth – and the Eastern Africa region is no exception to this general pattern. Rodrick and MacMillan (2011) highlight the fact that structural transformation in Africa since the 2000s has not been from low-productivity to high-productivity sectors, but rather, on the contrary, from high-productivity sectors towards low-productivity ones, leading to a net reduction in growth in Africa. Thus, for instance, since the late 1970s and early 1980s the manufacturing sector has stagnated in many countries across the region – indeed, in some, it has actually contracted both in relative and absolute terms (Table 2.5).

Only a couple of countries have managed to buck these trends. In Tanzania, the manufacturing sector has developed strongly, driven primarily by demand from regional markets, supported by the strengthening of the East African Community (EAC) common market. The manufacturing's share of Tanzania's exports grew from 3 percent in 2000 to 17 percent in 2010, with the key products being processed food, beverages, and tobacco products, followed by the manufacturing of furniture and other wood products (IMF, 2012a:68). Madagascar also managed an expansion in its manufacturing sector, on the back of considerable success in its textile sector, but this was put in jeopardy by the political crisis of 2008-9 and the country's subsequent suspension from the 'African Growth and Opportunity Act' (AGOA) which granted it preferential access to the US market.

“In Tanzania, the manufacturing sector has developed strongly, driven primarily by demand from regional markets, supported by the strengthening of the East African Community (EAC) common market”

Table 2.5: Manufacturing Value Added in Eastern Africa and Selected African Countries (Percent of Total GDP)

Countries	2000	2005	2012
Developing countries	19.5	20.6	21.3
Africa	11.2	10.0	10.0
Burundi	7.7	9.6	9.6
Comoros	4.5	4.6	4.6
Congo, D.R.	4.8	6.4	6.7
Djibouti	2.3	2.3	2.3
Eritrea	10.4	5.4	5.3
Ethiopia	5.2	4.3	4.2
Kenya	10.3	10.4	10.3

Countries	2000	2005	2012
Madagascar	11.1	13.4	13.3
Rwanda	7.0	6.7	6.6
Seychelles	19.2	12.0	12.2
Tanzania	8.8	8.6	8.8
Uganda	7.1	6.7	7.2

Source: <http://www.unido.org/resources/statistics/statistical-country-briefs.html>

“Much of the regional growth is being powered by service sectors, not manufacturing. For instance, the service sector in Kenya has been the largest contributor to GDP growth and foreign exchange revenue in recent years.”

Rodrick and MacMillan’s empirical observations lead them to argue that it is necessary to fundamentally adapt the structure of the economies in order to improve productivity, and the nature and speed of growth. In a similar vein, Page (2011) suggests that, without increasing their share of manufacturing, most African economies will struggle to meet their goals of becoming middle-income countries by the year 2025. He highlights this by comparing a benchmark version of the structures of the economies of the states that have attained middle-income status (such as India, China and Thailand) to the current state of eight low-income countries^{xxxii}. He terms the difference in the level of value added output in the different sectors as the “structural deficit”^{xxxiii}. The study also finds that a change in the structure of the lower income economies to one that more resembles that of the benchmark countries would lead to considerable labour-efficiency gains for the economies. This is assuming that sectoral productivity levels in the sample of African counties remained unchanged, but that the inter-sectoral distribution of employment changes to match that of the benchmark, under which case countries would achieve substantial productivity gains. On average, economy-wide productivity for the low-income African countries in the sample would increase 1.3 times. Ethiopia’s productivity would increase 1.6 times, Tanzania 1.4 times, and Kenya 1.1 times (Page, 2012:91). Regrettably, both McMillan and Rodrik on the one hand, and Page on the other, are low on specifics regarding how such structural change is to be achieved, beyond general exhortations to move into high-productivity sectors.

There is still a lot of attachment to the idea that manufacturing is the first option in terms of structural transformation. UNIDO (2009:6) points out that most sectors within manufacturing are particularly labour-intensive. Manufacturing growth can increase equality for women, as they tend to be disproportionately employed. Furthermore, formal employment in manufacturing helps people by providing them with steady wages and allowing them to develop their skill set much better than they would in self- or informal employment.

However, this appreciation goes up against the fact that much of the regional growth is being powered by service sectors, not manufacturing. For instance, the service sector in Kenya has been the largest contributor to GDP growth and foreign exchange revenue in recent years. Kenya has several world-class firms exporting high-value off-shore services, such as product development, research and development business ventures, insurance, accounting, and *Business Process Outsourcing* services. Kenya appears particularly competitive in transportation, communication, and financial services, given the relative abundance of qualified professionals in Kenya employed in the intra-EAC service trade, to which should be added a strong entrepreneurial tradition (IMF, 2012a). Similarly, the increase in the service sector to GDP in Ethiopia has been particularly strong since 1990 (Martins, 2012:11).

Although the service sector is usually associated with lower productivity work, the OECD (2001) finds that the quality of work in the service sector is dependent on the pre-existing structure of the service sector – and not all services are the same. Empirical evidence would suggest that the service sector can actually contribute to growth quite significantly, and can also boost export revenues as services become increasingly

tradable (Dadush and Wyne; 2011). One example of this is the tourism industry. In Rwanda, for instance, tourism revenues increased in 2011 by 25 percent to USD 251.8 million and has thus become one of the country's leading foreign exchange earners. Mold et al (2010) similarly show econometrically that certain sub-sectors of the services sector have the potential to become 'engines of growth' in just the same way as the manufacturing sector, especially in the finance, commerce and transport sub-sectors. To sum up, an economic policy solely preoccupied with promoting manufacturing is likely to be counterproductive. The global economy today is complex and opportunities exist in many sectors and sub-sectors. As pointed out by ECA's *Economic Report on Africa 2013*, a healthy manufacturing sector is, undoubtedly, essential as countries move towards middle-income status, but a single-minded focus on manufacturing, while ignoring other potential growth engines, could be counterproductive.

2.5.2 Avoiding the 'Benign' Neglect of the Agricultural Sector

If the contemporary arguments in favour of accelerating structural change contribute to the further neglect of agricultural sector development, then the debate will not be insightful. Historical evidence has shown that most successful developing countries have built success initially on a strong agricultural performance.^{xxxiv} A highly-productive agricultural sector is normally the bedrock for fast economy-wide growth. More pointedly still, it is often essential to guarantee that growth translates into faster poverty reduction. Much is talked about China's phenomenal economic growth and the great achievements in terms of poverty reduction. Singly, China has been responsible for moving 500 million people out of poverty since the 1980s. Less well recognised is the extent to which most of that poverty reduction was achieved in the 1980s, when the backbone of growth was in the agricultural sector. Poverty reduction actually slowed in the 1990s, as the economy moved rapidly towards an emphasis on industrial sector development (Huang, 2008:114-118). A similar story is to be told in South-East Asia, where Indonesia and Malaysia started their growth push in the 1970s and 1980s with agricultural development, with remarkable success in terms of the reduction of poverty (Henley, 2012). In fact, since 1700, virtually every example of mass poverty reduction has actually begun with an increase in agricultural productivity (World Bank, 2012:191).

These historical examples are backed up by recent evidence from Christiaensen, Demery and Kuhl (2011). In a cross-country study, they find that growth in agriculture is especially beneficial for the poorest of the poor. When it comes to USD 1-day headcount poverty, agriculture is up to 3.2 times better at reducing poverty than non-agricultural sectors, when accounting for the differences in sector size, with the advantage diminishing as countries become richer (and as inequality increases). Irrespective of the setting, a 1 percent increase in agricultural per capita value added was found to reduce the total USD 1-day poverty gap squared by at least 5 times more than a 1 percent increase in GDP per capita outside agriculture, despite being substantially smaller than the non-agricultural sector. Notably, however, the poverty reducing potential of non-agricultural sectors reduces substantially when extractive industries make up a sizeable part of the economy. Non-agricultural growth on the other hand is more powerful in reducing poverty among the relatively better-off (USD 2-day) poor, suggesting that, as countries in the region approach middle-income status, the non-agricultural sector takes on a more important role.

In sum, the empirical evidence presented in Christiaensen et al. (2011:251-252) supports the overall premise that enhancing agricultural productivity remains a critical starting point in designing effective poverty reduction strategies to reduce USD 1-day poverty (the first MDG), especially in low income and resource rich countries. When it comes to reducing poverty among the USD 2-day poor, non-agriculture has the edge, especially in resource poor country settings.

"A healthy manufacturing sector is undoubtedly essential as countries move towards middle-income status, but a single-minded focus on manufacturing, while ignoring other potential growth engines, could be counterproductive."

"Historical evidence has shown that most successful developing countries have built success initially on a strong agricultural performance. A highly-productive agricultural sector is normally the bedrock for fast economy-wide growth."

In Africa, in particular, the agricultural sector employs about 60 percent of the total labour force (FAO, 2012) – and in Eastern Africa, that share is even higher, at around 70 percent. For many economies this sector forms their backbone and helps to generate much needed foreign exchange through export. However, there are still a disproportionate number of people employed in the agricultural sector compared to the sectors contribution to GDP, reflecting low productivity and substantial inefficiencies (Gollin: 2009). Historical experience suggests that structural change begins in the agriculture sector, with the long-term shedding of employment in the sector, as productivity increases and to meet a growing demand for labour in other sectors of the economy (Lewis, 1954; Bairoch, 1992). Within the region, during the last 15 years, there is evidence of a fairly marked shift out of agriculture in most countries – albeit at varying speeds. Thus, in Uganda, for instance, the share of agriculture in GDP has declined by -3.5 percent per annum between 1995-2010 (AEO, 2013:119).^{xxv} For the largest regional economies (Kenya and Ethiopia), this shift has been more modest, though still at a relatively fast pace- the share of agriculture in GDP has declined by an average of -1.7 percent over the decade of the 2000s (Table 2.6). The outliers are Madagascar, Comoros and Eritrea, where agriculture’s contribution to GDP has either remained constant, or, as is the case in Eritrea, actual expansion has occurred.

Table 2.6: Structural Transformation: Output Shares of Agriculture, Mining, Manufacturing, Construction, and the Tertiary Sector, 1995-2010

	Agriculture		Annual percent change in agricultural GDP share	Mining		Manufacturing		Construction		Tertiary	
	Initial	Final		Initial	Final	Initial	Final	Initial	Final	Initial	Final
Seychelles (2004-2010)	3.9	2.4	-6.5	0.0	0.0	10.4	7.5	4.7	6.0	78.8	82.1
Uganda (2000-2010)	24.6	16.0	-3.5	0.3	0.4	7.9	7.5	11.8	16.2	51.0	56.7
Congo D. R. (2000-2010)	55.8	39.9	-2.9	10.4	14.7	5.4	4.5	4.8	10.2	33.2	39.6
Burundi	49.8	33.4	-2.2	0.8	0.4	10.6	10.0	3.0	5.9	34.3	48.8
Tanzania (1998-2010)	31.8	23.9	-2.1	1.5	2.4	8.5	9.5	5.2	7	45.8	48.3
Ethiopia (2000-2010)	49.4	41	-1.7	0.5	0.5	3.6	3.4	4.2	5.7	38.1	45.9
Kenya (2000-2010)	29.4	24.4	-1.7	0.4	0.4	10.3	9.9	2.9	3.2	55.1	59.8
Rwanda	45.9	39.4	-0.9	0.2	0.5	8.1	6.7	5.1	7.8	39.5	44.8
Madagascar	28.6	28.4	0.0	0.5	0.6	10.6	11.1	1.3	4.7	57.8	53.9
Comoros	41.9	45.9	0.6	0.0	0.0	4.1	3.6	6.2	6.5	46.3	42.7
Eritrea (2000-2010)	15.1	22.4	4.9	0.1	0	11.2	6.3	10.5	15.8	61.9	54.1

Source: IMF REO SSA - October 2012

Despite being a ‘declining sector’ in terms of its general contribution to value added and employment, the potential for the agricultural sector to contribute to poverty reduction and growth is well documented (AfDB: 2010 , Christiansen et. al, 2011). Across Africa, policy pronouncements seem to acknowledge the primacy of agricultural development. The Maputo Declaration of 2003, which focuses on agriculture and food security, stated that governments should allocate 10% of their national budgets to agriculture.

Unfortunately, it would seem that such verbal support is not always back up with substantial allocation of financial resources. Thus, for instance, the proportion of the Ugandan budget dedicated to agriculture in 2011/12 is only 4.5 percent (Development Initiatives, 2012a:12). In Kenya, approximately 70 percent of the population engages in agriculture as their main economic activity, which is mainly subsistence. Agriculture is the primary sector of Kenya's economy and has made an average GDP contribution of 22.7 percent in the last 5 years. Yet an extremely low and declining share of only 1.6 percent of the government budget is dedicated to the agricultural sector. Despite its oil wealth, even South Sudan (1.9 percent) allocates a larger share of its budget to agriculture (Development Initiatives, 2012b:16).

2.5.3 Targeted Industrial Policies – Towards a New 'Industrial Policy'?

Governments in the region are making a concerted effort to identify growth sectors. Indeed, across the region there has been a sea change in the attitude towards the role of government in making structural change happen. In its *Vision 2030* project, for instance, the Kenyan government has identified the following six sectors as its priorities: Tourism, Agriculture, the Wholesale and Retail Trade, Manufacturing, ICT, and Business Process Outsourcing (BPO) Services. The problem with such exercises is that the targeting is not always well defined since these are very large sectors, accounting for as much as 70-80 percent of the Kenyan economy. As such, the identification of 'priority sectors' makes less sense in such a setting. The other challenge is, of course, converting such blueprints into action.

Industrial policy is an approach to state economic stewardship in which direct support is given to particular sectors in pursuit of national goals by, for instance, providing support through soft credits, tax-rebates, tax holidays, etc. Partly through the discrediting of Soviet-style central planning, and partly because of externally-imposed policies during the 1980s and 1990s in the guise of Structural Adjustment Programmes, industrial policy fell out of favour quite abruptly in Eastern Africa. Many planning ministries were actually abolished during this period. Today the need for planning and industrial policy is getting recognition again, albeit of a rather different nature to the kind of industrial policy predominant prior to the 1980s.

The World Bank (2012) claims that "once again, the debate rages over industrial policy", and that "targeting is not necessarily industrial policy". The Bank argues that, whereas old style industrial policy is discredited, targeting of growth sectors and selective support for 'sunrise industries' is an acceptable part of the policy arsenal of government. It is easy to dispute these claims, however, and argue that the distinction between 'targeting' (good) and 'industrial policy' (bad) is pure semantics.

Firstly, as Chang (2010:205) points out, most OECD governments plan and shape the future of key industries through what is known as 'sectoral industrial policy'.^{xxvi} Secondly, in most OECD countries, the government owns, and often also operates, a sizeable chunk of the national economy through state-owned enterprises (SOEs). These enterprises are not only frequently found in the key infrastructure sectors (e.g. railways, roads, ports, airports), or essential services (e.g. water, electricity, postal services), but they also exist in manufacturing or finance. The share of SOEs in national output can be as high as 20 percent-plus, as in the case of Singapore, or as low as 1 percent, as in the case of the United States, though the international average is around 10 percent. As governments plan the activities of SOEs, as Chang points out, this implies that a significant part of the average capitalist economy is directly planned.

There are a number of countries across the region where either state-owned enterprises or enterprises with close links to government continue to exert a major influence in

"Verbal support [in favour of agricultural development] is not always back up with substantial allocation of financial resources."

"Today the need for planning and industrial policy is getting recognition again, albeit of a rather different nature to the kind of industrial policy predominant prior to the 1980s"

“Without government guidance, accelerated structural change is unlikely to happen in low-income countries.”

industrial development e.g. in Ethiopia, Tanzania and Rwanda. In Rwanda, for instance, Crystal Ventures reportedly controls assets worth more than USD 500 million inside the country. The group owns a construction and road-building company, granite and tile factories, a furniture company, a chain of up-market coffee shops (in Kigali, Boston, London, Washington and New York), a real estate developer and an agro-processing venture, Inyange. It also retains a stake in MTN Rwanda, the leading mobile phone operator in the country. This allegedly “*makes Crystal Ventures perhaps the largest quasi-private business venture in the country, and with 7000 staff, the second largest employer after the state.*” (The Financial Times, 2012:1).

Similarly, in Ethiopia, since the 1990s, four endowment conglomerates have emerged, each in one of its federated states and associated with one of the parties in the ruling coalition: the Endowment Fund for the Rehabilitation of Tigray (EFFORT) in Tigray Region; Tiret or Endeavour in Amhara; Tumsa in Oromia; and Wendo in the Southern Nations, Nationalities and Peoples’ Regional State (SNNPRS). The full portfolio of EFFORT companies has recently been rationalised into 16 enterprises, the most important of which are (in terms of the scale of investment and/or profits generated) Mesebo Cement, Guna Trading House, Almeda Textiles & Garmenting, TransEthiopia Transport & Logistics, Mesfin Industrial Engineering, Sur Construction and Addis Pharmaceuticals. EFFORT companies currently report around Ethiopian birr 2.7 billion in capital (approx. USD 160 million), and Ethiopian birr 6 billion in assets (approx. USD 360 million) (Vaughan and Gebremichael, 2011).

Whatever the configuration of the national private sector – whether the state has a direct role, or plays a rather more indicative role – it is clear that without government guidance, accelerated structural change is unlikely to happen in low-income countries. Quite simply, the private sector, whether foreign or nationally owned, often lacks the vitality on its own to make such structural change happen. As pointed out by the erstwhile Hollis B. Chenery in 1960 (later the Chief Economist of the World Bank, 1972-1982), growth is likely to be accelerated by anticipating desirable changes in resource use and retarded by institutional arrangements or government policies that inhibit such changes. This suggests that, despite the contemporary penchant for dismissing industrial policy out-of-hand, in the final resort governments may be ‘doomed to choose’. As Hausmann and Rodrik (2006:24) put it,

“Industrial policy conceived as the provision of inputs that are specific to subsets of activities is not a choice; it is an imperative. The idea that the government can disengage from specific policies and just focus on providing broad-based support to all activities in a sector neutral way is an illusion based on the disregard for the specificity and complexity of the requisite publicly provided inputs or capabilities.”

“Growth is likely to be accelerated by anticipating desirable changes in resource use and retarded by institutional arrangements or government policies that inhibit such changes.”

At the same time, Wade (2012:267) stresses the need to avoid the trap of thinking that industrial policy equals ‘picking winners’ and that it is like a light switch, either “on” or “off”, “present” or “absent”: ‘industrial policy can be big or small, discontinuous or incremental. It can “lead” the market or –less riskily – “follow” the market.’

The policy instruments to achieve these objectives are multiple. It can be achieved through the setting up of industrial parks, through the provision of necessary infrastructure, or the granting of tax incentives to domestic and foreign investors in favoured sectors. On a regional basis, it may be achieved through the levying of a higher common external tariff on consumer goods than on intermediate inputs or raw materials, as has been done in the case of the EAC.

Governments in Eastern Africa have already experimented with the whole range of these policies, with varying degrees of success. For instance, countries like Madagascar and Kenya have been able to expand jobs and increase exports by promoting Export

Processing Zones (EPZs) by emphasising low-way labour intensive industries like textiles. By 2004, there were over 100 000 employees in Madagascar's Zone Franche (more than 90 percent in textiles) (Stein, 2012:335). Some countries in the region have pursued more comprehensive approaches. In 2011, Tanzania adopted its Integrated Industrial Strategy ^{xxvii}, an ambitious plan to develop the industrial sector by looking at the entire value chain. Among other things, the strategy aims to develop large-scale economic zones at the waterfronts of each of Tanzania's four 'development corridors' and to develop agro-processing industries.

Such blueprints for structural diversification need to be acted upon. Regrettably, recent African economic history has seen numerous ambitious documents and action-plans which were never properly implemented. Hard-headed assessments of the long-term viability of the proposed measures to support particular industries or sub-sectors also need to be made. The contemporary global economic environment will make it very difficult to replicate export-driven industrialisation of the kind promoted in parts of Asia (UNECA ERA, 2013). We live in a world whereby the world trade arena is largely liberalised, and Asia stands as the 'workshop of the world', presenting a formidable competitive threat across many manufacturing sectors; as such, the judicious selection of sectors worthy of support is now more crucial than ever. Learning lessons from experiences of other governments which have successfully nurtured particular sectors is similarly important (Box 2.3).

Box 2.3: The Role of Government in the Development of the Textile Industry: Lessons from Bangladesh

Because it requires only low levels of investment, is labour intensive, and produces goods needed both in domestic and export markets, the textile and clothing industry has traditionally been seen as one of the stepping stones towards deeper industrialisation and structural transformation. The clothing industry is thought to be especially appropriate for Africa, as it makes extensive use of local resources including labour and raw materials (McCormick et al. 2009:3). With the advent of preferential market access to the US market in 2000, under the African Growth and Opportunity Act (AGOA), there has been an impressive increase in the textile export earnings of Kenya, Madagascar, Ethiopia and Tanzania. Between 1995 and 2010, total export earnings of the Eastern Africa region from apparel and clothing increased dramatically from USD 17 million to USD 526 million.

This rapid increase was mostly attributable to the *Rules of Origin Exemption* for countries of the region to allow the import of intermediate inputs (i.e. cotton), particularly from China and India (McCormick et al. 2009; Rotunno et al, 2012).^{xxviii} However, as the provision of *Rules of Origin Exemption* expired in October 2012, the region now has to face the challenge of enhanced competition from other sources of supply, particularly from China and Bangladesh. Already, the Malagache textile industry has reportedly lost some 50 000 textile jobs (Easterly and Freschi, 2009) (though this is also related to the political crisis that hit the country in 2008). In the face of such challenges, recommendations for retaining competitiveness in the sector tend to focus on long term upgrading and diversification through effective government support, comprehensive firm-level restructuring, enhanced capacities of innovation management, deeper investments in the production of fabric, and using synthetic fabric (Shakya, 2011; McCormick et al, 2009).

The Bangladeshi experience, which succeeded in elevating export earnings from textile and apparels through a concerted effort on the part of both government and private entrepreneurs can, arguably, provide some useful lessons for the region. The readymade garments industry (RMG) of Bangladesh started its journey in the late 70s

“Such blueprints for structural diversification need to be acted upon – regrettably, recent African economic history has seen numerous ambitious documents and action-plans which were never properly implemented.”

“The Bangladesh textile export boom is still generally seen as a private sector-led success story, but undoubtedly the government has played a major role in catalysing that success.”

when it contributed just USD 1 million to the country's total export earnings. Since the 1980s, Bangladesh had benefited from trade restrictions on East Asian textile exporters under the Multifibre Agreement (MFA), which allowed Bangladesh a breathing space to develop its own RMG industry. However, like in the case of East Africa now regarding the expiration of the AGOA rules of origin exemption, with the expiration of the MFA in 2005, many experts were sceptical about the ability of the Bangladeshi textile industry to continue to thrive. In the event, the skeptics were proved wrong - by 2012, export earnings were in excess of USD 19 billion.^{xxxix}

What explains the apparent resilience of the Bangladeshi textile industry? From a long-term perspective, the favourable international trading environment (which included unrestricted duty-free access to the European market), as well as prudent government initiatives, and a highly conducive investment environment are the factors which most frequently are cited to explain the export boom in Bangladesh (Rashid, 2006; Mottabatt and Sonobe, 2011).^{xxx} One particularly important catalyst to the sector's development was when the MFA imposed quantitative restriction on apparel exports from the newly industrialised countries of East Asia in 1974, consequently, investors started looking for alternative countries to where they could relocate their plants, so as to capture those countries' underutilised export quotas.^{xxxi}

In the process of relocation, massive investment and technology transfer took place in the recipient countries. One of the first investors was Daewoo Corporation of Korea, which teamed up with Bangladesh's Desh Garments Ltd. in 1979 to produce garments for export. At that time, the South Asian country had no modern industry. Little more than 20 years later, the industry was generating more than USD 12.5 billion in export revenue. Women accounted for 80 percent of its 3.6 million workers (World Bank, 2013:117). The RMG-led export growth process established a strong link between trade and poverty by creating massive employment opportunities for mostly Bangladeshi unskilled workers (Razzaque et al. 2008)

The Bangladeshi government allowed the free distribution of quotas among producers so that exporters could take full advantage of the quota premium, which worked as a price incentive for investors. Another stimulus arose from duty and quota free access to the EU market, first granted in 1995 under the auspices of the Generalised System of Tariff Preferences (GSP) programme (European Commission, 2004), reinforcing the potential for high returns. This favourable international trading environment, together with a cheap and abundant labour force, attracted many foreign investors who brought both their capital and technological know-how.

In the domestic arena, the government provided a number of incentives to facilitate the growth of the industry, including: a) bonded warehouses to import intermediate goods, and duty free import of machinery; b) the establishment of a **Back-to-Back Letter of Credit system** where garment exporters can procure intermediate goods without depositing any cash by keeping the contract between buyer and themselves as collateral and c) the provision of subsidised loans, tax holidays and cash incentives. To sum up, the Bangladesh textile export boom is still generally seen as a private sector-led success story, but undoubtedly the government has played a major role in catalysing that success.

However, one important caveat to this success story is the poor working conditions in some factories causing a series of accidents in early 2013. Aggrieved with the perceived indifference shown on the part of both government and the factory owners in this regard, some large international buyers have decided to pull out from Bangladesh following a recent building collapse incident where over one thousand garment

workers were killed in Dhaka. The companies' decision has put a huge question mark over the future of the industry, and ignited a heated debate over possible solutions. Nobel Laureate Dr Muhammad Yunus has expressed his concern that this decision of boycotting Bangladeshi apparels would be disastrous for the nation, worsening the current situation of the industry further and leading to major job losses. Instead, he urged the foreign buyers to help fix a minimum wage for the workers as a way out, either through an international minimum wage of 50 cents per hour, which is double the existing minimum wage available in Bangladesh, or a surcharge of 50 cents imposed on each Bangladeshi garment product. Funds would be used to form a *'Welfare Trust'* for the textile workers to address issues like workers' physical safety, pension, health care, child education and so on (The Guardian, 12 May 2013). While welcomed in many quarters, this proposal also received widespread criticism both in the national and international arena for being 'simplistic'.^{xxxii} Meanwhile, the government of Bangladesh has formed a minimum wage board to implement a pay raise within the next three months, and most importantly, decided to allow the formation of trade unions without prior permission from the owner of the factory to promote checks and balances between the profit maximising stance of the owners and the welfare of the workers (The Guardian, 13 May 2013).

As argued in both the *UNECA Economic Report on Africa 2013* (UNECA, 2013) and the *African Economic Outlook 2013* (AfDB/UNDP/UNECA/OECD, 2013), a sensible strategy would be to build upon Africa's existing strengths in primary resources (agriculture, minerals, metals, and hydrocarbons) through fully exploiting linkages, employment opportunities, revenue and foreign investment. Above all, avoiding the poorly planned and implemented sectoral support policies of the past is crucial.

2.6 CONCLUSIONS AND POLICY RECOMMENDATIONS

The remarkable turn-around in the economic fortunes of the Eastern African region at the end of the 1990s and the beginning of the 2000s has undoubtedly been a welcome development. Our analysis here, comparing economic growth and household asset growth in the 2000s, shows that, although the patterns have differed from country to country, broadly speaking economic growth has been accompanied by tangible improvements in living standards across the region (though pointedly such improvements have also been visible in countries like Madagascar not experiencing strong economic growth over the decade, hence creating a puzzle for economists to explain the apparent disconnect).

Nonetheless, this chapter has argued that growth has not realised its full potential in terms of poverty reduction. This has manifested itself through low poverty-reduction elasticities to growth. The positive impacts of growth have been undermined by a combination of factors:

- High income inequality;
- Relatively sluggish employment creation; and
- Excessively slow poverty reduction

High income inequality, in particular, has a number of unwelcome consequences, including weakening the pro-poor impact of growth and also (and less well recognised) undermining the political consensus behind building up 'national champions'. The chapter suggests that many governments in the region have been playing 'one clubbed

"Many governments in the region have been playing 'one clubbed golf', in the sense of pinning excessive hopes on the materialisation of 'pro-poor' or 'trickle-down' growth for the lowest quintile of the population, without fully considering other possibilities to actively redistribute incomes from higher income groups towards less favoured ones."

golf; in the sense of pinning excessive hopes on the materialisation of 'pro-poor' or 'trickle-down' growth for the lowest quintile of the population, without fully considering other possibilities to actively redistribute incomes from higher income groups towards less favoured ones. A number of redistributive measures are briefly considered in this chapter, including tax reform and expenditure programmes.

The lacklustre performance in terms of poverty reduction is also fundamentally attributable to the underperformance of the manufacturing sector as well as the relative neglect of agriculture. Both these issues need addressing. The first should be addressed by using targeted sectoral policies more efficiently and effectively. The second, by avoiding the neglect of agriculture through more financial resources and government support. Historical experience suggests that strong sectoral diversification cannot be built on the back of a sluggish agricultural performance. Governments should abide by the commitments of the Comprehensive Agricultural Development Programme (CAADP), whereby participating countries are committed to allocating at least 10 percent of their national budgets to the agricultural sector and to achieving an annual agricultural growth rate of 6 percent.

The chapter also argues that governments need to keep an open minded approach regarding the sectors to promote or support, and not overlook key drivers of employment creation outside the manufacturing sector. Building on existing comparative advantages in natural resources seems to be a sensible policy option.

Finally, it is important to explicitly recognise weaknesses in the private sector in certain sectors and countries of the region. In cases whereby private capital is not forthcoming, governments may need to take more direct action to promote structural transformation, through the creation and promotion of SOEs. To be sure, such interventions are not exempt of controversy, and SOEs have often become embroiled in accusations of corruption, favouritism, and rent-seeking activities (see Kelsal, 2013; Gökgür, 2012). However, particularly in the context of low income countries, assuming that the market alone can deliver the required degree of structural transformation is not warranted.

“Particularly in the context of low income countries, assuming that the market alone can deliver the required degree of structural transformation is not warranted.”

2.7 ANNEX: CONSUMPTION AND INCOME GROWTH GNI PER CAPITA (CONSTANT 2000 USD)

Table 1: Consumption and income growth Tanzania

	Year	Real GNI per capita	Owms radio	Owms TV	Owms refrigerator	Owms bike	Owms car	Owms motor-bike	Piped drinking	Access to electricity	Floor material cement	Flush toilet	Owms phone
	1999	298.00	0.432	0.024	0.020	0.323	0.011	0.007	0.157	0.080	0.211	0.015	na
	2004	360.06	0.584	0.061	0.038	0.383	0.016	0.011	0.072	0.114	0.266	0.027	0.093
	2010	452.34	0.6300	0.124	0.061	0.519	0.023	0.040	0.076	0.131	0.280	0.059	0.504
Compound annual growth rate(%)	1999-2010	3.5	3.2	14.7	9.7	4.0	6.3	15.6	-5.9	4.2	2.4	12.1	na
% growth (total period)	1999-2010	51.8	45.8	416.7	205.0	60.7	109.1	471.4	-51.6	63.7	32.7	293.3	na

Table 2 Consumption and Income growth Uganda

	Year	Real GNI per capita	Owms radio	Owms TV	Owms refrigerator	Owms bike	Owms car	Owms motor-bike	Piped drinking	Access to electricity	Floor material	Flush toilet	Owms phone
	1995	219.59	0.375	0.029	0.007	0.342	0.013	0.007	0.018	0.068	0.147	0.015	0.004
	2000	251.33	0.515	0.056	0.021	0.388	0.014	0.024	0.020	0.086	0.125	0.017	0.027
	2006	315.29	0.630	0.062	0.033	0.440	0.021	0.032	0.033	0.075	0.203	0.009	0.168
	2011	384.08	0.660	0.124	0.051	0.371	0.032	0.079	0.053	0.146	0.288	0.015	0.609
Compound annual growth rate	2000-2006	3.3	3.4	8.9	12.4	0.5	5.4	15.3	6.6	4.6	4.0	0.0	34.4
% growth (total period)	2000-2011	74.9	76.0	327.6	628.6	8.5	146.2	1028.6	194.4	114.7	95.9	0.00	15125.0

Table 3 Consumption and Income growth Rwanda:

	Year	Real GNI per capita	Owms radio	Owms TV	Owms refrigerator	Owms bike	Owms car	Owms motor-bike	Piped drinking	Access to electricity	Floor material	Flush toilet	Owms phone
	2000	211.81	0.351	0.024	0.014	0.076	0.009	0.007	0.055	0.062	0.130	0.012	0.011
	2005	272.31	0.458	0.023	0.012	0.110	0.007	0.005	0.025	0.048	0.127	0.010	0.054
	2008	326.23	0.581	0.033	0.009	0.122	0.008	0.009	0.034	0.060	0.142	0.008	0.142
	2010	349.75	0.626	0.053	0.012	0.152	0.008	0.011	0.050	0.097	0.164	0.011	0.406
Compound annual growth rate	2000-2008	4.7	5.4	7.5	-1.4	6.5	-1.1	4.2	-0.9	4.2	2.1	-0.8	38.8
% growth (total period)	2000-2010	65.1	78.4	120.8	-14.3	100.0	-11.1	57.1	-9.1	56.5	26.2	-8.3	na

Table 4 Consumption and Income growth Kenya:

	Year	Real GNI per capita	Owms radio	Owms TV	Owms refrigerator	Owms bike	Owms car	Owms motor-bike	Piped drinking	Access to electricity	Floor material	Flush toilet	Owms phone
	1998	411.73	0.631	0.130	0.038	0.239	0.048	0.009	0.232	0.145	0.336	0.118	0.027
	2003	399.14	0.736	0.194	0.043	0.293	0.049	0.007	0.210	0.160	0.344	0.110	0.128
	2009	456.07	0.743	0.268	0.056	0.349	0.052	0.024	0.195	0.181	0.350	0.064	0.633
Compound annual growth rate	1998-2009	0.9	1.4	6.2	3.3	3.2	0.7	8.5	-1.4	1.9	0.3	-5.0	30.1
% growth (total period)	1998-2009	10.8	17.8	106.2	47.4	46.0	8.3	166.7	-16.0	24.8	4.2	-45.8	2244.4

Table 5 Consumption and Income growth Madagascar:

	Year	Real GNI per capita	Owms radio	Owms TV	Owms refrigerator	Owms bike	Owms car	Owms motor-bike	Piped drinking	Access to electricity	Floor material	Flush toilet	Owms phone
	1997	237.28	0.382	0.063	0.013	0.053	0.010	0.005	0.060	0.109	na	0.023	0.006
	2004	234.56	0.590	0.175	0.034	0.160	0.020	0.010	0.061	0.203	0.216	0.022	0.054
	2009	243.38	0.622	0.157	0.034	0.246	0.024	0.023	0.045	0.164	0.188	0.019	0.277
Compound annual growth rate	1997-2009	0.2	3.8	7.3	7.7	12.5	7.0	12.5	-2.2	3.2	na	-1.5	34.3
% growth (total period)	1997-2009	-0.9	62.8	149.2	161.5	364.2	140.0	360.0	-25.0	50.5	na	-17.4	4516.7

Table 6 Consumption and Income growth Ethiopia:

	Year	Real GNI per capita	Owms radio	Owms TV	Owms refrigerator	Owms bike	Owms car	Owms motor-bike	Piped drinking	Access to electricity	Floor material	Flush toilet	Owms phone
	2000	122.77	0.207	0.019	na	0.008	0.003	0.001	0.047	0.127	0.033	0.003	0.013
	2005	148.78	0.356	0.049	0.019	0.015	0.006	0.001	0.060	0.120	0.035	0.015	0.062
	2011	229.14	0.405	0.104	0.037	0.023	0.009	0.002	0.085	0.230	0.043	0.020	0.292
Compound annual growth rate	2000-2005	5.3	5.8	15.2	na	9.2	9.6	5.9	5.1	5.1	2.2	17.1	29.6
% growth (total period)	2000-2011	86.6	95.7	447.4	na	187.5	200.0	100.0	80.9	81.1	30.3	566.7	2146.2

Footnotes

ⁱThe equivalent rate in 1995 was 156 deaths per 1000 live births. Note that these figures, gleaned from the DHS Surveys, do not coincide with the under-5 infant mortality rates cited by the World Bank Indicators, whereby there has been a quite significant decline in under-5 infant mortality rates, from 165 per 1,000 live births, to 69 in 2012. A caveat is equally warranted regarding the case of Tanzania, where figures just released (November 2013) as this publication went to press suggested that the national poverty rate had subsequently declined faster - to 28 percent living under 1.25\$ a day - a substantial improvement compared to the previous latest available figures (33 percent in 2007).

ⁱⁱ Rwanda stands out as one example, where one million people have been lifted out of poverty since 2006. Nonetheless, while it is true that impressive poverty reduction figures have been achieved since 2006, poverty reduction was sluggish from 2001-2005. As a result, the absolute number of people living under the national poverty line has barely changed since 2001 - there are now 4.7 million people under the poverty line out of a total population of 10.5 million, a decrease of just 68 000 over the decade. The explanation for this is, of course, the rapid rate of population, however, due to effective family planning policies, fertility has been declining rapidly in Rwanda, though it still stands at approximately 2.6 percent per annum.

ⁱⁱⁱ It is interesting to note that while in some countries in the region, nationally-defined poverty lines are more or less in line with the international poverty line (as defined by the World Bank), in other cases there are large discrepancies between the two sets of figures. Thus, while there are currently only small differences between the national and international poverty lines of Comoros, Ethiopia, Kenya and Madagascar, those differences are large in the cases of Burundi (14%), Uganda (14%), Rwanda (18%) and Tanzania (34%). This introduces a quite large degree of uncertainty into the calculation of poverty reduction elasticities.

^{iv} The Demographic and Health Surveys (DHS) are carried out by collecting national data on health and population and are funded by the United States Agency for International Development (USAID) with contributions from other donors like UNICEF, UNFPA, WHO and UNAIDS. Since 1984, a total of 321 DHS surveys have been conducted in 90 developing countries collecting information on total fertility rate, reproductive health, maternal health, child health, immunisation and survival, HIV/AIDS, maternal mortality, child mortality, malaria as well as various consumer durable goods to measure living standards.

^v Whether this argument is valid or not is debatable. From a consumers' perspective, subsidised goods are still real household consumption necessitating the sacrifice of constrained income to achieve them. The fact that these goods are subsidised will not change that fact, it just makes them cheaper.

^{vi} In measuring access to improved drinking water, only that proportion of households that have access to piped drinking water in their plots or yards have been considered as per the DHS survey. Similarly, for improved floor material, figures have only been considered for cemented floor. To gauge the extent of improved sanitation, only 'flush toilet' has been considered.

^{vii} According to Rwandan national statistical sources, sanitation coverage in 2009 stood at 49% (rural:44%, Urban 54%), keeping in mind that there exists difficulties in classifying private pit latrines used by the vast majority of the population. The national coverage of piped water is 32%, though only 3.4% (urban 17%; rural 0.9%) have access to it within their house or plot.

^{viii} One plausible explanation is that average household size has varied over the period under study. Given the demographic pressures in the Eastern African region, for instance, it might seem reasonable to assume that household size has increased over the period. But in actual fact, this is not the case - if anything, the DHS results suggest that the average household size in countries like Kenya and Rwanda has diminished.

^{ix} For example, during the period of what some called an 'economic miracle' (1968-73), Brazil sustained a GDP growth of more than 11% annually, but that growth proved to be unsustainable. The reasons for the collapse of the Brazilian Miracle are complex, but one reason often put forward is that social inequalities undermined the very growth process.

^x Countries like Brazil, on the other hand, have depended extensively on foreign direct investment (18 of Brazil's 25 largest firms are transnational corporations, as reported in PGD (2010) and have failed to promote national champion.

^{xi} See also Ravallion (1997).

^{xii} This is already done in a number of countries in the region. Cars are often taxed at very high rates, for instance. The issue is that the policy could be reviewed and applied more consistently across a wider range of 'luxury' items.

^{xiii} For instance, Tanzania used to publish distributions of taxpayers by income (e.g. in the publication *Income Tax Statistics for the Year 1974*), but subsequently, the practice was abandoned. In recent years, it should be possible to make use of the Income Tax Department Quarterly Reports of the Tanzania Revenue Authority. These reports contain information on the number of taxpayers and the tax assessed by presumptive tax bands

^{xiv} In Kenya for instance, from 2005 to 2010, spending on safety nets doubled, rising from Ksh 11.9 billion in 2005 to Ksh 20.5 billion in 2010, equivalent to 0.80 percent of GDP, largely due to relief and recovery response to the drought in 2008 and to a rapid increase in spending on social cash transfer programmes from 2009. On average, social protection programmes (both contributory and safety net) now cover 13 percent of the population (Kenyan Social Protection Review, June 2012).

^{xv} Cornia (2012) reviews the steady and widespread decline in income inequality which has taken place in most of Latin America over 2002-10. A review of the literature and an econometric test indicate that a few complementary factors played an important role in this regard, including a drop in the skill premium following a rapid expansion of secondary education, and the adoption of a new development model by a growing number of left-of-centre governments which emphasises fiscally-prudent but more equitable macroeconomic, tax, social expenditure and labour policies. For the region as a whole, improvements in terms of trade, migrant remittances, FDI and world growth played a less important role than expected although their impact was perceptible in countries where such transactions were sizeable.

^{xvi} In Kenya, for instance, in the run-up to the 2013 presidential election in April, Gallup data revealed that 36% of Kenyans aged 18 and older said that creating jobs was the most important issue the government needed to address over the next 12 months, and a statistically similar 28% named reducing corruption as the most important issue. Smaller percentages picked other issues such as improving education (14%) and improving agriculture (12%). See Gallup (2012).

^{xvii} Although the term is often attributed to the anthropologist Keith Hart (1973), in fact the 'informal sector' was actually 'discovered' in East Africa, in a study by the ILO in Kenya in the 1972.

^{xviii} These figures are subject to some important caveats, due the difficulties of obtaining labour market figures in countries with a high degree of informality.

^{xix} Of course this does not mean that one can afford to neglect the potential contribution of natural resources to growth. Firstly, given the right set of policies, considerable forward and backward linkages can be achieved with the rest of the economy (see, inter alia, Morris, Kaplinsky and Kaplan, 2012, and http://www.africamingvision.org/amv_resources/AMV/ISG%20Report_eng.pdf). Secondly, although the expansion of the natural resource sector does not contribute significantly to job growth directly, provided the right tax structures are in place, natural resource industries are able to provide important funds to governments. These funds can then be used either to finance public goods to support growth of other sectors with a higher potential for job growth or to provide financial support for employment-guarantee programmes of the kind currently operative in Ethiopia.

^{xx} See, for instance, Zenawi (2012). The urgency of bring about 'structural change' has also been a recurrent theme of Ugandan President Yoweri Museveni's speeches.

^{xxi} The acknowledgement of the importance of a more diverse economic structure was recognised long ago by economists of the 'structuralist' school, particularly those associated with UNECA's sister organisation in Latin America, UN-ECLAC. Together with Hans Singer, Raul Prebisch, the first Executive Secretary of ECLAC, argued vigorously in favour of structural change and a greater diversification of the economy if developing countries were to have a chance at emulating high income countries in terms of achieving broad-based human development.

^{xxii} The sample for the low-income countries includes four of the region's economies - Ethiopia, Madagascar, Kenya and Tanzania

^{xxiii} A definition attributable to most of the countries in our region (excluding Seychelles). The exceptions tend to be small city states like Hong Kong or Singapore, whose phenomenal economic growth was achieved in part because there was no agricultural sector to speak of to 'weigh-down' economic growth in the rest of the economy.

^{xxiv} The exceptions tend to be small city states like Hong Kong or Singapore, whose phenomenal economic growth was achieved, in part, because there was no agricultural sector to speak of to 'weigh-down' economic growth in the rest of the economy.

^{xxv} Similarly, the AEO (2013:119) reports that, in the 2000s, the share of the labour force in agriculture fell by more than 10 percent while the share of the labour force in manufacturing and services increase by around the same amount, indicative of major structural change.

^{xxvi} The role and contribution of Japan's Ministry of International Trade and Industry in the industrial development of the country is a good example.

^{xxvii} www.tzdpd.or.tz/index.php?eID=tx_nawsecuredl&u=0

^{xxviii} Concerns have been made regarding the sustainability of the African textile boom (Rotunno et. Al, 2012). They argue that with the provision of rules of origin exemption, Chinese producers have, in fact, been the main beneficiaries, by the transshipment of their products through these African countries.

^{xxix} According to Bangladesh Bank annual reports 2005-2006 and 2011-2012 respectively, total export earnings from woven garments and knitwear products was USD 6.4 billion in the fiscal year 2005 which shot up to USD 19 billion by 2012. Bangladesh Bank Website (<http://www.bangladesh-bank.org/>).

^{xxxi} See Razzaque and Raiha (2008). The constructed input-output model revealed a significant positive relationship between RMG expansion and poverty reduction in Bangladesh. The multiplier effect implied an increase in expenditure on nutrition by 0.76 taka (the Bangladeshi currency, BDT) for every extra taka of demand coming from the RMG sector. Non-agricultural households and female low-skilled workers were found to be the principal beneficiaries of the expansion of the RMG sector, while in the urban areas, the corresponding main beneficiary group was low educated households.

^{xxxii} Akash (2013) criticised Yunus' solution as "An external solution" relying on western companies, rather than an "internal one" accomplished through government or trade unions. He also argues that the additional 50 cents would not force the garment companies to spend some of their profits for the benefit of workers."





CHAPTER 3

AN ANALYSIS OF
THE GROWTH
DYNAMICS IN THE
EASTERN AFRICA
REGION

3.1 INTRODUCTION

After reviewing the burgeoning literature on structural change and describing the stylised facts for the Eastern Africa region in Chapter 2, Chapter 3 is focused on the same issues, but investigated from alternative analytical perspectives. Firstly, given the strong relationship between the patterns of structural change and development, we carry out a simple growth accounting exercise to look at the sectoral sources of economic growth for the period 2001-11. Secondly, the Chapter employs a growth decomposition analysis to explore more deeply the sources of growth in the region from the perspective of demand. Contrary to the contemporary policy emphasis on improving external competitiveness for growth, it is found that the domestic demand component is usually far more important for overall economic growth and poverty-reduction.

Thirdly, Section 3 of this Chapter looks at growth from the traditional growth-accounting perspective - a supply side focus. We analyse the improvements in total factor productivity (TFP) – the part of economic growth that is not accounted for by increased inputs - and that economists usually attribute to as technological progress or a better allocation of resources. The findings of this analysis for the region highlight a turnaround in the nature of growth since the early 2000s, in terms of an increase (albeit still weak) in TFP, and a marked rise in importance too of the component related to the quality of human capital (the education-adjusted labour share), reaffirming the importance of pursuing greater quality in the education sector. Finally, we econometrically estimate a simple growth model for the region, focusing particularly on the role of domestic savings and investment, the current account balance, the role of Overseas Development Aid (ODA), population growth and some other control variables. The findings here suggest that maintaining both high levels of domestic investment and savings is required if growth is to prove sustainable. The chapter concludes by drawing a series of policy conclusions regarding how the quality and sustainability of growth in the region can be improved.

“Contrary to the contemporary policy emphasis on improving external competitiveness for growth, it is found that the domestic demand component is usually far more important for overall economic growth and poverty-reduction”.

3.2 THE PATTERNS OF GROWTH IN EASTERN AFRICA – AN OVERVIEW

Since 2001, the region has been enjoying some of the benefits (and also some of the costs) of structurally higher commodity prices. The benefits accrue principally from windfall revenues for traditional exports such as tea (Kenya), coffee (Ethiopia, Burundi, Rwanda), and minerals such as gold (Tanzania), oil (South Sudan), vanilla (Comoros), etc. Generally speaking, the rise in commodity prices has been more accentuated for ‘soft’ commodities (e.g. cash crops) than ‘hard’ ones (minerals, fuels), but it has been pronounced.

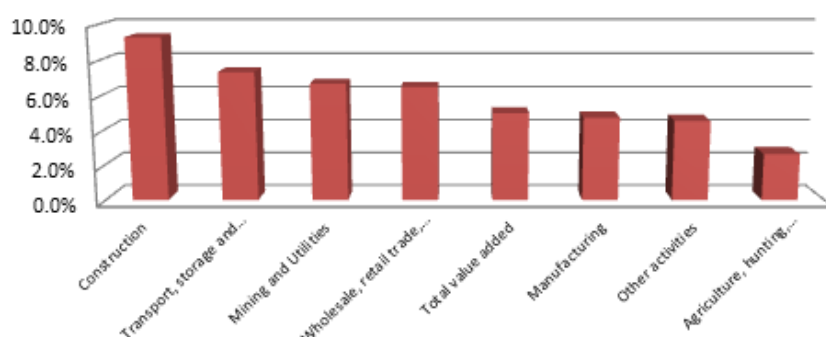
To what extent has this been responsible for the improved growth performance witnessed in the region since the end of the 1990s? Controversially, Page (2011) argues that the recent growth seen in Africa has mostly been attributable to higher commodity prices. Moreover, he argues that this is unsustainable in the long run as these markets are notoriously volatile and could result in a high level of external dependence. Instead, economies should adapt their structures in order to improve greater quality and sustainability of growth.

The rationale seems correct, but the role of commodity prices is perhaps overstated, particularly in the Eastern Africa region (which does not – as yet - enjoy significant benefits from the oil or mineral wealth of other parts of Sub-Saharan Africa)¹. While many countries in Africa have, undoubtedly, benefited from higher commodity prices, this has been a mixed blessing for countries in the Eastern Africa region, in the sense of raising prices on traditional cash-crop exports (e.g. coffee, tea), while simultaneously being accompanied by sharply rising import costs for fuels and food. The terms of trade have certainly not worked unambiguously in favour of economic growth in the region over the last decade.

McKinsey (2010) shows that, of the growth in Africa over the period from 2000-2008, natural resources, and the related government spending they financed, *generated just 32 percent of the total growth*. The remaining two-thirds came from other sectors, including wholesale and retail, transportation, telecommunications, and manufacturing. Moreover, they note that economic growth accelerated across the continent, in 27 of its 30 largest economies, including in countries such as those in Eastern Africa without significant resource exports.

Our own analysis of the patterns of growth in Eastern Africa between 2001-2010 attests to this story. The analysis here is based on a homogenous dataset produced by UNCTADStat (2012).ⁱⁱ The calculations displayed here are for all the 13 countries in the Eastern Africa region. (all regional economies except South Sudan), as an aggregated group, as well as for individual countries (see Annex 1 and 2). Among the different countries, there is, in fact, very little variation with regards to the main drivers of growth. In terms of the growth rates of the sectors, construction has been, by far, the most dynamic sector, growing at an annual average in excess of 9 percent per annum, hence supporting anecdotal impressions that the region is in the middle of a construction boom. Transport, storage and communications have also been one of the faster growing sectors (> 7 percent per annum) along with mining and utilities (6.7 percent per annum). Pointedly, agriculture, hunting, forestry and fishing has been consistently a 'lagging sector', growing at only 2 percent per annum compared to a 5 percent growth in total value-added, thus dragging down overall growth rates in the region. In addition, in nearly all countries in the region, manufacturing too has lagged behind overall economic growth.

Figure 3.1: Fastest Growing Sectors, EAR-13, 2001-2010



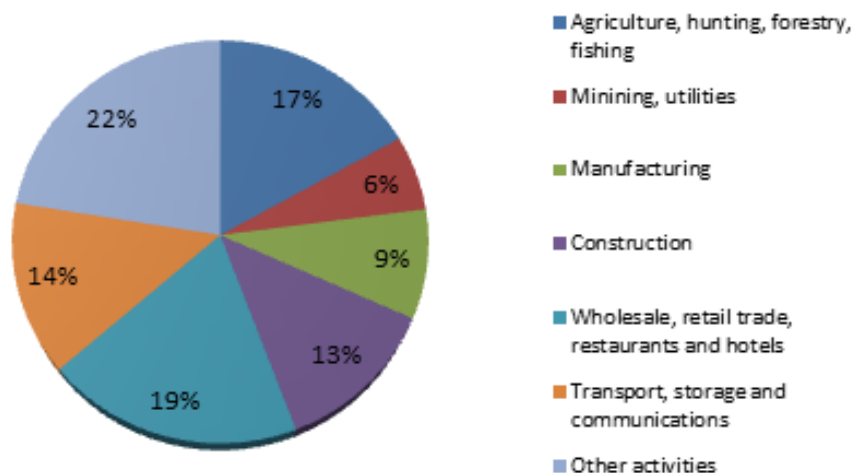
Source: UNECA calculations, on the basis of data from UNCTADStat (2012)

These patterns of growth are important to recognise because of the extent to which growth in the region over the last decade seems to have been concentrated largely in capital intensive sectors, particularly in transportation, storage and communications, and mining and utilities. Sectors such as these have had only a marginal effect on employment, which means that they have not facilitated broad-based participation. The low level of correlation between GDP growth and poverty reduction can be explained, in part, by the relatively slow expansion of the agricultural and manufacturing sectors, which together account for as much as four-fifths of the regional employment.ⁱⁱⁱ

However, it can also be misleading to read too much into such trends as these figures are the growth rates of particular sectors, but tell us little about the overall contribution of the sector to economic growth. Construction, for instance, may be able to sustain fast growth rates precisely because previously it was a small sector, and thus the growth figures look more impressive. When looked at in terms of each sector's specific contribution to growth, one notes that *other activities* (which includes the government sector and finance) have been the most important contributors to overall growth in the region, responsible for as much as 22 percent of the total growth.

“Construction has been by far the most dynamic sector, growing at an annual average in excess of 9 percent per annum, supporting anecdotal impressions that the region is in the middle of a construction boom.”

Figure 3.2 : Sectoral Contribution to Growth, 2001-2010



Source: UNECA calculations, on the basis of data from UNCTADStat (2012)

“The growth of the government sector is partly the product of the expansion of investments in the social sectors, principally health and education... these investments in human capital will eventually strengthen economic growth and resilience, but with a considerable time delay before the positive impact becomes manifest.”

The growth of the government sector is partly the product of the expansion of investments in the social sectors, principally health and education. It could be argued that these investments in human capital will eventually strengthen economic growth and resilience, but with a considerable time delay before the positive impact becomes manifest. According to this view, poverty rates will decline more rapidly once countries in the region have reached a sufficient level of human capital development and income (World Bank Tanzania Update, 2012:22). Against this view is the fact that a number of countries have achieved quite impressive improvements in human development indicators, while still having a sluggish economic performance. Put simply, there is no automatic link between higher levels of human capital and economic growth (Mehrotra and Jolly, 1997).

The wholesale, retail trade, restaurants and hotels sector has also been a major contributor to growth, accounting for 19 percent of growth in the 2000s. The third largest contributor to growth has been agriculture, with a 17 percent share. Thus, despite its poor growth performance, as a ‘lagging sector’, agriculture is still a major overall contributor to economic growth in the region. It is unlikely that the agricultural sector will lose this protagonism within the time frame countries in the region aspire to attain middle income status (in the range of 2020-2030), reinforcing the earlier conclusions regarding the importance of actions to strengthen agricultural performance.

Finally, these figures represent regional averages though there is, of course, some variability in particular countries. The results, on a country-by-country basis, are shown in Annex 1 and 2. Nevertheless, in the majority of cases, the broad story told at the regional level is reaffirmed at the country level – a sluggish growth in manufacturing and agriculture; fast service sector growth; and a pronounced role for the construction sector.

3.3 A DEMAND-DECOMPOSITION PERSPECTIVE ON ECONOMIC GROWTH IN THE EASTERN AFRICAN REGION

Most analyses of the causes of economic growth nowadays take a supply-side perspective. Yet a demand-side analysis could also provide insights into growth processes, particularly in the context of poor countries, with a weak resource base, and

a burgeoning domestic demand for goods and services. Weak domestic demand, the product of widespread poverty, can result in a serious handicap for growth performance. Lopez and Serven (2009) estimate econometrically the impact of poverty on growth. The results reveal a consistently negative and strongly significant impact of poverty on growth, which is also statistically significant: a 10 percentage-point increase in the headcount poverty rate reduces annual per capita growth by about a 1 percentage point.

A lack of effective demand can thus be a fundamental impediment to sustained economic growth. Demand-constrained growth of this type is worrying from a number of other theoretical perspectives. UNCTAD (2004:143) hypothesise that there is a weaker relationship between export expansion and private consumption growth per capita in countries where export expansion predominates as the major demand-side component of economic growth than in countries where there is a more balanced form of economic growth in which export expansion, domestic demand, and import substitution all contribute to growth.

This hypothesis stems from the observation that there is no logical necessity, from an accounting point of view, for average private consumption per capita to be growing if economic growth is predominately achieved through export expansion. Domestic demand expansion can of course be based on increases in investment and private and public consumption. Broadly speaking, however, average private consumption per capita is likely to rise in countries where domestic demand expansion makes a significant contribution to overall output growth. The authors of the UNCTAD (2004) report observe an empirical regularity between trends in average consumption per capita and the incidence of poverty, and conclude that poverty reduction is likely to be more effective in economies in which domestic demand expansion is the most important contributor to growth. This is ascertained by a simple decomposition, first used by the World Bank Chief Economist, Hollis B. Chenery in 1971, of the demand-side components of growth:

$$(Y_t - Y_{t-1}) = \alpha_{t-1} (D_t - D_{t-1}) + (\alpha_t - \alpha_{t-1}) S_t + \alpha_{t-1} (X_t - X_{t-1})$$

GDP	Domestic	Import	Export
Increase	demand	substitution	effect
	contribution	contribution	...

where:

Y = GDP, D = Domestic demand ($=Y+M-X$), S = total supply ($=Y+M$), X = total exports of goods and services (fob), M = total imports of goods and services (cif), α = GDP as share of total supply (Y/S), t = final year of period, $t-1$ = initial year (period).

Calculations are made on an annual basis for the 12 countries in the region where data were available for the 2000s. Growth in a country is classified as either export-led (EE), domestic demand-led (DD), or import substitution-led (IS), according to whichever contributes the largest share to total growth. In DD1 countries, export expansion contributes to over 20 percent of GDP change and domestic demand remains the major source of GDP change. DD2 countries are the remaining DD countries, and could be considered 'hyper-domestic demand led'.

The findings of this analysis for Eastern Africa are quite revealing. The expansion of domestic demand was, by far, the major source of economic growth (45 classified as DD1, and 64 classified as DD2, totaling 109 out of 156 observations). In consonance with the advice given by UNCTAD (2004:147) to the LDCs, these figures would appear

“Poverty reduction is likely to be more effective in economies in which domestic demand expansion is the most important contributor to growth.”

to confirm the importance of domestic demand for low-income developing countries. In contrast, there are only 20 observations of EE led-growth, and 12 cases of IS-led growth. It is notable that two countries, Ethiopia and Tanzania, have never experienced EE-led growth – and that domestic demand has been the main driver of their growth processes since 1999. In fact, only the Seychelles has experienced export-led growth in more than three periods, explainable by its income from tourism.

The decomposition of these findings, with respect to their subsequent performance in terms of growth and poverty reduction, gives rise to some particularly interesting results (Table 3.1 and Figure 3.3). In terms of export growth, it is clear that the EE countries have been far more successful, with an annual real growth rate of exports 38.8 percent ^{iv}, compared to a mere 2.4 percent for DD countries. But this is an almost tautological finding – EE-led countries, by definition, see their exports grow faster. More revealing, in terms of the growth rate of GDP, is that the EE countries fare less well than the growth of DD-classified countries (4.2 percent per annum vis-à-vis 4.8/4.9 per annum depending on DD1 or DD2 percent).

What is really notable, however, is that, in terms of growth rates in consumption per capita (which could be taken as a proxy for poverty reduction), this expands in both the DD1 countries and DD2 countries (at 3.4 and 3.8 percent respectively), whereas the IS and EE countries actually experienced a fall in per capita consumption of -1.0 and -2.0 percent per annum respectively. Thus the best trade-poverty reduction nexus occurs when domestic demand expansion is the major source of economic growth.

“The nexus between export growth and income growth is far from automatic”.

It would seem, therefore, that the nexus between export growth and income growth is far from automatic. There is a quite straightforward explanation of these patterns - even if growth of exports does lead to a rapid growth of GDP, it does not follow that GNP or GNI will also grow rapidly (Griffin, 1999:76). Much depends on the “returned value” in the export sector. Thus, if a high proportion of export proceeds remain in the domestic economy as wage payments, profits of domestically-owned enterprises, taxes and royalties, and as payments to domestic suppliers of material inputs and services, then there is likely to be a positive correlation between the expansion of exports and the domestic economy as a whole. But if the ‘returned value’ is low, the expansion of GDP may not be mirrored in an expansion of GNI and the correlation between exports and overall development may be low. ^v

Contrary to the contemporary policy emphasis on improving external competitiveness, then, these results suggest that the domestic demand component is usually by far the more important for overall economic growth and poverty-reduction. Nonetheless, a couple of important caveats to this conclusion are warranted. Firstly, the analysis may be less pertinent to smaller countries. For example, Djibouti has a population of about 800 000 and so a strategy to sustain high domestic demand inevitably comes up against the constraint of the small size of the local market. In other words, the conclusion about the importance of domestic demand must acknowledge the varying structure of the economies in the sub-region.

Secondly, our findings should not be interpreted to imply that the external sector is not important – on the contrary, in a region afflicted by quite large current account deficits, an improved export performance is a necessary (but not sufficient) condition for more resilient growth. This is informed by the fact that productivity growth in tradeable goods is an important spur to economic progress and development. However, it is necessary to get a correct sense of perspective regarding the relative importance of tradeable and non-tradeable sectors for growth, poverty reduction and employment creation. Moreover, as expressed by UNCTAD (2012:40), in the current context of slow growth in developed countries, it has become evident that developing countries will not be able to depend on exports to developed countries for growth as much as in the past,

and must increasingly rely on domestic markets, as well as regional and South-South trade. This is especially the case for Eastern Africa, which in the past has generally been highly dependent upon the export markets of high income countries.

This is also where the earlier arguments in Chapter 2 regarding the importance of tackling income inequality and boosting domestic demand come together, for the size and composition of such markets also depend, to a significant extent, on income distribution. Countries in Eastern Africa will thus need to make greater efforts in reducing income inequality and find the appropriate balance between external and domestic demand.

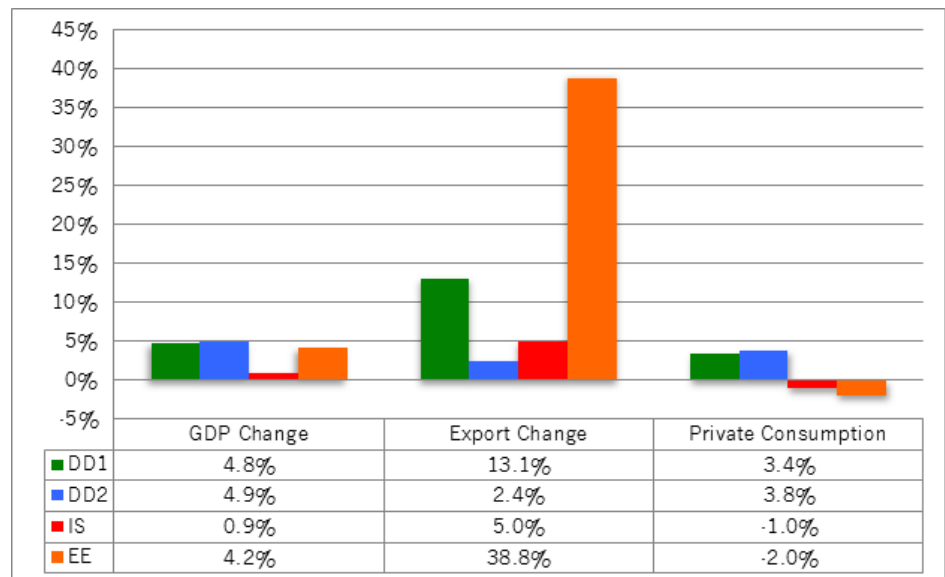
Table 3.1: Growth Decomposition 1999-2012

Country	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Burundi	IS	EE	DD1	IS	DD1	DD1	DD1	EE	DD2	DD2	DD1	DD2	DD1
Comoros	EE	DD2	DD2	DD2	EE	DD2	DD2	DD1	EE	DD1	DD2	DD1	DD2
Djibouti	DD2	IS	EE	DD1	DD2	EE	DD2	DD1	DD2	IS	IS	DD1	DD2
Ethiopia	DD1	DD2	DD1	DD2	DD1	DD2	DD2	DD2	DD2	DD2	DD2	DD1	DD2
Eritrea	DD2	DD1	DD2	EE	IS	DD2	DD2	IS	DD2	DD2	DD2	EE	NA
Kenya	DD1	DD2	IS	EE	DD1	DD1	DD2	DD1	DD1	DD2	EE	DD1	DD1
Madagascar	DD1	DD1	DD1	DD1	DD1	IS	DD1	DD1	DD2	DD2	DD1	EE	DD1
Rwanda	DD2	EE	DD2	DD2	DD2	DD2	DD2	DD2	DD2	DD2	DD2	DD2	DD2
Seychelles	EE	IS	IS	DD2	IS	DD2	EE	DD1	IS	EE	EE	EE	DD1
Tanzania	DD1	DD1	DD2	DD1	DD2	DD1	DD2	DD1	DD1	DD2	DD2	DD1	DD2
Uganda	DD2	DD1	DD2	DD2	DD1	DD1	DD2	EE	EE	DD2	DD2	DD2	DD2

NB: IS, EE and DD countries are countries in which import substitution, export expansion and domestic demand expansion, respectively, are the major demand-side components of economic growth. In DD1 countries, export expansion contributes to over 20 percent of GDP change and domestic demand remains the major source of GDP growth. DD2 countries are the remaining DD countries.

Source: UNECA Calculations on the basis of EIU (2012) data.

Figure 3.3: Growth, Export and Private Consumption Performance, Classified by the Major Source of Growth: Average 1999-2011



Source: UNECA calculations, using EIU (2012) data.

3.4 SUPPLY-SIDE ANALYSIS- A TOTAL FACTOR PRODUCTIVITY ANALYSIS

“While TFP analysis is widely used in the analysis of growth processes in developed countries, it has only rarely been applied to the cases of the Eastern African countries.”

Growth accounting (or Total Factor Productivity (TFP) analysis) has become a widely used methodology to explain differences in growth rates across countries. In essence, growth accounting consists of calculating the contributions of the different factors of production (labour and capital) to growth, and an unexplained element or residual, which is the part of growth that cannot be attributed to increasing inputs of capital and labour. This unexplained residual is often interpreted by economists as reflecting technological improvements, or more general gains in economic efficiency. As such, it is often the technological residual which receives the most attention from economists and policymakers, as it reflects, broadly speaking, the amount of technological progress. Rapid TFP growth can be explained in poor and relatively small open economies by two factors. Firstly, aggregate productivity gains can be achieved through the reduction of macroeconomic disorders (e.g., lower inflation due to better macroeconomic management). Secondly, improved productivity can result from structural changes, i.e., allocation of factors to more productive activities, which contributes to a sustained growth path. (Martinez and Mlachila, 2013:7).

However, the methodology to compute TFP is not without problems and serious technical limitations.^{vi} While TFP analysis is widely used in the analysis of growth processes in developed countries, it has only rarely been applied to the cases of the Eastern African countries.^{vii} One reason is the lack of data availability for sufficiently long time periods. Another is that, if the procedure for calculating TFP has some serious shortcomings for developed economies, in a developing country context, it is even more fraught with difficulties. One particular weakness is that the role of land as a separate factor of production is generally ignored – partly because of inadequate data (Agenor, 2004:513). This results in the share of capital in the production function being overestimated and the rate of TFP growth being underestimated. This problem is particularly serious in

the case of Eastern African economies, where the agricultural sector makes up such a large share of total output. Nonetheless, as a first approximation to the supply-side determinants of growth, it can arguably still provide some useful insights.

Notwithstanding the limitations of the TFP approach to growth analysis, a number of past studies have revealed interesting patterns in the growth performance. An analysis by Ndulu et al (2007) reveals that whereas in the early years of independence, from 1960-73, output per worker expanded rapidly, and both capital accumulation and TFP were on a rising trend, the period spanning 1973 to 1990 marked a serious collapse in growth as output per worker fell precipitously. Of the six countries in Eastern Africa covered by Ndulu's analysis, only one country managed to retain positive TFP growth (Kenya) in this period. The period was marked by civil conflict (Ethiopia, Uganda), and by harsh structural adjustment programmes, whereby contractionary macroeconomic policies were adopted.

To cover trends in TFP performance since 1990, we carried out the corresponding analysis for six countries (Burundi, Congo D. R. , Kenya, Rwanda, Tanzania and Uganda) where data was available. Following Bosworth and Collins (2003), we assume a constant returns to scale production function of the form

$$Y = AK^\alpha(LH)^{1-\alpha}$$

Where Y is the output, A is a measure of productivity, K is physical capital, L is labour input, H is a measure of human capital and, following Bosworth and Collins (2003) and other studies, the capital share, α , is assumed equal to 0.35. Growth in output per worker $\Delta \ln(Y/L)$ is thus decomposed into the contributions of growth in capital per worker $\Delta \ln(K/L)$, increases in education per worker $\Delta \ln(H)$, and improvements in total factor productivity $\Delta \ln(A)$. It then follows that:

$$\Delta \ln(Y/L) = \alpha[\Delta \ln(K/L)] + (1 - \alpha)\Delta \ln H + \Delta \ln A.$$

The results of this decomposition, shown in Table 1, reveal that improvements in TFP in the 1990s and 2000s were less marked than suggested in the earlier comparable exercise by Ndulu et al. (2007). During the 1990s total factor productivity growth was negative for all five countries in the region for which it was possible to calculate TFP, while in the 2000s, it increased in just three (Congo D. R. , Rwanda and Tanzania) out of the six countries.

“During the 1990s total factor productivity growth was negative for all five countries in the region for which it was possible to calculate TFP, while in the 2000s, it increased in just three (Congo D. R. , Rwanda and Tanzania) out of the six countries.”

Table 3.2: Growth Decomposition for Six Regional Economies, 1990s and 2000s

Country	Year	Growth in output (annual % change)	Growth of output per worker (annual % change)	Contribution by component (Percentage points)		
				Human capital per worker	Physical capital per worker	Total Factor Productivity
Burundi	1991-2000	-1.9	-3.1	1.7	48	-53
Burundi	2001-2010	3.6	-1.1	3.9	-0.2	-4.7
Congo, D. R.	1991-2000	-6.3	-8.9	5.4	-1.6	-12.7
Congo, D R.	2001-2010	6.1	2.8	1.3	0.4	1.1
Kenya	1991-2000	2.1	-0.4	6.0	0.5	-7.0
Kenya	2001-2010	4.0	1.1	3.4	1.0	-3.3
Rwanda	2001-2010	7.9	4.5	2.3	1.1	1.1
Tanzania	1991-2000	2.7	-0.5	3.7	0.2	-4.3
Tanzania	2001-2010	7.3	4.9	1.8	1.6	1.5
Uganda	1991-2000	7.5	4.4	4.9	0.0	-0.6
Uganda	2001-2010	6.2	3.1	3.0	1.3	-1.2

Source: UNECA calculations

“In the East African region improvements in TFP have not been regional-wide– and in two of the largest economies in the region (Kenya, Uganda), as well as in Burundi, TFP actually continued declining in the 2000s”

What are the causes of the modest turnaround in TFP performance observed in the analysed Eastern African countries in the 2000s? Berthélemy and Söderling (2001) explain that the sources of the improvement in the TFP seen across Sub-Saharan Africa (SSA) since the mid-1990s were as a result of the reduction in the distortion of the foreign exchange market (black market premium), structural changes (e.g., move from agricultural to non-agricultural activities) and the increase in exports. It has similarly been argued that policies that reduce population growth rate and debt, facilitate greater openness, sound macroeconomic fundamentals, price stability, financial deepening and greater private participation have been linked to higher total factor productivity in SSA (Martinez and Mlachila, 2013: 13).

Pointedly, however, in the East African region improvements in TFP have not been regional-wide– and in two of the largest economies in the region (Kenya, Uganda), as well as in Burundi, TFP actually continued declining in the 2000s. In contrast, physical and human capital per worker increased for most countries over the whole period from 1991 and 2010, implying that growth has been mainly driven by gains from capital accumulation as opposed to productivity gains. In other words, growth has been through ‘perspiration rather than inspiration.’

Although impressive, from a resources mobilisation perspective, this does not bode well for the future of sustainability of growth in the region, particularly in view of the fact that population pressures (amongst the highest in the world) will make capital accumulation per worker an increasingly difficult strategy to sustain. On a more encouraging note, the contribution of improved human capital has been positive, reflecting the outcome of regional efforts to expand educational opportunities. ^{viii}

3.5 ECONOMETRIC ANALYSIS OF REGIONAL GROWTH PERFORMANCE 1980-2011

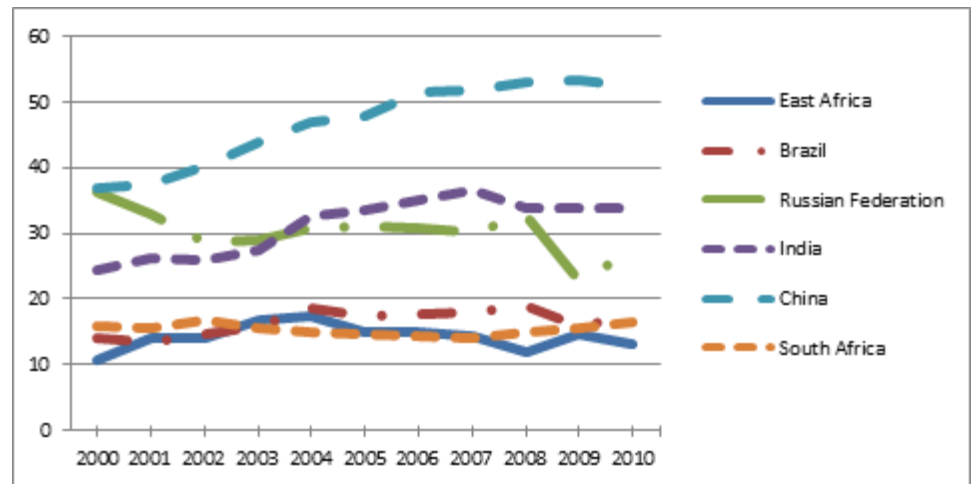
Since the mid-1980s, there has been an outpouring of literature and research into the macro-determinants of economic growth, attempting to understand and explain the differences in the rates of growth and per capita incomes across countries of the world (Thirlwall, 2005:153). Much of this work has been carried out within what is known as the 'endogenous growth theory'. Reflecting trends in the theoretical literature, variables considered in econometric analysis of this kind include initial per capita income (to see whether 'convergence' has occurred with higher income countries), savings/investment ratios, population growth, education (as a proxy for human capital), government consumption, political instability, monetary and fiscal variables, trade variables and inflation. Increasingly, too, these models incorporate variables to capture quality of governance aspects.

In this section, we construct an econometric model to help explain growth in the region, but focusing specifically on the way in which growth has been financed. There are several reasons for this approach. Firstly, most countries in the region sustain large current account deficits, indicative of a high dependence on external sources of development finance. How this impacts on growth has implications for the sustainability of growth in the region. Secondly, despite the theoretical support for the idea that the quality of governance matters for economic performance, governance indicators display many imperfections (Oman and Ardent, 2010) and, moreover, complete series of such indicators are not available for the Eastern Africa region. Hence, we decided to adopt a more parsimonious specification to the growth regressions. Before explaining the econometric specification, estimation method and results, we begin with a discussion of the importance of domestic savings for growth.

3.5.1 The Importance of Domestic Savings for Growth

Rajan et al. (2005) find that the more a developing country finances its investment through its domestic savings, the faster it grows. Conversely, the more external financing it relies on, the more slowly it grows. One of the key constraints to the region's economic growth has been the failure to mobilise resources for large-scale investments. In recent years, access to external finance and debt relief have significantly improved for Sub-Saharan Africa. Nevertheless, governments have often struggled to mobilise domestic resources for the same purpose (UNECA,2011:58). This applies particularly to the Eastern Africa region where savings rates have been consistently low compared to the countries which have sustained fast growth over recent decades (Figure 3.4). As is widely acknowledged, for instance, China's savings rate is remarkably high, and despite an ongoing shift towards greater domestic consumption, has been one of the main explanations for the resilience of its economic performance since the reform programmes began in the early 1980s. There is more variation among the other BRICS countries. But it is clear that Eastern Africa's savings rates are still lower than the countries under comparison.

"Savings rates have been consistently low [in the Eastern Africa region] compared to the countries which have sustained fast growth over recent decades."

Figure 3.4: Comparison of Mean Savings Rates (as percent of GDP)

Source: Authors Calculation from the World Bank Databank 2012

“The growth in savings has been much weaker in the EAC. Instead, EAC countries have relied on external resources—mainly donor aid—to finance the bulk of investment.”

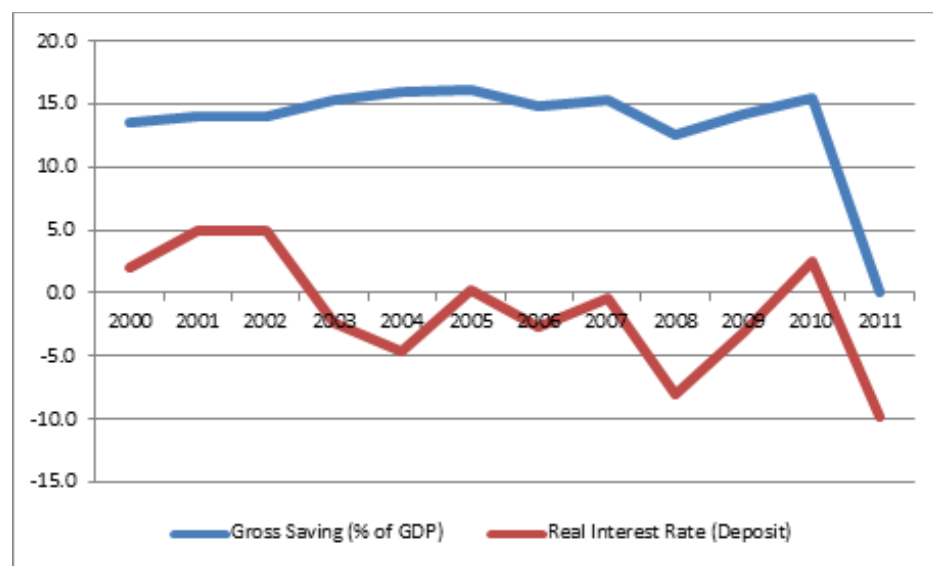
The importance of generating savings from within the region is primarily because it gives greater decision-making power to domestic actors (be they government or individuals) for investment. Studies, such as those by Levine and Renelt (1992), have found a consistently robust positive correlation between investment rates and economic growth. Greater funds for investment allow governments to upgrade the regions infrastructure and other important public financing projects. Spending on infrastructure, in particular, can act as a catalyst for further economic growth (AU and NEPAD: 2011). Furthermore, according to Heuty and Letouze (2006) it does not appear to be the case that private sector investment substitutes for public investment in infrastructure.

In a recent study that compares the East African Community (EAC) member states with a group of developing countries that have managed to sustain their economic growth over prolonged periods, McAuliffe, Saxena, and Yabara (2012) note that EAC growth has been financed principally by external borrowing. While domestic savings picked up rapidly in sustained growth countries after their takeoff—quickly narrowing the gap between savings and investment—the growth in savings has been much weaker in the EAC. Indeed, net savings have declined in the EAC since the start of their takeoff. Instead, EAC countries have relied on external resources—mainly donor aid—to finance the bulk of investment. Official development assistance (excluding debt relief) has averaged more than 15 percent of GDP since the growth takeoff in the EAC, well above the average for the group of ‘sustained-growth’ countries.

Within the region there are a number of factors that are currently hindering the ability of states to substantially increase savings. The main constraints to an increase in mobilisation are “low levels of income, demographic factors and weak institutional capacity” (UNECA, 2011:58). Although these refer to problems faced across Africa they apply, in particular, to the East African region, where the rates of financial inclusion (in the sense of access to the formal banking sector) remain low and the rates of demographic expansion are among the highest in the world (see ‘Tracking Progress 2012’). As long as financial inclusion remains low it is difficult for investments to be made through public and private institutions as the tax base and the number of depositors remain small. Furthermore, due to high inflation in the region over recent years, real interest rates have remained unfavourable for savers. An example of this is Kenya, which has one of the region’s highest levels of financial integration (Figure 3.5). Clearly, the current level of interest rates is such that it does not encourage deposits in a bank. These interest rate

patterns are observed throughout the region and incentivise consumption over saving, as revealed by the low savings to consumption ratios (Table 3.3). This may increase growth over the short-run but higher savings will remain key to long-term economic growth prospects.

Figure 3.5: Gross Savings and Real Interest Rates in Kenya 2000-2011



Source: EIU and World Bank Databank 2012

A recent study by Matovu (2010-13) outlines various reasons for the low private savings rates in Uganda, including the fact that savings are often held in non-financial assets hence making them less readily available for long-term and large-scale investments. Most formal financial institutions are located in urban areas, limiting access for those living in rural areas. Within the formal banking sector, weak competition, high overhead costs and poor credit information translate into wide spreads: borrowers can pay as much as 24 percent, while savers earn only 4 percent. Finally, once more the story of high levels of inequality may have a bearing on this experience. Traditionally, echoing the famous 'Kuznet's curve', it is argued that if inequality increases, the planned savings of all households taken together will rise, because the saving propensity of the rich is higher than the saving propensity of the poor. However, in such situations, producers are immediately faced with falling demand for their products and falling profits. They will typically react by cutting their investment in new productive capacity, hence impinging negatively on growth prospects. At the same time, when saving plans are based on the expectation of incomes being dependent on a rise in investment but in actual fact investment falls, aggregate income will be lower than what was expected by households when they originally made their savings plans. Hence the planned rise in overall household savings may not materialise. Moreover, in the face of lower growth, firms' savings (i.e. retained profits) are likely to fall. Thus although the ex-post macroeconomic identity of savings and investments hold, the mechanism to trigger the equalisation is an unexpected fall in real income that neutralises the planned increase in savings (UNCTAD, 2012: 35). To sum up, then, contrary to traditional economic thinking on the matter, higher inequality can end up undermining savings, and through this channel, it ends up having a negative impact on growth.

“Contrary to traditional economic thinking on the matter, higher inequality can end up undermining savings, and through this channel, it ends up having a negative impact on growth.”

Table 3.3: Savings to Consumption Ratios, 2000, 2005 and 2010

	2000	2005	2010
Burundi	0.01	0.12	(0.07)
Djibouti	0.07	0.44	
Eritrea	0.06	-	
Ethiopia	0.22	0.16	0.19
Kenya	0.17	0.22	0.21
Madagascar	0.11	0.09	
Rwanda	0.15	0.19	0.15
Seychelles	0.34	0.08	
Tanzania	0.17	0.26	0.31
Uganda	0.19	0.27	0.25

Source: UNECA calculated from World Bank Development Indicators 2012

3.5.2 Econometric Analysis of the Sources of Growth in Eastern Africa

“Initial per capita income is highly significant and negative in the regressions, suggesting that since 1980 poorer countries in the region have grown faster than richer ones.”

The model used in this report builds on earlier work by Bosworth and Collins (2003) and Prasad, Rajan and Subramanian (2005). The pooled regressions include observations for 11 countries in the region over the time period 1980-2010. Table 3.3 presents the core regression results with data taken from the Penn World Tables (version 6.2), EIU, UNCTADStat and WDI. The dependent variable is the annual average growth rate of GDP per capita over 1980-2010. We include the following control variables in the standard specification: initial (1980) GDP per capita, initial life expectancy, and initial trade openness (the Sachs-Warner measure).

To test the inter-relationship between domestic savings, investment, and the current account, variables are added to these core regressions. To check whether the results are robust we include a demographic variable (population growth), a key determinant of saving.^{ix} To minimise the risks of multicollinearity and bidirectional causality, savings and investment variables are not included in the same regression. Because of the high dependence of the region on ODA inflows, ODA is also included in the regressions, as is a dummy variable for the year 2002, which is meant to capture the sharp improvement in the performance of Eastern African countries since the beginning of the 2000s, related to improvements in the external environment (better financing possibilities – increased ODA, FDI and remittances, and higher commodity prices) (Romily, Prizzon and Rogerson, 2013). All coefficients are standardised.

The results, which proved to be surprisingly robust for this kind of cross-country regression framework, are shown in Table 4 and confirm a number of interesting characteristics of growth in the Eastern Africa region:

1. Initial per capita income is highly significant and negative, suggesting important degrees of convergence towards the income levels of richer countries in the region (since 1980 poorer countries in the region have grown faster than richer ones).
2. The human capital proxy (life expectancy) similarly proves to be significant in most specifications, confirming the importance of investment in human capital for development outcomes.
3. The Sachs-Warner trade policy variable, reflecting countries with a more liberal trade regime, does not seem to have had any impact on growth. In a region highly dependent on the export of commodities, which for two decades out of three were experiencing chronically low prices, such an outcome is not surprising. Indeed, trade 'openness', in the context of volatile international prices, actually could contribute to undermining economic performance in the region.
4. Regarding the investment variable, in line with many other previous studies (Levine and Renelt (1992), Easterly, Loayza and Montiel (1997), and Hoeffler (2002) it is consistently significant, with an estimated parameter value which suggest an Incremental Capital Output Ratio (ICOR) of around 4 to 5. In other words, a 10 percent increase in the investment to GDP ratio gives rise to a 1.8-2.4 percent increase in GDP per capita growth.
5. Similarly, the savings rate to GDP gives a consistently significant parameter value, which again ranges from 0.16-21, again confirming the findings of earlier studies.
6. Of particular interest, however, is the way that savings and investment interact with the current account balance. Prasad et.al. (2007) hypothesise a situation whereby for high income countries, current account imbalances lead to higher growth rates, through investments induced by recurring to foreign savings. They find, however, that this relationship does not hold for low income countries, whereby current account deficits are negatively associated with economic growth. In other words, the Feldstein-Horioka (1980) finding that countries tend to finance investment through domestic resource mobilisation still holds for the low income countries. ^x At odds with the findings of Prasad et al., our results suggest that there is no relationship between current account balances and growth in the Eastern Africa region. One explanation for this finding is that most countries in the region actually sustain quite chronic current account imbalances, and so there is little variability in the sample countries to explain differences in growth rates. In addition, a large share of the current account deficits are financed through grants (ODA), meaning that the negative impact of running persistent current account deficits is not felt to the full extent by countries in the region.
7. In line with a number of earlier econometric studies (e.g. Knight, Loayz and Villanueva, 1993), population growth in the region is found to be significantly correlated with growth. This does not imply that there are no negative consequences from high rates of demographic expansion. As summarised in 'Tracking Progress 2012' report (UNECA, 2012), it can mean, for instance, that the provision of social services (education and health) is particularly onerous, not to mention difficulties in creating sufficient employment opportunities. However, on aggregate, a growing population leads to an expanding market, greater domestic demand, and hence is conducive to higher rates of per capita income growth.

"A 10 percent increase in the investment to GDP ratio gives rise to a 1.8-2.4 percent increase in GDP per capita growth."

“Much aid in the region from the traditional OECD Development Aid Committee (DAC) donors is destined towards the social sectors (education, health and social protection) with very little of DAC aid being directed towards the productive sectors.”

8. Development aid (ODA), in contrast, shows no significant effect on economic growth. Given the high degree of aid dependence of the region, this finding may seem a disappointment to advocates of development aid programmes. But this agnostic finding is echoed in other studies (e.g. see, Easterly et. al, 2004, Rajan and Subramanian 2005, Driffield and Jones, 2013).^{xi} In addition, as documented in UNECA (2012), much aid in the region from the traditional OECD Development Aid Committee (DAC) donors is destined towards the social sectors (education, health and social protection) with very little of DAC aid being directed towards the productive sectors. As a consequence, its direct impact on growth may be difficult to measure.^{xii} In addition, the data used here is only for the traditional 24 DAC donors – and does not capture the rising importance of non-DAC donors in the region (particularly China). The non-DAC donors dedicate far more of their efforts directly to productive sectors, and so the impact of these flows is likely to be reflected more readily in improved growth performance. Further study would be required to confirm this hypothesis.
9. Finally, the dummy variable for 2002 is highly significant, suggesting that ‘something happened’ in the 2000s which represented a clean break with the past. That ‘something’ is clearly related to a much improved external environment (better external financing options, higher commodity prices, debt relief, etc.), but also due to improvements in domestic policy (improved macro-stability, policy reforms, etc.). As revealed by the earlier TFP analysis, improvements were notable already in the mid-to late 1990s for a number of countries in the region. But it was not until the 2000s that a significant turnaround in the economic fortunes of the regional economies was notable.

To sum up, these regressions ‘explain’ only a small part of income per capita growth in the region (an R2 of 0.16). But the parameter estimates are robust and most variables significant. The regressions could be extended to include more sophisticated regression techniques, such as GMM, as used by Prasad et. al. (2007), to control for the endogeneity issue. However, often more sophisticated techniques have a cost in terms of the clarity of the subsequent results. As a first approximation to the relationship between growth and financing in the region, these results provide some important insights.

Table 3.4: Econometric Analysis of the Determinants of Growth in the Eastern African Region

Method: Pooled EGLS (Cross-section random effects)													
Sample: 1980 2010													
Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)					
C	4.63	3.33	4.23	3.60	-1.84	-1.64	-2.20	-2.49					
Life expectancy 1980	0.23 *	0.23 *	0.24	0.23	0.23 *	0.23 *	0.23 **	0.27 **					
Per capita income 1980	-0.36 **	-0.30 **	-0.35 **	-0.33 **	-0.25 *	-0.25 *	-0.24 **	-0.28 **					
Openness 1980	-0.01	-0.01	0.00	0.00	-0.03	-0.05	-0.04	-0.05					
Investment/GDP	0.23 ***		0.24 ***		0.19 ***			0.18 ***					
Saving/GDP		0.20 ***		0.21 ***		0.20 ***	0.16 ***						
Current Account Balance/GDP			0.04	-0.07	-0.07	-0.07	-0.05	0.03					
Population growth					0.25 ***	0.26 ***	0.25 ***	0.27 ***					
ODA as a share of GNI						-0.01	-0.02	0.00					
Dummy 2002							2.47 ***	2.37 ***					
R-squared	0.06	0.05	0.05	0.05	0.11	0.11	0.16	0.16					
No. of Observations	317	330	316	329	329	319	319	306					
No. of Cross Sections	11	11	11	11	11	11	11	11					
S.E. of regression	5.54	5.47	5.54	5.45	5.31	5.36	5.31	5.33					
F-statistic	6.25	5.50	4.59	4.42	7.50	6.58	8.41	8.06					

Source: UNECA elaboration

N.B. Variable is significant at *1%, **5%, and ***10% intervals of confidence respectively.

3.6 CONCLUSIONS AND POLICY RECOMMENDATIONS

In Chapter 2, we explained how growth in the region has been handicapped by a combination of high income inequality, low employment creation and an excessively slow rate of poverty reduction. As confirmed in the patterns of economic growth examined in Section 1 of this Chapter, this combination of challenges is partly the product of two structural problems – the underperformance of manufacturing and the relative neglect of agriculture.

To further clarify these issues, analytical studies undertaken in this Chapter revealed the following key findings:

“One of the centrepieces of economic policy must be to ensure consistently high levels of domestic demand. This will ensure both faster economic growth and poverty reduction.”

- Growth has generally been led by domestic demand in the region. Of course, given the current account imbalances prevailing in the region, countries cannot afford to neglect strengthening export performance. However, one of the centrepieces of economic policy must be to ensure consistently high levels of domestic demand. This will ensure both faster economic growth and poverty reduction. This will lead to a mutually reinforcing process whereby faster poverty reduction will strengthen the resilience of economic growth. A number of policy related conclusions can be derived from this. Firstly, a more equal distribution of income would help sustain domestic demand. Secondly, in recent years the region’s economies have been vulnerable to inflationary bouts, and there has been a tendency to confront the resultant inflationary pressures through tightening monetary policy. Real interest rates have been correspondingly high in a number of countries in the region. Yet in cases where the inflation has been due to exogenous factors (e.g. imported foodstuffs), rather than excessively loose domestic monetary policy, tightening monetary policy is not the right response, and risks choking off economic growth (McAuliffe, Saxena, and Yabara, 2012:36).^{xiii}
- An overwhelming majority of economists agree that technological acquisition and constant technological upgrading is fundamental to achieving sustainable growth. According to our analysis of TFP in the 1990s and 2000s, growth since 2000 was driven, in part, by a faster growing TFP residual, indicative of the growing role of technological progress and efficiency in production. Pointedly, however, in Eastern Africa improvements in TFP have not been region-wide – and in two of the largest economies in the region (Kenya, Uganda), as well as in Burundi, TFP actually continued to decline in the 2000s. In contrast, physical and human capital per worker increased for most countries over the whole period from 1991 and 2010, implying that growth has been mainly driven by gains from capital accumulation as opposed to productivity gains. In other words, growth has been through ‘perspiration rather than inspiration.’ In the long run, this is unlikely to be sustainable, and more efforts are required regionally to catalyse technological progress (see Box 3.1 for an example of one such initiative which is supported by UNECA).
- Regarding the financing of growth in the region, sustaining higher levels of domestic saving and investment should be a priority. Removing constraints to savings - negative real interest rates and the large spreads between deposit and savings rates (indicative of a highly profitable but inefficient banking sector) - would go a long way to addressing some of these problems. As recently stressed by the governor of the Ugandan Central Bank, Professor Tumusiime-Mutebile, greater efforts to reduce demographic pressures, though family planning, should be encouraged, as this will also help raise savings rates over the long run. In addition, measures to encourage financial inclusion, particular in rural areas, are required.^{xiv}

“Sustaining higher levels of domestic saving and investment should be a priority.”

Box 3.1: UNECA's Support to Technological Upgrading – The Case of the Rwanda Innovation Endowment Fund (RIEF)

The Rwandan government's Vision 2020 Statement, its National Policy on Science, Technology and Innovation, and the Economic Development Poverty Reduction Strategy (EDPRS) for Rwanda are all based on the premise that, through embarking on a concerted effort to build science, technology and innovation capacity, Rwanda will greatly enhance her prospects of achieving the growth, poverty reduction, wealth creation, and export diversification objectives. With this in mind, the Government of Rwanda officially launched the Rwanda Innovation Endowment Fund (RIEF) to fund research and development in innovative market oriented processes and products in partnership with the United Nations Economic Commission for Africa (UNECA) and One UN Rwanda.

The objective of this Fund is to stimulate economic transformation through R&D in innovative market-oriented products and processes in priority areas of the economy, thereby increasing prosperity and the competitiveness of the Rwandan economy. At a launching ceremony (April 2012) attended by representatives of government, diplomatic corps, international organisations, private sector, higher-learning and research institutions, Hon. Vincent Biruta, Minister of Education told guests that the Fund creation will: *"provide the opportunity for Researchers, Entrepreneurs and Business people to work together in order to fully contribute to the sustainable socio-economic development of Rwanda"*.

The RIEF provides funding for scientific applied research projects or feasibility studies, implemented by education and research institutions or commercial enterprises in Rwanda. Activities includes grants, exchanges and others to strengthen research and capacity building in education and research institutions and funding projects that foster innovations to apply knowledge and technology to specific situations and challenges with a focus on supporting social development, learning and economic growth in Rwanda.

The fund account has been opened with an initial total capital of 390 million Rwandan francs. Through the One Fund, the UNECA has provided 125 000 dollars as seed capital, which has been supplemented by 300 million Rwandan francs by the government of Rwanda, for the first stage of the fund.

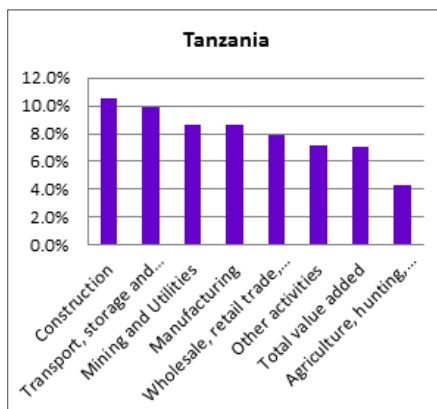
The RIEF funding priorities is initially focused on three priority areas, namely agriculture, manufacturing and ICT. The first call for proposals, which targeted young graduate innovators, was launched in November 2012 and fund request applications were submitted from October 15th to November 15th 2012. A total of 369 applicants submitted their innovative projects concept papers, including 138 agriculture related projects, 135 projects in the manufacturing sector and 96 applications in the ICT sector. Applications came from 29 out of 30 districts in Rwanda. For the first phase, 10 best projects were selected for funding. The first RIEF Awards Ceremony was held on 2 May 2013 in an event officiated by Rwanda's Minister of Education, Honourable Dr Vincent Biruta. Grants of around USD 50 000 each were given to 8 successful innovation project proposals. They will support the deepening of the project ideas towards their fruition.

Source: UNECA

3.7 ANNEX

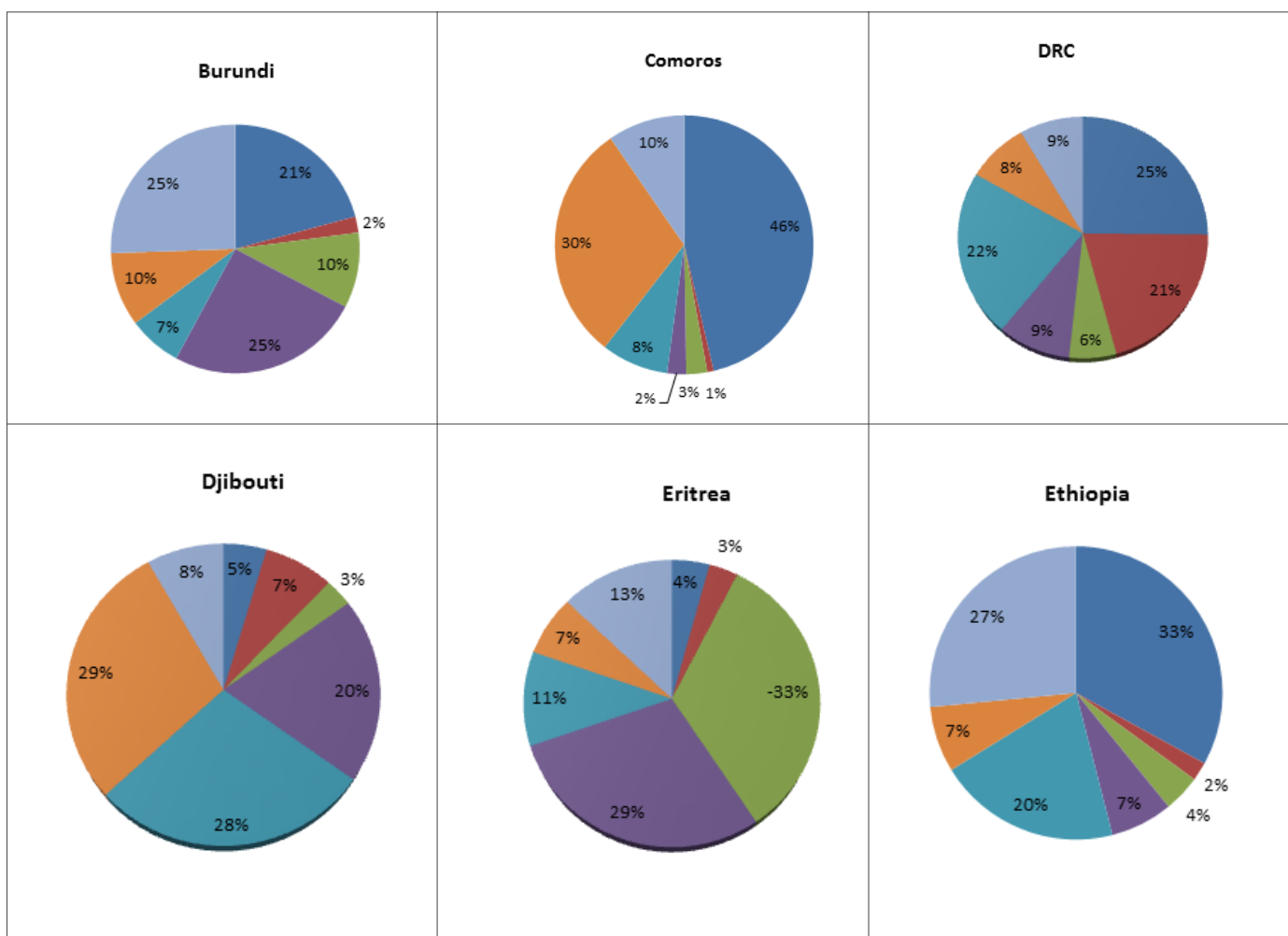
3.7.1 Annex I: Fastest Growing Sectors, 2001-2010

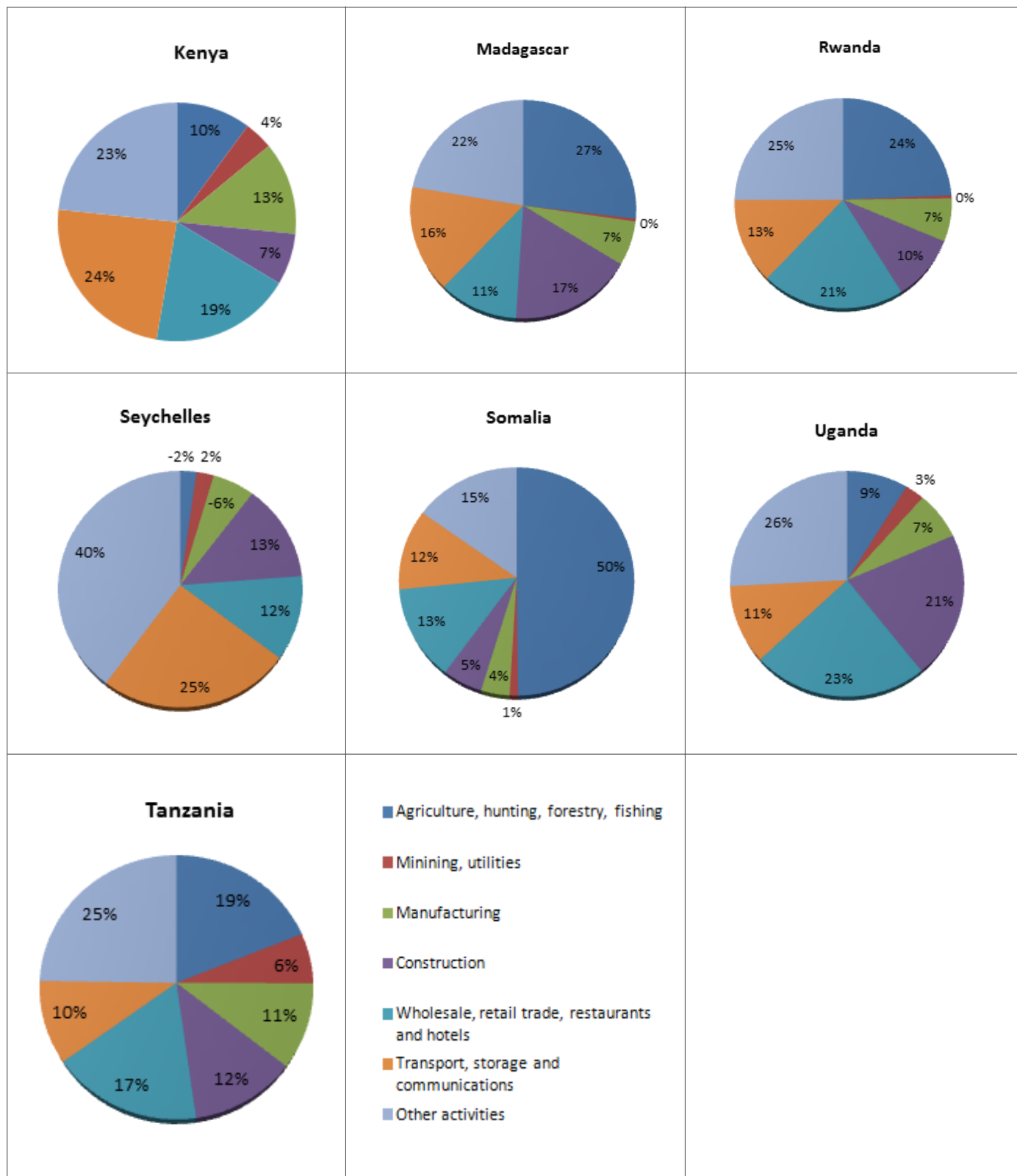




Source: UNECA calculations, on the basis of data from UNCTADStat (2012)

3.7.2 Annex II: Sectoral Contribution to Growth: 2001-2010





Source: UNECA calculations, on the basis of data from UNCTADStat (2012)

Footnotes

ⁱ The obvious exceptions are South Sudan (oil), Congo D. R. (metals), Eritrea and Tanzania (gold). However, it is arguable that the rents derived from these natural resources have either not yet been of sufficient volume or over a sufficiently long time to prompt a transformation of their countries' economies.

ⁱⁱ The level of aggregation is quite high, and ideally such an analysis should be repeated at a more disaggregated level. This could be done at the national level, but at the possible cost of losing the ability to compare across countries.

ⁱⁱⁱ These observations are drawn from the World Bank Tanzania Economic Update (2012), but are equally applicable to the whole region.

^{iv} The figure is surprisingly high, but is explainable by one exceedingly high number for Eritrea in 2010-11 (where export growth in the period was 500 percent) the fact that the averages are not weighted; and the number of observations of EE-led growth limited.

^v These results coincide with other recent evaluations, although our interpretations of the results differ. Martinez and Mlachila (2013) decompose Africa's GDP growth since 1995 into its two components—growth in domestic demand and growth in net exports (exports minus imports) - revealing that the major share was due to domestic demand changes, and only a small portion to changes in net exports. One plausible explanation for this is that as export earnings surged, African countries imported a lot, leaving only a small change in net exports (and hence their correspondingly small contribution to GDP growth).

^{vi} For a formal discussion on how TFP is calculated and the methodological difficulties in calculating it, see Agenor (2004), Chapter 13.

^{vii} African studies include Ndulu(2007), and Berthelemy and Soderling (2001).

^{viii} Empirical evidence confirms this two-way relationship between investment in education and growth for African economies. The stock of education is a source of growth but as economies keep growing the investment in education tends to increase. Seetanah (2009) shows that the rate of school enrollment will tend to be higher where the economy grows faster (Martinez and Mlachila, 2013: 8).

^{ix} Beyond the standard determinants of saving (income, interest rates), demographic factors are important – ceteris paribus, faster rates of demographic expansion depress savings rates, while a slow growing, aging population tends to increase savings rates. For a discussion of this, see Agenor (2004).

^x Feldstein and Horioka (1980) posited the idea that, with the globalisation of international finance, the statistical relationship between domestic savings rates, investment and growth should break down. But they found a quite startling statistical consistency in the relationship between domestic savings and investment, suggesting that growth and investment are, to use Keynes's phrase, mostly 'homespun'

^{xi} The aforementioned study on the sustainability of growth in the EAC by McAuliffe, Saxena, and Yabara (2012:36) similarly notes that there is little evidence that donor aid supports higher productivity and growth.

^{xii} It may, of course, impact indirectly through improving human capital. Such a positive impact may however only be felt with a long time lag (education expenditures, for instance, taking perhaps as much as a generation to manifest themselves in terms of improvement of human capital in the labour market), and so may be difficult to detect econometrically.

^{xiii} This is particularly so in the context of low income countries with poorly developed financial markets in which the transmission mechanisms between monetary policy and inflation are weak. (see Mishra et al., 2010). Buigut (2009) examined monetary transmission in three countries (Kenya, Tanzania, and Uganda) belonging to the EAC, using a three-variable VAR approach with real output, inflation and a policy interest rate as endogenous variables, and a Choleski decomposition to identify structural shocks. He found that changes in policy interest rates had only small and statistically insignificant effects on output and inflation, and concluded that monetary transmission was weak in all three countries.

^{xiv} There are some encouraging signs that things are moving in the right direction. For instance, Allen et. al (2012) document how the banking system in Kenya has expanded greatly in terms of the number of branches in recent years - between 2006 and 2009 the total number of bank branches in Kenya increased from about 600 to almost 1000 (by 68%), an increase not only in urban districts but also in rural and in arid and semi-arid districts. This expansion involved all ownership categories of banks, namely domestic private banks, foreign banks and government banks. Similarly, the percentage of Rwandans aged 18 and above who have opened saving accounts has increased from 9.2% in 2005/2006 to 20.6% in 2010/2011 (NISR, 2012).





CHAPTER 4

CHAPTER 4.
ADDRESSING
EDUCATIONAL
DEFICITS IN
EASTERN AFRICA
– THE CHALLENGE
OF EDUCATIONAL
'DEEPENING'

4.1 INTRODUCTION

“Given the dearth of skills in certain sectors of the economy, and the need to align educational systems better to the needs of the jobs market, vocational training has also moved high up the agenda.”

Over the last decade, in line with Objective II of the Millennium Development Goals, Eastern African countries have achieved an impressive expansion of primary education. Yet doubts have lingered regarding both the quality of the education provided, and the degree to which governments have simultaneously been able to expand educational opportunities at higher levels of provision – secondary and tertiary. Given the dearth of skills in certain sectors of the economy, and the need to align educational systems better to the needs of the jobs market, vocational training has also moved high up the agenda. Together, we call this set of objectives the challenge of ‘educational deepening.’

Education is considered integral to development, as it is not only a means but also an end in itself. Higher levels of education will improve the quality of living, including the overall health of society, an increase in productivity and a reduction in crime (DFID: 2012). Studies have found that education for women, in particular, is associated with a reduction in infant mortality, as better awareness of causes of disease can increase women’s ability to prevent and respond to children’s illnesses (Caldwell: 1979). Greater *educational deepening* will thus improve a country’s stock of human capital and increase the potential for what economists call ‘endogenous growth’ (put simply, growth which is self-sustaining) (Chang 2010:181, Prichett 2004).ⁱ

“Most politicians nowadays understand the long-term primacy of achieving improvements in education, but it is still easier to give greater attention to projects and programmes that produce more immediate and tangible results, such as investment in physical infrastructure”

For policymakers and governments, however, providing greater educational opportunities is a particularly difficult challenge. For one thing, there is an enormous *time-consistency* problem, in the sense that improved educational performance takes many years before its positive impact is felt. The rewards from greater investments in education today will typically not bear fruit for at least two decades. And for many politicians, such long time horizons mean that the benefits will be reaped long after they have left office. It is true, of course, that most politicians nowadays understand the long-term primacy of achieving improvements in education, but it is still easier to give greater attention to projects and programmes that produce more immediate and tangible results, such as investment in physical infrastructure. In other words, educational reform requires vision and long-term political commitment.

Secondly, inadequate attention has been given to the quality of education, including basic factors affecting pupils’ opportunity to learn. These include pupil attendance and teacher effectiveness: both of which are key determinants of learning outcomes and value for money (ICAI, 2012). Financial *leakages* from the education sector represent a serious challenge to improving educational quality. For instance, a public expenditure tracking study (Reinikka and Smith, 2004) suggested that in *Uganda a mere 13 percent of the non-wage resources allocated to public primary schools arrived at the school*. The education sector in Tanzania witnessed much public controversy in 2008 over ‘phantom’ teachers retained on the public payroll after they had either left or died.ⁱⁱ Similarly, a 2010 public expenditure tracking survey in education (Impact Assessment: Green-Amber) found that 30 percent of initial budget allocations to primary schools were not received (ICAI, 2012:14). Further, even when resources reached the schools, the teachers were often not in school. Teacher absenteeism rates in Uganda and Tanzania have been estimated at about 27 and 23 percent, respectively. However, even when teachers are present at school, the quality of the service can often be poor. Teachers in Uganda and Tanzania spend approximately just 20 and 25 percent of the time in class teaching, respectively (Devarajan and Fengler, 2012:28).

In such circumstances, it is not surprising that external assessments have generally been quite sceptical about the capacity of countries in Sub-Saharan Africa to achieve ‘educational deepening’. For instance, the World Bank (2012:13) has recently lamented the status of human capital in Africa, noting that “-despite a decade and a half of economic

growth, some poverty reduction, and improvement in human capital indicators, Africa still has the lowest levels of human capital in the world, even with considerable resources—from donors and African taxpayers—having gone into the health and education sector.”

This is in fact a half-truth, in the sense that, while governments and donors alike in Eastern Africa have attached a greater priority to education over the last decade, the resources provided have not necessarily been commensurate to the scale of the challenges. To be sure, as a percentage share of GDP, governments have increased the priority given to education over the last decadeⁱⁱⁱ and donor funding to the sector has often been generous. But in view of the very low levels of income per capita, the resulting resources are often not sufficient to make a marked difference on educational outcomes.^{iv} The problem is compounded by the aforementioned ‘leakages’ in the system, in the sense that a lot of the expenditure dedicated to the sector does not reach its intended beneficiaries – the students and teachers.

In this chapter, we thus use the term ‘educational deepening’ to refer to both an extension of government priorities towards secondary, tertiary and vocational training, and also, and quite crucially, a single-minded focus on improving the quality of educational provision. We argue that this constitutes one of the most pressing challenges for countries in the region if sustainable growth is to be achieved. Although it has become fashionable to look only at educational ‘outputs’ (e.g. enrolment rates, literacy rates, etc.), we will look at both educational ‘inputs’ (e.g. indicators of class size, availability of textbooks, etc) and ‘outputs’, in the belief that the two are inextricably linked. Crowded classrooms, poorly paid and demotivated teachers, and crumbling schools are unlikely to be conducive to raising educational standards.^v

4.2 INCREASED POLITICAL AND FINANCIAL PRIORITISATION OF EDUCATION AS A NECESSARY BUT NOT SUFFICIENT CONDITION FOR EDUCATIONAL DEEPENING

Before addressing the political and financial prioritisation of education, a brief discussion of the role of educational quality on development is warranted. The recognition of the centrality of education to development is not new. It has been stressed in developmental frameworks ever since the 1948 *Universal Declaration on Human Rights*, which recognises education’s contribution to the growth of national income by improving the productive capacities of the labour force. Probably the most notable mention of education within development frameworks in recent history is in the Millennium Development Goals (MDG), signed in 2000 by the General Assembly of the UN, wherein a target was set to ensure that by 2015, boys and girls everywhere will be able to complete a full course of primary schooling. Within the MDG framework, it is recognised that there is “an interconnectedness of all development goals with key inter-linkages between education, health, poverty reduction, and gender equality, where improvement in one area has a positive effect on the others.”^{vi}

In recent years, there is a growing recognition of the need to improve not only quantitative but also qualitative indicators of performance in the educational sector. At the meeting held in Dakar in 2000, convened by UNESCO, improving the quality of education became an explicit objective of UNESCO’s *Education for All* framework. Goal six is ‘Improving the quality of education’ whereby countries are exhorted to improve “... all aspects of the quality of education and ensuring excellence of all so that recognised and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.”^{vii}

“While governments and donors alike in Eastern Africa have attached a greater priority to education over the last decade, the resources provided have not necessarily been commensurate to the scale of the challenges.”

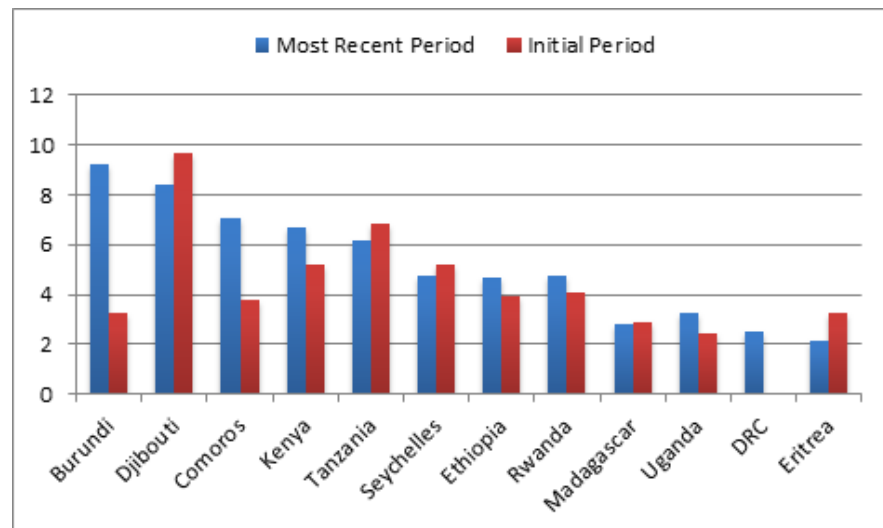
“Educational reform requires vision and a long-term political commitment.”

“Crowded classrooms, poorly paid and demotivated teachers, and crumbling schools are unlikely to be conducive to raising educational standards”

Africa specific-developmental frameworks have also stressed the primacy of achieving better educational outcomes. In 2009, for instance, the Chief of the New Partnership for Africa's Development (NEPAD) appreciated the work of the NEPAD Education and Training Sector. in its *"quest to ensure that education and training are central to developing a strong skills base, as a vehicle for sustained economic development on the Continent"* (NEPAD, 2009). This publication recognises the centrality of education quality, focusing on the same areas as identified by UNESCO, but adding considerations of gender and culture, quality management, technical and vocational education and training (NEPAD, 2009:8).

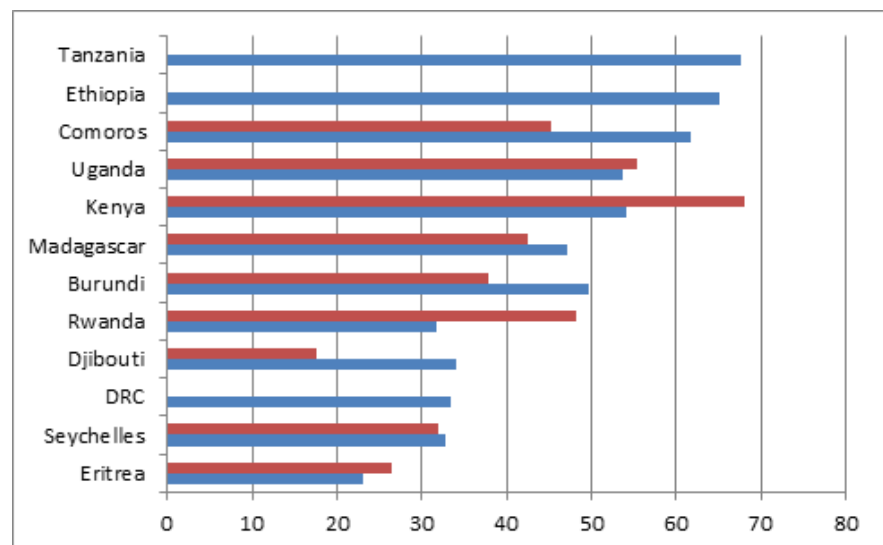
Has this increased political recognition of the primacy of achieving better educational outcomes been accompanied by an increase in the amount of financial resources governments spend on education? Since the early 1990s, most countries in the region have increased their expenditures as a share of GDP markedly – the exceptions being Djibouti, Eritrea, and Tanzania.

Figure 4.1: Expenditure on Education as a % of GDP^{viii}



Source: UNESCO Dataset: 2012

Figure 4.2: Educational Expenditure in Primary Education as % of Total Educational Expenditure^{ix}

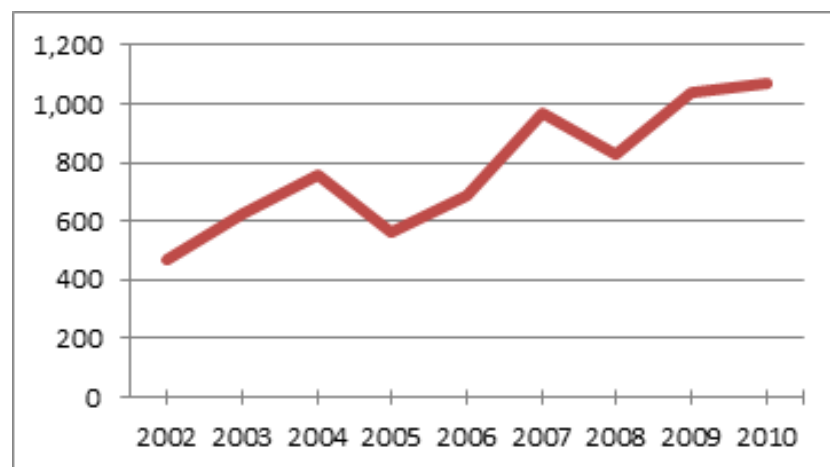


Source: UNESCO Dataset: 2012

In addition, for many countries, the priority given to primary education seems clear – in five countries in the region (Tanzania, Ethiopia, Comoros, Uganda and Kenya), primary education constitutes more than 50 percent of total education spending. Tanzania, in particular, stands out in terms of the, perhaps, disproportionate share of education expenditure allocated to primary education, but as will be seen in the following sections, this spending has been accompanied by some success in achieving better outcomes for students.

Similarly, traditional OECD Development Aid Committee donors have focused an enormous amount of attention on supporting educational systems in the region, either through project aid, sector-wide approaches, or general budgetary support. This has led to a more than doubling of aid flows supporting the sector in the region since the early 2000's, reaching approximately USD 1 billion in 2010 (OECD, 2012). The increases in spending have happened across all countries but inflows, particularly to the Congo D. R. , Ethiopia and Tanzania have risen significantly. However, there has also been a marked change in what the Overseas Development Assistance has been spent on in the last few years.

Figure 4.3: Amount of Overseas Development Aid for Education to the Eastern African Region (Millions of Dollars)

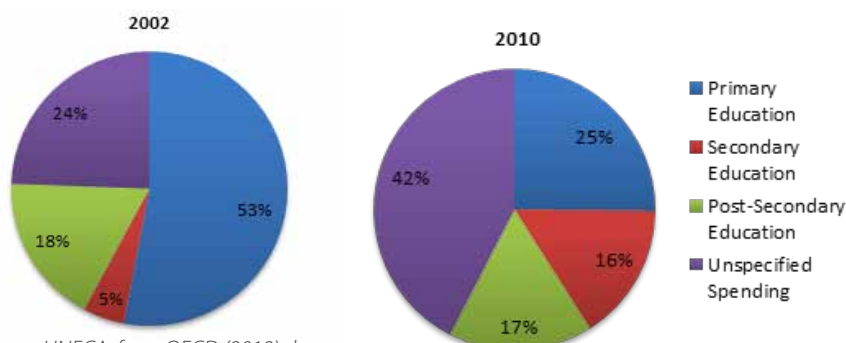


“The share of donor resources dedicated to secondary education has more than tripled between 2002-2010.”

Source: OECD 2012, on the basis of figures for the 14 countries in the region

The share of donor resources dedicated to secondary education has more than tripled between 2002-2010. At the same time, the share being spent on primary education seems to have declined significantly. This may reflect a slow reorientation of donor spending. During this period, the amount of unspecified spending^x has seen a significant increase, but post-secondary spending has remained stable as a percentage of overall spending.

Figure 4.4: Share of DAC ODA Spending on Education to the Different Levels of Provision, 2002 and 2010



Source: UNECA, from OECD (2012) data

The amount of financial resources being spent on education has clearly helped some countries improve their performance. For instance, improvements in the Net Enrolment Rate (NER) for Burundi can, to some extent, be traced back to their increased spending on education. This has been part of a concerted effort to improve educational outcomes in Burundi, which had an annual increase in the budget allocated to education of 12.2 percent between 1999 and 2009. Of the expenditure in Burundi, about one-third came from ODA (UNESCO: 2011). This highlights the continued need for foreign support of educational projects. This said, it is noteworthy that donors too have been criticised for their lack of attention to orienting spending to improve the quality of education. Between 2005-2015, for instance, the UK's Department For International Development (DFID) will spend almost £1 billion (GBP) in total on education in Ethiopia, Rwanda and Tanzania. Yet it has been criticised by the Independent Commission for Aid Impact (ICAI) (2012:22)^{xi}, who, while recognising that falling education attainment is to some extent an inevitable outcome of rapid expansion of access, expressed their concern:

"We are nonetheless concerned that the quality of education being provided to most children in these countries is so low that it seriously detracts from the development impact of DFID's educational assistance. To achieve near-universal primary enrolment but with a large majority of pupils failing to attain basic levels of literacy or numeracy is not, in our view, a successful development result. It represents poor value for money both for the UK's assistance and for national budgets." (Al-Samarrai 2003)^{xii}

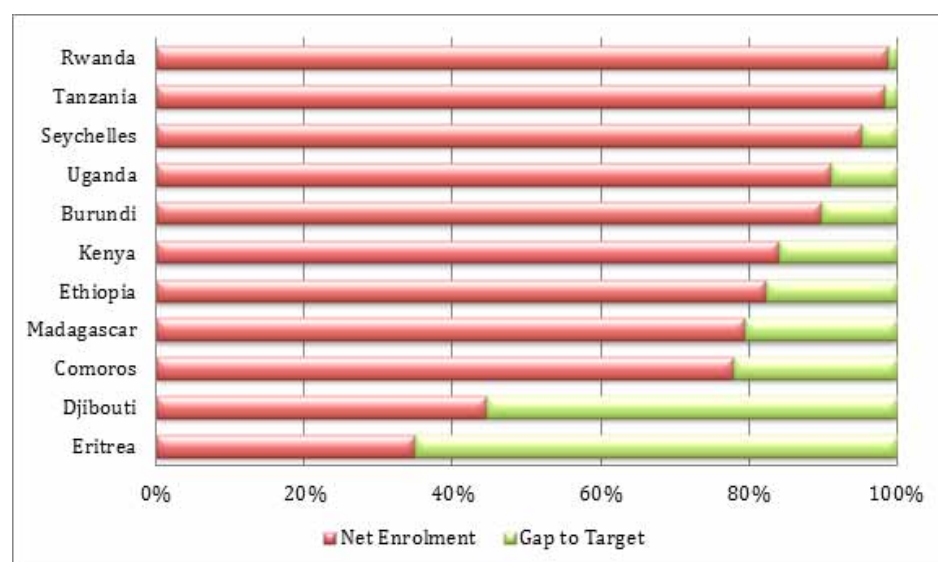
"Over the last decade the improvements in the Net Enrolment Rates in most countries have been striking"

4.3 OUTCOME INDICATORS

4.3.1 Improvements in Enrolment Rates

In one of the major success stories in the Eastern Africa region, in line with the MDG objective II, over the last decade the improvements in the Net Enrolment Rates (NER) in most countries have been striking. In most of the states in the region the number of children enrolled in school has been increasing steadily since the 1990s. For instance, both Rwanda and Tanzania have done well in approaching their NER targets and are on track to reaching them by 2015 if current trends continue (UIS: 2012). Another high achiever is Ethiopia, a country which has made a concerted effort to improve its rates of enrolment and achieve a rapid expansion of primary education over the last 5 years – all three high achievers have notably received significant amounts of financial support from the donor community for their education sectors. In South Sudan, gross enrolment rates have risen spectacularly since 2000. Primary school enrolments approximately doubled between 2000 and 2005 from 0.3 million to 0.7 million, and to 1.4 million by 2009. As a result, the primary school gross enrolment rate (GER) increased from an estimated 21 percent in 2000 to 72 percent in 2009, *"an impressive feat by any measure that speaks to the commitment of the people of South Sudan to educating their children."* (World Bank, 2012: 2).

In addition, a number of countries have also been able to reduce their Pupil to Teacher Ratios (PTRs) (see Table 4.1), which reflects efforts made to improve both quantity and quality of teaching. These improvements have mostly been driven by a carrot and stick approach in addressing constraints people faced, while at the same time obliging them to send their children to school. Among other things, the abolition of school fees and the provision of meals^{xiii} made it more attractive for parents to send their kids to school (WFP: 2012). Simultaneously, policymakers have enacted legislation to make school attendance compulsory for children of primary school age under law (Mehrotra 1997:104).^{xiv} The effect of these policies has been a vast improvement in attendance rates of primary schools, especially in drought prone areas (WFP: 2012).

Figure 4.5 : Meeting Net Enrolment Targets

Source: UNESCO Dataset 2012

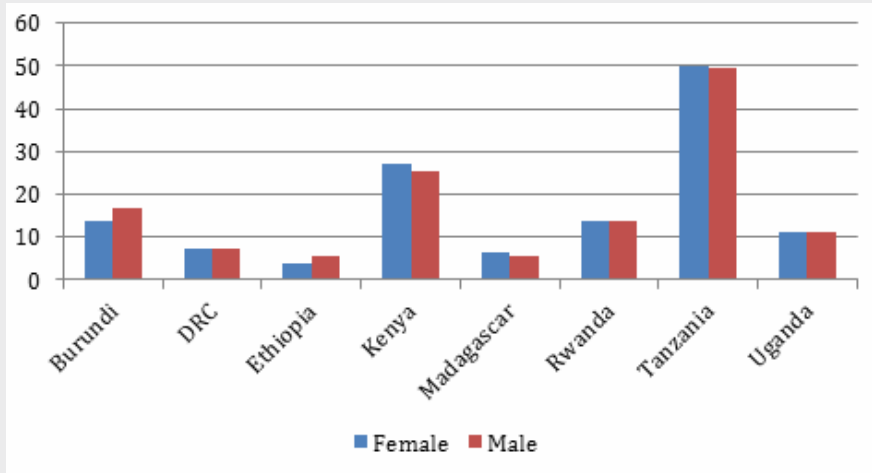
Box 4.1 : A Snapshot of Education Across the Region: What Can be Gleaned from the DHS Surveys?

Demographic and Health Surveys (DHS) are currently carried out in 8 countries in the region. These large scale surveys include thousands of respondents, to provide statistically significant representations of the entire population. For example, the number of respondents for 2010 DHS in Rwanda was 13 671 and in Tanzania it was 10 300. Unlike indicators like the Universal Primary Education (UPE), the advantage of the DHS country profiles is that it provides a view of educational attainment across all age-groups, employment status, income, religion and place of residence.

The results of these different surveys reveal that the countries of the region still have a long way to go in terms of improving educational performance. It also drives home the need to dedicate sufficient resources to adult educational programmes, such as literacy campaigns. Focusing exclusively on improving educational performance among the youngest implies that it will take many years before the benefits of improved education policies will be felt.

For instance, DHS studies reveal that low percentages of the population have completed even primary education – in Uganda, Congo D. R. , and Madagascar, for instance, barely 11.3 percent, 7.1 percent and 5.7 percent of men have completed primary education, respectively. Only in Tanzania are the figures much more respectable with an average of 49.4 percent of men having completed primary schooling. This is no doubt in part the product of socialist policies from the 1960s-1980s until Julius Nyerere's retirement, when primary education was extended to the whole population.

Figure 4.6: Percent of Male Population Having Completed Primary School, by Income Quintile



Despite these low figures, few governments in the region are investing in adult literacy programmes. Yet there is clear evidence about the effectiveness of such programmes, as witnessed in Cuba and Kerala, whereby volunteers from secondary schools were drafted to run well-organised literacy campaigns (Mehrotra, 1997:102).

DHS studies also reveal interesting information about educational attainment by income level. Figure 4.7 and Figure 4.8 show that, while there are relatively minor differences in the male completion rate for primary education across income quintiles (with the exception of Congo D. R., where hardly any males in the lowest three quintiles have completed primary education), the differences are abysmally large in the case of males who have achieved some type of post-secondary education.

“Post-secondary opportunities are highly skewed across the region towards the higher income groups”

Educational Attainment by Wealth Quintile Male

Figure 4.7: Primary School Completion

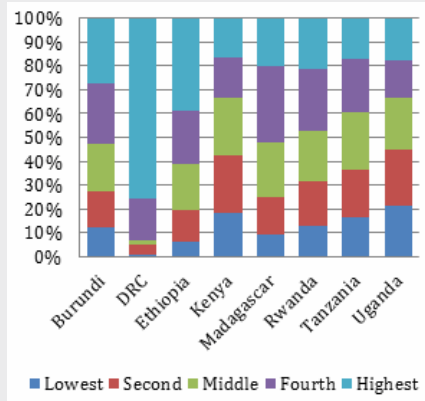
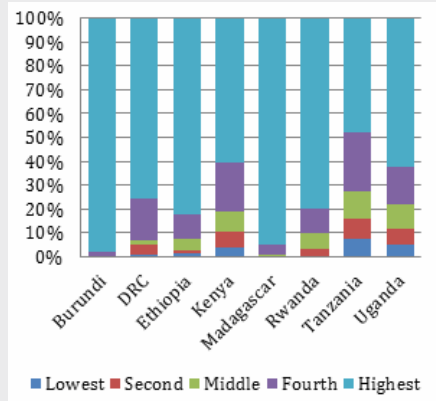


Figure 4.8: Post-Secondary School



In the cases of Burundi and Madagascar, more than 95 percent of the male population who have achieved some post-secondary education come from the highest quintile. Only in Tanzania, Kenya, and Uganda do more than one third of males with some post-secondary qualifications come from outside the upper quintile. In other words, post-secondary opportunities are highly skewed across the region towards the higher income groups. Greater equity of access to higher education would seem to be something which policy makers need to prioritise.

Source: UNECA from DHS Surveys (various)

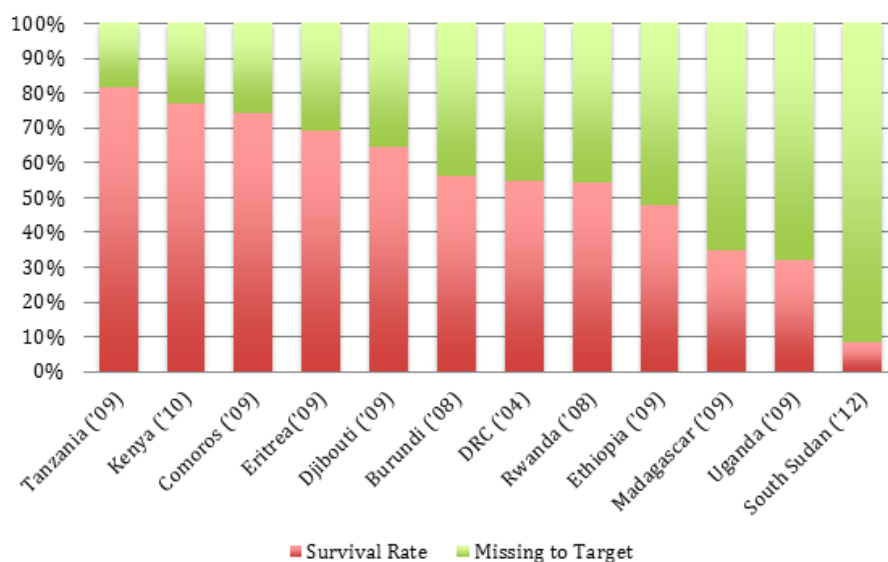
4.3.2 Progress through the Educational System

Efforts by regional governments to provide students with Universal Primary Education (UPE) have generally been very successful and have resulted in a steady increase in enrolment rates to primary schools. However, it is also important to assess the quality of the education children get once they are in the school system. This section will look at this through school progression and studies on numeracy and literacy.

4.3.3 Primary Completion Rate

The number of children that are entering schooling for the first time in the region has been increasing but it appears many of these students do not actually end up finishing their education. Enrolling children into school should set them up to progress through the education system but it appears that many children do not finish primary school and leave the school system prematurely. This is particularly wasteful because educational specialists often argue that under 4 years of primary education is not sufficient to guarantee basic literacy, and once leaving schools, these students may become again functionally illiterate. So the efforts made to get these children into school are effectively wasted.

Figure 4.9 : Completion Rate to Last Grade of Primary



Source: UNESCO Dataset 2012, World Bank 2012

Tanzania and Kenya have a noticeably better record of getting children through primary school than some of the other countries in the region. Both have increased the number of students going through their primary system over the past few years as well. Nevertheless, completion rates are low in some of the bigger countries of the region, with Uganda and Ethiopia faring particularly poorly. After years of conflict the South Sudanese education system is beginning to recover but a high incidence of poverty means that currently only 8 percent of children complete primary school.

Tanzania has the best record of enrolling and retaining students in the region. This was helped by government policies that ensured that better qualified teachers were moved to younger age groups within schools in order to ensure that children from socially disadvantaged backgrounds were helped to catch-up with children who had higher

prior levels of literacy and numeracy (EFA: 2011. p.52). Stronger restrictions on the age that children were allowed to enter school^{xv} made a difference too as children who were older were entered into informal schooling called the Complementary Basic Education in Tanzania (COBET) project (ibid, p.52). Assessments suggest that this project has met with considerable success and has allowed about 8 percent of the children formerly out of school to enter back into schooling and subsequently reduced dropout rates significantly. Tanzania shows that an integrated schooling system and policies, which focus on retention, can accommodate children from disadvantaged backgrounds in a way that allows them to stay in the schooling system. That said, this does not come cheaply as Tanzania spends noticeably more on its primary education than other countries in the region (UNESCO: 2011a).

“Tanzania shows that an integrated schooling system and policies, which focus on retention, can accommodate children from disadvantaged backgrounds in a way that allows them to stay in the schooling system. That said, this does not come cheaply as Tanzania spends noticeably more on its primary education than other countries in the region”

4.3.4 Disappointing Outcomes

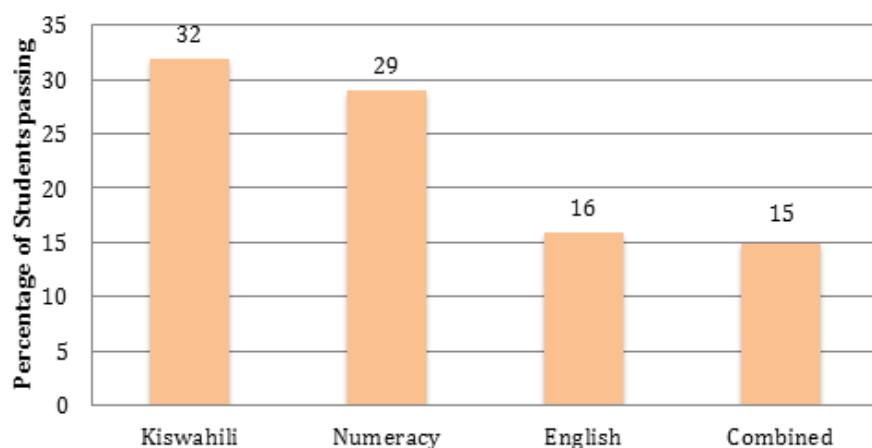
Although the number of children enrolled in school has increased, evidence suggests that the quality of education has not improved significantly in the region. The low number of children who complete primary school is one aspect of this poor performance. Further, various studies on the quality of teaching and the educational outcomes of students attending school in the region come to the conclusion that many of the children who graduate do not learn adequate numeracy and literacy skills.^{xvi}

The Uwezo Report (2012) is the largest comparative study on educational standards in the Eastern Africa region. The report found large differences in average test scores between countries in East Africa. Kenyan pupils perform best in literacy and numeracy. Ugandan children perform worst in the lower school years, but slowly overtake Tanzanian children and outperform them after six years in school. The 2011 surveys tested literacy and numeracy skills of about 350 000 children aged between six and 16 in more than 150 000 households across Kenya, Uganda, and Tanzania. In the literacy tests, children were asked to recognise a letter from the alphabet, read a word, read a paragraph, and read and understand a short story. The test was in English, which is taught as a subject and is the language of Primary School Leaving Exams in Uganda and Kenya. In Tanzania and Kenya (but not in Uganda) a further literacy test was administered in Swahili.

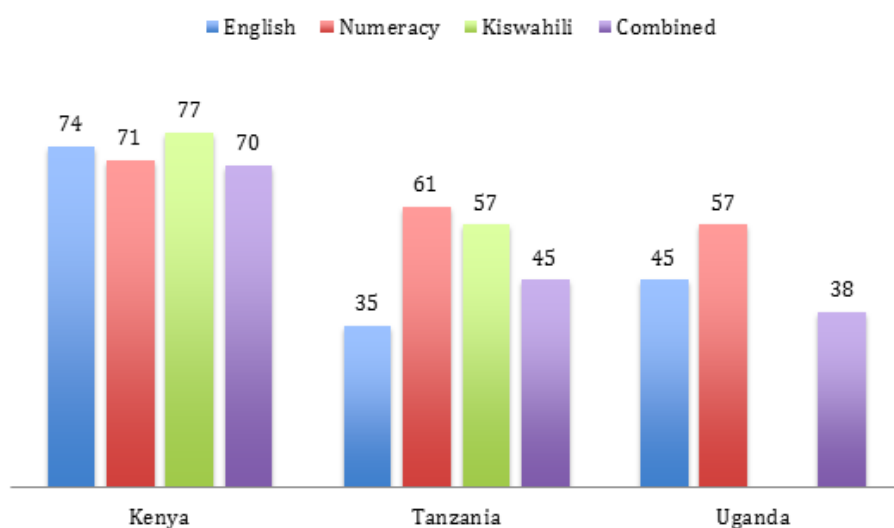
The report found significant differences in average test scores among districts within East African countries, with large disparities in all three countries. While there were minimal differences in test scores between boys and girls, poorer pupils did worse everywhere, with children from disadvantaged households performing worse in all tests at all ages (UNESCO: 2012).^{xvii}

Pointedly, private schools performed better than state schools in all three countries – a difference particularly marked in Tanzania, where the pass rate among 10 to 16-year-olds for numeracy and literacy tests was 47 percent in state schools, compared with 75 percent in private schools. This was partly attributable to the fact that the share of pupils in Tanzania attending private schools is much lower, suggesting that they are particularly selective. In Kenya, the pass rate in private schools was 83 percent, compared with 75 percent in government schools, while in Uganda the gap was 53 percent to 36 percent, respectively.

In the numeracy tests, children were asked to recognise numbers and perform basic calculations – addition, subtraction, multiplication and division. Less than one in three children were able to pass the Swahili test (32 percent) and numeracy tests (29 percent). Only one in six passed the English test (16 percent). Less than one in six passed both the literacy and numeracy tests (15 percent). The authors of the study concluded that *“these results imply that the vast majority of pupils are not acquiring basic competencies during the early years of primary school as expected in the national curricula.”*

Figure 4.10 : Test Pass Rates for Children Enrolled in 3rd Grade, All Eastern Africa

Source: Uwezo: 2012

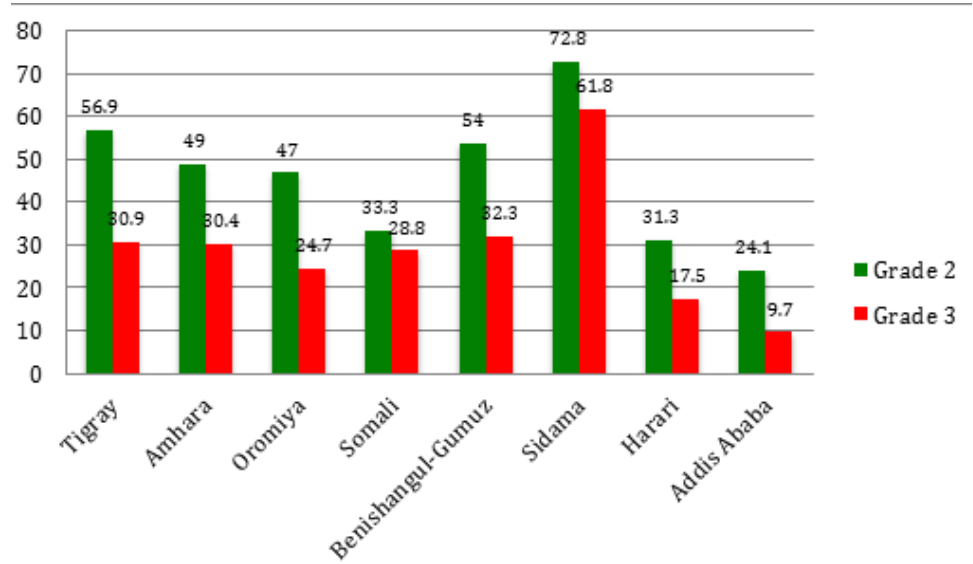
Figure 4.11 : Pass Rates for Children 10-16 by Country

Source: Uwezo: 2012

The poor performance of Uganda was analysed by Tamusuzi (2011), who suggests that some children drop out because of their poor exam performance or because of their need to repeat a class. However, it is also noted that there have been some policies introduced that are said to reduce the amount of class repetition in Uganda. These include 'on-time' enrolment, which ensures that children are enrolled at the right age, a policy that has proved successful in Tanzania. Enrolling at the correct age improves not only enrolment rates but increases completion rates and reduces dropout and completion rates (Tamusuzi: 2011, p.142). Other issues that appear to contribute to the high-level of dropouts are the demand for child labour, the difficulty of accessing schools and the lack of school meals (p.142).

A 2010 study by USAID finds that Ethiopian primary school students have similar problems with literacy and numeracy. The report found that many children are illiterate and that some who could read did not understand what they were saying as they failed simple comprehension tests. The poor pass rate is evident in all regions though the test was administered in the native languages that are spoken in the respective districts.

Figure 4.12: Percentage of Children Scoring Zero on Reading Comprehension, Ethiopia



Source: USAID Ethiopia Early Grade Reading Assessment (2010)

The study found that improvements are necessary in most parts of the education system particularly during the early formative years. Children do not have sufficient access to books in or outside the classroom to allow them to practice their reading skills (p. ES-6). This finding should be considered alongside the poor performance of some of the countries to provide the necessary resources to teach. The problems with numeracy and literacy highlighted by these studies show that, to ensure a more effective education, focus needs to move beyond simply getting children into school to enhancing their learning abilities.^{xviii}

Finally, the trends outlined by these regional studies are supported, in part, by Global Partnership for Education (GPE) (2012). They find that the difference in learning outcomes between low-income and high-income countries is much bigger than the gap in enrolment rates. The study thus concludes that “low-income countries are much farther from catching-up to high-income countries in learning outcomes than in access or completion rates” (p.120).

4.4 IMPORTANCE OF EDUCATIONAL INPUTS

4.4.1 Changes in Pupil to Teacher Ratio

One widely used indicator to assess the quality of schooling is to measure the Pupil to Teacher Ratio (PTR). Although not applicable universally (UNECA and African Union, 2011:40).^{xix}, smaller class sizes are generally associated with better schooling outcomes (Finn et al.: 2001). The table below outlines some of the changes that have taken place over the time periods for which data was available. In particular, Eritrea and Madagascar appears to have significantly lowered its PTR over the time period measured.

Table 4.1: Change in Pupil-Teacher Ratio over Time

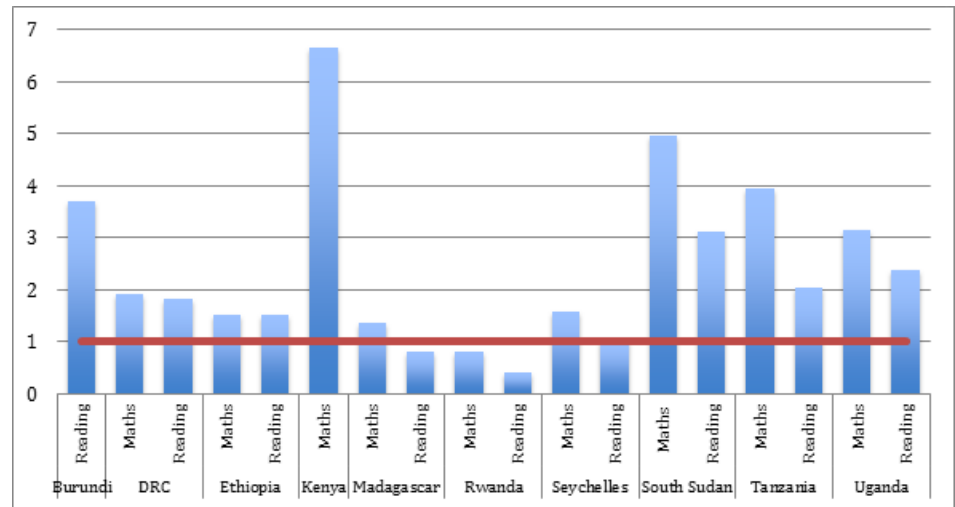
Country	Period	Annual Change (percent)	Initial PTR	Final PTR
Madagascar	2005-2010	-2.7	53.6	40.1
Eritrea	2005-2010	-1.9	47.5	38.0
Comoros	2005-2008	-1.6	35.0	30.2
Rwanda	2006-2011	-1.6	65.9	58.1
Ethiopia	2000-2010	-1.3	67.3	54.1
Tanzania	2005-2010	-1.0	55.9	50.8
Uganda	2005-2010	-0.3	50.1	48.6
East Africa	2005-2010	-0.2	45.3	44.0
Seychelles	2005-2010	-0.2	13.7	12.6
Djibouti	2006-2011	0.3	33.6	35.2
Congo D.R.	2002-2010	0.3	34.3	37.0
Burundi	2005-2010	0.4	48.7	50.6
Kenya	2004-2009	1.5	39.5	46.8
South Sudan	2009	NA	NA	52.0
Somalia	NA	-2.7	53.6	40.1

Source: UNESCO Dataset 2012, plus World Bank (2012).

There are a couple of plausible explanations for the improvements. The first is that, in a few cases, the reduction in the teacher-pupil ratio may be a reflection of a worsening in access to schooling for children rather than an actual improvement in the quality of education. This is, for instance, probably the case for Madagascar. An increased emphasis on private teaching and schooling may also have had an impact. Another reason is simply the expansion in the number of teachers. Eritrea, for instance, now has five institutions that are able to train teachers, which is a marked increase (Bines and Wood, 2007). Nonetheless, it is worth noting that both Eritrea and Madagascar are currently off track in their enrolment rates and continue to struggle to meet the target of UPE (UIS: 2012) and therefore a fall in the PTR alone does not give the whole picture.

Djibouti and Kenya, in contrast, have both seen an increase in the PTR. In Djibouti, the education system has reportedly been marred by poor investment in schools, some of which have to run without running water or electricity (Education International: 2012). In Kenya, the problem appears to be a lack of sufficient infrastructure to deal with the increasing number of students (Mungai: 2012). The worst performer in the region in terms of PTR is South Sudan. Between 2002 and 2009, the average enrolment in South Sudanese primary schools doubled to 429 students, resulting in many overcrowded schools. In 2009, the average pupil-teacher ratio in primary schools was 52 when volunteer teachers were included and 81 when excluding volunteers, and there were, on average, 129 pupils per classroom (World Bank, 2012:6).

Another measure that is often used to measure the quality of inputs for education is the ratio between the number of students and the number of textbooks that are available to them. For instance, a study on Ethiopia (USAID: 2010), shows the importance of children having access to textbooks that can help them to improve their reading abilities and comprehension.

Figure 4.13 : Pupil to Textbook Ratio in the Region

Source: (Hungu: 2011 and UNESCO: 2011)

The region has some countries that are performing well in this metric. Rwanda in particular does well. According to the UNESCO data source, Rwanda is below the threshold of one textbook per pupil in both mathematics and for reading while the recent 2012 Education Statistics shows that Rwanda has already reached the threshold (MINEDUC: 2012).^{**} The other countries that are close to achieving this are Madagascar and Seychelles. Seychelles also performs best in other regional quality indicators such as the PTR and has the most advanced education system in the region (Leste and Benstrong: 2011).

Box 4.2: Learning the Lessons from The Seychelles – A Regional High-Performer

The Seychelles is one of the few countries in the region that are expected to meet the MDG goals (UNDP: 2010). The Seychelles has drawn significant attention not only by improving health and poverty reduction, but also by its impressive efforts to meet its education targets. The strong performance of the Seychelles (see Table 4.2) can be traced back to a couple of important factors. First and foremost, there has been a concerted effort by the government to achieve universal education. This was first set out in the 1984 policy statement "Education for a New Society". The policy set out a centralised control for primary education by the Ministry, which was in charge of staffing, payment and facilities (Leste and Benstrong: 2011). However, since the 1990s when the government began to achieve high enrolment rates the policy of the Ministry of Education has been increasingly to decentralise the process in order to allow school to achieve their "optimal teaching and learning environment" (Leste and Benstrong: 2011p.2, MOE: 2000). This is particularly important when compared to the struggles that some of the other member states had with a similar system. The government has been very successful in achieving its own benchmarks and has been able to outperform other *Southern and Eastern Africa Consortium for Monitoring Educational Quality* (SACMEQ) members but has not performed as well as it would like in some of its indicators:

Table 4.2: Benchmarking the Quality of Schooling in the Seychelles

Selected Indicator	Description of the Indicator	National Benchmark	Seychelles (2007)	Seychelles (2000)	SACMEQ Mean
Basic Learning Materials	Pupil has at least one exercise book, a pencil or pen and a ruler	100%	98%	87%	79%
Mathematics Textbooks	Pupil has sole use of a mathematics textbook during mathematics lessons	100%	63%	76%	41%
Pupil Teacher Ratio	Total number of pupils in a school divided by number of teachers in the school	20:01	14	17	43
Primary 6 Class Size	Average number of primary 6 pupils per class	30	25	27	46

Source: Collected from SACMEQ: 2011

These indicators give some indication of the quality of education in the Seychelles by going beyond showing the number of children enrolled in school. The provision of materials to write with is an essential indicator that shows how children can learn and moves beyond just measuring attendance. The same is true for the Pupil Teacher Ratio (PTR), which can be a proxy for how effective children can learn as smaller classes allow students to improve their academic results (Finn et al.: 2001). The improvements in the indicators are pleasing but the 13 percent reduction of the number of students that have sole use of a mathematics textbook during a mathematics lesson is a worrying development. However, the government has recognised this and has considered some of the changes through the Education Reform Act of 2010 (MOE: 2010). Nevertheless, the improved performance of the Seychelles is something that should be understood in order for other countries to learn from their experience. Although the island is small, it still shows that effective spending^{xxi} and concerted government policies can markedly improve educational outcomes.

Kenya's relatively poor performance is often attributed to corruption related to government procurement practices. However, according to Hungi (2011), the government has begun to tackle this problem and improvements are expected in both PTR and Pupil-to-Textbook ratios. Other countries are struggling to reach the same levels of textbook coverage as Seychelles and Rwanda. This includes newly formed South Sudan, where the educational infrastructure has so far been unable to keep up with the post-independence increases in student numbers.

4.4.2 Role of School Fees

Most countries in the region have abandoned primary school fees (IRIN: 2011).^{xxii} Making primary education free and compulsory is now regionally accepted as being a best practice in increasing enrolment into primary schools. Uganda was the first country in the region to abolish primary school fees in 1997. Studies on Uganda have since shown that girls and rural children, populations that previously struggled to get access to education due to social and economic reasons, were the biggest beneficiaries of the abolition of fees (Deininger: 2003). In Rwanda, the government has gone further, and abolished fees on secondary schooling too.

The abolition of school fees and a more concerted effort by governments to get children into school has certainly increased enrolment (MDG Progress Report: 2012). This is

particularly true for Rwanda, Tanzania and Uganda where the governments undertook serious efforts to revamp the curriculum and also to invest in more textbooks as well as increasing teacher training in order to improve access. Moreover, the demonstrative power of this kind of policy has led to similar programmes being adopted elsewhere - thus Burundi has recognised the effectiveness of these programmes and is now seeking to implement similar policies (United Nations: 2012).

Nevertheless, some form of financial contribution from families to the cost of schooling is still expected in many countries in the region (EFA: 2011). In some parts of South Sudan for example, schools are still charging “modest” school fees. However, in this particular case, not much is known about how high these fees are and whether they are hindering children from going to school (World Bank: 2012, p.109). Usually the payments are made for textbooks, exam entrance fees, and contributions to Parent Teacher Associations (EFA: 2003, UNESCO: 2011a, p. 64). In Rwanda, for instance, IPAR (2012) assesses the impact of parental contributions by assessing schools in two contrasting Rwandan districts, one very poor and one better off. Parental contributions in wealthier areas were very significant, more than doubling schools non-salary budgets. In contrast parental contributions had only a marginal impact on school budgets in the poorer district. *“As a result schools with more needy, poorer pupils had lower levels of overall funding than schools in wealthier areas where pupils are, on average, less needy. These findings raise questions about whether the Rwandan schools system is helping achieve greater equality of opportunity.”*

“Non-state institutions are increasingly becoming part of the educational landscape in countries of the region.”

Moreover, the problem of financial sustainability remains. School fees had been abolished previously in the 1960s and 1970s, but due to financial difficulties user fees were later re-introduced in many of the region’s countries. In order for education to remain free, governments need to continue to expand their funding. If this is not the case a situation may arise similar to that of the 1980s where governments are no longer able to finance public education (EFA: 2012, p. 12). This problem could be exacerbated by the fall in aid budgets of developed countries and the inability (for now) of prospective donors (like China and India) to bridge the funding gap.

With governments phasing out fees in the early 2000s, a few of them introduced Universal Primary Education (UPE) capitation grants (Uganda, Kenya, Tanzania, Rwanda). In the Congo D.R., this was mainly donor-funded (De Herdt et al. 2012). These funds were meant to replace revenue lost to schools because of the abolition of fees and to improve the quality of education by making real resources available at the school level. The Uwazi study (2010) notes that they were meant to finance the purchase of textbooks and other teaching and learning materials. Through these schemes, governments would transfer funds directly to schools in proportion of their student enrolments. As this implies high levels of decentralisation, it equally calls for concomitant levels of accountability as head teachers are expected to utilise funds. While capitation grants have registered some success in most of these counties, they have not been without challenges. For example, a study by Uwazi (2010), shows that in Tanzania, the original capitation grant policy of allocating USD 10 per pupil has never been followed, and that even where followed, the grants are too small to cover the cost of learning materials (Uwazi:2010, REPOA:2012).^{xxiii} Additionally, pupils do not perform well in the Primary School Leaving Exams (PSLE), with results having declined by 35 percent since 2002 (Uwazi, 2010). The situation has deteriorated even more in 2012.

The on-going problem of financing has meant that non-state institutions are increasingly becoming part of the educational landscape in countries of the region. These tend to be either not-for-profit NGOs who work in remote areas that are difficult to get to or for profit-institutions aimed at the wealthier citizens in the respective countries. Both of these types of non-public institutions have played important roles in improving educational access and outcomes. In some countries fee-paying institutions are covering excess

demand. In the remote areas of other countries, such NGO-run schools, may be the only viable options because of the weak performance of the public sector. Although some studies find that private education provides better outcomes for students (UNESCO: 2011), it is clear that in order to provide better access to education, free schooling is necessary (UNICEF: 2009). This is certainly true at the primary level, where the private sector's role has generally been more limited in the cases of 'high achievers' in terms of educational outcomes (Mehrotra, 1997). Moreover, studies which look into the apparent stronger performance of private schools and control for socio-economic background of the families of the students tend to find that the better performance of private schools is almost solely attributable to the socio-economic background of the child. Once this is controlled for, the differences between public and private schooling almost disappear (OECD 2011).^{xxiv}

4.5 CONSTRAINTS TO IMPROVING THE EDUCATION SECTOR OF THE REGION

The previously mentioned studies touched upon some of the poor outcomes that result from the existing school systems. However, the causes of these problems are varied. Some of the issues are related to the demand for education by parents and some are due to the inability of governments and their development partners to supply the necessary infrastructure. This section will look at some of these constraints in more detail.

4.5.1 Economic and Geographical Factors

One of the biggest problems of keeping children in school is that many are required to help with chores in their parents' households. This is mostly for tasks such as working in the field or gathering water. Many parents value the work their children can do for their family now rather than the potential long-term benefit of education (Cockburn: 2000). The location of a school is also important in determining whether or not children are able to go to school. Rural families tend to find it more difficult to send their children to school. Generally speaking, they tend to be poorer and schools are remote and harder to access, so they have to give up more to allow children to attend school. Low urbanisation rates across the region may help to explain why, despite recent improvements, enrolment rates in the region are currently still relatively low, while recent accelerated processes of urbanisation experienced in some countries offer the prospect of giving a boost to enrolment rates.

The African Development Bank finds that the level of parents' education has a positive effect on the likelihood that their children will also attend school (Tamausuza: 2011). This suggests that once a generation has been to school, they would likely encourage their children to also attend school.

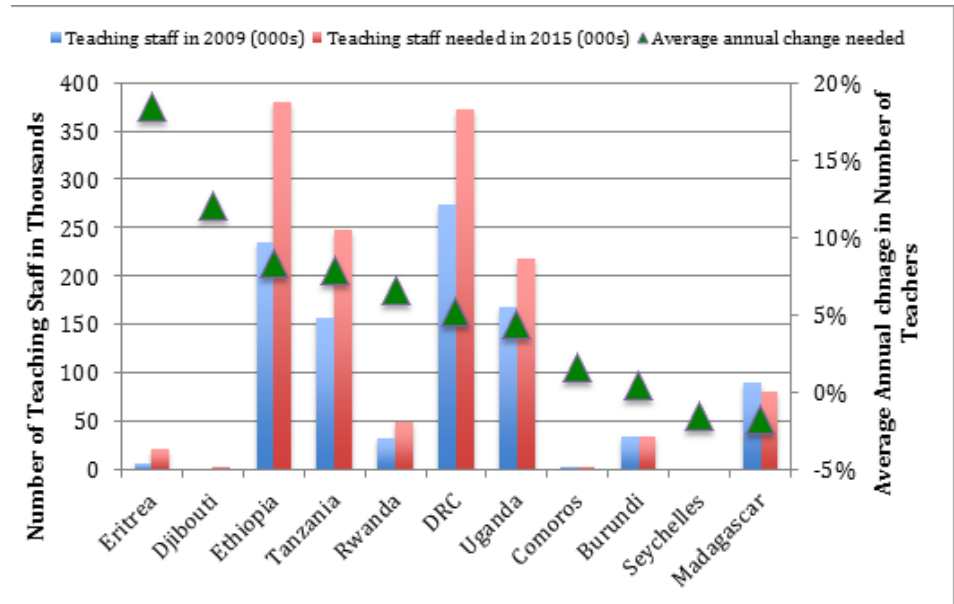
4.5.2 Teachers

To provide effective education it is necessary to have qualified and able teachers. Das et al (2011) suggest that increasing teaching inputs such as the number and effort of teachers can increase the level of educational output (p. 31). However, the region is struggling to educate and hire enough teachers in order to meet the growing demand outlined in the previous section. A recent study by UNESCO (2011b) found that the global shortage of teachers to meet the MDGs of 2015 is 8 million. In the region, as shown in Figure 14, most countries will need to increase their hiring of teachers markedly to reach the goal. The annual change necessary to meet the UPE targets is highest for two of the smaller countries (Djibouti and Eritrea). South Sudan is experiencing similar problems

“Studies which look into the apparent stronger performance of private schools and control for socio-economic background of the families of the students tend to find that the better performance of private schools is almost solely attributable to the socio-economic background of the child.”

as it has struggled to find funding to hire and pay the number of qualified teachers needed to keep up with the increases in school enrolment (World Bank: 2012, p.120). Given these teaching shortages it is unlikely that most of the countries in the region as a whole will be able to meet the UPE goal by 2015. The combined problems of the quality of outputs and inputs discussed earlier and a low level of primary school completion rate of students' means that educational outcomes in the region may continue to stall.

Figure 4.14 : Teacher Needs in the Region to Meet UPE by 2015



Source: (UNESCO: 2011)

Rwanda has recognised the need to address this and has started a hiring programme for teachers from the region. The government has begun to recruit 4 000 teachers from other East African countries to improve the standard of English in the country (Mugisha: 2012). So far, this policy has met with some success, but the region's teacher shortage makes it difficult for Rwanda to attract the desired number.

4.5.3 Teacher Incentives

Not having enough teachers is symptomatic of a wider problem in the profession. Teacher absenteeism has continued to be a problem worldwide and, as noted in the introduction to this Chapter, in this region in particular. Rodgers and Vegas (2009) found that the biggest reason for absenteeism is the lack of accountability in the school system. The lack of accountability comes from both parents and the ministries of education, as they do not have the appropriate mechanism to sanction teachers who fail in their duties. This problem is aggravated by the remoteness of some of the schools and the lack of education of the parents, who may not be able to utilise the procedures correctly to hold someone accountable.

Governments are already beginning to introduce some policies meant to overcome these problems and encourage teachers to attend school more often. For example, Duflo et al. (2012) finds that in Kenya, contract teachers rather than civil service teachers have a better attendance record in school and also produce better outcomes. They stress that it is important to actively engage parents in the process of education and to let them know their powers. Furthermore, many teachers are not paid enough money and have

“Given these teaching shortages it is unlikely that most of the countries in the region as a whole will be able to meet the Universal Primary Education goal by 2015.”

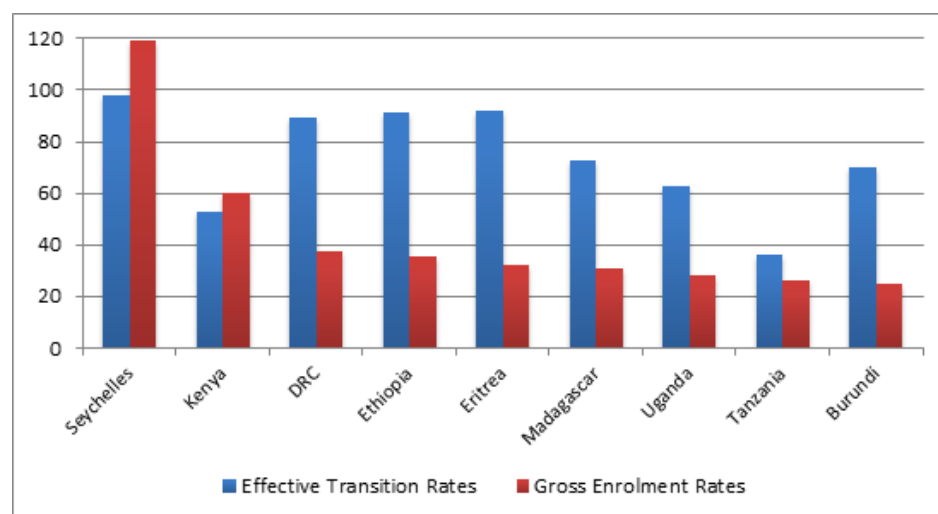
to take second jobs to make ends meet. In Tanzania this often includes having to take up private tuition in the evening, which means that, teachers cannot give full attention to their classes (Lambert: 2004, p. 4). Therefore further investigations into setting up effective teachers pay mechanisms may be necessary.

Clearly this is not just a question of the willingness of governments to improve outcomes but also a question of funding. The United Nations has recognised this as a worldwide problem and has launched an initiative that seeks to increase the number of teachers and the number of classrooms (UN: 2012). The programme seeks to build a further 4 million classrooms, but so far only part of the funding has been guaranteed. The problem of funding is considered one of the major challenges that countries will face in order for educational progress to be maintained in the region to meet the programme's ambitious goals (EFA: 2012).

4.6 TRANSITION THROUGH THE EDUCATION SYSTEM

The success in attracting more students to primary education has not been matched to the same level in secondary education. In fact, throughout the region the level of transition is very low, thus reflecting many of the constraints that were outlined in the previous section.

Figure 4.15: Effective Transition Rates ^{xxv} from Primary to Secondary Education from 2008 to 2009 and the Gross Enrolment Rate for Secondary School in 2010



Source: *Educational Digest 2011, World Bank 2008 and UIS 2012*

It appears that only Seychelles has high secondary education gross enrolment levels. Many of the other countries with higher retention rates have very low enrolment rates at the primary level, which means that only a few children are receiving a full education. For example, Eritrea has had falling net enrolment rates since 2004 (UIS: 2012). This means that although the transition rates are relatively high, the gross enrolment rates remain low. The case of Tanzania highlights that although they have high primary enrolment rates, the country is struggling to get its students into secondary school.

Many of the constraints that are faced by students and parents at the primary school level are exacerbated at the secondary level (UNESCO: 2011b). This includes, in particular, the infrastructure constraints such as the number of teachers and classrooms. This problem is associated with the relatively higher costs of building specialised classrooms (such as laboratories) and specialising teacher training (UNESCO: 2011b). Many countries were

“The secondary school system in many of the region’s countries is in need of an upgrade, both in terms of physical and human capital.”

faced with a choice over whether to expand access to primary education or improve conditions in secondary school. The focus of the MDGs on the importance of primary education meant that the sensible investment at the time was to increase access to school for primary students. However, the educational infrastructure does not yet exist in many countries to allow children to progress through the system. In Kenya, the problem of a lack of classrooms is so grave that the education secretary stated that an additional 4500 classrooms^{xxvi} are needed to meet demand at the secondary school level (East African: 2012). The lack of space in schools throughout Africa has meant that many children are unable to attend secondary school, as there simply is no space for them (EFA, 2011: 15). Uganda has also begun to face similar problems as more of its students complete their primary education (Kavuma: 2011)

Furthermore, parents struggle to justify sending their children to school if it is not clear that the investment will pay off in the long run. This is a direct consequence of the drop in the quality of education and applies to both primary, but in particular secondary education (EFA 2011).^{xxvii} It becomes especially true when children can contribute more to family income through work in the fields or fetching water (Cockburn: 2000).

One of the biggest constraints on providing the necessary infrastructure to children is the lack of funds to do so. This is why, in recent years, public-private partnerships have become increasingly popular. Although private schools have tended to produce better results, there are various academics that argue that this is purely due to paying for the education or because of socio-economic self-selection. Duflo et al. (2009) suggest that the important factor for better schooling outcome is parent interaction, rather than payment.

The secondary school system in many countries in the region is in need of an upgrade, both in terms of physical and human capital. Improvements in both of these will allow children to progress through the education system. Then students can either join the workforce or continue to study. Either way it will enable governments to access higher skilled labour for their development plans.

“A modern and structurally diverse economy requires a skilled work force – in such circumstances, an exclusive focus on primary or secondary education is likely to condemn a developing country to a perpetual bottom rung on the ladder in the international division of labour.”

4.6.1 Strengthening Tertiary Education

In the 1990s, the donor community put an almost exclusive emphasis on primary education. This ‘bias’ in favour of lower levels of education was arguably strengthened by the MDG 2 prioritisation of achieving 100 percent primary school enrolments. Yet for developing countries aspiring to achieve and sustain high rates of economic growth, such a policy focus is likely to dampen long-term growth prospects. A modern and structurally diverse economy requires a skilled work force – in such circumstances, an exclusive focus on primary or secondary education is likely to condemn a developing country to a perpetual bottom rung on the ladder in the international division of labour. Put simply, governments need to aspire to more ambitious goals regarding the upgrading of their work forces. As the World Bank has recently acknowledged, in the Sub-Saharan region:

“Tertiary-level enrolments are well below levels necessary to accelerate industrial deepening and export diversification” (World Bank 2009:37).

In the past, arguments have been mustered against public expenditure on tertiary education on the grounds that it is regressive (i.e. that it usually benefits children of middle and upper class families, who are most likely to attend a university). But this is often misleading. It is not sufficient to show that the upper quintiles ‘capture’ more of the benefits from public support to tertiary education – the correct comparison is whether such expenditures are more or less unequal than the pre-tax distribution of wealth. Thus, if the degree of ‘capture’ of such expenditures by the upper quintiles is less than

the initial distribution of disposable income (i.e. income as defined in most household and expenditure surveys), then public expenditure in higher education still contributes towards the mitigation of inequalities. Conversely, if the share of lower income groups from public expenditure on tertiary education is higher than their share in disposable income, the net outcome can be less inequality, even when their benefit in per capita terms is lower than that accruing to higher income groups.

Unfortunately, this kind of comparative exercise is rarely carried out. One exception is UNCTAD (2002:44). They looked at the ‘benefit capture’ by quintile in education expenditures for four Sub-Saharan African countries, including Kenya. Because of data difficulties, the authors were unable to break the figures down by the different levels of expenditure (primary, secondary or tertiary). But their analysis did show that public spending on education was highly ‘progressive’ in the sense of making contribution towards raising the imputed income share of the poorest quintiles. In this sense, expenditures had helped reduced inequalities.

Even if this was not the case, however, governments would have to decide whether they are prepared to support a little more inequity in exchange for investing in the long-term development of their economies through greater support for tertiary education. Conscious of the need to accelerate structural change and upgrade their economic capacities, most governments would probably reply in the affirmative to this trade-off.

Nevertheless, a number of important challenges lie in the way of making progress in this area. The first key challenge is the extent of the international ‘brain drain’. In recent years, economists have downplayed the negative impact of the international brain drain on developing countries. Yet there is still a lot of anecdotal evidence that retaining highly qualified staff is still a major challenge for countries in the region (Box 4.3). To give just one example, UNCTAD (2012:101) estimates that around 1000 Ethiopian medical doctors work in the United States, whereas the total number of physicians working in the home country in 2009 was just 2 154. In other words, out of all qualified Ethiopian doctors, between one-third and one-half work abroad (UNCTAD 2012b).^{xxviii}

Given the expense of supporting higher education in low income countries, it is highly problematic when much of the resulting skilled labour manages to emigrate. While high income countries put in place strong controls on the immigration of unskilled labour, generally controls are much more permissive in the case of skilled workers, thus making the challenge of retaining skilled workers all the more difficult.

Box 4.3 : Impact of the Brain Drain on Ethiopia’s Universities.

Ethiopia over the last 15 years has made concerted efforts to expand its higher education. Yet, as a recent report by UNCTAD (2012), has pointed out, the sector is adversely affected by brain drain. The number of students graduating at the bachelor’s level rose sharply from 29 800 in 2007 to 75 300 in 2011. At the same time, however, the corresponding figure for higher level education (masters and PhD) rose more moderately: from 2 700 to 6 200. Among the 15,192 teachers and researchers working in the country’s 25 universities, only 979 (6.4 percent) hold a doctoral degree. The bulk of the country’s university teachers and researchers have only a master’s degree (43.4 percent) or a bachelor’s degree (42.6 percent). Ethiopian higher education institutions lack very high-skilled people. Yet at the same time the number of PhD-holding teachers and researchers active in the country’s universities is much lower than the members of the Ethiopian diaspora just in the United States and Canada who have that level of education: 1 600, according to conservative estimates.

“Out of all qualified Ethiopian doctors, between one-third and one-half work abroad.”

“While high income countries put in place strong controls on the immigration of unskilled labour, generally controls are much more permissive in the case of skilled workers, thus making the challenge of retaining skilled workers all the more difficult.”

UNCTAD's case study on the Ethiopian academic diaspora identified 200 Ethiopian professors currently working in foreign universities, of whom 148 are active in the United States. Among these, 72 are full professors. In Ethiopia, by contrast, only 65 persons hold an equivalent position. In other words, there are more Ethiopian full professors working in the United States than in Ethiopia itself, in spite of the strong need of Ethiopian universities for very highly skilled people.

In order to tackle the deficit of university lecturers and researchers, the Ethiopian Government has recently launched a campaign to recruit more than 600 teachers and researchers from abroad, targeting especially Indians.

Source: UNCTAD LDC Report (2012)

A second major challenge is the skill-mismatch evident in much of the educational profiling of the region. Figures available for the whole of sub-Saharan Africa with regards to the professions chosen by university graduates show a distinct deficit compared to the OECD average (a good benchmark in terms of comparing with 'mature' economies) in careers linked to engineering, manufacturing and construction, health and welfare, and service related industries. In contrast, it would seem that social sciences, business and law are over represented. It has often been noted that successful 'development states' like South Korea or Singapore primed much more careers linked to engineering or other technical careers – social sciences like economics were given a low priority. Indeed, the people in charge of developmental planning in these countries were often engineers, and rarely with a background in the social sciences.

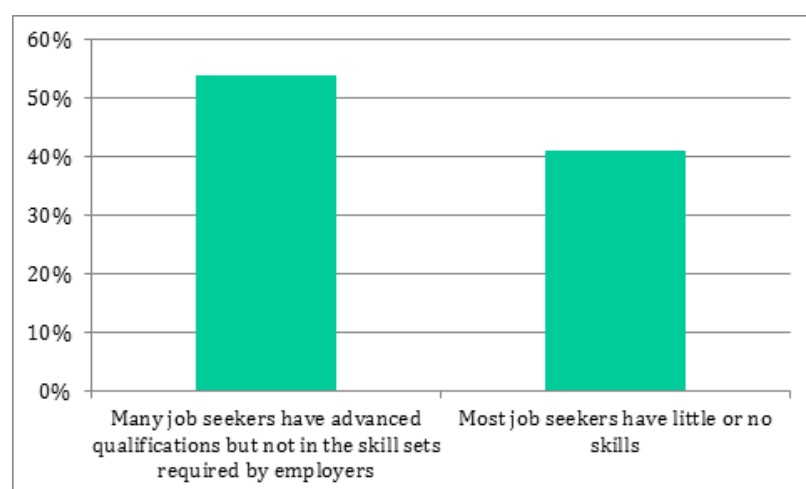
Table 4.3 : What do Students Study? University Graduation Percentage Rates in Africa and the World (2008-2010)

	Education, Humanities and Arts	Social Sciences, Business and Law	Science	Engineering, Manufacturing and Construction	Agriculture	Health and Welfare	Services	Other
Sub-Saharan Africa	26 %	44%	12% (3% ICT)	4%	2%	5%	0%	7%
North Africa	22%	51%	8% (1% ICT)	10%	1%	6%	1%	1%
Asia	23%	30%	6%	20%	4%	9%	4%	4%
Latin America	23%	38%	7%	9%	2%	13%	3%	5%
OECD	25%	37%	10% (3%ICT)	11%	2%	11%	4%	1%

Source: AEO data, UNESCO

It is not surprising to find, therefore, that "higher education in Africa has been faced with the challenge of mismatch between skills acquired by university graduates and those demanded by industry."^{xxix} As Figure 16 reveals, the AEO Country Expert Survey (AEO, 2012) gives evidence of the gap between skills and job profiles. Surveys within the Eastern Africa region paint a similar picture. In Somalia, for instance, university-educated youth are experiencing quite high unemployment rates because they do not meet formal labour market needs. Technical and vocational training institutions do not have clear standards for curriculum development and training based on job market demand (UNDP, 2012:64).

Figure 4.16 : Lack of Skills versus Skills Mismatching



Source: AEO Country Experts Survey 2012

The need for high quality human resources for national development has long been recognised.^{xxx} However, the delivery of quality education has been hampered by the need to thinly spread meagre resources as more students enrol in higher education. Another challenge has arisen from the liberalisation of education and the establishment of private universities. In most instances, governments have not been in a position to ensure that private education providers meet the required quality standards.

Major higher education stakeholders in Africa have agreed that there is a need to revitalise higher education systems through at least three major strategies:

- Development of new forms of higher education delivery, including private higher education institutions and open and distance learning;^{xxxix}
- Identification of new sources of funding; and
- Promotion of quality and equity (UNESCO, 2005).

Implementation remains the greatest challenge. It is evident that improving educational quality is a long-term challenge and needs continuous reforms. *The Conference on Accreditation, Quality Assurance and Recognition of Qualifications in Higher Education in Africa* which took place in Nairobi in 2006 noted that Sub-Saharan Africa was the least served continent in terms of guaranteeing higher educational standards. The East African Partner States (Kenya, Tanzania, Uganda) established as far back as 1980 the Inter-University Council for East Africa (IUCEA) as a platform to discuss academic and other matters pertaining to higher education, and helping to maintain high and comparable academic standards. Membership has since grown. The IUCEA has introduced new quality guidelines for higher education regulators in Kenya, Tanzania, and Uganda in the effort to foster common regional standards of quality in higher learning.^{xxxii} As mentioned earlier, the challenge is all the more difficult because of the proliferation of private-sector providers of educational services across the region. This is particularly true in the case of university education, where many new private universities have opened, but legitimate doubts have been raised about the quality of the qualifications awarded.^{xxxiii}

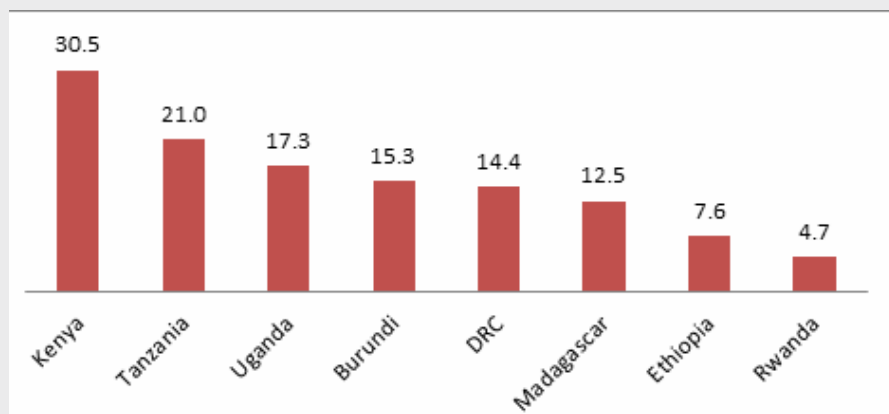
To sum up, strengthening secondary and higher educational provision in the region is a large-scale task and requires a long-term implementation plan. According to the World Bank (2009), Africa has a 15 to 20 year window to begin introducing technologies and building the hard and soft infrastructures needed to accommodate the major structural changes required to make a more resilient economy. This would require

African countries to make and maintain significant investments in secondary and tertiary education to ensure the volume and quality of skills needed to service market and societal needs efficiently.

Box 4.4 : Towards a Reading Culture?

One of the surprising results that transcends from the DHS studies is the extremely low percentage of population that engage in reading the printed press on a regular basis. For instance, in countries such as Congo D.R., Ethiopia, and Rwanda, barely 10 percent of the population read a newspaper as much as once a week, even among the richest quintiles. Kenya has the strongest reading culture in terms of reading the printed press, followed by Tanzania, Uganda, and Madagascar. But even in these cases, there is an enormous disparity among income groups – more than 50 percent of the upper quintile in Kenya reads the press compared to 5 percent of the lower quintile. These figures reflect widespread illiteracy, particularly among the poorest quintiles of the population, and it drives home the need to reconsider the importance of adult education and literacy campaigns.

Figure 4.17: Percentage of Population Who Reads a Newspaper at least Once a Week



“In countries such as Congo D.R., Ethiopia, and Rwanda, barely 10 percent of the population read a newspaper as much as once a week, even among the richest quintiles.”

Experimenting with other ways of encouraging a ‘reading culture’ is also important. A number of countries in the region have, for instance, zero-rated books for VAT purposes, and abolished import charges. However, libraries are rare resources. Other measures to tackle the problem could include starting ‘book week’ festivals, special training of teachers so that they know better about how to encourage students to read more, and starting ‘community libraries’. Perhaps one of the most effective ways, however, is through active adult literacy campaigns. Having illiterate parents is deeply discouraging to children with regards to cultivating good reading habits.^{xxxiv}

Source: UNECA, from DHS Studies (various)

4.6.2 Technical and Vocational Education and Training

Vocational education and training has in recent years enjoyed a revival in academic research as well as in the political arena. It is also regarded as a particularly suitable means of promoting economic growth (Nilsson 2010). Technical and Vocational Education and Training (TVET) has traditionally been used as a means to equip young people with practical skills to enter the labour market. In developing countries, these programmes are typically concentrated in the informal sector. In Africa, the private sector plays an important role in providing this type of service and experience suggests that private

sector involvement, both in terms of financing and provision, helps ensure that training content is responsive to labour market needs, that training costs are kept in check, and that networks with prospective employers are developed to facilitate trainees' transition into working life.

Good quality demand-driven TVET is potentially one of the most important tools for skilling young people, both in and out of school (USAID, 2011:2). In OECD countries, the TVET systems benefit from close communication and linkages with the private sector. Unfortunately, most developing countries have little, if any, history of collaboration between employers and the educational system. One particularly emblematic model of TVET is the German system, which is highly regarded for its internship and apprenticeship programmes, and which has been instrumental in supporting economic growth and competitiveness in the manufacturing sector. Substantial private-sector investment, industry-wide skill standards and a collaborative process of curriculum development for learning at schools and workplaces further help to produce graduates able to immediately contribute to the labour force. High-stake exit exams lead to well-paid technical jobs with the help of deeply rooted industry and trade associations, and other intermediaries who bring the various stakeholders together to hold one another accountable and share the costs and benefits.^{xxxv}

The Korean development model is often held up as another example where technical education played a major role in reducing the skills/job mismatch to a minimum. In the 1960s, the Korean government pursued an aggressive economic development strategy in which junior colleges were important suppliers of skilled human resources (World Bank 2009:73). In order to achieve similar success, countries in the region should make greater efforts to provide an industry-specific skilled labour force. This can be developed through training programmes that run in tandem with on-the-job learning with the said companies, as is the case in Germany.

The AEO (2008) Report focused on TVET, and put forward a typology of African countries, grouping them in three different categories: the first group encompasses countries with a relatively high share (in excess of 10 percent of the secondary school population) enrolled in TVET programmes: Rwanda (36 percent) and Congo D.R. (10 percent) were classified in this group. The second group had a proportion of TVET enrolment in general secondary education between 5 percent and 9 percent. This group of countries includes Burundi and Djibouti (8 percent). Finally, the third group of countries includes Uganda (4 percent), Ethiopia, Eritrea, and Kenya (1 percent). The Ethiopian TVET is institutionally separate from the rest of the education system, and forms a parallel track (Krishnanand Shaorshadze, 2012:12).

A number of countries in the region have announced ambitious plans to expand TVET to meet growing demands. In Ethiopia, the government plans to increase its admissions to technical and vocational education from 103 708 (2005) to 312 826 (2010) and 624 095 by 2015. Furthermore, 3 300 classrooms and workshops will be built while an additional 4 500 TVET teachers will be hired. Moreover, new standards and programmes for technical and vocational education are being put in place. Rwanda, which exhibits the highest TVET, at 36 percent, also has plans to increase the number of technical and vocational education institutions by 50 percent by 2015.

4.6.3 Investment in Early Childhood Development Programmes

There is an increasing recognition of the importance of Early Childhood Development (ECD) programmes in improving educational performance. The reasons for investing in ECD programmes are numerous and interrelated. Project research has shown that children who participate in well-conceived ECD programmes tend to be more successful

“Good quality demand-driven TVET is potentially one of the most important tools for skilling young people, both in and out of school.”

in later school, are more competent socially and emotionally, and show higher verbal and intellectual development during early childhood than children who are not enrolled in high quality programmes. ECD programmes in education prepare children for school, improving their performance and reducing the need for repetition ensuring healthy child development, therefore, is an investment in a country's future workforce and capacity to thrive economically and as a society. Integrated programmes for young children can modify the effects of socioeconomic and gender-related inequities, which are some of the most entrenched causes of poverty (Twaweza, 2012, Carneiro and Heckman, 2003, Van der Gaag and Tan, 1998).

Acknowledging these findings, a number of Eastern African countries are now investing in ECD programmes, including the Early Child Development Project in Kenya (USD 35.1 million), the Integrated Early Childhood Development in Eritrea (USD 49 million), as well as the Nutrition and Early Childhood Development Project in Uganda (USD 40 million). In the EAC region, the new curriculum harmonisation document proposes that children between 3-5 years be enrolled in ECD. In the Congo D. R., the Package for Improving Education Quality (PIEQ) project aims to improve French and math learning. It builds the capacity of teachers, schools, and communities in three Congolese provinces to increase student learning by improving teaching and the school environment (EDC).^{xxxvi} This USD 40 million programmes, sponsored by the United States Agency for International Development, will reach 3 600 schools, 21 000 teachers, and 900 000 students.

Box 4.5 : Applying New Technologies to Enhance Educational Systems.

Across the 14 member States of the Eastern African region, even though traditional face-to-face instructions are commonplace, governments have started to adopt other means which have proved equally effective. For example, in Comoros and Madagascar, the Support Technology for Educators and Parents (ATEC in French) has sought to improve the quality of public education through production of audio products focused on enriching pre-service and in-service teacher training. It also includes the creation and support of parent-teacher association listening groups for radio broadcasts that provide guidance to improve schools, teaching and learning, as well as improving English language teaching practices at the secondary and university levels. This is achieved by providing a seminar series designed to meet locally identified teaching needs and facilitating small grants to support English learning. In South Sudan, an interactive radio instruction project was instituted to complement classroom instruction in local language literacy, English language, mathematics and life skills. The Ministry of Education, Science and Technology also uses radio programmes to improve the teaching practice. As these are schedule radio broadcasts, schools have taken advantage of them as alternative learning technologies. A similar project exists in Somalia, designed to help children and youth whose access to the schooling network is low.^{xxxvii}

Another initiative which takes advantage of new technologies is the ECD Virtual University Sub-Saharan Africa (ECDVU- SSA) programme which is described as *"an innovative and multifaceted approach to addressing ECD capacity building and leadership development in Africa."* This training and results-oriented programme uses a face-to-face approach and distributes learning methods including: residential seminars, web-based instruction, CD-Rom and print material support, and a 'community of learners' strategy within and among cohort countries. The ECDVU courses are fully accredited and are part of the School of Child and Youth Care, University of Victoria, Victoria, British Columbia, Canada.

Source: UNECA

4.7 CONCLUSIONS

It is widely acknowledged that quality education is a necessary but not sufficient condition for East African countries to reach middle income status to which they aspire. The demands of the modern economy and of the labour market are such that without the necessary highly qualified labour force, the structural transformation of the regional economies will be not be forthcoming.

In recent years, regional governments have (rightly) been focusing on primary education, in an effort to comply with the MDG objective, and provide a better basis for broad-spread development. However, as countries' economies grow and initiate a structural transformation, a more ambitious educational agenda is required, which includes a greater focus on secondary and tertiary education. Donors seem to be increasingly recognising this, as well as national governments, which is an encouraging development. But a much greater focus on vocational training and courses adapted to local labour market needs is also required.

In budgetary terms, in most countries of the Eastern Africa region education has received a fairly generous share of total public sector spending. In this report, we do not thus argue in favour of a major upscaling of expenditures, rather a more efficient use of the existing expenditures. 'Quality first' needs to be the lemma adopted by regional governments in dealing with their educational challenges. Part of the challenge is to reduce the numerous 'leakages' in the system. There are some interesting initiatives in the region which attempt to tackle this problem head-on. In Tanzania, for example, the NGO Twaweza has mobilised the community to monitor the declining level of public funding reaching the school level (Twaweza) (ICAI, 2012:13). Although governments are largely responsible for improving the efficiency of resources in the education sector, public pressure – particularly from parents and civil society - is the ultimate incentive to producing better outcomes.

This said, there are clearly some countries where spending is totally inadequate. Congo D. R. is a case in point, where the whole educational budget does not amount to more than 2 percent of GDP. In recent years, the donor community has been making up some of the short-fall, but in a country with 75 million people, the total budget is still inadequate for the scale of the challenges. Similarly, Somalia's long-running political and humanitarian crises highlights the plight of three generations deprived of schooling since the education system collapsed in the mid-1980s (UNDP, 2012). With the growing stabilisation of the country, the education system is slowly being reconstructed (UNDP 2012:98).^{xxxviii} In these cases, however, more resources are clearly a priority.

Finally, in this Chapter we argue in favour of renewed efforts to promote adult literacy, which is probably the *Cinderella* of educational policy in the region in that adults are often overlooked within educational systems. Yet building a literate society requires tackling educational deficits across all age groups; therefore, the region has to compensate for years of (benign or otherwise) neglect of their educational sectors, caused by civil conflicts or simply policy failure. To focus solely on the children and youth in such circumstances is probably mistaken emphasis.

The demands of the modern economy and of the labour market are such that without the necessary highly qualified labour force, the structural transformation of the regional economies will be not be forthcoming

"As countries' economies grow and initiate a structural transformation, a more ambitious educational agenda is required, which includes a greater focus on secondary and tertiary education."

Footnotes

ⁱ The consensus on the importance of education for economic growth and resilience is not shared by everyone. Chang (2011:181) argues that the link between education and higher productivity is an ambiguous one, and notes that while some developing countries like Argentina, with high educational levels at the beginning of the 1960s subsequently failed to grow rapidly, others with only weak initial educational levels, like Chinese Taipei, grew at much faster rates. Chang points out that many econometric studies show only weak or ambiguous evidence that education is related to economic growth – he makes the case that providing a more highly educated workforce in itself is unlikely to make a significant boost to economic growth and resilience – more important, he argues, is the way in which an economy is organised and its human resources deployed. In other words, the efficiency in the use of resources is just as important. See also Prichett (2004).

ⁱⁱ The East African reported mismanagement of funds under the universal primary and secondary education programme through the channel of creating ghost schools, teachers, learners and support staff. „Probe unearths ghost UPE schools in Uganda“ Halima Abdullah, April 14,2012,The East African,

ⁱⁱⁱ See ‘Tracking Progress 2012’ (UNECA, 2012).

^{iv} In ‘Tracking Progress 2012’ (UNECA, 2012), for instance, we calculated that although six of thirteen countries in the region were dedicating more than 20 percent of their government budgets to education, rarely did this amount to more than 100 USD on a per capita basis. In some extreme cases, e.g. Congo D. R., expenditures amounted to as little as 5 dollars per person- Building any kind of educational system on the back of such low expenditures is of course an extremely difficult task.

^v As Archer (2012) claims, it is a mistake to think *“that a focus on learning outcomes means “inputs” are not important any more. When I pointed out to World Bank officials that many children in rural Africa are taught in classes of 100, with untrained or undertrained teachers and few textbooks or visual stimuli, I was told I should stop dwelling on the old “input model”. I reject that. Nothing is more important to learning than a well-trained teacher, working in a manageable class size, with basic teaching-learning resources available. Our focus on outcomes should be a reminder of the fundamental importance of these basic inputs – and we cannot feign surprise if children in overcrowded and under-resourced classrooms fail to learn. We need to put in place the basics first.”* <http://www.guardian.co.uk/global-development/poverty-matters/2012/apr/23/children-school-learn-literacy-education?intcmp=239>

^{vi} Report of the Secretary-General,, Implementing the Internationally Agreed Goals and Commitments in Regard to Education, E/2011/L.28 (New York, 2011)

^{vii} Dakar Framework for Action. Accessed at <http://unesdoc.unesco.org/images/0012/001211/121147e.pdf>

^{viii} Periods refer to periods 2000 and 2011, but are different for Djibouti (2000-2007), Comoros (2002-2008), Eritrea (2000-2006),Ethiopia (2000-2010),Kenya(2000-2010), Seychelles (2002-2006), Uganda (2000-2012) and Tanzania (2008-2010)

^{ix} Refers to 2011 Data in the most recent period but 2010 for Djibouti, 2004 for Eritrea and Seychelles, 2008 for Tanzania and Comoros, 2006 for Kenya and 2012 for Uganda . The initial period refers to 2000 for Burundi, Kenya and Rwanda, to 2001 for Eritrea, 2002 for Madagascar and Seychelles and 2004 for Uganda.

^x This includes spending on policy and administration, facilities and teacher training and educational research. It, therefore, becomes slightly difficult to assert whether this spending has been made throughout the education system or has been targeted to a certain sector of the education system.

^{xi} Supporting the view,the guardian criticised DfID aid programmes for putting emphasis on enrolment without sufficiently considering the efficacy or output in terms of the children's ability to read and write.“UK aid for education in East Africa is failing” Claire Provost,May 18,2012,The Guardian

^{xii} This statement is backed by a study by Al-Samarrai (2003), which found that the link between educational spending and educational outcomes across a sample of countries appears to be weak. They, instead, suggest that it is important to focus on what leads to improved educational outcomes in order to improve the effectiveness of educational spending, rather than just increasing budgets.

^{xiii} Independent assessments suggest that this was especially effective in Tanzania.

^{xiv} In his review of case studies of 'successful' human development in a range of developing countries, Mehrotra (1997:104) concludes that compulsory primary education legislation has not been essential to achieving universal primary education – it is only effective when enrolment rates are already quite high.

^{xv} Children over the age of seven were not allowed into the primary school level

^{xvi} As highlighted by the studies conducted by Uwezo and USAID

^{xvii} In fact, an existence of educational disparity has been reported by UNESCO (2012) pointing out disparities in the enrolment rates in terms of household wealth, gender and geographic location. As the child progresses towards higher grades, this gap between advantaged and disadvantaged groups even widened in terms of the children's ability to read and write. According to the Africa Learning Barometer of the Brookings Center for Universal Education, "if you are a poor, female child currently attending school in a rural region you are far more likely to not be learning the critical skills, such as reading, writing and math" further backing the findings of the report. "Poverty, Inequality and Africa's Education Crisis" Julius Agbor, September 26, 2012..

^{xviii} The Rwandan Government has conducted similar studies along district lines on the quality of education called "Learning Achievement in Rwandan Schools". This found large differences in the ability of children to read according to what district they live in and acknowledged many of the problems that the Rwandan school system has been facing since the end of the genocide.

^{xix} PTR is often used as an indicator of quality of education as it is often considered that smaller classes are better for student development. Notice, however, that the OECD PISA study finds that the quality of the teachers is the salient variable, rather than class-room size per se, which have most impacts on educational outcomes. The UNECA report in contrast, put emphasis on small class size opining that the very large class size had lead to the subsequent high drop-out rate in the region. UNECA, African Union (2011). "Governing Development in Africa: The Role of the State in Economic Transformation," Page 40.

^{xx} , Pupil-textbook ratio is 1,3,2,2 and 7 for mathematics, kinyarwanda, english, social studies and elementary science and technology respectively according to 2012 Education Statistics Yearbook, Ministry of Education, Republic of Rwanda, 2013(Annex -8, page 42) while UNICEF Tanzania reported it to be, on average ,5:1 in Tanzania. http://www.unicef.org/tanzania/6911_10874.html.

^{xxi} The Seychelles did not spend more than around 5.25% for the period between 2002 and 2007 (WB Database: 2012), which is comparable to the South African spending over the same period

^{xxii} At least the nominal fees have been abolished in all the regional countries. However the political problems in Madagascar in 2009 and the resulting removal of donor funding meant that parents again have to contribute (IRIN: 2011). It remains that many parents are still asked to make informal contributions to the school.

^{xxiii} Uwazi, 2010. Capitation grant for education: when will it make a difference. Policy brief TZ.08/2010E. The 2nd phase of the Primary Education Development Programme (PEDP) in Tanzania saw a reduction of the grant to about USD 7 per enrolled child (REPOA, 2012)

^{xxiv} In an OECD PISA Study (2011), for 16 OECD countries and 10 partner countries, the typical private school student outperformed the typical public school student. This private school "advantage" revealed itself in PISA reading scores that were 30 points higher in the private schools. The report concedes that around one-tenth of this private school advantage was attributable to greater competition and the higher levels of autonomy in defining the curriculum and allocating resources that private schools enjoy. But more than three-quarters of that 30-point difference could be attributed to private schools' ability to attract socioeconomically advantaged students. Schools that

attract advantaged students are also more likely to attract better-performing students as well as greater resources. In fact, in most school systems, private schools have a more advantaged student population, more material resources, fewer teacher shortages and better disciplinary climates than the public schools in those systems. <http://www.oecd.org/pisa/pisaproducts/48482894.pdf>

^{xxv} The effective transition rate refers to the number of students that complete all of the years of primary school and then continue their education by enrolling in secondary school. The data is from the cohort that completed primary school in 2008.

^{xxvi} Assuming that each class had 45 students in it.

^{xxvii} UNESCO EFA Global Monitoring report 2011 argued that considering direct and indirect cost involved in terms of loss of potential income earned by the child otherwise, the parents would have less incentive to keep their children at school if the education is not of the adequate quality.

^{xxviii} According to the aforementioned UNCTAD (2012) report, a number of LDCs (5 in total) in the region registered a high degree of 'brain-drain' with more than 20% of the high-skilled labour force living abroad. The data for this is admittedly somewhat outdated (dating back to 2000), as more recent data is not yet available. However, there are good reasons to speculate that some of these trends may have improved since the year 2000 – on the back of increased political stability and strong economic growth, many skilled workers from the region may either have chosen to stay put, or others in the diaspora have returned.

^{xxix} Ibid

^{xxx} For instance, during its Third Session of the Conference of Ministers of Education of the African Union (COMEDAF), this view was reiterated. African Union. COMEDAF 3rd Session... YEAR?(???)

^{xxxi} The NEPAD's Education and Training seeks to among others, ensure provision of sufficient and properly trained teachers, through open and distance learning, so as to meet demands of the education systems in Africa. This project is focused, at the moment, on selected countries from the SADC and ECOWAS regions

^{xxxii} The IUCEA is not unique to the region. For instance, the *Conseil Africain et Malgache pour l'Enseignement Supérieur* (African and Malagasy Council for Higher Education) (CAMES) aims to enhance mutual recognition of qualification, promote professional mobility and define the role and function of higher education in francophone Africa.

^{xxxiii} See, for instance, the recent controversy in Uganda concerning the Kampala International University and the awarding of 42 doctorates at once. Kenya's higher education commissioner subsequently declared that the Kampala International University's certificates would not be recognised in Kenya. As an editorial of The Observer newspaper noted, it is important in such cases that the national regulatory body (in this case, the National Council for Higher Education) acts boldly to ensure that standards are maintained. <http://allafrica.com/stories/201211280154.html>

^{xxxiv} See the discussion by Stephen Mugisha 'A Reading Culture: Its Relevance and Challenges', The New Times, Tuesday November 27th, 2012, page 14.

^{xxxv} Ibid

^{xxxvi} Education Development Centre. <http://idd.edc.org>

^{xxxvii} Education Development Centre. EDC. <http://idd.edc.org/resources>

^{xxxviii} For instance, UNICEF is partnering with the Galkayo Education Centre for Peace and Development (GECPD) to support 12,000 primary school girls and women in vulnerable communities (UNDP:2012:98).

4.8 REFERENCES

- Agenor, Pierre-Richard (2004), *The Economics of Adjustment and Growth* (Second Edition), Harvard University Press.
- AfDB (2012), 'Youth Employment in Africa' Brief for the C10. April 2012, Washington, DC
- AfDB, OECD, UNDP and UNECA (2013), African Economic Outlook 2013 - "*Structural Transformation and Natural Resources*," OECD Publishing, Paris.
- Africa's Pulse (2012), "An Analysis of Issues Shaping Africa's Economic Future", The World Bank, Washington
- African Development Bank (2012), Inflation Dynamics in Selected East African Countries
- African Economic Outlook (2008), "Access to Technical and Vocational Education in Africa," <http://www.africaneconomicoutlook.org/en/in-depth/developing-technical-vocational-skills-in-africa/the-rationale-for-technical-and-vocational-skills-development/taking-stock-of-technical-and-vocational-skills-development/access-to-technical-and-vocational-educat>
- African Progress Panel (APP) (2012), *Jobs, Justice and Equity- Seizing opportunities in times of global change* Geneva: African Progress Panel
- African Renewal (2012), "African schools keep an eye on the prize: Meeting the target for universal primary education" [online] <http://www.un.org/africarenewal/magazine/august-2012/african-schools-keep-eye-prize> (Accessed on 29/10/2012)
- African Union (2009), "Harmonisation of Higher Education Programmes in Africa: Opportunities and Challenges", 3rd Ordinary session of the Conference of Ministers of Education of the AU (COMEDAF III).
- Alesina and Rodrick (1994), 'Distributive Politics and Economic Growth' *Quarterly Journal of Economics*, 109 (2), pp. 465-490
- Allen, Franklin, Elena Carletti, Robert Cull, Jun Qian, Lemma Senbet, Patricio Valenzuela (2012), "Resolving the African Financial Development Gap: Cross-Country Comparisons and a Within-Country Study Of Kenya", NBER Working Paper 18013, <http://www.nber.org/papers/w18013> April 2012
- Al-Samarrai, Samer. (2003), "Financing education for all: public expenditure and education outcomes in Africa" Institute of Development Studies, University of Sussex, Brighton, UK.
- Amsden, A. H. (2001), *The Rise of "the Rest": Challenges to the West from Late-Industrialising Economies* Oxford: Oxford University Press.
- Atkinson, A B & M A Lugo (2010), 'Growth Poverty and Distribution in Tanzania.' IGC Working Paper 10/0831 [online] http://eprints.lse.ac.uk/36376/1/Growth_poverty_and_distribution_in_Tanzania.pdf
- AU and NEPAD (2011), 'Infrastructure Development as Catalyst for Economic Growth' Thematic Paper presented at 17th APF [online], Available at: <http://www.oecd.org/site/africapartnershipforum/48908487.pdf> (Accessed on 15/11/2012)

- Bairoch, P. (1992), *Le Tiers-Monde dans L'Impasse :Le démarrage économique duXVIIIe au XXe siècle*, Paris, Gallimard.
Bangladesh Bank Website (<http://www.bangladesh-bank.org/>).
- Banque Centrale du Congo (2013), Condensé Hebdomadaire D'informations Statistiques, N° 35/2013, 30th August, http://www.bcc.cd/downloads/pub/condinformat/Cond_Info_Stat_N35.pdf
- Bastagli, F., D. Coady and S. Gupta (2012), Income Inequality and Fiscal Policy, IMF Working Paper
- Beradi, N. and F. Marzo (2009), "The Elasticity of Poverty with respect to Sectoral Growth in Africa", mimeo, OECD Development Centre, Paris
- Berg, Andrew and Jonathan Ostry (2011), "Inequality and Unsustainable Growth: Two Sides of the Same Coin?", IMF Research Department, April <http://www.imf.org/external/pubs/ft/sdn/2011/sdn1108.pdf>
- Berthelemy and Soderling (2001), 'Will there be New Emerging Countries in Africa by 2020?' Paper prepared for the Conference on Development Policy in Africa: Public and Private Perspectives, Oxford University, CSAE, 29-31 March 2001
- Bigsten, A., Kebede, B., Shimeles, A. and Tadesse, M., (2003), "Growth and Poverty Reduction in Ethiopia: Evidence from Household Panel Surveys," *World Development*, 31 (1), pp. 87-106
- Bines H. and Wood E. (2007), "Country Profile commissioned for the EFA Global Monitoring Report 2008, Education for All by 2015: will we make it?" <http://unesdoc.unesco.org/images/0015/001555/155508e.pdf> (Accessed 1/11/2012)
- Birdsall, Nancy (2007), "Income Distribution: Effects on Growth and Development", Centre for Global Development Working Paper No. 118, Center for Global Development, Washington, D.C.
. http://www.cgdev.org/files/13505_file_Income_Distribution_Birdsall.pdf
- Bosworth, Barry and Susan M. Collins (2003), "The Empirics of Growth: An Update," Brookings Papers on Economic Activity, Economic Studies Programme, The Brookings Institution, vol. 34, issue 2, pages 113-206.
- Buigut, Stephen (2009), "Monetary Policy Transmission Mechanism: Implications for the Proposed East African Community (EAC) Monetary Union." <http://www.csaе.ox.ac.uk/conferences/2009-EDiA/papers/300-Buigut.pdf>
- Burke, Jason Hammadi Saad, and Neville Simon (2013), "Fashion chains sign accord to help finance safety in Bangladesh factories," *The Guardian*, Monday 13 May 2013 [online] <http://www.theguardian.com/world/2013/may/13/fashion-chain-finance-safety-bangladesh-factories>
- Caldwell, J.C. (1979), Education as a factor in mortality decline: an examination of Nigerian data. *Population studies*, vol. 33(3), 395-413.
- Carneiro, Pedro and James J. Heckman (2003), 'Human Capital Policy.' In Benjamin W. Friedman (ed) *Inequality in America: What Role for Human Capital Policies?* Cambridge, MA: MIT Press.
- Chang, Ha-Joon (2010), *23 Things they don't tell you about Capitalism*, London: Penguin Group.

- Chenery, H. B. (1960), "Patterns of industrial growth" *The American Economic Review*, 50(4): 624-654.
- Chenery, Hollis B, et al., (1971), *Studies in Development Planning*, Harvard University Press.
- Christiaensen, L., Demery, L., and Kuhl, J. (2011), 'The (evolving) role of agriculture in poverty reduction--An empirical perspective' *Journal of Development Economics*, 96 (2), pp. 239-254
- Cockburn, J. (2000), 'Child Labour Versis Education: Poverty Constraints or Income Opportunities?' [online], Oxford Centre for the Study of African Economies, <http://www.csae.ox.ac.uk/conferences/2000-OiA/pdfpapers/cockburn2.PDF>
- Cornia, G. (2012), 'Inequality Trends and their Determinants: Latin America over 1990-2010', WP/09
- Cummins and Ortiz (2011), Isabel Ortiz & Matthew Cummins, 2011. 'Global Inequality: Beyond the Bottom Billion – A Rapid Review of Income Distribution in 141 Countries', Working papers 1105, UNICEF, Division of Policy and Strategy
- Dadush U. and Zaahira Wyne (2011). 'Don't be afraid of the service sector.' *International Economic Bulletin* [online], <http://carnegieendowment.org/2011/11/10/rise-of-services-sector/8mtf>
- Das, J., Dercon, S., Habyarimana, J., Krishnan, Muralidharan, K., Sundararaman, V. (2011), 'School Inputs, Household Substitution, and Test Scores' [online] <http://www.econ.yale.edu/seminars/develop/tdw11/muralidharan-111107.pdf>. (Accessed on 6/11/2012)
- De Herdt, Tom, Titeca, Kirstof and Wagemakers, Inge. (2012), Make schools, not war? Donors' Rewriting of the Social Contract in the DRC. *Development Policy review*. Volume 30, Issue 6, pages 681–701, November 2012.
- Deininger, K. (2003), 'Does cost of schooling affect enrolment by the poor?' *Universal primary education in Uganda*, *Economics of Education Review*, 22, pp. 291-305
- Devarajan, Shantayanan, Wolfgang Fengler, (2012), 'Is Africa's Recent Economic Growth Sustainable?', *Programme Moyen-Orient/Maghreb*, page 28.
- Development Initiatives (2012a), "Kenya Resources for Poverty Eradication" <http://devinit.org/report/kenya-resources-for-poverty-eradication/>
- Development Initiatives (2012b), "Uganda Resources for Poverty Eradication" <http://devinit.org/report/uganda-resources-for-poverty-eradication/>
- DFID (2012), "Learning for All: DFID's Education Strategy 2010-2015" <http://consultation.dfid.gov.uk/education2010/files/2010/04/learning-for-all-strategy.pdf>.
- Driffield, Nigeland Chris Jones (2013), "Impact of FDI, ODA and Migrant Remittances on Economic Growth in Developing Countries: A Systems Approach", *European Journal of Development Research* (2013) 25, 173–196. doi:10.1057/ejdr.2013.1
- Duflo, E. Dupas, P. and Kremer, M. (2012), 'School Governance, Teacher Incentives, and Pupil-Teacher Ratios: Experimental Evidence from Kenyan Primary School' [online], National Bureau of Economic Research, http://www.nber.org/papers/w17939.pdf?new_window=1. (Accessed 27/10/2012)

- Easterly William and Freschi Laura (2009), "Madagascar textile workers ask President Obama to keep their jobs for Christmas, but nobody is listening." Aidwatch, 2009[online], <http://aidwatchers.com/2009/12/last-ditch-effort/>
- Easterly, W., Levine, R. and Roodman, D. (2004), Aid, policies, and growth: Comment. *American Economic Review* 94(3): 774–780
- Easterly, William & Loayza, Norman & Montiel, Peter (1997), "Has Latin America's post-reform growth been disappointing?," *Journal of International Economics*, Elsevier, vol. 43(3-4), pages 287-311, November.
- Economist Intelligence Unit (2012), Country Report Ethiopia, 4th Quarter 2012
- Economist Intelligence Unit (2013a), Country Report Burundi, 1st Quarter 2013
- Economist Intelligence Unit (2013b), Country Report Somalia, 1st Quarter 2013
- Education International (2012), "Djibouti: Interview with a champion of the independence of teaching unions" [online] http://www.ei-ie.org/en/news/news_details/2103 (Accessed on 25/10/2012)
- EFA (2003), *Education for All Global Monitoring Report: Gender and Equality for all the Leap to Equality* Paris: UNESCO Publishing
- EFA (2005), *Education for All Global Monitoring Report: Education for All: The Quality Imperative*, Paris :UNESCO Publishing.
- EFA (2009), *Education for All Global Monitoring Report: Overcoming inequality: Why Governance Matters*, UNESCO: Oxford University Press.
- EFA (2011), *Education for All Global Monitoring Report: The Hidden Crisis: Armed Conflict and Education*, Paris: UNESCO
- EFA (2012), *Education for All Global Monitoring Report: Youth and Skill Putting Education to Work* Paris: UNESCO Publishing
- EIU (2012), Economist Intelligence Unit database), <http://www.eiu.com/>
- Emran, Hossain (2013), "Muhammad Yunus' Bangladesh Workers Proposal Criticised as 'The Business of Begging.'" *huffingtonpost.com*. The Huffington Post, 05/13/2013 3:46 pm [online] http://www.huffingtonpost.com/2013/05/13/muhammad-yunus-bangladesh-workers_n_3267851.html?
- European Commission (2004), The European Union's Generalised System of Preferences GSP, Directorate General for Trade [online] http://trade.ec.europa.eu/doclib/docs/2004/march/tradoc_116448.pdf
- FAO (2012), "FAO Statistical Yearbook Africa- Food and Agriculture", Rome, <http://www.fao.org/docrep/018/i3137e/i3137e00.htm>
- FAO Statistics (2013); <http://www.fao.org/economic/ess/en/#.UkGolxYznzI>
- Feldstein, Martin and Charles Horioka, (1980), "Domestic Saving and International Capital Flows", *Economic Journal*, Vol.90 (358): 314–329
- Financial Times (FT), (2012), Special Issue on Rwanda, September.

Finn, J., Gerber, S., Achilles, C., Boyd-Zaharias, J. (2001), 'The enduring effect of Small Classes' Teachers College Record, Volume 103, Number 2, April pp. 145-183 New York: Columbia University

Fosu, Augustin (2011), 'Growth, Inequality, and Poverty Reduction in Developing Countries: Recent Global Evidence', Working Papers UNU-WIDER, Working Paper W, World Institute for Development Economic Research (UNU-WIDER).

Fosu, Augustin (2009), 'Inequality and the Impact of Growth on Poverty: Comparative Evidence for Sub-Saharan Africa' *The Journal of Development Studies*, 45(5), pages 726-745

Gallup (2012a), "Kenya Votes 2013: Attitudes Toward the Election, Judicial System, and Security", <http://www.gallup.com/poll/157898/kenya-votes-2013-attitudes-toward-election-judicial-system-security.aspx>

Gallup (2012b), "Global Payroll to Population Employment Rate at 27% for 2011", 5th September <http://www.gallup.com/poll/156944/global-payroll-population-employment-rate-2011.aspx>

Global Partnership for Education: Quality Education for all Children, (2012), Strategic Plan 2012-2015, http://www.globalpartnership.org/media/docs/library/GPE_Strategic_Plan_2012-2015_English.pdf

Gökgür, Nilgün (2012), 'Rwanda's ruling party-owned enterprises: Do they enhance or impede development?' IOB Discussion Paper/2012.03, October, Antwerp.

Gollin, Douglas, (2009), "Agricultural Productivity and Economic Growth," chapter for *Handbook of Agricultural Economics*, Volume 4, June 2009.

Griffin, Keith (1999), *Strategies of Economic Development*, Oxford University Press.
Hart, K. (1973), 'Informal Income Opportunities and Urban Employment in Ghana' *Journal of Modern African Studies*, 11(1): 61-89.

Harttgen, Kenneth, Stepan Klasen and Sebastian Vollmer. (2012), "An African Growth Miracle? Or: What do Asset Indices Tell Us about Trends in Economic Performance?", Courant Research Centre, University of Göttingen.

Hausmann, Ricardo, Jason Hwang, and Dani Rodrik (2007), 'What you export matters', *Journal of Economic Growth*, 12 (1), pages 1-25

Henley, David (2012), "The Agrarian Roots of Industrial Growth: Rural Development in South-East Asia and sub-Saharan Africa", *Development Policy Review* Volume 30, Issue Supplement s1, pages s25-s47, February 2012.

Herndon, Thomas, Ash M. and Pollin R. (2013), Does High Public Debt Consistently Stifle Economic Growth? A Critique of Reinhart and Rogoff <http://www.peri.umass.edu/236/hash/31e2ff374b6377b2ddec04deaa6388b1/publication/566/>

Hoeffler, Anke (2002), "Openness, Investment, and Growth." *Journal of African Economies*, vol.10, Issue 4, Pp. 470-497.

Huang, Yasheng (2008), *Capitalism with Chinese Characteristics – Entrepreneurship and the State*, Cambridge University Press, Cambridge

- Hungi, N. (2011), *Policy Brief: Quality of Primary School Inputs in Kenya* [online] http://www.sacmeq.org/downloads/School%20inputs/KEN_School_Inputs_17Nov2011_FINAL.pdf (Accessed on 29/10/2012)
- ICAI (2012), "DFID's Education Programmes in Three East African Countries." <http://www.oecd.org/countries/ethiopia/50360183.pdf>
- ICO Statistics, (2013), Indicator prices <http://www.ico.org/prices/p2.htm>
- Imbs, Jean and Romain Wacziarg (2003), "Stages of Diversification," *American Economic Review*, American Economic Association, vol. 93(1).
- IMF (2012a), *Regional Economic Outlook – Sub-Saharan Africa: Sustaining Growth amid Global Uncertainty*, April 2012, <http://www.imf.org/external/pubs/ft/reo/2012/afr/eng/sreo0412.htm>
- IMF (2012b), *Debt Sustainability Analysis (various countries)*, Washington, DC.
- IMF (2012c), *World Economic Outlook: Coping with High Debt and Sluggish Growth*, Washington, DC.
- IMF (2012d), *The Government of Seychelles, Letter of Intent (Sixth Review)*, November 2012
- IMF (2013a), *Regional Economic Outlook: Sub-Saharan Africa Building Momentum in a Multi-Speed World*, Washington, DC.
- IMF (2013b) *Uganda: Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding*
- IPAR (2012), "School funding and Equity in Rwanda: Policy Brief," Institute of Policy Analysis and Research-Rwanda.
- IRIN (2011) "Madagascar: No more free primary schooling", 18th March ,2011. <http://www.irinnews.org/report/92235/madagascar-no-more-free-primary-schooling>
- Jenkins, G. P., Jenkins, H. P. and Kuo, C. Y. (2006), 'Is the Value Added Tax Naturally Progressive?' Available at SSRN: <http://ssrn.com/abstract=897677> or <http://dx.doi.org/10.2139/ssrn.897677>
- Jerven, Morten.(2009), "Random Growth in Africa? Lessons from an Evaluation of the growth evidence on Botswana, Kenya, Tanzania and Zambia, 1965-1995", Simon Fraser University, Vancouver, Canada.
- Jeune Afrique, 9-15 June 2013; <http://www.jeuneafrique.com/Article/JA2735p032-034.xml0/>
- Kavuma, R. (2011), 'Free Universal Secondary Education in Uganda has yielded mixed results' [online], *The Guardian*, <http://www.guardian.co.uk/global-development/poverty-matters/2011/oct/25/free-secondary-education-uganda-mixed-results> (Accessed on 9/11/2012)
- Kelsall, Tim (2013), 'Business, Politics and the State in Africa – Challenging the Orthodoxies on Growth and Transformation', Zed Books, London.
- Knight, Malcolm, Norman Loayza, and Delano Villanueva, (1993), "Testing the

Neoclassical Theory of Economic Growth: A Panel Data Approach," IMF Staff Papers, Palgrave Macmillan, vol. 40(3), pages 512-541, September

Krishnan, Pramila and Irina Shaorshadze (2012), "Technical and Vocational Education and Training in Ethiopia", Paper for the International Growth Centre-Ethiopia Country Programme, London School of Economics and Political Science, London, UK.

Lambert, S. (2004), 'Teachers' pay and conditions: an assessment of recent trends in Africa' [online], UNESCO Background Paper, <http://unesdoc.unesco.org/images/0014/001466/146656e.pdf>. (Accessed 29/11/2012)

Leste, A. and Benstrong, E. (2011), "Policy Brief: Quality of Primary School Inputs in Seychelles", http://www.sacmeq.org/downloads/School%20inputs/SEY_School_Inputs_15Oct2011_FINAL.pdf (Accessed on 5/11/2012)

Levine, R. and Renelt, D. (1992), 'A Sensitivity Analysis of Cross-Country Growth Regressions' *The American Economic Review*, Vol. 82 (4), pp. 942-963

Lewis, W. A. (1954), 'Economic development with unlimited supplies of labour' *The Manchester School*, 22, May: 139-92.

Lopez, H. and Serven, L. (2009), 'Too poor to grow', *Policy Research Working Paper Series*, 5012, The World Bank

Martinez, Marcelo and Mlachila, Montfort (2013), The Quality of the Recent High-Growth Episode in Sub-Saharan Africa (February 2013). IMF Working Paper No. 13/53. Available at SSRN: <http://ssrn.com/abstract=2233755>

Martins, Pedro (2012), 'Growth, Employment and Poverty in Africa: Tales of Lions and Cheetahs.' Background paper prepared for the World Development Report 2013, World Bank.

Mathieu, P and P. Imam (2009), Reforms, IMF Support Pull Seychelles Back From the Brink, IMF Survey, June 30.

<http://www.imf.org/external/pubs/ft/survey/so/2009/car063009a.htm>

Matovu, J. M. (2010), Domestic Resource Mobilisation in Sub-Saharan Africa: The Case of Uganda. Ottawa, Canada, North-South Institute McKinsey

McAuliffe, Catherine, Sweta C. Saxena, and Masafumi Yabara (2012), "The East African Community: Prospects for Sustained Growth", IMF Working Paper

McCormick, Dorothy, J.A. Kuzilwa and Tegegne Gebre-Egziabher (eds) (2009), "Industrialising Africa in the era of globalisation : challenges to clothing and footwear", Nairobi University Press.

McKinsey Global Institute (2010) "Lions on the move: The progress and potential of African economies",

McKinsey Global Institute (2012), *Africa at Work: Job Creation and Inclusive Growth* [online] http://www.mckinsey.com/insights/mgi/research/africa_europe_middle_east/africa_at_work

MDG Report (2012), *Assessing Progress in Africa toward the Millennium Development Goals* Addis Ababa: United Nations

McMillan, Margaret S. and Dani Rodrik (2011), "Globalisation, Structural Change and Productivity Growth," Working Paper No. 17143, NBER (<http://www.nber.org/papers/w17143>), June 2011

Mehrotra, S. and Panchamukhi, P. R. (2007), *Universalising Elementary Education in India: is the private sector the answer?*, in Srivastava, P. & Walford, G. (eds.), *Private Schooling In Less Economically Developed Countries*, Oxford: Symposium Books.

Mehrotra, Santosh (1997), "Health and Education Policies", in Santosh Mehrotra and Richard Jolly, 'Development with a Human Face', Clarendon Press, Oxford. Chapter 3

Mehrotra, Santosh and Richard Jolly (1997), "Development with a human face: Experiences in social achievement and economic growth", Clarendon Press, Oxford.

MINECOFIN (2012), *EDPRS Lessons Learned 2008-2011*, Ministry of Economy and Finance, Kigali.

MININFRA (2010), *National Policy and Strategy for Water Supply and Sanitation Services*, Ministry of Infrastructure, Kigali: Government of Rwanda.

Ministry of Education (2000), *Education for a Learning Society: Policy Statement of the Ministry of Education Seychelles* [online] http://planipolis.iiep.unesco.org/upload/Seychelles/Seychelles_Education_for_a_Learning_Society.pdf (Accessed on 4/11/2012)

Ministry of Education (2010), *The Seychelles Education and Training System: Education Reform Plan* [online] http://planipolis.iiep.unesco.org/upload/Seychelles/Seychelles_Education_Reform_Action_Plan_2009-2010.pdf (Accessed on 3/11/2012)

Ministry of Education, Republic of Rwanda (2012), *2012 Education Statistics Yearbook*

Ministry of Finance Planning and Economic Development: Republic of Uganda (2013), *The Background to the Budget 2013/14 fiscal year*.

Mold, Andrew, Acevedo Alejandra and Perez Caldentey, Esteban (2010), "The Analysis of 'Leading Sectors': A Long term view of 18 Latin American economies," *Cuadernos Economicos de ICE* N.º 78, Madrid Mottaleb, Abdul, Khondoker and Tetsushi.

Mugisha, Stephen 'A Reading Culture: Its Relevance and Challenges' [online], *The New Times*, Tuesday November 27th, 2012, page 14. <http://www.newtimes.co.rw/news/index.php?i=15189&a=61118> (Accessed on 28/11/2012)

Mugisha, Stevenson 'Search for English Teachers continues' [online] *The New Times*, <http://www.newtimes.co.rw/news/index.php?i=14960&a=52392> (Accessed on 28/11/2012)

Mungai C. (2012), "East Africa: School Transition Blues As Kenya's Secondary Education Misses Out [online]" 18 February, <<http://allafrica.com/stories/201202202273.html>> (Accessed on 2/11/2012)

National Bank Ethiopia, 2013 <http://www.nbe.gov.et/>

National Bureau of statistics, South Sudan, 2013; <http://ssnbs.org/>,

- National Institute of Statistics of Rwanda (2012a), National Data on Employment by Sector, 2011, Press Release.
- National Institute of Statistics of Rwanda (NISR) (2012b), *"The evolution of poverty in Rwanda from 2000 to 2011: Results from the household surveys (eicv)"* February
- Ndulu, Benno J. (with L. Chakraborti, L. Lijane, V. Ramachandran, and J. Wolgin) (2007), *Challenges of African Growth – Opportunities, Constraints, and Strategic Directions*, World Bank, Washington
- NEPAD, (2009), "Education and Training Annual Report". http://www.nepad.org/system/files/NEW_NEPAD_AR_LR_FINAL_ENGLISH.pdf
- Nilsson, Anders. (2010), Vocational education and training—an engine for economic growth and a vehicle for social inclusion. *International Journal of Training and development*. 14:4. p. 251-271.
- NISR (2012), *"Tremendous Growth in the Savings Culture in Rwanda"*, <http://www.statistics.gov.rw/publications/article/tremendous-growth-savings-culture-rwanda>
- OECD (2001), *The characteristics and quality of service sector jobs*, OECD [online], Paris. <http://www.oecd.org/els/employmentpoliciesanddata/2079411.pdf>
- OECD (2011), *Perspectives on Global Development - Shifting Wealth*, OECD Development Centre, Paris
- OECD (2011), *"Strong Performers and Successful Reformers in Education: Lessons from PISA for the United States"*. <http://www.oecd.org/pisa/pisaproducts/48482894.pdf>
- OECD (2012), OECD Stat, (database) [online] <http://stats.oecd.org/> (Accessed on 14/11/2012)
- OECD (2012), *Perspectives on Global Development Social Cohesion*, OECD Development Centre, Paris.
- OECD Statistics 2013; <http://www.oecd.org/statistics/>
- Oman, Charles and Christiane Ardent (2010), *"Measuring Governance"*, OECD Development Centre Policy Briefs (October) http://www.oecd-ilibrary.org/development/oecd-development-centre-policy-briefs_20771681
- Overseas Development Institute (ODI) (2012), *The Euro zone crisis and Developing countries*.
- Page, John (2011), *"Aid, Structural Change, and the Private Sector in Africa"* WIDER Working Paper 2012/21 Helsinki: UNU World Institute for Development Economics Research.
- Page, John (2012), *Youth, Jobs, and Structural Change: Confronting Africa's "Employment. Problem"* Working Paper Series N° 155 African Development Bank.
- Prasad, Eswar S., Raghuram G. Rajan, and Arvind Subramanian (2007), *"Foreign Capital and Economic Growth"*, NBER Working Paper No. 13619, November 2007

- Prichett, Lant, (2004), "Does learning to add up add up? The returns to schooling in aggregate data", BREAD Working paper No. 053. Bureau for Research in Economic Analysis of Development.
- Rajan, Raghuram G. and Arvind Subramanian (2005), "Aid and Growth: What Does the Cross-Country Evidence Really Show?"; NBER Working Paper No. w11513
- Rashid, M. A. (2006) 'Rise Of Readymade Garments Industry In Bangladesh: Entrepreneurial Ingenuity Or Public Policy', Paper presented at the Workshop on Governance and Development organised by the World Bank and BIDS, Dhaka 11-12 November 2006.
- Ravallion, Martin (1997)." Can high-inequality developing countries escape absolute poverty? *Economics Letters*, Vol. 56 (1997): 51-57
- Razzaque,Abdur and Selim Raihan, (2008), "Venturing Into A Quota-Free World:The Ready-Made Garment Industry Of Bangladesh";Pathak Shamabesh.
- Reinhart, Carmen M. and Rogoff, Kenneth S., (2010), *Growth in a Time of Debt*, *American Economic Review*, American Economic Association, vol. 100(2), pages 573-78
- Reinikka,Ritva and Nathanael Smith,(2004), 'Public expenditure tracking surveys in education, Paris: UNSCO Publishing.
- REPOA (2012), "The Governance of the Capitation Grant in Primary Education in Tanzania: Why Civic Engagement and School Autonomy Matter"Kenny Manara and Stephen Mwombela. Special Paper 12/1. http://www.repoa.or.tz/documents/SP_12-1_.pdf
- Rodgers, F. and Vegas, E. (2009), 'No More Cutting Class? Reducing Teacher Absence and Providing Incentives for Performance' [online] <https://openknowledge.worldbank.org/bitstream/handle/10986/4043/WPS4847.pdf?sequence=1> (Accessed on 7/11/2012)
- Romily Greenhill, Annalisa Prizzon and Andrew Rodgerson (2013), "The age of choice: how are developing countries managing the new aid landscape?" Overseas Development Institute, London. <http://www.odi.org.uk/publications/7345-aid-development-finance-china-brics>
- Ronnas, Pet et. Al. (2010), "Rwanda forging ahead – the Challenge of getting everyone on board", Employment working paper 62, ILO, Geneva.
- Rotunno,Lorenzo,Pierre-Louis Vezina and Zheng Wang.(2012), 'The rise and fall of (Chinese) African apparel exports';CSAE Working Paper WPS/2012-12,Centre for the study of African Economics,Department of Economics,University of Oxford,Oxford,U.K.
- Roy, R., Heuty, A., and Letouzé, E. (2006), "Fiscal Space for Public Investment: Towards a Human Development Approach," Paper prepared for the G-24 Technical Meeting in Singapore, September 2006, UNDP, New York.
- Sewanyana and Yoewanyana, S and Younger, SD. (2008), "Infant mortality in Uganda: determinants, trends and the Millennium Development Goals", *Journal of African Economies*,17(1), pp. 34-61,

- Shakya, Mallika (2011), "Yes Africa Can", The World Bank, Washington D.C.
- Shaohua, C. and Ravallion, M (2004), 'How Have the World's Poorest Fared Since the Early 1980s?' World Bank Research Observer, 19 (2), pp. 141–70.
- SID (2012), "The State of East Africa Report 2012 - Deepening Integration, Intensifying Challenges" http://www.sidint.net/docs/SoEAR2012_final.pdf
- Sonobe.(2011). "An inquiry into the Rapid Growth of the Garment Industry in Bangladesh";Tokyo:GRIPS
- Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) , (2011), Trends in achievement levels of Grade 6 Learners in Seychelles, no. 1, August 2011. Accessed at <http://www.sacmeq.org>
- Srivastava, P. and Walford, G.(2007), (Eds), Private Schooling in Less Economically Developed Countries: Asian and African Perspectives. Oxford, UK, Symposium Books, pp. 129–52.
- Staritz, Cornelia (2011),"Making the Cut?: Low-Income Countries and the Global Clothing Value Chain in a Post-Quota and Post-Crisis World",World Bank,Washington, D.C.
- Stiglitz, Joseph (2013), "Sub-Saharan Africa's Eurobond borrowing spree gathers pace - Why are an increasing number of developing countries resorting to expensive sovereign-bond issues?"The Guardian online, www.theguardian.com, 26/6/2013
- Stein, H. (2012), 'Africa, Industrial Policy and Export Processing Zones: Lessons from Asia' in Norman, A., K. Botchwey, H. Stein and J. Stiglitz, 'Good Growth and Governance in Africa – Rethinking Development Strategies' , Oxford University Press.
- Tamausuza Anthony (2011), 'Leaving School Early: The Quest for Universal Primary Education in Uganda' Journal Statistique Africain,13, November, pp.110-151
- The Africa Report (2012), Country profiles, November 2012 <http://www.theafricareport.com/country-files.html>
- The Free Library (2010), "Hard times for Madagascar textile and clothing industry following AGOA suspension." [online] <http://www.thefreelibrary.com/Hard+times+for+Madagascar+textile+and+clothing+industry+following...-a0284324570>
- Thirlwall A. P. (2005), Growth and Development, with Special Reference to Developing Economies, Eight Edition, Palgrave MacMillan, Basingstoke.
- Tracking Chinese Development Finance to Africa – BETA (2013) China.aiddata.org
- Tumusiime-Mutebile (2013), "Uganda must attract new investments and boost productivity to grow economy", The East African, 7th September, www.theeastafrica.co.ke
- Twaweza (2012), Three experiments to improve learning outcomes in Tanzania: Delivering capitation grants better and testing local cash on delivery. <http://twaweza.org/uploads/files/Twaweza%20Education%20Experiments%20Note.pdf>
- Uganda Bureau of Statistics , 2013; <http://www.ubos.org/>
- UIS (2012) UNESCO *Institute of Statistics* [online database] <http://stats.uis.unesco.org/>

- UN (2012), 'Needed: 2 million teachers, 4 million classrooms, 16 billion dollars' [online], <http://www.unric.org/en/latest-un-buzz/27860-needed-2-million-teachers-4-million-classrooms-16-billion-dollars>. (Accessed on 8/11/2012)
- UNCTAD (2002), "Economic development in Africa: from adjustment to poverty reduction—what's new?", UNCTAD, Geneva
- UNCTAD (2004), The Least Developed Countries Report 2004: Linking International Trade with Poverty Reduction. United Nations publication, sales no. E.04.II.D.27, Geneva and New York.
- UNCTAD (2012a), "Trade and Development Report 2012 - Policies for Inclusive and Balanced Growth", Geneva.
- UNCTAD (2012b), "The Least Developed Countries Report 2012", New York and Geneva: United Nations.
- UNCTAD (2013), World Investment Report; Global Value Chains: Investment and Trade for Development, UNCTAD, Geneva
- UNCTADStat (2012). Database.
- UNDESA (2013), World Economic Situation and Prospects 2013, Update as of mid-2013
- UNDP (2012), 'Somalia Human Development Report 2012: Empowering Youth for Peace and Development', UNDP, Mogadishu
- UNECA (2012), "Tracking Progress on Macroeconomic and Social Conditions in Eastern Africa Region 2011-12: Sustaining Economic Growth and Development in Turbulent Times," Economic Commission for Africa publications, Addis Ababa
- UNECA and African Union (2011), "Governing Development in Africa: The role of the state in economic transformation"
- UNECA Economic Report on Africa, (2013), "Making the Most of Africa's Commodities: Industrializing for Growth, Jobs and Economic Transformation". UNECA AU. http://www.uneca.org/sites/default/files/publications/unera_report_eng_final_web.pdf
- UNESCO (2011a) *Financing Education in Sub-Saharan Africa: Meeting the Challenges of Expansion, Equity and Quality*, Montreal: UNESCO Institute of Statistics.
- UNESCO (2011b) *Global Education Digest 2011: Comparing Education Statistics Across the World* Montreal: UNESCO Publishing
- UNESCO (2012). Education for all: Global Monitoring Report.
- UNIDO (2009), Industrial Development Report 2009: Breaking In and Moving Up: New Industrial Challenges for the Bottom Billion and the Middle-Income Countries", http://www.unido.org/fileadmin/user_media/Publications/IDR_2009_print.PDF
- University of Oxford (2012), "Oxford Poverty and Human Development Initiative (OPHI): Rwanda", Oxford Department of International Development, University of Oxford
- USAID (2010), Ethiopia Early Grade Reading Assessment Data Analytic Report: Language and Early Learning, Research Triangle Park: RTI

USAID (2011), Technical and Vocational Education and Training : A study of Promising models in international development. <http://www.equip123.net/docs/e3-TVET.pdf>

Uwazi (2010), "Capitation grant for education: When will it make a difference?" Policy Brief TZ.08/2010E, Dar es Salaam <http://www.twaweza.org/uploads/files/Capitation%20Grant%20for%20Primary%20Education.pdf>

UWEZO (2012), *Are our Children learning? Literacy and Numeracy across East Africa*, Nairobi: Uwezo & Hivos/Twaweza

Van der Gaag, J & Tan, J.P (1998), 'The benefits of Early Child Development Programmes: An Economic Analysis'. Education, the World Bank. http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/1999/04/13/000094946_99032505565335/Rendered/PDF/multi_page.pdf

Vaughan, S. and Gebremichael, M. (2011), Rethinking business and politics in Ethiopia - The role of EFFORT, the Endowment Fund for the Rehabilitation of Tigray, African Power and Politics Research Report No. 2, August 2011.

Wade, R. (2012), 'How can Low-Income Countries Accelerate their Catch-Up with High-Income Countries? The Case for Open-Economy Industrial Policy', in Norman, A., K. Botchwey, H. Stein and J. Stiglitz, 'Good Growth and Governance in Africa – Rethinking Development Strategies', Oxford University Press.

Wilkinson, Richard and Pickett, Kate (2009), *The Spirit Level: Why More Equal Societies Almost Always Do Better*, London: Penguin Books.

World Bank (2009), Accelerating catch-up: Tertiary education for growth in SSA, Washington, DC, World Bank.

http://siteresources.worldbank.org/INTAFRICA/Resources/e-book_ACU.pdf
World Bank (2012), *Education in the Republic of South Sudan: Status and Challenges for a New System*, Washington, DC, World Bank

World Bank (2012), *"Tanzania Economic Update 2012 – From Growth to Shared Prosperity"*, November <http://www.worldbank.org/en/news/feature/2012/11/01/tanzania-economic-update-from-growth-to-shared-prosperity>

World Bank (2012), "World Development Report 2013 – Jobs", Washington, DC, World Bank

World Bank (2013), Global Economic Prospects: Sub-Saharan Africa Region, Washington, DC, World Bank. <http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1322593305595/8287139-1358278153255/GEP13aSSARegionalAnnex.pdf>

Young, Alwyn. (2012), "The African Growth Miracle", National Bureau of Economic Research, Cambridge.

Yunus, Muhammad, "After the Savar Tragedy, time for an international minimum wage." The Guardian, 12 May 2013. <http://www.theguardian.com/commentisfree/2013/may/12/savar-bangladesh-international-minimum-wage>

Zenawai, Meles (2012), 'States and Markets: Neoliberal Limitations and the Case for the Developmental State', in Norman, A., K. Botchwey, H. Stein and J. Stiglitz, 'Good Growth and Governance in Africa – Rethinking Development Strategies', Oxford University Press.



UNITED NATIONS
ECONOMIC COMMISSION
FOR AFRICA

Sub-regional Office for Eastern Africa

NATIONS UNIES
COMMISSION ECONOMIQUE
POUR L'AFRIQUE

Bureau Sous-Régional pour l'Afrique de l'Est



SRO-EA