



International
Labour
Office
Geneva

**Employment Sector
Employment Working Paper No. 73**

2010

**Employment Diagnostic Analysis:
Malawi**

Dick Durevall
Richard Mussa

Employment
Sector

Copyright © International Labour Organization 2010
First published 2010

Publications of the International Labour Office enjoy copyright under Protocol 2 of the Universal Copyright Convention. Nevertheless, short excerpts from them may be reproduced without authorization, on condition that the source is indicated. For rights of reproduction or translation, application should be made to ILO Publications (Rights and Permissions), International Labour Office, CH-1211 Geneva 22, Switzerland, or by email: pubdroit@ilo.org. The International Labour Office welcomes such applications.

Libraries, institutions and other users registered with reproduction rights organizations may make copies in accordance with the licences issued to them for this purpose. Visit <http://www.ifro.org> to find the reproduction rights organization in your country.

ILO Cataloguing in Publication Data

Durevall Dick; Mussa Richard

Employment diagnostic analysis: Malawi /; Dick Durevall; Richard Mussa; International Labour Office, Employment Sector. - Geneva: ILO, 2010 v.

ISBN 978-92-2-124101-0 (print); 978-92-2-124102-7 (web pdf)
ISSN 1999-2939 (print); ISSN 1999-2947 (web pdf)

International Labour Office; Employment Sector

employment / child labour / wages / labour productivity / education / labour supply / Malawi

13.01.3

The designations employed in ILO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the International Labour Office concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers.

The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them.

Reference to names of firms and commercial products and processes does not imply their endorsement by the International Labour Office, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

ILO publications and electronic products can be obtained through major booksellers or ILO local offices in many countries, or direct from ILO Publications, International Labour Office, CH-1211 Geneva 22, Switzerland. Catalogues or lists of new publications are available free of charge from the above address, or by email: pubvente@ilo.org

Visit our website: <http://www.ilo.org/publns>

Printed in Switzerland

Preface

The primary goal of the ILO is to contribute, with member States, to achieve full and productive employment and decent work for all, including women and young people, a goal embedded in the ILO Declaration 2008 on *Social Justice for a Fair Globalization, and*¹ which has now been widely adopted by the international community.

In order to support member States and the social partners to reach the goal, the ILO pursues a Decent Work Agenda which comprises four interrelated areas: Respect for fundamental worker's rights and international labour standards, employment promotion, social protection and social dialogue. Explanations of this integrated approach and related challenges are contained in a number of key documents: in those explaining and elaborating the concept of decent work², in the Employment Policy Convention, 1964 (No. 122), and in the Global Employment Agenda.

The Global Employment Agenda was developed by the ILO through tripartite consensus of its Governing Body's Employment and Social Policy Committee. Since its adoption in 2003 it has been further articulated and made more operational and today it constitutes the basic framework through which the ILO pursues the objective of placing employment at the centre of economic and social policies.³

The Employment Sector is fully engaged in the implementation of the Global Employment Agenda, and is doing so through a large range of technical support and capacity building activities, advisory services and policy research. As part of its research and publications programme, the Employment Sector promotes knowledge-generation around key policy issues and topics conforming to the core elements of the Global Employment Agenda and the Decent Work Agenda. The Sector's publications consist of books, monographs, working papers, employment reports and policy briefs.⁴

The *Employment Working Papers* series is designed to disseminate the main findings of research initiatives undertaken by the various departments and programmes of the Sector. The working papers are intended to encourage exchange of ideas and to stimulate debate. The views expressed are the responsibility of the author(s) and do not necessarily represent those of the ILO.

José Manuel Salazar-Xirinachs
Executive Director
Employment Sector

¹ See http://www.ilo.org/public/english/bureau/dgo/download/dg_announce_en.pdf

² See the successive Reports of the Director-General to the International Labour Conference: *Decent work* (1999); *Reducing the decent work deficit: A global challenge* (2001); *Working out of poverty* (2003).

³ See <http://www.ilo.org/gea>. And in particular: *Implementing the Global Employment Agenda: Employment strategies in support of decent work*, "Vision" document, ILO, 2006.

⁴ See <http://www.ilo.org/employment>.

Foreword

Development of a comprehensive National Employment and Labour Policy (NELP) is one of the priority outputs envisaged in the Malawi decent work country programme in order to create a conducive environment for accelerating the realization of productive and decent employment for men and women in Malawi. This employment diagnosis is the first step in the development of the National Employment and Labour Policy.

Furthermore, the employment diagnosis represents an important benchmark for Malawi as it enters the next cycle of national development planning articulated in the *Malawi Growth and Development Strategy II* (2011 onwards). It provides a rare opportunity to achieve the twin objective of informing the mainstreaming of employment and labour issues in the national development strategy as well as ensuring coherence between the national development strategy and the Malawi decent work country programme.

Malawi's economic growth and progress in reducing poverty during recent years has been the result of clear policy decisions. This study suggests that sustaining the momentum will require further efforts to increase labour productivity and create opportunities for young people. This is because labour is a key factor of production, and work which is productive and fairly remunerated is the main means of increasing household incomes.

The study highlights that poverty in Malawi is less the outcome of open unemployment than the inability of work to provide secure and decent levels of income, especially for those who work but remain below the poverty line. Addressing this will require an increasingly educated and skilled labour force prepared for the demands of a growing and changing economy. The study also calls for progress in a range of areas including compliance to minimum wage rates, consideration of exchange rate policy, and further agricultural diversification, amongst others. Many stakeholders are involved in these areas of work, and therefore partnership approaches which are well coordinated and underpinned by mutually re-enforcing policies, across many sectors and with both public and private stakeholders, will be necessary.

Globalization has meant new opportunities for many countries, but also new constraints and challenges. Securing a balance between economic goals and social and labour objectives will be central to Malawi's continuing prosperity. The Government is committed to pursuing a development path that places employment as a central objective and means for poverty alleviation of its people.

This work would not have been possible without the invaluable contribution of several stakeholders. I wish to express appreciation firstly to the International Labour Organization, who provided technical assistance for the study and for the successful partnership with the Ministry. Particular appreciation goes to Ms Alana Albee, Chief of Country Employment Policy of the ILO in Geneva, who tirelessly worked with the Ministry to ensure that the study was successful. Thanks also go to the main authors of this study, to the many people who contributed information including the workers' and employers' organisations.

Hon, Yunis Mussa, MP
Minister of labour

Table of Contents

Preface	iii
Foreword.....	v
Figures	ix
Acknowledgements.....	xi
Executive Summary	xiii
List of Acronyms	xix
Introduction.....	1
Background.....	3
Employment.....	8
Employment and sectoral distribution	8
Formal and informal sectors	12
Underemployment	14
Child Labour.....	18
Earnings and Labour Productivity	22
How much do Malawians earn?	22
Why are wages so low?	27
Poverty and Inequality	31
Education and Employment.....	36
Enrolment trends.....	36
Quality of education in Malawi	40
Education and the labour market	43
<i>Education, employment and type of industry</i>	43
<i>Private rates of return to education</i>	43
<i>Duration of job search, type of job and education</i>	45
Demography and Labour Supply	47
Economic Growth and Changes in Employment and Wages	51
Changes in employment	51
Changes in wages	53
What Explains Growth in Malawi?.....	56

Maize subsidies and economic growth	61
Growth Challenges.....	63
Constraints to Employment Growth	68
Labour market constraints	68
Foreign exchange shortage and exchange rate policy	71
Market intervention	73
Power.....	74
Finance.....	76
Other constraints.....	78
Concluding Remarks and Recommendations	78
Employment at the centre of national policy and monitoring.....	79
Agriculture.....	79
Land utilisation.....	80
Productive diversification.....	80
Education and development of human resources	81
Population policy	81
Exchange Rate Policy	82
Regional and international markets	82
Minimum wage adjustments.....	83
References.....	85
Appendices.....	92
Appendix 1: List of People and Organization Met in the Study.....	92
Appendix 2: Employment in 1998: Information from the 1998 Population Census	93
Appendix 3: Labour Market Institutions and the Structure of Education in Malawi	95
1. Labour Market Institutions	95
<i>Institutional Framework</i>	95
<i>Legal Framework</i>	95
<i>Dispute Resolution</i>	96
2. Structure of Education	96
Appendix 4: Surveys and Data on Employment.....	98
Appendix 5: Tables on Time Use	99

Figures

Figure 1. Index of GDP per capita, 1961-2009 (1980=100).....	6
Figure 2. Growth rate of GDP per capita, 1961-2009 (in percent)	7
Figure 3. Sources of income in percent.....	12
Figure 4. Percentage of boys and girls (age 5 to 15) working less than 10 hours per week	21
Figure 5. Percentage of boys and girls (age 5 to 15) working more than 70 hours per week.....	22
Figure 6. Average maize and tobacco yields per hectare, 2005-2008 (in kilograms).....	29
Figure 7. Graduate output by year of study	40
Figure 8. Primary school completion rates in a selection of countries (2006-2007)	41
Figure 9. Education and employment	44
Figure 10. Skills profile by sector of activity.....	44
Figure 11. Private rates of return to education (RORE).....	45
Figure 12. Duration of job search after leaving university, higher education Grads/Dropouts	46
Figure 13. Occupational situation of high education graduates by field of study.....	46
Figure 14. Population in 1000 by age group 0-70 (in 2008).....	49
Figure 15. Percent of population living in urban areas 1987-2008.....	50
Figure 16. Real minimum wages for urban and rural areas, 1980-2009 (in 2005 prices).....	54
Figure 17. Average annual remuneration 1994-2006 (in constant 2005 prices).....	55
Figure 18. Average annual remuneration in Agriculture and Forestry 1994-2006.....	55
Figure 19. Indexes of real GDP and real exports	58
Figure 20. Indexes of real GDP and real tobacco exports.....	58
Figure 21. Total exports and exports of tobacco 1994-2009	59
Figure 22. Indexes of real GDP and volume of maize, 1994-2009 (1994=100).....	59
Figure 23. Quantity and real value of maize (1994=1)	60
Figure 24. Maize production 1960-2009, in kg	60

Figure 25. Constraints firm growth and productivity.....	69
Figure 26. Observed vacancy rate.....	70
Figure 27. Kwacha-US dollar exchange rate January 1990 – May 2010.....	72
Figure 28. Private sector credit 1990:1-2009:12 (in constant 2005 prices)	77

Acknowledgements

This study benefited from many people's time and effort, and we wish to thank the following individuals and organisations.

The Ministry of Labour, Malawi and most especially the Hon. Minister Yunus Mussa (MP, Zomba Central) and Mrs. Andrina F. Mchiela, Principal Secretary who identified the need for an employment diagnostic to inform the forthcoming National Employment Policy and the Malawi Growth and Development Strategy (II). In addition, we wish to thank the many staff of the Ministry of Labour including Elias D. Zirikudondo (Labour Commissioner), Michael C. Mwasikakata (Deputy Labour Commissioner), and Brain Ngombe, Director of Planning. Their assistance and insights were extremely valuable in ensuring the timely completion of the study.

We wish also to acknowledge the ILO, which resourced this work and most especially Alana Albee, Chief of Country Employment Policy in Geneva who together with Per Ronnas (Sr. Employment Specialist) provided the framework and guiding methodology for the research and gave regular technical reviews and managerial oversight. Support was also considerable from ILO Lusaka's Director Gerry Finnegan, Belinda Chanda (Programme Officer), ILO staff in Lilongwe, namely, Chimwenge Simwaka, and the ILO Office Pretoria, Vic Van Vuuren, Ashwani Aggarwal, Yaw Ofosu and Rajendra Paratian.

Thank you to all those institutions and individuals who provided background information to the study, comments on a first draft at a workshop in Lilongwe, and comments on the full draft, particularly Gender, Equity and Rural Employment Division (ESW), Rural Employment Team, FAO, Rome.

The Authors

Executive Summary

Malawi has turned the corner into a new era of development, following lacklustre economic performance (1994-2004) and devastation from the impact of HIV/AIDs. Since 2005 there has been steady and reasonably robust annual GDP growth (6.77%) and falls in poverty. This positive trend can be attributed to increased agricultural production, resulting in part from the introduction of subsidies for fertilizers and improved seeds for maize production.

Eighty percent of Malawians earn their income from agriculture,⁵ and since 2005 there have been large harvests that have led to more work and earnings in rural areas. Available data indicate a strong increase in work between 2005 and 2008/09, and a rapid accumulation of livestock and other assets, which are vital to most rural households. Real wages have increased over the decade, as indicated by both average real minimum wages and real remuneration in the formal sector since 1999, although there is a lack of data for recent years. Moreover, the share of the population living below the poverty line is estimated to have fallen from 52 to 40 per cent over the past five years, but substantially higher levels of productivity are needed to address the generally low but wide range of earnings among workers. These rapid achievements, in the context of a largely subsistence agrarian society with high fertility and dependency rates and limited education, should not be underestimated.

Continued strong agricultural growth will also depend on more broad-based policy support to this sector. The challenge lies now in sustaining and strengthening this momentum of growth through further increases in productivity and jobs. While growth has been triggered by agriculture, and agricultural development will remain crucial for maintaining broad-based growth in the short and medium term, future continued growth of agricultural production will require a shift from subsistence to market orientated production. This shift in orientation necessitates both vertical linkages to strengthen commercialization and diversification into non-agricultural sectors.

Ministers of Economy and Finance across Africa met in Malawi (March 2010) and echoed the need for this strategic re-orientation generally. They set the agenda to “ignite the engines and drivers of high, sustained, job-rich growth”.⁶ The best performers to date have clearly been those countries which found ways of deliberately moving their productive structure from “low quality activities” (characterized by diminishing returns, flat learning, low productivity and low wages) into high quality activities characterized by economies of scale, steep learning curves, high productivity, technology and higher wages. This calls for a local capabilities approach inclusive of a focus on small holder farmers’ productivity.

Malawi was cited by the Ministers as an example of success in nationally determining the early steps for igniting growth through local capabilities. The next generation of the

⁵ The report estimates that only 8 to 10 percent of the labour force works in the formal sector, and that the informal sector (excluding subsistence farmers) is larger than the combined formal private and public sectors.

⁶ 3rd Joint Annual Meeting of the AU Ministers of Economy and Finance, and ECA, 29 March 2010.

Malawian Growth and Development Strategy (2011 onwards) presents an opportunity to focus on sustaining and strengthening these gains. This Employment Diagnostic study seeks to contribute through underpinning analysis of the main opportunities and constraints in the next step to furthering the employment intensive growth approach in Malawi.

Unemployment is low in Malawi, but this does not mean that the employed have productive or full time jobs. In fact, it is enough for a person to have worked one hour last week to be classified as employed in surveys and population censuses. Underemployment and working poverty is common, particularly in the rural areas where the seasonality in labour demand is very pronounced. Studies of time use show that during most months 15 to 25 percent of the men work less than 10 hours per week, and only during planting time, in December and January, does the share decline to less than 10 percent.

Malawian wages are very low. Minimum wages, which serve as important guideposts, are below the poverty line for a normal family. One reason for the low minimum wage is the long interval between adjustments, during which price rises substantially reduce buying power. Thus, minimum wages should be revised annually, possibly with help an automatic-adjustment cause to avoid long having negotiations every year.

In many cases actual pay is even less than the minimum wage, since most workers are subsistence farmers, *mlimi*, or work in the informal sector. There is also anecdotal evidence that some formal firms pay less than minimum wages. According to a survey in 2008, over half of all adults (aged over 18) earned less than MKW 5,000 (USD 36) per month in cash income, and 30 percent earned less than MKW 2,500 (USD 18) per month.

There are large wage differences across sectors. These are clearly evident in data from the formal sector. Employees in agriculture, forestry and construction earn on average 3 to 5 percent of what employees in insurance companies, banks and other financial intuitions do. Wages are better in manufacturing, but still only 16 percent of those in banks.

Wages are usually assumed to be determined by labour productivity, and in Malawi it is low in comparison to other countries in the region. Labour productivity in turn is related to educational levels, and they too are low in Malawi in comparison to neighbouring countries. Thus, sector wage differences, at least partly, reflect differences in human capital; the educational levels are much higher in the well paid sectors. Yet, labour productivity does not only depend on education. At a national level, it depends on yields per worker and prices paid for crops and inputs. Hence availability of land and inputs also play a key role; land-labour ratios are small in Malawi and agricultural inputs are expensive. There is also evidence that availability of inputs in a wide sense, including roads, power, water, etc., determine labour productivity in manufacturing, pointing towards an important role for constraints to production as an explanation for low wages.

Income inequality remains high in Malawi, although we do not know how it has changed since the last Integrated Household Survey in 2004/05. Nonetheless, there is no doubt poverty is much more common in rural than urban areas, and in the South than in the North. Moreover, there seems to be large differences in income across ethnic groups.

With an increasing level of education, Malawians are more likely to work in better paying types of employment. The share of wage employees increases from an estimated 5 percent among illiterates to as high as 72 percent among those with higher education. And as mentioned, the level of education varies by sector. Over 40 percent of employees in finance

and insurance have a higher degree. In all other sectors the shares of employees with higher education are low; 1.9 percent in agriculture, 2.7 percent in construction, 3.6 percent in manufacturing and 3.7 percent in transport. As the levels of education increase, returns to education increase from 5 percent from primary level to 65 percent from university education. Interestingly, female workers tend to have higher rates of return on education than male workers, particularly at higher levels of education.

The very high level of rates of return at higher levels of education reflects severe shortages of skilled and highly educated workers, demonstrating the country's urgent need to ensure greater access rates to relax an important growth the constraint. Returns to education appear to be high by African standards.

The education sector faces major challenges which include inadequate and poor infrastructure, and a lack of qualified teachers. These challenges in turn impact negatively on the quality of education, which in turn affect the quality and employability of the labour force.

An analysis of drivers of economic growth confirmed earlier findings of the importance of exports; tobacco exports, as well as other exports, seem to be a major determinant of GDP growth. However, maize production also appears to have a potential to generate economic growth, in contrast to claims in other studies. In addition, increases in maize production are the fastest way of improving food security and reducing poverty. Indeed, while the importance of export growth should not be belittled, future job-rich growth in Malawi will probably have to rely on domestic demand, and thus there is need to focus on generating domestic demand by continued support to agricultural production. This is required throughout the country, if income inequalities particularly prevalent between rural and urban areas, and between Southern and Northern region are to be addressed. For the landless and near landless rural population, non-farm economic pursuits may offer the only way out of poverty. The importance and characteristics of this growth will need to be further explored.

Main challenges for enhancing and sustaining inclusive and job-rich growth

Malawi needs to address a number challenges and to implement a range of policies to sustain the present momentum. There might be some quick gains, but in general sustainable pro-employment growth requires policies that address medium and long term issues in a consistent way, and puts the country on a path of inclusive job-rich growth.

Sustaining growth of returns to both labour and land in agriculture

Increasing productive employment and incomes in agriculture will continue to be a cornerstone for development and poverty reduction in Malawi in the years to come. There is a need to continue with Government support to maintain the current high maize production. However, there is a limit to how much maize production can increase both in terms of yields and return to Government outlays. If the strategy of boosting maize production is to have an impact on economic growth in the medium term, the subsidies will have to be sustainable and the indirect effects will need to generate increases in investment and consumption.

Despite some general scepticism with regard to the sustainability and effectiveness of agricultural subsidies, there is evidence that well designed programmes can be successful. But for this to happen, Government expenditures on subsidies should not crowd out other high-return projects such as building roads, power plants, etc. According to a recent

evaluation of Malawi's programme, the main weaknesses are in design and implementation, there are failures to target the poorest farmers and corruption seems to be common.

As availability of inputs increases, other constraints on agricultural production will set in. The obvious ones are related to the availability of labour and land. It is a multifaceted problem and requires a multi-pronged approach. Along with an overall focus on increasing yields and returns to land, new technology is required to increase labour productivity, since there are labour shortages during harvesting time, while those with small plots need more land. Moreover, crop diversification is needed to provide work when labour demand is low, enhancing the impact of the subsidies.

Irrigation is one option which could increase both all-year employment and productivity, as well as improve food security. A minute part of Malawi's agricultural land is irrigated, but the Government recently launched the Green Belt Initiative, which aims at expanding the areas under irrigation massively. There is also ample scope for improving productivity; few households own a plough, oxcart, ox or donkey, and fertilizer use, and subsequently yields, varies greatly across districts. Moreover, the costs of fertilizer use can be reduced through agronomic research, since knowledge is limited.

Land resettlement schemes can increase the use of underutilized land and increase land plots. The great challenge is resettling Southerners, who have little land, to the Northern region, where there is idle land. The current land redistribution programme is restricted to the Southern region where land from estate farms is transferred to households with little land. The programme seems reasonably successful but is still too small to have a major impact.

Reducing population growth

A medium to long term challenge is fast population growth. Land pressure, and demand for jobs in both urban and rural areas will increase sharply as many young people enter the labour force. Although fast economic growth could alleviate the problem, providing decent work to all will be very difficult. There are two other solutions, migration and lower fertility. There will be migration, but hardly enough, and it will contribute to the brain drain. Hence, fertility needs to be reduced. There is no consensus on how to design policies that reduce fertility in a democratic society, but improved education for women, particularly access to secondary school, expanded family planning and the introduction of pensions, are some tools that seems to have worked in developing countries. The recent decline in under-five mortality should help containing child bearing, but it usually takes many years to have an impact. Malawi has family planning programmes, but there are large variations across districts. Moreover, to some extent the fight against HIV/AIDS seems to have been at the cost of family planning in Malawi, and many other countries.

Economic diversification

Policies to stimulate economic diversification beyond agriculture are urgently needed. In fact, diversification is a requirement for transforming Malawi into a middle income country, which is one of Government's goals. The focus should be on activities closely related to existing ones, such as agro-processing, since it is difficult to jump from one type of industry to another. Government should thus facilitate private sector investment in agro-based production or similar activities in rural areas, which would generate employment opportunities. This requires both public sector investments, such as electrification, and pro-

private sector policies that build confidence among potential investors. Moreover, Government needs to improve marketing and distribution facilities, particularly feeder roads.

There are also other constraints that affect job creation. Power shortages are common and recognized as a major problem; it is most certainly affecting jobs and wages negatively. Lack of financial capital, particularly for small and medium sized firms, also seems to be an important constraint. There is a need for more micro finance, as well as increased competition in the banking sector to improve access to finance for formal firms. Moreover, there is ample scope for improving international corridors and export value chains, including reducing the administrative burden for exporters and transport costs through lower taxes and tariffs.

Policies in support of competitiveness and creation of productive employment

Exchange rate policy is considered a key policy tool for generating/supporting economic growth. Malawi has a tradition of attempting to maintain a stable nominal exchange rate. Such a policy needs to be backed by other macroeconomic policies, or good luck, but in Malawi it has repeatedly resulted in overvaluation followed by devaluation. Currently the exchange rate is maintained by administrative means, which de facto implies overvaluation and rationing of foreign exchange sales to the private sector.

There are some short-term gains from having an overvalued exchange rate, inflation declines and imports are cheaper than otherwise. However, an overvalued exchange rate means lower profits for exporters, since their products are valued less when measured in Kwacha, and tougher competition for companies that produce goods that can be imported, since foreign goods are cheap compared to domestically produced goods. As a result, there is less investment and job creation, and lower wages. Moreover, the incentive for diversification and innovation is reduced. If the creation of decent jobs is a policy goal, Malawi needs to reconsider its current exchange rate policy and avoid overvaluing its currency.

Few if any markets work perfectly, making it necessary for Governments to intervene in different ways. Interventions should be in the form of regulation of standards, such as occupational safety, quality control, etc. In Malawi it is common to fix minimum prices of some goods. This might have beneficial effects for sellers, but this policy is likely to deter firms from expanding production and new investors from entering the market, thus affecting job creation. Moreover, it might even hurt the sellers, whom it is supposed to defend. Recent interventions seem to have had such effects, thus impacting on job creation in the agribusiness sector. Support to sellers could be achieved through many other means, such as subsidies.

Investing in human development

Yet, the impact of the policies and interventions suggested above will only bear fruit and can only be sustained if there are strategic complementarities with public investment in human resources. For medium term productivity and job gains, the educational sector must take priority among the competing interests embraced within the MGDS II. The continuing high rate of population growth means continued new entrants to the labour market annually of 300,000 to 400,000. These young people need to be better prepared for the labour market. The declining performance of the education system and the high prevalence of child labour are of enormous concern. The small share of the population with more than primary

education, and the small number of graduates from secondary and tertiary levels of education (including vocational training) must be reversed through more and better managed public resourcing. Although it is well known that the 10 percent of students who have studied longest benefit from 73 percent of public resources in education, which makes Malawi's education system "the most elite in Africa"⁷, it is the shortage of secondary, vocational and university facilities combined with poor quality and limited relevance to the labour market, that are the main constraint to productivity and increased earnings in Malawi today. In fact, many firms rank "inadequately educated labour force" as a leading constraint in Malawi.⁸

Summing up

There are thus several major issues that should be dealt with to set Malawi on a path towards decent work.

In the short term, the support for smallholder agriculture should be sustained. Minimum wages need to be revised annually, and compliance should be ensured through strengthened local labour administration. Exchange rate policy should be geared towards job creation and economic growth, even if there are some short term costs. This means avoiding overvaluation.

To enable sustainable development over the medium and long term, there should be large investments in education, including vocational training and improved opportunities for women's schooling after primary school. Curriculums should be adjusted to market demand, both current and expected, such as demand for workers in agri-businesses. There is also a need to reduce child labour, targeting those who work long hours outside the household in the first instance.

Diversification both within and outside agriculture is a prerequisite for increasing employment and wages. The agricultural subsidy programme should thus include incentives for agricultural intensification, particularly in the Southern region where poverty is widespread and landholdings small. Government should also make it more attractive for entrepreneurs to invest by providing a credible stable economic environment, investing in electrification, rural feeder roads, improving water supply, and facilitating access to export markets.

As a concluding note, data on employment and labour in Malawi are weak and inconsistent. An essential starting point for Government is to set agreed employment targets within the MGDS II, and consider regularly monitoring the newly agreed MDG Employment Indicators⁹. This should be coupled with more rigorous tracking and monitoring of these indicators, first through improving the content and consistency of labour/employment questions in national surveys, and providing regular analysis to policy makers.

⁷ Country Status Report (2008)

⁸ Global Competitiveness Report 2010 (World Economic Forum, 2010), Business Climate Survey 2009 (MCCCI, 2009).

⁹ (1) labour productivity (2) employment to pop ratio (3) working poverty (4) vulnerable employment (5) Share of women in wage employment.

List of Acronyms

ADMARC	Agricultural Development and Marketing Corporation
ADR	Alternative Dispute Resolution
AES	Annual Economic Survey
AfDB	African Development Bank
AIDS	Acquired Immune Deficiency Syndrome
AISP	Agricultural Input Subsidization Programme
ART	Anti Retroviral Treatment
BAT	British American Tobacco
BIR	Business Information Register
CABS	Common Approach to Budget Support
CAS	Country Assistance Strategy
CBET	Competency-Based Education and Training
CDSSs	Community Day Secondary Schools
CIA	Central Intelligence Agency
COMATU	Congress of Malawi Trade Unions
CSR	Country Status Report
CSSs	Conventional Secondary Schools
DAC	Development Assistance Committee
DFID	UK Department for International Development
ECAM	Employers Consultative Association of Malawi
ECAM	Employers Consultative Association of Malawi
ECD	Early Childhood Development
ESCOM	Electricity Supply Commission of Malawi
FAO	Food and Agriculture Organisation
Ganyu	Contract Labourers

GDP	Gross Domestic Product
HIPC	Highly Indebted Poor Countries Initiative
HIV	Human Immuno-deficiency Virus
ICT	Information and Communication Technologies
IFC	International Finance Corporation
IHS	Integrated Household Survey
ILO	International Labour Organisation
IMF	International Monetary Fund
IOE	International Organisation of Employers
IRC	Industrial Relations Court
JCE	Junior Certificate of Education
MAC	Malawi Advanced Craft
MCA	Millennium Challenge Account
MCC	Millennium Challenge Corporation
MCCCI	Malawi Confederation of Chambers of Commerce and Industry
MCTU	Malawi Congress of Trade Unions
MDG	Millennium Development Goal
MGDS	Malawi Growth and Development Strategy
MICS	Multiple Indicator Cluster Survey
MK	Malawi Kwacha
Mlimi	Subsistence Farmers
MoE	Ministry of Education
MoL	Ministry of Labour
MSCE	Malawi School Certificate of Education Examination
MSEs	Micro and Small Enterprises
NAC	National AIDS Commission

NGOs	Non-governmental Organisations
NSO	National Statistics Office
OSH	Occupational Safety and Health
PSLC	Primary School Leaving Certificate
PSLE	Primary School Leaving Certificate Examination
RORE	Private Rates of Return to Education
SACMEQ	Southern African Consortium for Monitoring Educational Quality
SADC	Southern African Development Community
SOAS	School of Oriental and African Studies
SSA	Sub-Saharan African
SWAp	Sector-wide Approach
TEVET	Technical, Entrepreneurial, Vocational Education and Training
TFR	Total Fertility Rate
TLAC	Tripartite Labour Advisory Council
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
WDI	World Development Indicators
WMS	Welfare Monitoring Survey

Introduction

Malawi seems to have turned the corner into a new era of development, following lacklustre economic performance (1994-2004) and devastation from the impact of HIV/AIDs. Since 2005 there has been steady and reasonably robust annual GDP growth (6.77%) and falls in poverty. This positive trend can be attributed to increased agricultural production, resulting in part from the introduction of subsidies for fertilizers and improved seeds for maize production.

However, in spite of the recent high growth rates and substantial decreases in poverty, there is a long way to go before Malawi becomes an industrial nation that provides welfare for its population, the vision of the Government (Malawi Government, 2009a). To achieve this vision, job creation has to increase and be kept high for many years. Moreover, workers have to receive a decent income, which means substantially higher wages for employees and better returns to farming for smallholders.

To provide a quick picture of the current situation and the challenges Malawi has to confront, the Millennium Development Goals *Employment* Indicators are reported in Table 1 below. They highlight the recent rapid high growth rates; labour productivity rose by 4.6 percent during 2005-2008, up from -1.6 percent during 2000-2004. The employment ratios, i.e. the number of people working as a share the population are also high, 86 percent for all, and higher for women than for men. However, the ratios are too high; values over 80 usually indicate that there are many low-quality jobs. This interpretation is supported by the large number of working poor, 2.43 million, or 40 percent of the labour force, as well as the large share with vulnerable employment, 86 percent. There is also a substantial gender bias; the share of women in wage employment is only 20 percent. When combined with the large female employment-to-population ratio, it is clear that most women work in agriculture and the informal sector.

The purpose of this report is to describe challenges and opportunities for enhancing decent work in Malawi. To a large extent this is about generating economic growth, since without growth, there is no potential for sustainable job creation and wage increases. However, it has to be labour-intensive growth, providing decent jobs to most citizens.¹⁰ And since the vast majority of the Malawians work in the agricultural sector, it has come about through rapid growth in agricultural output and productivity, at least in the short to medium term.

The reports focus is on job creation and wages, and on constraints to growth. As a result three of the four pillars in ILO's Decent Work Agenda, rights at work, social protection, and

¹⁰ The term jobless growth is often used in this context, but it mainly refers upturns in business cycles without reductions in unemployment. There is no such thing as jobless long-run economic growth, but some types of growth have less impact on employment than others.

social dialogue, are treated cursory, if at all.¹¹ This does not of course imply that they are unimportant, only that topic covered is extensive enough for one report.

Table 1. Millennium Development Goals Employment Indicators

Period	2000-2004	2005-2008	
Growth rate of labour productivity (1%)	-1.6	4.6	
Period		2008	
Employment to population ratio (15 years and older)	Total 86	Females 87	Males 84
Working poor	2,430,000		
Working poverty rate (%)	40		
Vulnerable employment rate (%)	86		
Share of women in wage employment in the non-agricultural sector (%)	20		

Sources: Welfare Monitoring Survey 2008 and 2008 Population Census (NSO, 2009a, 2009b).

Note: Vulnerable employment is defined as the proportion of own-account and contributing family workers to total employment.

The report consists of thirteen sections. It begins with a brief overview of the main structural economic characteristics of Malawi and its growth performance since independence in 1964. Then seven sections describe aspects of the labour market. Sections 3, 4 and 5 use data from various sources to provide a picture of employment, wages and labour productivity. Section 6 deals with inequality and poverty, Section 7 looks at education and labour demand and Section 8 discusses population growth and labour supply. Section 9 focuses on economic growth and recent changes in employment and wages. Section 10 partly recaps some results from recent studies on drivers of growth in Malawi, Lea and Hanmer (2009), a background paper to the Country Economic Memorandum of the World Bank (2009a), and a report from Millennium Challenge Account (MCA, 2010), and partly takes another look at some of their findings. Sections 11 and 12, respectively, outline major challenges to growth and job creation. Finally, Section 13 concludes the report and provides recommendations.

¹¹ Malawi Decent Work Country Programme 2010-2016 (ILO, 2010a) provides information on the three pillars, rights at work, social protection and social dialogue.

Background

Malawi is a small and landlocked country with a population of 13.1 million living on 94,000 sq km. It is thus one of the world's most densely populated countries. GDP per capita was estimated to be 900 PPP dollars in 2009, or about US\$ 300 at the official exchange rate. This puts Malawi on the 218th place in a ranking of 228 countries' PPP-dollars per capita income (CIA, 2010). Malawi is thus one of the poorest countries in the world.

To provide an overview of the structure and recent performance of Malawi's economy, Table 2 shows the distribution of the main economic sectors and their growth rates for the period 2004-2009. By far the largest sector is Crop & Animal Production, accounting for 30 percent of GDP. There are two sub-sectors: smallholders, who produce 75-80 percent of agricultural output, and estates that produce the rest. Agriculture is, however, more important than revealed by its contribution to GDP: it provides jobs to about 80 percent of the work force and accounts 80 percent of Malawi's exports (NSO, undated).

The second largest sector is Wholesale & Retail, accounting for 14 percent, while Manufacturing is in the third place with 8 percent. The sectors Forestry & Logging, Fishing & Aquaculture and Mining and Quarrying are all very small, having shares below 2 percent.

Malawi is not only heavily dependent on agriculture, but also on a small number of agricultural crops; tobacco, sugar, tea and cotton are the dominant cash/export crops, although coffee, rice, nuts and sunflower seed are also important, while maize, potatoes, and cassava are the main staple crops. The estates primarily produce tobacco, sugar, tea, and sugar, and some coffee and macadamia, while smallholders produce the other crops, including tobacco, and cotton.

The manufacturing sector is small, primarily because of limited domestic market and export opportunities: Doing Business 2010 ranks Malawi as 172 out of 183 countries for difficulties and cost of trading across borders (World Bank, 2010a). Moreover, from independence in 1964 to well into the 1990s, economic policies favoured large state-owned conglomerates on the behalf of private manufacturing businesses. Nonetheless, several firms are exporters, while others produce goods that compete with imports. The major products are food and beverages, tobacco processing, textile and footwear, wood and metal products, and chemicals, soap and plastics.

Mining & Quarrying accounts for 1 percent of GDP. The main products are coal, gemstones, and limestone (World Bank 2009c). However, the sector expanded considerably with the opening of the Kayelekera uranium mine in April 2009. It is expected to contribute substantially to foreign exchange earnings, about 20 percent of current exports, though initially most earnings will be used to pay back debt. Several other mining projects are in the pipeline, so the sector is expected to grow rapidly during the next 10 years (World Bank, 2009c).

Table 2 also shows growth rates for 2004-2009. The average growth rate for all sectors was 6.77 percent (column 4). The major contributors were Crop & Animal Production and Wholesale & Retail, with shares of 33.7 and 18.4 percent, respectively, followed by Financial & Insurance Activities, Manufacturing, and Construction, each contributing about 6 percent (column 3). The other sectors accounted for 4 percent or less.

The picture is somewhat different when looking at individual growth rates (column 4). Mining & Quarrying is the best performer, with a growth rate of 11.5 percent, and then follows Construction, Information & Communication, Professional & Scientific Services, Wholesale & Retail, and Transportation & Storage. The main agricultural sub-sector, Crop & Animal Production, grew by 7.45 percent, while Manufacturing only grew by 5 percent. Thus, the sectors exposed the least to foreign competition, such as Wholesale & Retail, and Construction, seem to have performed better than those competing with foreign firms. One consequence of this is that the relative size of manufacturing declined over 2004-2009.

With an average growth rate of 6.77 percent, Malawi has had one of the world's highest growth rates during recent years. However, when viewed over a longer time period, its performance is less impressive. This is illustrated by Figure 1 and 2, which show GDP per capita (1980=100) and the annual growth rate over the 1961 to 2009 period.

Table 2. National accounts by sector, average rates for 2004-2009 (in percent)

Sector	Sector share	Sector contribution to growth (in percent)	Sector growth rate
Agriculture	32.4	33.7	6.97
Crop & Animal Production	30.1	31.4	7.45
Forestry & Logging	1.4	1.5	2.40
Fishing & Aquaculture	0.9	0.9	2.57
Mining & Quarrying	1.0	1.6	11.52
Manufacturing	8.1	6.0	5.02
Electricity and Water	1.6	1.3	5.55
Construction	4.5	6.0	9.08
Wholesale & Retail	14.2	18.4	8.68
Transportation & Storage	3.6	4.1	7.65
Accommodation & Food	1.8	0.9	3.30
Information & Communication	3.0	4.3	9.75
Financial & Insurance Activities	6.3	6.5	6.95
Real Estate Activities	4.4	3.8	5.77
Professional & Scientific Services	1.6	2.1	9.12
Public Administration & Defence	3.2	1.9	4.00
Education	2.9	1.7	3.87
Human Health & Social Works	3.6	2.4	4.45
Other services	4.5	5.1	7.47
Sum of all industries	96.4 ^a	100.0	6.77

Source: Reserve Bank of Malawi webpage

^{a)} The sum is not 100 since some minor items have been excluded

The period from independence in 1964 to 1994 is characterized by the rule of Kamuzu Banda. He started as a minister in 1963, and later became President for Life in a one party state. During the first fifteen years of his regime, Malawi had rapid but volatile growth (Figure 2). There was a consistent development strategy, supporting large-scale agriculture with large subsidies, which subsequently expanded quickly, 17 percent per year over 1964-

1977. Smallholder agriculture, which was limited to food crop production by Government regulation, only grew by 3 percent per year, below the rate required to ensure self-sufficiency (Malawi Government, 2009b). There was little distinction between the resources of the private sector, state and the ruling party during this period (Booth et al., 2006) As a result, the number of parastatals also grew, and by the mid-1980s there were 35 parastatal institutions accounting for 25 percent of GDP (Record, 2007).

The rapid growth prior to 1980 did not bring about much development. Poverty remained widespread, and Government allocated few resources to social development. For instance, by mid-1980s, 54 percent of the population had never attended school and only 3 percent had secondary education (NSO, 1996). Booth et al. (2006) characterize the Banda regime and its development strategy as efficient but unsustainable, since the vast majority of the population were left out.

Malawi's growth slowed down in the 1980s, as in the rest of the world; in fact, it was on average negative during 1980-1994, reducing GDP per capita by 20 percent (Figure 1). Several factors contributed to this: oil price shocks, low commodity prices, high world-market interest rates and global recession 1981-1982. Malawi was also affected by the war in Mozambique that closed its most important port in 1984/1985, and attracted 700,000 Mozambican refugees. Moreover, fiscal discipline deteriorated over the period, culminating in a deficit-to-GDP of 15 percent in 1994.

As most other African countries, Malawi implemented a series of structural adjustment programmes: the first one in 1979. One of the primary goals was to remove the bias against smallholder agriculture. The overall short to medium term outcome was disappointing, as evidenced by the lack of growth during the 1980s.

Two reforms are of special interest here because of their effects on the structure of agricultural production. First, the reform of the Special Crops Act allowed smallholders to grow tobacco, so thousands of them started planting tobacco in addition to maize. At the same time estates, that previously produced all tobacco, went into a period of stagnation. Second, the monopoly power of the government-owned ADMARC's (Agricultural Development and Marketing Corporation) was removed, and later in the mid-1990s ADMARC was partially dismantled. The withdrawal of government intervention in agriculture raised prices sharply on agricultural inputs and food crops, but it did not generate a supply response. A small domestic market, high transport costs, and a lack of public investments to support smallholders combined to prevent farmers from increasing production (Malawi Government, 2009b).

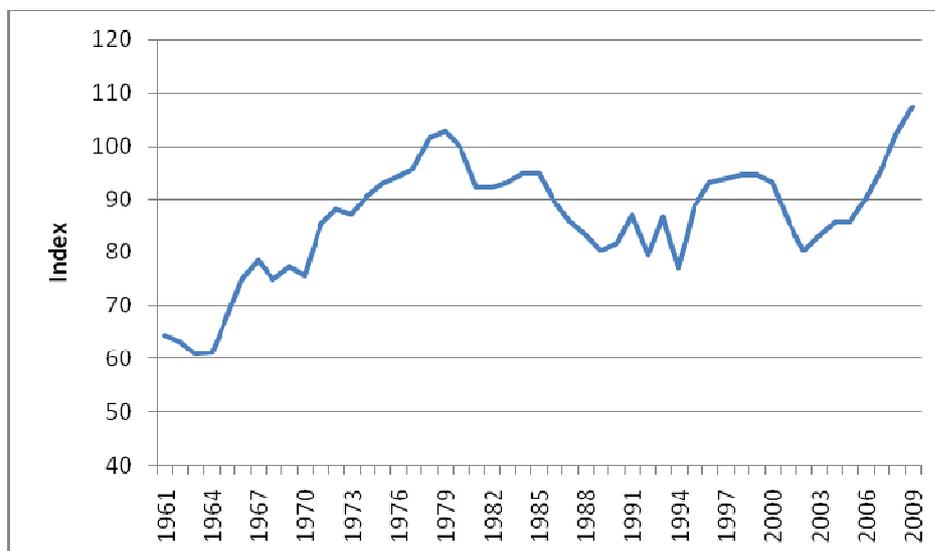
The economic decline stopped in the early 1990s, and growth turned positive after the first democratic elections held in 1994. Good rainfall and large inflows of foreign aid, which increased from US\$ 200 million per year in the 1980s to close to US\$ 500 million per year 1990-1999, boosted growth initially (DAC, 2010). Moreover, the value of tobacco exports rose sharply in the mid-1990s. Direct government support to smallholders in the form of seeds and fertilizer is also believed to have contributed to the increase in the growth rate (Malawi Government, 2009b). However, then growth turned negative so GDP per capita declined again, and in 2001-2003 it was back at the 1994 level, which was the same level as in the early 1970s. To this should be added the possibility that GDP is overestimated: data on agricultural growth seems inconsistent with other indicators, such as household caloric consumption (World Bank, 2004).

Thus, during the first ten years of democracy, 1994-2004, there was hardly any increase in per capita income. It should be noted that public expenditures on education and health increased substantially, mostly due to the removal of fees on primary education.

The lacklustre performance of Malawi's economy from 1994 to 2004 was mainly due to inconsistent economic policies in combination with external shocks (Booth et al., 2006). Year after year budget deficits turned out to be higher than planned, aid flows were therefore intermittent, and as a result, domestic debt grew. Government borrowing in the domestic market increased real lending rates to over 20 percent, among the highest in the world, and private sector credit was subsequently squeezed out. Furthermore, domestic interest rate payments rose to over five percent of GDP in the early 2000s, amounting to over 20 percent of government expenditure (World Bank, 2004). To this should be added high and volatile inflation, and a number of large devaluations. The result was an unstable macroeconomic environment that inhibited investment and economic growth.

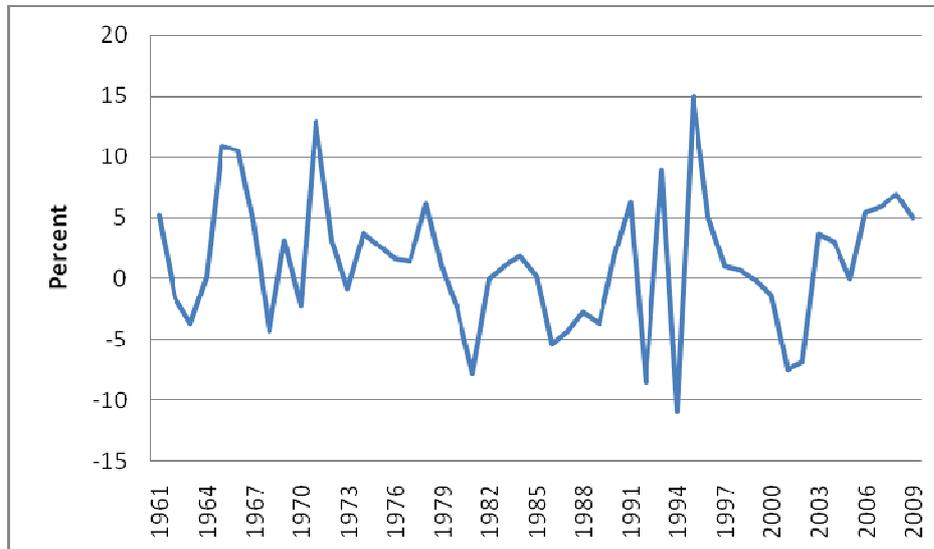
During this period HIV/AIDS also became a severe problem; the national infection rate increased from about 5 percent to 12 percent among adults, and annual AIDS deaths rose from about 10,000 to 80,000 (UNAIDS, 2008). HIV/AIDS is likely to have inhibited growth, although the size of the impact is uncertain and difficult to measure. Some recent estimates indicate that it reduces growth by one to two percent per year in a country such as Malawi (Papageoriou and Stoytcheva, 2008), while others argue that it has a negligible effect (Werker et al., 2006).

Figure 1. Index of GDP per capita, 1961-2009 (1980=100)



Source: World Development Indicators and Reserve Bank of Malawi webpage

Figure 2. Growth rate of GDP per capita, 1961-2009 (in percent)



Source: World Development Indicators and Reserve Bank of Malawi webpage

Elections in 2004 led to a change of President, who appointed a new cabinet. Since then economic performance has improved and most years have seen high growth rates. The accumulated impact is substantial, as evident from GDP per capita, which reached its highest level ever in 2009 (Figure 1).¹²

Many countries across the world experienced rapid growth during 2004-2009, but Malawi was among the best performers. This was probably due to the new government, which improved policies speedily. It took control over fiscal expenditures, and reduced budget deficits from 8 percent of GDP in 2003 to about 2 percent in 2005-2007. One result was that Malawi was granted debt relief under the Highly Indebted Poor Countries initiative (HIPC) and Multilateral Debt Relief Initiative, and its foreign debt declined from 108 percent of GDP in 2005 to 17 percent of GDP in 2007 (Briançon and Lightfoot, 2009). Another result was reduced real interest rates, which allowed for the expansion of private sector credit and investments. Government also introduced the Agricultural Input Subsidisation Programme (AISP), which aims at providing cheap fertilizer and seeds to poor smallholders. During 2005/6-2008/9, the AISP, in combination with good rains, increased maize, and to some extent tobacco, production substantially, though the size of the impact of the subsidies is not known. Another favourable development during the period was a rise in tobacco prices, which boosted export income (Briançon and Lightfoot, 2009 World Bank, 2007: SOAS, 2008; Malawi Government, 2009b).

¹² The data on GDP per capita is uncertain. As already mentioned, agricultural production might be overestimated (World Bank, 2004; Lea and Hanmer, 2009). However, population size might also be overestimated, since the 2008 Population Census showed that there were two million fewer inhabitants than indicated by projections using the 1998 census. Unfortunately, population projections, reported by Malawi's National Statistical Office, World Development Indicators database, UN World Population Prospects and US Census Bureau, have not been revised yet.

The introduction of input subsidies on a much larger scale than in the 1990s seems to have yielded major and immediate results. From a situation of maize shortages, Malawi has been self sufficient, and has even exported of maize in some years. Moreover, estimates indicate that the poverty headcount (in percent) has declined sharply; from 52 percent in 2004/5 to 40 percent in 2008, and the share of stunted and wasted children declined from 43.7 percent to 36 percent, and 2.2 percent to 2 percent, respectively, over the same period (NSO, 2005; 2009a). These improvements look promising, but they need to be confirmed by the Income and Household Survey, carried during 2010.

Employment

In this section we provide information on employment and its sectoral distribution¹³. Describing employment in Malawi is a challenge, since there is no comprehensive source of information, such as a labour force survey. Moreover, information on employment from 2008 Population Census is not yet available. Instead, we use information scattered across surveys, even though the data collected are not ideal as they are from different dates, and the surveys do not focus on employment.

Employment and sectoral distribution

Current information on employment is provided by the 2008 Welfare Monitoring Survey (WMS). It provides information about the activities of the working age population. A major drawback with the WMSs, as well as the population censuses and most other surveys, is that the definitions of employment and work are very wide: employment is defined as ‘at least one hour of work during 7 days preceding the survey’, and work is defined “as both formal and informal work, both paid work (in cash, in kind, or barter), and unpaid work contributing to the livelihood of the household, including work on the agricultural holding, not only for the owner, but for family members helping out without pay.” (NSO 2009a, p.57). With such a definition, working time can vary between one and maybe up to seventy hours per week, so underemployment cannot be measured and it is difficult to detect changes in working over time.

Nevertheless, there is some useful information, summarized in Table 3 and 4. First, 86 percent of those over 15 years were considered economically active (Table 3). The shares are somewhat higher for women than for men, 87 versus 84 percent, and clearly higher in urban than rural areas, 96 versus 79 percent. Out of those who are not part of the labour force, 75 percent are students and most of the others do household duties or are too old to work (data not reported).

Table 3 also shows that the unemployment rate is only 1 percent. This number is, however, not comparable to the common usage of the word. It is low because the definition of work, at least one hour week is not much, and the lack of social security that forces almost all people to work to survive. This is evident when comparing educational levels; the higher

¹³ In appendix 3, we discuss labour market institutions in Malawi.

the educational level, the lower the labour force participation and employment level. This is most likely because less educated people earn less and therefore they must work.

Table 3. Percentage distribution of working population aged 15 years and over by economic activity

	Labour force participation rate			Employment			Unemployment		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Malawi	86	84	87	99	99	99	1	1	1
Urban	96	95	96	96	96	97	4	4	4
Rural	79	79	79	99	99	99	1	1	1
Education									
None	87	85	88	100	100	100	0	0	0
Primary 1-5	85	82	88	99	99	100	1	1	1
Primary 6-8	82	81	83	99	99	99	1	1	1
Secondary +	80	82	76	96	97	96	4	3	5

Source: NSO (2009a)

There are small differences in age specific labour force participation and unemployment rates. The only age group that differs substantially is 15-24 (not reported): labour force participation is 60 percent, which is because many go to school. The unemployment rate is 4 percent. It is, however, hard to interpret this number due to the definition of work. Many of those classified as unemployed live in urban areas or have recently left school. And among those classified as working, there is extensive underemployment, as described below. In fact, youth unemployment is known to be a severe problem, so the 4 percent unemployment rate reported is not describing reality.

WMS 2008 also reports data on type of payment, employer, and economic activity for those aged 15 and over for the main job by sex and geographical location (Table 4). The vast majority of those with income (76 percent) are mlimi, which is the same in 1998 (see Appendix 2). About 8 percent have wages or salary, while 8 percent are self employed (29 percent in urban areas and 6 percent in rural areas). Only 1 percent received income as ganyu, farm work done for smallholders, as their main activity. There are also substantial gender differences: 81 percent of the women work as mlimi, compared to 70 percent of the men, and 3 percent of the women and 13 percent of the men have wage income.

The middle panel of Table 4 reports the type of employment. Again mlimi is the most common one with 80 percent (88 percent for women and 72 percent for men), while close to 4 percent work for the public sector, and another 4 percent work for private business. Only 1 percent works on estates, i.e., commercial farms.

Table 4. Economically active according to type of payment, employer and economic activity for the main job (aged 15 and over)

	Type of payment							Total
	Mlimi- not paid	Wages/ Salary	Payment in kind	Casual/ Ganyu	Unpaid family business worker	Self employed	Tenant	
Malawi	76	8	0	1	1	8	0.2	100
Male	70	13	0	2	1	10	0.2	100
Female	81	3	0	1	1	6	0.2	100
Urban	17	33	1	1	2	27	0.1	100
Rural	83	5	0	1	1	5	0.2	100

	Type of employer						Total	
	Mlimi	Private business	Private individual	Public sector	Mission/ NGO	Self employed		Estate
Malawi	80	3	4	4	1	8	1	100
Male	72	5	5	5	1	10	2	100
Female	88	2	2	2	0	6	1	100
Urban	22	15	15	5	5	29	0	100
Rural	86	2	3	2	0	6	1	100

	Economic Activity						Total
	Agriculture, forestry & fishing	Manufacturing	Construction	Wholesale & retail, marketing/hotel, restaurant	Social and community services	Other	
Malawi	84	1	1	7	4	2	100
Male	77	2	2	8	6	5	100
Female	90	0	0	6	2	1	100
Urban	24	5	4	32	18	13	100
Rural	90	1	1	4	4	1	100

Source: NSO (2009a)

The type of economic activity, shown in the bottom panel, highlights the importance of Agriculture, forestry & fishing for employment, 84 percent work in this sector. It is particularly important for women, providing work for 90 percent of them. Wholesale & retail, marketing/hotel, restaurant comes in the second place, employing 7 percent (32 percent in urban areas). The table also shows the small role played by Manufacturing and Construction, 1 percent work in each. Even when only the urban areas are considered, Manufacturing and Construction do not employ more than 5 and 4 percent, respectively.

Another recent survey is FinScope 2008. It provides additional information on economic activity since questions were asked about primary and secondary sources of income, not only the main activity. The survey is nationally representative covering a sample of 4,993 individuals over 18 years, all from different households. The drawback of the

survey is that it was carried out during November and December only, so seasonality might influence the findings (Agar et al., 2009).

The survey confirms that the vast majority of the adult Malawians are involved in farming or fishing in some way; 46 percent only work with farming, and 40 percent work with farming as well as other activities. In fact, only 10 percent have no involvement in farming and fishing (Agar et al, 2009).

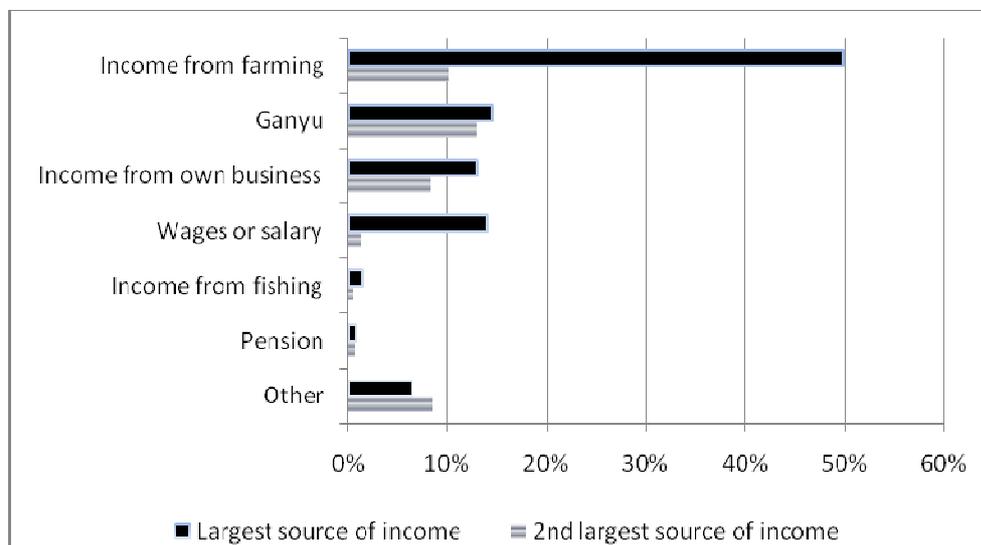
Figure 3 shows sources of income received that can be used for purchases or trade. Questions were asked about both the main and second source of income; and an important finding is that as many as 65 percent of the sample had a second source of income (not reported).

Out of the individuals interviewed, about 50 percent have farming as their main economic activity and 25 percent have it as their second most important economic activity. Ganyu labour is much more common than indicated by WMS: it is the main activity for 15 percent and the second activity for 13 percent, but the main activity for 1 percent according to WMS. It is not obvious why there is such a large difference but it could be a seasonal effect in combination with the design of the survey, the WMS runs over 13 months. Moreover, the age groups differ, over 18 instead of 15 and over.

Work with own business is also common: it provides income for over 20 percent of the households, 13 and 8 percent, respectively, for main and second activity. In this case the WMS, which reports 8 percent for main activity, is in line with FinScope since the age groups differ.

In total only 15 percent of the individuals receive a salary or wages. This number includes those who work in the formal and informal sector, highlighting the small role played by normal employment in Malawi, and the importance of smallholder farming and own businesses. This is higher than in the WMS where the share is 8 percent, but this, again, could be due to the different age groups.

Figure 3. Sources of income in percent



Source: Constructed with data from FinScope Malawi 2008.

Formal and informal sectors

The formal sector is small in Malawi. According to the WMS 2008, about 2.5 percent of the labour force work for private businesses and 1.1 percent work on estates, adding up to about 222,000 formal private sector employees, while another 3.6 percent, 220,000, work in the public sector. Hence, out of a labour force of close to 6,100,000¹⁴ only 440,000 work in the formal sector. These numbers for the public sector are in line with those available from other sources of information, for instance, there are about 141,000 civil servants (CABS, 2009), and to these we should add employees in the armed forces, the police force and public sector companies.

The estimate for the privates sector seems to be on the low side, however. The Annual Economic Survey (AES) provides information about employment for some medium but mostly large scale formal-sector enterprises. These are taken from the Business Information Register (BIR), a database with all enterprises registered by the National Statistical Office. Although continually updated, the register does not cover all enterprises, so AES only includes 350-400 enterprises and thus underestimates the number of employees. Nevertheless, total employment was about 450,000 according to AES 2005/6, the most recent survey available. The reason the number is high is probably because there is no distinction between part-time and full-time workers in the AES questionnaire.

¹⁴ The size of the work force is calculated using the information in WMS 2008 on the share economically active of those over 14 years (86 percent) and data from 2008 Population Census.

AES also provides information on the distribution of employment across sectors for formal enterprises (Table 5). About 30 percent of the 450,000 are in Manufacturing & Mining (though Mining is very small). Wholesale & Retail has 17.3 percent, Transport & Telecommunications 8 percent and Agriculture & Forestry 7.6 percent.

Table 5. Percentage distribution of employment, large scale firms, 2005-2006

All industries	Agriculture & forestry	Manufacturing and mining	Electricity & water	Construction	Wholesale & retail	Hotels & restaurants	Transport & tele-communications
100	7.6	31.3	1.9	3.9	17.3	6.5	8.0
Banking & intermediation	Leasing & credit granting	Insurance & pension	Auxiliary financial intermediation	Real estate & other business activities	Regulatory activities	Education & health	Recreation sports & laundry
2.7	1.1	4.1	1.1	5.8	0.8	6.0	1.9

Source: Annual Economic Survey (2009), 450 large and medium scale companies

There is no explicit information about the informal sector in the population censuses or WMSs, although it is easy to infer that among those who are not mlimi, the majority work in the informal sector, i.e., about 12 percent. This implies that at least 90 percent have their main activity in the informal sector.

The only survey that primarily focuses on the informal sector is the Malawi National Gemini Micro and Small Scale Enterprise (MSE) Survey from 2000 (NSO, 2001). It covered firms with less than 50 employees and on-farm agricultural activities as long as 50 percent of the production was sold and the household earned more than MK 6,000 from the sale of the produce. The survey thus included both mlimi who sell a large part of their harvest, and small firms, capturing small-scale private businesses which mainly is in the informal sector.

MSE's employed over 1.7 million people in 2000, which was 38 percent of the total labour force. Many of these were of course smallholder farmers, but the off-farm enterprises employed as many as 22 percent of the labour force. This reflects the low commercialization rate among smallholders; most of them sell much less than 50 percent of their produce. Women made up over 40 percent of the employees, and 80 percent of the MSEs were located in the rural areas (NSO, 2001).

Summary results from the survey are reported in Table 6 below. It shows that most firms are in Commerce, Trade & Hotels, followed by Manufacturing and Agriculture. The number of employees per enterprise is small, 2.3 on average. The most interesting information in the table is the annual growth rate in total employees, 7.7 percent on average and over 20 percent in some sectors. Further study is needed to evaluate the importance of these numbers, if they are productive jobs and if the high growth rate has continued after 2000.

Table 6. Economic indicators of micro and small enterprises by sector, 2000

	Agriculture, mining and natural resources						Manufacturing, commerce and services				
	All Sectors	Crops	Live-stock	Forestry	Fishing	Mining	Manufac-turing	Cons-truction	Comm-erce, trade & hotels	Trans- port	Services
Distribution of Enterprises ('000s)											
Enterprises	747.4	160.8	7.3	9.6	11.0	0.9	206.4	6.5	306.7	4.7	33.6
By size:											
0-4 employees	674.1	113.4	5.2	9.6	6.8	0.8	200.6	5.1	296.9	4.4	31.4
5-20 employees	72.3	46.8	2.1	-	4.1	0.1	5.8	1.4	9.5	0.3	2.2
21-50 employees	1.0	0.6	-	-	0.1	-	-	-	0.3	-	-
Employees ('000s)	1,700.7	615.4	22.3	10.5	43.8	2.1	354.4	19.0	556.9	14.2	62.1
Annual growth rate in total employees (percent)	7.7	12.8	18.3	-2.9	22.8	26.9	5.8	7.8	7.1	8.7	3.4
Employees per Enterprise	2.3	3.8	3.1	1.1	4.0	2.3	1.7	2.9	1.8	3.0	1.8
Profit per employee per hour (MK)	14.50	5.94	3.99	9.78	50.15	16.64	17.95	5.70	13.59	15.21	7.57

Source: NSO (2001).

Underemployment¹⁵

As reported in Table 3 previously, only 0.7 percent were considered unemployed in 1998. This number hides the fact that underemployment is widespread, particularly in the rural areas where labour demand varies greatly over the year. In this section we use the Integrated Household Survey 2004/2004 (IHS2) to describe work time in rural areas.

The allocation of time use measured in IHS2 is reported for men and women in Tables 9 and 10. The tables show hours of work per week during 13 months, March 2004 – March 2005, for eight activities for those aged 15 and over. Moreover, the shares of those working less than 10 hours or more than 70 hours are reported. All activities closely connected with a household's production are considered as work, including household chores and collecting water and firewood, but not caring for children and sick and disabled household members. The mean number of hours per week varies over the year between 27 and 36 for men, and 35 and 47 for women.

¹⁵ This section relies heavily on Wodon and Beegle (2006).

There are large gender differences, women work about 10 hours more per week than men. It is also more common among women to work more than 70 hours, and uncommon to work less than 10 hours; for example, in March 2004, 10.5 percent of the women worked less than 10 hours and 18.1 percent worked more than 70 hours, while 26.4 percent of the men worked less than 10 hours and 8.1 percent worked more than 70 hours. There are also differences in tasks: men spend more time working in agriculture, with non-agricultural businesses, ganyu, and salaried work, while women do much more household chores.

Seasonality is very pronounced in agricultural work, for men it raises mean hours to over 35 hours in December and January, and reduces the share working less than ten hours to 4.0 percent and 7.4 percent; during some other months the share working less than ten hours is over 20 percent. The same pattern is present among women.

To conclude this sub-section we note that although the data reported are not ideal for describing employment and its distribution across activities and sectors, they probably provide a reasonably accurate picture. Agriculture is by far the most important sector, followed by Wholesale & Retail and Manufacturing, even when considering the informal sector. The informal sector seems to be larger than the combined formal private and public sector, even when subsistence farmers are not counted: a rough estimate indicate that 8-10 percent of the labour force works in the formal sector. Furthermore, underemployment, or more correctly, large seasonal differences in workload, is a dominant and important characteristic of the Malawian labour market.

Table 7. Men's work time by time and categories recorded in IHS2 in rural areas

	Cooking laundry, & cleaning	Collecting water	Collecting fire- wood	Collecting agricultural work	Running non-ag. business	Helping with non-ag. Business	Casual part-time & ganyu work	Salaried work	Total work (mean)	Total work (median)	Working less than 10 hours	Working more than 70 hours
March 2004	1.5	0.5	0.6	15.6	2.6	0.7	2.6	4.9	29	25	26.4	8.1
April 2004	1.7	0.6	0.5	15.2	5.9	0.7	2.5	3.6	30.9	29	17.2	6.9
May 2004	1.5	0.6	0.4	13.9	3.6	0.5	1.9	4.7	27	25	24.2	4.8
June 2004	1.6	0.9	0.4	12.6	3.3	0.7	2.6	6.1	28.3	28	22	4.7
July 2004	2.1	0.8	0.6	11.2	4.9	0.6	2.9	5.1	28.3	26	19.1	4.9
August 2004	2.2	0.7	0.3	12.2	4.4	0.3	2.4	4.4	26.9	24	22.2	4.6
Sept. 2004	2.4	0.8	0.4	12.8	3.6	0.2	2.7	6.7	29.4	26	18.4	7
Oct. 2004	1.9	0.6	0.3	15.5	4	0.2	3.4	4.5	30.3	30	16.5	5.8
Nov. 2004	2.1	0.7	0.4	18.8	2.2	0.2	3.1	6.3	33.9	32	10.9	6.8
Dec. 2004	1.3	0.6	0.3	24.7	2.8	0.3	3.1	3	36.2	34.5	4	5.5
Jan. 2005	1.5	0.9	0.3	19.4	3.4	0.1	2.4	7.1	35.2	34.5	7.4	7.4
Feb. 2005	1.6	0.7	0.3	16.7	3	0.2	2.3	5.2	29.9	28	15.7	4.3
March 2005	1.9	0.8	0.3	16.3	3.3	0.2	2.8	5.2	30.8	30	15.6	5.2

Source: Wodon and Beegle (2006) and IHS2.

Table 8. Women's work time by month and categories recorded in IHS2 in rural areas

	Cooking laundry, & cleaning	Collecting water	Collecting fire- wood	Collecting agricultural work	Running non-ag. business	Helping With non-ag. business	Casual part-time & ganyu work	Salaried work	Total work (mean)	Total work (median)	Working less than 10 hours	Working more than 70 hours
March 2004	14.7	5.6	3.3	13.6	1.9	1.2	1.8	0.8	43	38.5	10.5	18.1
April 2004	14	5.4	2.2	14.1	2.4	0.6	1.1	0.9	40.7	38.5	10.8	13.2
May 2004	13.6	5.8	2.6	14.8	1.3	0.3	1.1	0.4	39.9	38.5	8.6	10.4
June 2004	15.1	6.7	2.6	12.4	2	0.5	1.9	0.4	41.7	39.5	9.5	14.6
July 2004	14.5	6.7	2.5	9.3	2.4	0.4	1.6	1.2	38.5	35	11.1	11.1
August 2004	15.4	7.3	2.5	10.6	2.5	0.2	1	0.6	40.2	38	7.6	11.3
Sept. 2004	15.4	7.4	2.4	12.4	2.1	0.4	0.8	0.5	41.4	40	8.9	13
Oct. 2004	15.3	7.4	2.3	15.8	1.7	0.3	1.1	0.7	44.6	44	6.9	12.5
Nov. 2004	14.3	7.4	2.3	19	1.2	0.3	1.5	1.1	47.2	46	5.2	15
Dec. 2004	12.6	6.4	1.8	23.3	1	0.2	2	0.4	47.7	47	4.5	12.1
Jan. 2005	13.8	8.2	1.9	18.2	0.9	0.5	1	1.7	46.4	47	5.5	12.9
Feb. 2005	14	6.8	1.8	15.9	1.3	0.3	1.7	1.2	43.1	43	7.4	11.6
March 2005	14	7.3	2.2	14.8	1.4	0.2	1.5	1	42.4	41	6.8	10.3

Source: Wodon and Beegle (2006) and IHS2.

Child Labour

There are several national surveys that provide reasonably current information about the problem of child labour in Malawi, such as the Malawi Child Labour Survey from 2002, IHS2 from 2004/2005, WMS 2008 and UNICEF's Multiple Indicator Cluster Survey (MICS) from 2006. In this section we mainly rely on information from MICS and IHS2 to provide an overview of the situation; summary data from Malawi Child Labour Survey 2002 can be found at ILO (2010).

It should be acknowledged that all work is not bad for a child, and that it is not obvious where to draw the line and classify work as child labour. Malawi Government defines child labour as "any economic activity that employs a child less than the age of 14 years. Any activity that exploits a child, prevents a child from attending school that negatively impacts on the health, social, cultural, psychological, moral, religious and related dimensions of the child's upbringing, is child labour. The temporal aspects of child labour include working seven or more hours per week." (NSO and MoL 2004). The first part of the definition is easy to agree with, but the number of hours is more subjective. For example, In MICS a child is considered to be involved in child labour if it is aged 5-11 and does one hour of economic work or 28 hours of domestic work per week, or if it is aged 12-14 years and is involved in at least 14 hours of economic work or 28 hours of domestic work per week (UNICEF and NSO, 2008: 197). Hence, the definition of child labour used in MICS is more restrictive than the official one. Yet, it does not coincide with the ILO Conventions 132, which also covers children aged 15-17, and does not distinguish between child labour in general and worst form of child labour (ILO Convention 182).

Child labour is very common even according to the definition used in MICS; one of every four children works too much (Table 9), amounting to about 900,000 children. The problem is largest in rural areas, 27.7 percent, compared to 13.9 percent in urban areas, and in Northern region, 32.7 percent, compared to 23.0 and 26.7 percent in Central and Southern region. It is also somewhat more common among girls than boys, 26.2 percent compared to 25.3 percent.

Most of the work is directly for the family, in the form of household chores or work for family businesses (4.6 percent and 14.8 percent). However, 10.8 percent work outside the household. Girls do more household chores while boys work for family business, which mainly is farming. The level of wealth and education do not matter for most children, except for those whose mother has gone to at least secondary school or those that belong to the wealthiest quintile. The reason these children work less could be that they live in urban areas.

There are several reasons why children work, poverty, being one important factor (Admassie, 2002). AIDS also contributes. In 2007 there were close to 70,000 AIDS deaths, so obviously many adults were ill requiring both caring by family members, including children, and help with farm work (UNAIDS, 2008). AIDS also increases poverty, obliging children to drop out of school and work to provide income for the household (Arrehag et al., 2006, Chap. 2).

A potentially negative consequence of child labour is lower school attendance, which in turn leads to lower human capital accumulation. Hence, an important question is how child

work affects schooling in Malawi. Surprisingly, children that go to school tend to work more often; in fact 27.8 of those who go to school work while 17.7 percent of those who do not go to school work. This finding does not seem to be a coincidence, Blanco Allais and Hagemann (2008) get the same result analysing the Malawi Child Work Survey 2002. They use an index measuring the ratio of school attendance between economically active and inactive children for 36 countries. Malawi is one of the few countries where the index is greater than one.

Table 9. Percentage of children involved in child labour

Background characteristic	Working outside household		Working for household		Total child labour
	Paid work	Unpaid work	Household chores for 28+ hours per week	Working for family business	
Total Malawi	2.6	8.2	4.6	14.8	25.7
Urban	1.2	4.4	3.8	5.8	13.9
Rural	2.9	8.8	4.8	16.3	27.7
Region					
Northern	0.8	10	6.7	19.9	32.7
Central	2.3	6.7	4.4	13.7	23.0
Southern	3.4	9.2	4.3	14.7	26.7
Sex					
Male	2.8	7.1	3.6	16.2	25.3
Female	2.4	9.2	5.6	13.6	26.2
Missing	2.4	0	15.5	17.9	17.9
Age					
5–11 years	2.8	10.4	2.7	16.7	27.5
12–14 years	2.1	2.5	9.6	10.1	21.2
School participation					
Yes	2.7	8.8	5.1	16.3	27.8
No	2.3	6	2.9	9.1	17.7
Mother's education					
None	3.3	7.7	4.5	16.4	26.6
Primary	2.5	8.8	4.7	14.7	26.3
Secondary +	0.7	5.9	4.6	8.1	17.3
Other	3.5	10.2	5.9	21.1	34.8
Wealth index quintile					
Lowest	2.8	7	4.1	17.1	26.3
Second	3.4	10.5	5	16.6	29.8
Middle	3	9.9	4.8	17.1	29.3
Fourth	3	8.6	5	14.2	26.2
Highest	1.1	5.5	4.2	9.6	18

Source: MICS 2006, NSO and UNICEF 2008.

Note: A child is considered as child labour if it is aged 5-11 and does one hour of economic work or 28 hours of domestic work per week, or if it is aged 12-14 years and is involved in at least 14 hours of economic work or 28 hours of domestic work per week (UNICEF and NSO, 2008: 197).

Wodon and Beegle (2006) provide additional information on child labour using data from IHS2. Table 10 shows the average numbers of hours worked per week, including household chores, by income quintile during March 2004 - March 2005 for children aged 5-14. On average, children worked 8.5 hours per week. There is surprisingly little difference between income quintiles, but it is noteworthy that those in the poorest quintile work fewer hours per week (7.7) than those in higher wealth quintiles.

Table 11 below shows the average numbers of hours worked per week by gender and type of activity. On average, boys worked about 6.57 hours while girls worked 10.63 hours. Hence, there seems to be a greater gender disparity when the numbers of hours worked are counted compared to the shares who work. This is also evident from the differences between the mean and the median number of hours worked; 6.57 compared to 0.65 for boys and 10.63 and 6.04 for girls. The difference between mean and median implies that a large part of the boys work very little, while some work many hours. The gender aspect is also apparent from the shares working less than 10 hours, 74.74 percent for boys and 61.28 percent for girls. Furthermore, girls do household chores, while boys do agricultural work and ganyu labour.

Table 10. Average hours per week spent working March 2004-March 2005, for children aged 5-15 according to income quintiles

Poorest quintile	2nd quintile	3rd quintile	4th quintile	Richest quintile	Total
7.7	8.9	8.6	9.3	8.6	8.5

Source: Wodon and Beegle (2006). The data are from IHS2.

Note: All activities closely connected with a household's production are considered as work, including household chores and collecting water and firewood, but not caring for children and sick and disabled household members.

Table 11. Child work March 2004-March 2005, average numbers of hours per week (aged 5-15)

Cooking, laundry & cleaning	Collecting water & firewood	Agricultural work	Working with non-ag. business	Casual part-time & ganyu work	Salaried work	Total work (mean)	Total work (median)	Working less than 10 hours (percent)
<u>Boys 5-15</u>								
1.49	1.28	3.12	0.17	0.30	0.12	6.57	0.65	74.74
<u>Girls 5-15</u>								
3.54	4.04	2.47	0.27	0.20	0.12	10.63	6.04	61.28

Source: Wodon and Beegle (2006). The data are from IHSII.

Note: The entries do not sum up exactly to Total work (mean) because of rounding errors. All activities closely connected with a household's production are considered as work, including household chores and collecting water and firewood, but not caring for children and sick and disabled household members.

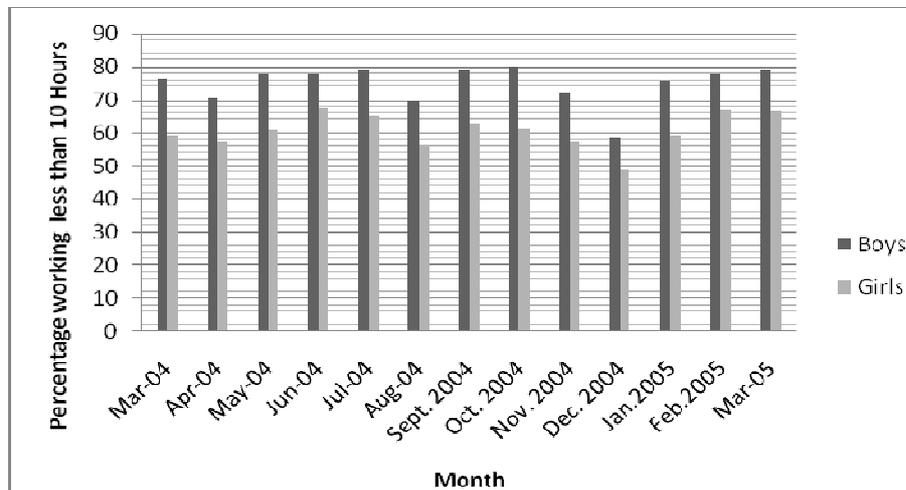
The differences across wealth and the unequal distribution of working hours give possible explanations for why child labour seems to have a positive effect on schooling. Poor children both work and attended school less than others. According to a recent study, lack of clean clothes and other basic needs were the most common reasons given why children miss school. Moreover, poor children are ill more often, resulting in school absenteeism (Bennell, 2005). Bad clothes and health could thus be one reason why school attendance and child labour tend to go hand in hand in Malawi. Another factor could be that child labour only affects schooling negatively among those who work long hours, which is masked in Table 10 since it reports shares of those classified as child labourers. Yet another explanation is that school attendance is irregular even among those who go to school, as indicated by the low completion rates (see Section 8.1). If child labour is a major reason for the low completion rates, it is indeed a very serious problem. These are issues that need further study.

In order to get a year round feel of the allocation of time, the annual allocation of time across various activities for boys and girls aged 5 to 15 is reported in Tables A4 and A5 (in Appendix 5). Just like the case of adults presented earlier, all activities closely connected with a household's production are considered as work. The tables show hours of work per week over the period March 2004 to March 2005, for eight activities. The mean number of hours per week varies over the year between 5.6 and 11.3 for boys, and 8.4 and 15.4 for girls. There are gender differences in the kind of work that children perform around the year, but the seasonal patterns look similar.

Figure 4 shows the percentage of boys and girls aged 5 to 15 who work less 10 hours per week over the period March 2004 to March 2005. In all months, the percentage of girls working less than 10 hours is consistently lower than that for boys. This gender disparity suggests that girls tend to work more than boys all year round. It is worth noting that just like the case for adults discussed earlier, children work displays a perceptible seasonal pattern with the percentage of those working less 10 hours being lowest in December.

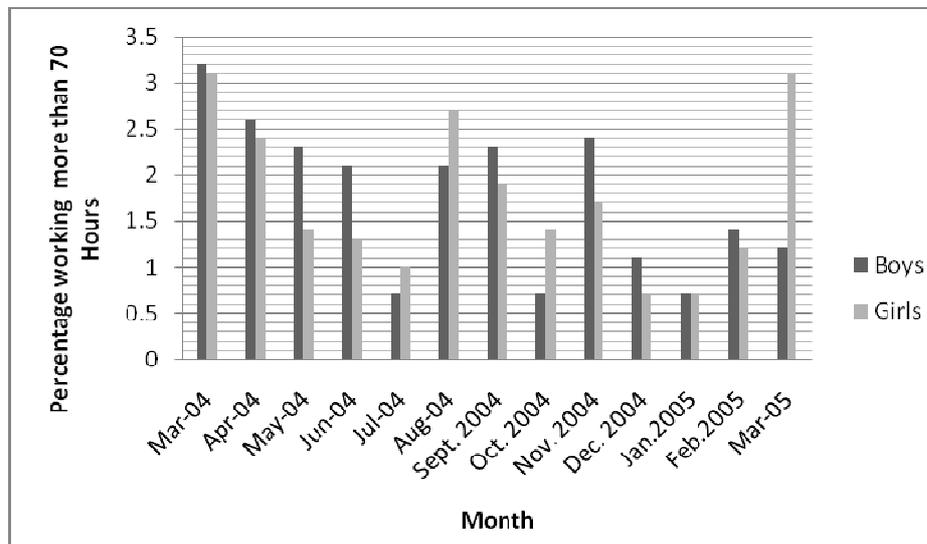
While there is no discernible seasonal pattern in the the gender difference in children working under 10 hours, the picture is different when one looks at the percentage of children working over 70 hours per week. Figure 5 shows that between April and June, a higher percentage of boys relative to girls work more 70 hours. This picture is different from that of adults discussed before where fewer adult males were consistently shown to work more 70 hours. Although the picture is mixed for boys, March compared to the other months clearly sees the highest percentage of girls working over 70 hours per week.

Figure 4. Percentage of boys and girls (age 5 to 15) working less than 10 hours per week



Source: Wodon and Beegle (2006).

Figure 5. Percentage of boys and girls (age 5 to 15) working more than 70 hours per week



Source: Wodon and Beegle (2006).

Earnings and Labour Productivity

This section first describes wages and salaries both across sectors and for the formal and informal sector. Then it reports some direct and indirect measures of labour productivity.

How much do Malawians earn?

The most widely used wage rates in Malawi are probably minimum wages. These are determined after negotiations between Malawi Congress of Trade Unions (MCTU), the Congress of Malawi Trade Unions (COMATU), Employers Consultative Association of Malawi (ECAM) and Government (Ministry of Labour). Although there is no information about how many workers are paid minimum wages, most firms seem to use them as guideposts, so they should be valid for low-skilled labour, which comprise the vast majority of the wage earners. There also exist employers that pay less than the minimum wage, although it is illegal.

Table 12 shows minimum wages and housing allowances for urban and rural areas for 2008-2010, in Kwacha and in US dollars. We also report wages for 2004-2007, since they are later used for comparison with data from other sources.

Currently, the daily minimum wage plus housing allowance is MK 129.30 in urban areas and MK 105.45 in rural areas. A person working full time in an urban area would thus get MK 3,362 per month or MK 40,342 per year, and a person working in a rural area would get MK 2,742 or MK 32,900. In US dollars, daily minimum wages were US\$ 0.92 and US\$ 0.75, respectively, i.e., less than a dollar per day when measured at the 2009 average current exchange rate. The annual urban and rural incomes in US dollars were US\$ 286 and US\$ 233. Thus, minimum wages are low, and would not suffice to keep a family five – the average family size in Malawi – above the poverty line.

Table 12. Minimum wages 2008-2010, in Kwacha and US dollars

Year	Urban				Rural			
	Daily wage	House allowance	Monthly wage	Annual wage	Daily wage	House allowance	Monthly wage	Annual wage
2004-2007	87.5	9	2,509	30,108	66.5	7	1,911	22,932
2008-2010*	117.3	12	3,362	40,342	95.45	10	2,742	32,900
2009 US\$	0.83	0.09	23.81	286	0.68	0.07	19.40	233

Source: Ministry of Labour.

* As of March 2010. The minimum wage is currently under consideration and will probably be raised during 2010.

Another good, but limited, source of information on wages is the Annual Economic Survey. The survey collects information on remuneration, which includes all 'payments in cash or in kind during the reference year in relation to work done for the establishment i.e. including gratuities, bonus, overtime, benefits in cash and kind and pension contributions' (AES, 2009). It also has information on value added and the number of employees.

Table 13 reports the average annual remuneration per employee for 14 major sectors over 2005-2006, the latest two surveys available. Remunerations in Agriculture & Forestry, Real Estate, and Construction are low (about MK 60,000) but roughly twice as high as annual minimum wages. In the other sectors remunerations are much higher; for instance, Wholesale & Retail pays MK 310,000.

One striking features of the Malawian labour market is the large differences in wages. Table 14 illustrates this by comparing sectors' average annual remuneration per employee with Banking & Intermediation. Remuneration in Agriculture & Forestry and Construction are only 3 to 4 percent of Banking & Intermediation, while Manufacturing & Mining is 16 percent. The sectors Wholesale & Retail, Electricity & Water, Education & Health, and Hotel & Restaurants pay about 20 percent of Banking & Intermediation. And the pay in Agriculture & Forestry is on 3 percent of financial sectors, such as Banking & Intermediation, Auxiliary Financial Intermediation, and Insurance & Pension.

Table 13. Average annual remuneration per employee by sector, 2005-2006

Agriculture & forestry	Manufacturing & mining	Electricity & water	Construction	Wholesale & retail	Hotels & restaurants	Transport & Telecommunications
57,450	282,700	409,350	63,950	310,050	292,000	617,500
Banking & intermediation	Leasing & credit granting	Insurance & pension	Auxiliary financial intermediation	Regulatory activities	Education & health	Recreation sports & laundry
1,764,000	1,462,950	1,534,000	1,778,350	316,300	468,750	346,350

Source: Annual Economic Survey (2009), 450 large and medium scale companies.

Table 14. Average remuneration per employee relative to banking by sector, 2005-2006 (in percent)

Agriculture & forestry 3	Manufacturing & mining 16	Electricity & water 23	Construction 4	Wholesale & retail 18	Hotels & restaurants 17	Transport & tele-communications 35
Banking & Intermediation 100	Leasing & Credit Granting 83	Insurance & Pension 87	Auxiliary Financial Intermediation 101	Regulatory Activities 18	Education & Health 27	Recreation Sports & Laundry 20

Source: Annual Economic Survey (2009), 450 large and medium scale companies.

Since the AES mainly includes large scale enterprises, we also checked if the relative levels of the remunerations were consistent with the defunct Employment and Earnings Survey. It covered over 4,200 registered enterprises irrespective of size (NSO, 1995). Data from the latter half of the 1980s support the general features of Table 14, although the differences were somewhat smaller: earnings in Agriculture and Manufacturing compared to the financial sectors were 5 and 25 percent, respectively (data not reported).

Differences in remuneration usually reflect both the human capital, i.e., level of skills, and use of capital, which, as well as supply of other inputs (discussed in Section 7.3), which all affect labour productivity (Eifert, et al., 2008). Moreover, several other factors might be of importance, such as segmented labour markets and implicit contracts between employers and employees. Yet, the ranking in Table 14 corresponds quite well to the sectoral education levels of the labour force (see Figure 10: Skills Profile by Sector of Activity in Section 7). Educational attainment among workers in Agriculture is clearly lower than in Manufacturing, where, in turn it is lower than in Commerce & Services. The workers in Finance and Insurance have a much higher level of education than in the other sectors; 45 percent have more than secondary school, while the share is less than 5 percent in Manufacturing and Agriculture and below 10 percent in the other sectors. The differences in remuneration across sectors suggest a very high skills premium.

Malawian banks are very profitable; actually they have the highest returns on assets and equity among eleven Southern and Eastern African countries according MCA (2010). Thus, high profitability and risk sharing among workers and owners might explain the high wages. And the high profits could be due to lack of international competition. Agriculture and Manufacturing, for example, are probably the two least protected sectors, and they clearly pay less than Wholesale & Retail, which probably is unusual in an international perspective.

The formal sector employs a small share of Malawi's workforce, so to obtain an idea of wages in the informal sector, data from the 2000 Gemini survey was used (NSO, 2001). It allows calculation of return to labour and earnings of employees, based on profits. These are reported in Table 15 for various sectors, measured in 2005 prices to make them comparable to labour costs in the large scale formal firms and minimum wages.

Profits per employee in the sectors differ greatly, but not as much as in the formal sector. Fishing is by far the most lucrative sector with annual profits of MK 200,000 per employee, while livestock and crops only pay MK 16,800 and MK 25,100, respectively. In between these we find Manufacturing with MK 76,000 and Mining with MK 75,000.

In 2005, annual minimum wages in urban and rural areas were MK 30,108 and MK 22,932, the same magnitude as profits per employee in Crops and Construction, and higher than those in Livestock. However, many worker in the MSE sector must earn less than

minimum wages, since profits hardly are shared equally among the owner and employees, and profits in the sample are highly skewed; a small number of firms have high earnings while many earn less than the average income (NSO, 2001). On the other hand, for many people the MSE activities are not their only or main occupation (Agar et al., 2009). The fact that profit per employee in Manufacturing is higher among MSEs than remuneration among large scale manufacturing firms indicates that the absolute values are not really comparable. Hence, information on income is needed for a proper evaluation of earnings.

Table 15. Returns to labour and employee earnings among MSEs (MKW in 2005 prices)

	Average firm hourly sales	Hourly profits/employee	Yearly profits/employee
Livestock	56.8	7.98	16848
Forestry	35.62	19.56	41304
Fishing	736.12	100.3	211834
Mining	107.48	33.28	70296
Manufacturing	149.9	35.9	75792
Construction	58.06	11.4	24072
Commerce and trade, hotels	155.92	27.18	57408
Transport	214.14	30.42	64248
Services	61.86	15.14	31968
All	152.68	29	81360

Source: Malawi Micro and Small Enterprises Survey, 2000 (NSO, 2001)

Note: To facilitate comparison with other surveys, all values were increased using the change in consumer prices 2000-2005.

Profits are thus measured in 2005 prices

The Enterprise Surveys of the World Bank have information that allows for the description of differences in wages across size and ownership of firms, though only for manufacturing and services. Table 16 reports labour costs per full time equivalent employee from the 2009 Enterprise Survey, which should correspond to remuneration in AES. As often found in studies on wages, they are higher in large firms. This is true for both manufacturing and services. The difference is particularly great for services where average annual labour cost was MK 113,420 for small firms and MK 349,127 for large firms. These variations in size probably reflect differences in both skill levels and capital stocks, where larger firms have more skilled labour and larger capital stock.

In the bottom row of Table 16, average labour cost across ownership is reported. Firms owned by European/Caucasians have by far the highest labour costs, MK 482,000, while the ones owned by African, Indian and Other Asians are similar, with labour costs of about MK 125.000-130,000.

Table 16. Average remuneration in 2009 in MK per full-time equivalent employee

Size and sector	Small	Medium	Large	
Manufacturing	206,508	213,721	293,930	
Services	113,420	207,851	349,127	
Ownership	African	Indian	Asian (non-Indian)	European/Caucasian
	125,648	131,235	125,648	482,484

Source: Enterprise Survey 2009 (World Bank, 2010b).

Note: Size is defined as; small 5 to 19 employees, medium 20 to 99 employees and large 100 or more

Finally we report data on income available collected by Finscope 2008. It is individual cash income, not household income (as in the IHS2); although the difference is probably not always clear, especially for smallholders.

Table 17 shows monthly and annual income for different income categories ranging from zero income to over MK 40,000 per month, and the percentage share of the sample in each category for all, females and males. Over 55 percent of the adults earned less than MK 5,000 per month (US\$ 36), while 30 percent earned less than MK 2,500 (US\$ 18), a smaller amount than a full time job paying minimum wages, i.e., MK 3,360 in urban areas and MK 2,740 in rural areas (including housing allowance). Only 7.5% earned more than MK 25,000 (US\$ 180). There is a gender difference but it is surprisingly small: 59% of the women earn less than 5,000 compared to 53% for men, while 6% compared to 8% earn more than 25,000, respectively.

Annual income was estimated by multiplying annual income by twelve. This is likely to overestimate income since 41 percent of the respondents classified the monthly income a high, 37 percent considered it average, and only 21 percent said it was low. Nevertheless, it shows that 96 percent earned less than MK 480,000 per year in 2008 (about US\$ 4,560), which is about the same as average remuneration in Education & Health in 2005/06, and a quarter of the remuneration in the financial sector.

Table 17. Monthly and annual income for individuals

Monthly income	Annual income (12 x monthly income)	All (%)	Females (%)	Males (%)
No income	No income	8.0	8.9	7.0
Less than 1000	Less than 12,000	14.5	16.0	12.8
1,001 - 2,500	12,000-30,000	15.2	15.5	14.9
2,501 - 5,000	30,000-60,000	18.8	18.8	18.7
5,001 - 7,500	60,000-90,000	8.8	7.7	10.0
7,501 - 10,000	90,000-120,000	6.5	6.6	6.4
10,001 - 12,500	120,000-150,000	4.0	3.9	4.0
12,501 - 15,000	150,000-180,000	3.0	2.9	3.2
15,001 - 20,000	180,000-240,000	3.4	2.8	4.2
20,001 - 25,000	240,000-300,000	2.9	2.7	3.2
25,001 - 30,000	300,000-360,000	1.5	1.1	1.8
30,001 - 40,000	360,000-480,000	2.0	1.8	2.3
More than 40,000	More than 480,000	4.0	3.1	4.9
Does not know		3.6	4.0	3.1
Refused		1.8	1.9	1.7
Missing		2.0	2.3	1.7

Source: FinScope 2008.

Why are wages so low?

Labour is cheap in Malawi, or in other words, wages seem to be low by international standards. This is evident by the low minimum wages, measured in US dollars, US\$ 24 for urban and US\$ 19 for rural areas. Moreover, these are much lower than minimum wages in neighbouring Mozambique, which is an almost equally poor country (see Table 18 below). For example, in 2009, monthly minimum wages in Mozambique were US\$ 55 for farm workers and US\$ 89 for manufacturing workers, more than twice as high as in Malawi (Muhate, 2009).¹⁶ Furthermore, several value chain analyses of agricultural products,

¹⁶ The minimum wages for Mozambique were converted to US dollars using the official exchange rate. They are valid for the first quarter of 2009. However, they are only marginally higher than the 2008 dollar values. If purchasing power parity for consumption is used instead of the official exchange rate, the difference is equally large: 94 dollars for farm workers in Mozambique compared 40 dollars in rural areas in Malawi.

reported by Keyser and Tchale (2009), show that labour costs are low in the agricultural sector.

The standard explanation for low wages is low labour productivity, implying that Malawian workers do not produce as much as workers in most other countries. However, low wages could also be due to excess supply of workers combined with constraints on other factors of production, or market power among employers. In these cases profits make up a large share of value added, leaving a small share for employees.

The most straight forward way of evaluating labour productivity is to look at value added per worker and wage shares at the national level. However, lack of data prevents us from analysing how GDP in Malawi is allocated to owners of capital and labour, i.e., the shares going to wages and profits. Instead, we first report, average labour productivity for 2004-2007, measured as GDP in constant US or PPP dollars divided by the labour force for Malawi and six comparator countries (Table 18). When GDP is measured in constant PPP dollars, labour productivity is lower in Malawi than in the other countries with the exception of Mozambique. We obtain the similar results when we use GDP per capita instead; but now the ratios are clearly lower for Malawi than in any of the other countries. Hence, for a given distribution between profits and wages, we expect Malawian workers to be paid less than workers in, for example, Kenya, Tanzania, Zambia and Uganda. In 2005 PPP dollars, Tanzanians and Ugandans would be paid about 30 percent more, and Zambians 90 percent more, than Malawians.

Table 18. Labour productivity and GDP per capita in US dollar and PPP dollars

Malawi	Kenya	Mozambique	South Africa	Tanzania	Uganda	Zambia
Labour productivity in constant 2005 PPP dollars (2004-2007)						
1631	2986	1505	23871	2152	2162	3057
Labour productivity in constant 2000 constant dollars (2004-2007)						
347	941	693	9610	667	696	943
GDP per capita in constant 2005 PPP dollars (2004-2008)						
695	1396	717	8826	1077	967	1171
GDP per capita in constant 2000 US dollars (2004-2008)						
148	441	331	3556	334	312	362

Source: World Development Indicators (World Bank, 2010d).

Since most Malawians work in agriculture, agricultural productivity has a strong influence on overall labour productivity. In general, yields per hectare in Malawi are lower for all major crops when compared to its neighbouring countries, even tobacco (Keyser and Tchale, 2009; MCA, 2010). And if one takes a long-term view, yields per hectare have hardly risen at all. Maize yields, for instance, have been about 1.5 tonnes over the last 40 years, while the world average has risen from 2 to 5 tonnes. In Africa the average is currently 1.8 tonnes per hectare. The recent seed and fertilizer subsidy program, initiated in 2005/2006, has however raised maize yields substantially, though the sustainability of the programme is an on-going issue of debate.

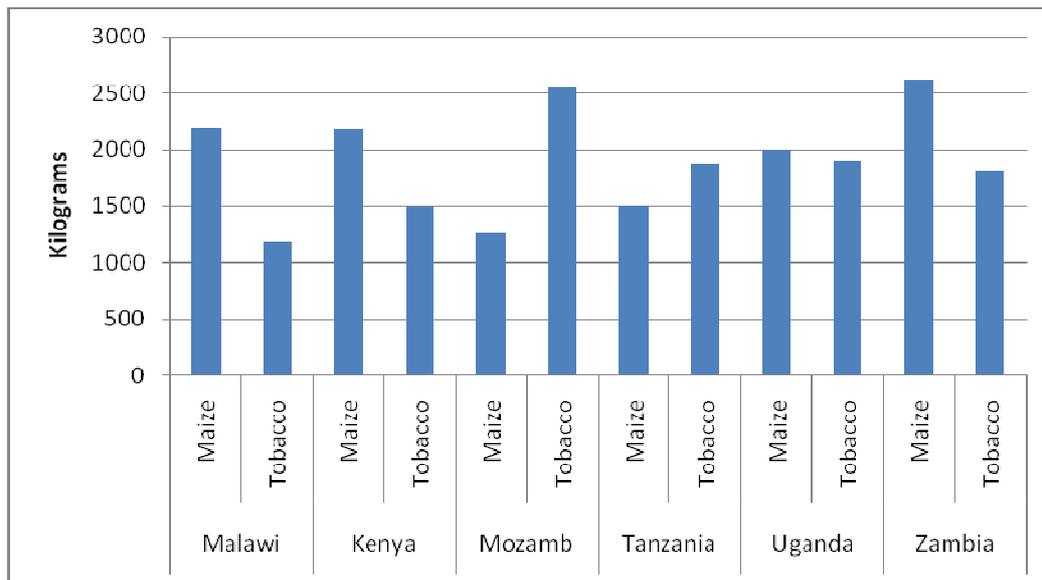
Figure 8 illustrates the current situation by showing average maize and tobacco yields per hectare in Malawi and five comparator countries for 2005-2008. Maize yields are higher in Malawi than in Mozambique and Tanzania, about the same as in Kenya and Uganda, and

only lower than in Zambia. This is due to the exceptionally large harvests during recent years: doing the same figure for 2000-2006 puts Malawi behind Tanzania and at the same level as Mozambique. Moreover, recent maize harvests might be overestimated by as much as 20 percent (Lea and Hanmer, 2009). Tobacco yields, on the other hand, are clearly lower than in all comparator countries.

Labour productivity in agriculture does not only depend on yield per hectare, but also on the size of land holdings per adult household member, and these are on average smaller in Malawi than in neighbouring countries because of high population density. Average size of land holding per household in Malawi is 1.2 hectare, and average landholding per person living in rural areas is 0.23 hectares. This is much lower than most other SSA countries: in Rwanda, for example, it is about 0.5, and the average for Sub-Saharan Africa (SSA) is 0.4 hectares. Moreover, other countries with small landholdings do not have a monomial rainfall pattern, as Malawi has (World Bank and Malawi Government 2006, MCA, 2010).

In addition, input costs are in general higher in Malawi than in other countries; for example, fertilizer prices in 2007 were twice as high as in Mozambique (Keyser and Tchale, 2009). High input prices of course have a negative effect on the income received by farmers. All these factors combine to make labour productivity low in farming, both in terms of output quantities and values.

Figure 6. Average maize and tobacco yields per hectare, 2005-2008 (in kilograms)



Source: FAO Statistics database.

It is hard to find recent studies on labour productivity in Malawi's manufacturing sector. The report from the 2006 Enterprise Survey (carried out in 2005), which covered about 150 formal firms, contains some information. Labour costs as a share of value added is much lower in Malawi than in countries such as Madagascar Tanzania and Zambia (Enterprise Surveys, 2006). These percentages are suspiciously low, but the Enterprise Surveys should be comparable across countries. Moreover, wage shares obtained from AES also indicate that wage shares are smaller than in comparable countries. According to

Enterprise Surveys (2006), the small wage shares are evidence of low labour productivity in Malawi, implicitly assuming workers are paid according to their productivity.

One argument for why labour productivity is low is low skills levels or low levels of human capital. The 2006 Enterprise Survey shows that the share of unskilled workers in Malawian firms on average is larger than in most other SSA countries. It was 66 percent, slightly lower than for Burundi, but clearly higher than for the other 8 SSA countries for which there is data. Hence, low levels of human capital, or skills, is likely to be contributing to low wages. This argument is also supported by the generally low levels of education and literacy encountered in Malawi (see Section 7 on Education).

Using the 2006 Enterprise Survey data in a study of investments, Record and Simon (2007) obtain some interesting results that support the low productivity story. Increases in the number of workers do not raise production, in fact, there seems to be negative returns to labour. Furthermore, increases in inputs, but not capital, raise output per employee. Together these findings point towards poor utilization of workers, which of course show up as low labour productivity. Firms thus seem to employ workers and keep them when there is little work to do. Since labour regulation is considered much less of a constraint in Malawi than in other countries, even though there are complaints about payments to retrenched workers, as described in Section 10, other factors must be at play. One explanation is that wages, and marginal productivity, are so low that the cost of workers become negligible for firms, at least when considering negative consequences of retrenchment, including both direct firing costs and social costs, as workers usually support many relatives.

The study also illustrates the fact that labour productivity depends on the availability of inputs, not only human and physical capital, which seems to be common in other Sub-Saharan countries (Eifert et al., 2008). One example is power. In Malawi lost sales due to power outages were estimated to be 17 percent in 2009, the third highest among 118 countries so far included in the Enterprise Surveys (World Bank, 2010). It was even higher than in the Republic of Congo, 16 percent, and much higher than in Tanzania and Uganda, about 10 percent. Part of this revenue loss is most certainly paid by workers in the form of lower wages. Other costs that also might matter are transport costs, high interest rates on loans, etc. These costs show up in measures of *total factor productivity*, i.e., value added divided by a weighted average of the amount of capital and labour used. Estimates from 2006 Enterprise Survey show that total factor productivity is low in the Malawian firms compared to those on other (Enterprise Surveys, 2006).

To summarize, most Malawians have low wages by international standard, but there are large differences across sectors. To some extent, low wages are most certainly due to low labour productivity. This is also the case for the large differences across sectors. However, it requires a detailed analysis, beyond the scope of this study, to evaluate how important other factors are.

The low overall labour productivity clearly depends on low yields in agriculture, as well as low skills levels. There is also some evidence that availability and quality of inputs in a broad sense, including power, roads, etc, matter greatly for productivity, pointing towards an important role for constraints to production.

Poverty and Inequality

Poverty is widespread in Malawi, but it seems to have declined substantially during recent years. Table 19 shows headcount ratios for poor and ultra poor by region from surveys carried out between 1998 and 2008.¹⁷ Although the surveys are not designed in the same way, and not directly comparable, there seems to have been a sharp drop in the share of the poor between 2004-2005 and 2008, from 52 percent to 40 percent. The share of the ultra poor also declined, from 22 percent to 15 percent. These improvements are consistent with the good performance of the economy. It is noteworthy that there was hardly any improvement between 1998 and 2005.

Table 19. Poverty headcount ratios

	IHS1 1998	IHS2 2004	WMS 2005	WMS 2006	WMS 2007	WMS 2008
Proportion poor						
Malawi	54	52	50	45	40	40
Urban	19	25	24	25	11	13
Rural	58	56	53	47	44	-
Rural Northern region	56	56	51	46	46	35
Rural Central region	48	47	46	40	36	40
Rural Southern region	68	64	60	55	51	51
Proportion ultra-poor						
Malawi	24	22	21	17	15	15
Urban	5	8	8	6	2	3
Rural	26	24	23	19	17	-
Rural Northern region	25	26	21	17	18	11
Rural Central region	16	16	16	12	11	12
Rural Southern region	35	32	30	25	22	24

Sources: NSO (2000, 2005, 2006, 2007, 2009a).

Note: IHS1 and 2 are Integrated Household Survey 1998 and 2004/05.

Poverty is much more common in rural than urban areas (Table 19). Nonetheless, the decline in poverty in percentage points has been similar in the two areas. But this implies that poverty has been halved in urban areas, declining from 25 percent in 2004/2005 to 13 percent in 2008, while it has decreased from 56 percent in 2004 to 44 percent in 2007 in rural areas.

The WMSs from 2005 and 2007 allow for estimates of changes in poverty by source of income. Table 20 shows the percentage share of poor households by household's head employment status and sector for 2005 and 2007: the information is not available in the

¹⁷ The Welfare Monitoring Surveys do not collect information on income or expenditure, so poverty is estimated using various indicators, such as assets. Hence, they are not directly comparable with the Integrated Household Surveys.

WMS 2008 report but there is little change in poverty between 2007 and 2008. The level of poverty is clearly highest in the rural areas, particularly among the economically inactive and the unemployed, but poverty among mlimi is also very high. Those who work in the private and public sector are least likely to be poor.

There is also evidence of a strong reduction in poverty from 2005 to 2007. This is often attributed to good harvests and improved food security, possibly as a result of the AISP. For instance, in 2007/2008 Government handed out voucher/coupons for seed and fertiliser to 59 percent of the households (NSO, 2009a). It is thus surprising that poverty has not declined much more in rural than urban areas (see Table 19), and that the shares of the poor and ultra poor have not declined more among mlimi in rural areas than among those with other sources of income (Table 20). The explanation could be that export income, particularly from tobacco, is the major driver of recent growth, and that it has large multiplier effects, affecting urban areas strongly. The importance of exports for economic growth in Malawi is emphasised by World Bank (2009) and Lea and Hanmer (2009), an issue that is discussed in more detail in Section 9.

Malawi has an unequal income distribution, though the degree of inequality and its development over time are uncertain due to paucity of good data. Nonetheless, according to recent calculations by the World Bank, in 2004/2005 the Gini coefficient was 0.39, (0.48 in urban areas and 0.34 in rural areas). There appears to have been little change over recent years, in 1998 the Gini coefficient was also 0.39, but inequality was lower in urban areas (0.40) while it was about the same in rural areas, 0.33 (World Bank, 2006). Since economic growth has been high since 2004, inequality may have changed considerably; the 2101 IHS, which is currently being implemented, will provide more information.

There are also large regional (spatial) differences in income. Rural areas in the Southern region are the poorest, but that is where the decline has been the most modest, while the rural parts of Northern region have done well (Table 19). These inequalities are most likely due to differences in the sizes of land holdings; they are clearly larger on average in Northern region. The disparities in poverty are particularly great for the ultra poor, where the rate in 2008 was twice as high in rural areas in Southern region compared to those in Central and Northern region, 24 percent versus 12 percent and 11 percent, respectively.

The use of ratios hides another important aspect of the geographic poverty distribution. Since about 45 percent of Malawi's population live Southern region, over 60 percent of the poor and 70 percent of the ultra poor live in rural Southern region.

Table 20. Employment status head of household and household poverty, 2005 and 2007

		Urban		Rural	
		Poor	Ultra-poor	Poor	Ultra-poor
Private business	2005	12	4	48	20
	2007	9	2	31	10
Private individual	2005	25	6	54	23
	2007	13	3	40	14
Public	2005	18	7	24	10
	2007	5	1	21	7
Self employed	2005	21	5	46	18
	2007	14	3	40	15
Mlimi	2005	53	23	57	25
	2007	30	9	47	18
Unemployed	2005	44	15	62	34
	2007	10	3	50	20
Not economically active	2005	37	12	59	24
	2007	10	3	51	21

Source: Welfare Monitoring Survey 2005 and 2007.

Formally the three regions are administrative units, but there are also ethnic differences. Accordingly, the geographic differences in poverty have an ethnic dimension. This could be because Northern region is less populated and population density is less than in Central and Southern region, so there is more land per person. However, there is information indicating that Northerners have a dominant position in the labour market, occupying many top positions.¹⁸ They are also claimed to dominate higher education, both as faculty and students. This kind of inequality might cause social problems, and the discontent is already noticeable in articles in NYASA Times (www.nyasatimes.com). One consequence is that Government recently decided to introduce a two-step procedure for university applicants, starting at the district level. This will improve the regional distribution of the students, but discriminate against some Northerners who will not enter university although they are more qualified than some of those accepted.

It is beyond the scope of this study to investigate these claims in detail, but the Finscope 2008 survey can be used to provide a picture of income across ethnic groups. Table 21 reports the distribution of monthly income within various ethnic groups for income segments. The three penultimate columns show shares for those earning less than MK 5,001, less than MK 15,001 and more than MK 15,000 per month. The ethnic groups with the smallest shares of people earning less than MK 5,000, and the highest shares of more than MK 15,000 are Ngonde, Tumbuka and Lambya. All three groups originate from Northern

¹⁸ According to sources on the internet, there exists an unpublicised report on the composition of labour markets in terms of regional and tribal affiliations in Malawi (NYASA Times, 2009).

region. Although these findings should be interpreted with care, they do provide some support for a commonly held view and merit further study.

Remittances are a source of income that usually lessens inequality. We have information about remittances from FinScope 2008. Surprisingly, it is not very common to receive remittances from abroad: only 3 percent of the adults had received money during the 12 months preceding the survey. Of course, some might have received help in kind, such as seeds, but it was not included in the survey.

This finding is supported by official statistics on inflows of remittances, which are very small in Malawi, about a million US dollar per year during the last ten years. Although there is serious underreporting, official remittances to neighbouring countries are many times larger, such as US\$ 677 million to Uganda (World Bank, 2010c). Moreover, both the share of population that has emigrated from Malawi and the share of emigrants with tertiary education are lower than for neighbouring countries, such as Mozambique and Uganda (World Bank, 2008).

Transfers within the country are more common, 14 percent were given money. Almost 40 percent of the transfers are from children to parents, and 30 percent are to other family members and 20 percent are from parents to children (Agar et al, 2009). Unfortunately we do not have information about how large the transfers are.

Summing up this section we conclude that there appears to have been a substantial reduction in poverty during the last five years, but poverty is still high. Furthermore, the improvement might not be sustainable; adequate rainfall contributed to large harvests, as well as agricultural subsidies, and there is no certainty these will be as favourable in the future. Hence, fighting poverty must continue to be high on the agenda.

There is also evidence that the share of the poor in urban areas has declined as much, or more, than in rural areas, and that mlimi in rural areas have seen smaller decreases in the share of the poor and ultra poor than other groups. This is surprising and indicates that sources of growth other than food production have contributed to the poverty decline. One possibility is increases in exports, and another one is that AISP has missed targets.

There is also a great deal of income inequality in Malawi. The inequality is multifaceted but is particularly high in urban areas, and between urban and rural areas. There are also regional/ethnic differences in income, which probably will constitute a major challenge in the future.

Table 21. Income distribution within ethnic groups

Tribe	No income	Less than 1,000	1,001 - 2,500	2,501 - 5,000	5,001 - 7,500	7,501 - 10,000	10,001 - 12,500	12,501 - 15,000	Less than 5,001	Less than 15,001	15,000 and more	Total
Chewa	7	18	19	21	10	6	3	2	65	87	13	100
Nyanja	8	18	14	21	8	7	4	5	61	86	14	100
Yao	13	13	15	22	9	7	3	3	62	85	15	100
Tumbuka	6	9	13	17	10	9	6	6	45	76	24	100
Lomwe	7	16	16	23	11	7	5	2	61	86	14	100
Ngonde	9	10	10	9	12	10	7	5	38	72	28	100
Ngoni	10	14	18	20	10	8	4	4	61	87	13	100
Sena	8	21	13	18	7	5	6	3	61	82	18	100
Tonga	7	13	11	25	8	6	6	3	57	80	20	100
Lambya	5	24	11	11	13	3	5	5	50	76	24	100
Other	10	12	10	18	10	10	8	1	49	78	22	100

Source: Finscope (2008) and own calculations.

Note that ethnic groups with few observations in the survey have been excluded.

Education and Employment

Low levels of education are widely considered to be a major impediment to economic growth, employment creation and the eradication of poverty in SSA (Glick and Sahn, 2000). This is because low levels of education make it more difficult to take advantage of opportunities offered by a globalized economy, where liberalization and educational expansion can either, in a virtuous cycle, reinforce each other, or lead to a stagnation (Kim and Kim, 2000).

Investments in education also have other more subtle benefits. For example, societies with high illiteracy levels have been shown to be more susceptible to political manipulation, corruption and bad governance, as well as civil strife and violence; phenomena that undermine human as well as economic development. Moreover, education has a direct influence on social behaviour. People with more education have different ways of responding to certain situations (e.g., pregnancy, malarial treatment for children, and HIV/AIDS) than those with less education, independent of household income. In Malawi, there is evidence that with an increasing level of education, the interval between two consecutive births is longer, and women have fewer births in total (NSO and UNICEF, 2008). This section discusses; enrolment trends at different levels of education, the quality of education, and the relationship between education and the labour market in Malawi.

Enrolment trends¹⁹

Table 22 reports enrolment trends at all levels of education in Malawi for the period 1998-2007. Primary education growth was constant at 1 percent from 2004 to 2007 (see last column). It is worth noting that there is a large difference in enrolment growth between public and private primary schools over the same period: private primary schools registered a growth rate of 17 percent compared to just 1 percent for public primary schools.

The secondary school level showed a 1 percent annual growth rate between 2001 and 2004, accelerating to 5 percent annually between 2004 and 2007. Interestingly, for the period 2001 to 2004, there was a negative growth (-3 per cent) in public secondary enrolment while there was a positive growth (22 per cent) in private secondary enrolment.

Higher education enrolment grew on average by 15 percent annually between 2001 and 2004, but after this it declined to mere 4 percent. In 2007, enrolment in higher education was mainly public (89 percent); Polytechnic, Chancellor College, and Mzuzu University enrol about 65 percent of the total number of students.

In Malawi, 73 percent of public resources are appropriated by the most educated 10 percent of students, which makes Malawi one of the least equitable countries in Africa. Moreover, due to social selectivity and the distribution of public resources by education

¹⁹ In appendix 3, we present the structure of the education system in Malawi.

levels, urban people appropriate 8.4 times more resources than rural, and the richest 20 percent of households get 11.4 times more public education spending than the poorest 20 percent (Country Status Report, 2008).

The literacy rate has improved greatly during the last 20 years and is now 72 percent among adults, compared to 48.5 percent in 1987 (Table 23). Among those aged 15-24, it is clearly higher, 83 percent, and even higher than the regional average, 72 percent. The gender gap, which previously was very large, has also declined and almost disappeared among the 15-24 year olds.

School attendance is reasonably high, 88 percent of girls and 82 percent of boys are in primary school, and 22 percent of girls and 25 percent of boys are in secondary school (UNESCO, 2010). However, quality of schooling is an issue (discussed in more detail in the next section): the introduction of free primary education increased enrolment by 1.3 million pupils (68 percent) from 1993 to 1994, and the educational system does not appear to have recovered yet.

Table 22. Trends of enrolment at different levels of education

Education Level	1998	2001	2004	2006	2007	Average annual growth rate 2001-2004	Average annual growth rate 2004-2007
Early Childhood Development (ECD)	38166	72760	2229823	615478	683826	47%	44%
Primary Education	2805785	3187835	3166786	3280714	330692	0%	1%
Public	N/A	N/A	3140440	3242483	3264594	N/A	1%
Private	N/A	N/A	26346	38231	42332	N/A	17%
Secondary Education	59636	176252	180157	218310	210325	1%	5%
Public	N/A	153119	137822	166307	161575	-3%	5%
Private	N/A	23133	42335	52003	48750	22%	5%
Adult Literacy	63035	88240	103965	146301	N/A	6%	19%*
State	63035	85807	95515	128967	N/A	4%	16%*
Non-state	N/A	2433	8450	1733	N/A	51%	43%*
University	3385	4304	6478	6346	7263	15%	4%
Public	3385	4304	6478	6346	6458	15%	0%
Private	N/A	N/A	N/A	N/A	805		
TEVET	Not Available						

Source: Education Management Information System (EMIS) data from the Ministry of Education Science and Technology and from the Ministry of Women and Child Development. N/A: not available.

*Due to the absence of 2007 data, the average annual growth rate is calculated for those levels from 2004 to 2006.

There is a shortage of secondary schools and universities, making entrance difficult. Table 24 shows the shares of those over 15 years old that had secondary or university education over the period 2005 to 2008. The percentages are low; 15.93 per cent had finished secondary education and 1.08 per cent had finished university education in 2005. There were

also large gender differences; for instance looking at secondary school, the percentages for females in 2005 were 12.41 while those for males were 18.99. Interestingly, between 2005 and 2008, the gender gap at the tertiary level unlike that at the secondary school level seems to be declining. This decline in the gender gap at the tertiary level could possibly be due to affirmative action policies put in place by government to ensure more girls go to university.

Another positive development is that the percentages of both males and females with tertiary and secondary education is increased that over the period 2005-2008. This implies that the amount of human capital available for the social economic progress of the country is increasing. It should however be noted that the period under review is short, and therefore we can say very little about whether this positive trend will continue. Moreover, the information reported from the 2008 Census on highest level of education completed (Table 19) seems incorrect and cannot be used for comparison with the 1998 Census (NSO, 2009b).

Table 23. Literacy rates 1987 and 2007, in percent

	Gender	1987	2007	SSA regional average 2007
Adults (15 years and older)	Both	48.5	71.8	62.3
	Males	65.3	79.2	71.2
	Females	33.5	64.6	54
Youth (15-24 years)	Both	59.1	83	72
	Males	70.4	83.7	77.1
	Females	49.1	82.3	67.3

Source: UNESCO (2010)

Table 24. Highest educational level attended by sex for population aged 15 years and over 2005 to 2008, in percent

Sex	Education	Share in percent	Share in percent	Share in percent	Share in percent
		2005	2006	2007	2008
Both	Secondary school	15.93	16.21	12.89	17.03
	University	1.08	1.29	1.03	1.21
Males	Secondary school	18.99	20.09	17.47	20.63
	University	1.49	1.83	1.5	1.51
Females	Secondary school	12.41	11.73	8.76	13.08
	University	0.61	0.65	0.6	0.89

Source: Welfare Monitoring Surveys (various waves) and NSO 2006, 2007, 2008, 2009a.

Table 25, reports the distribution of TEVETA graduates by type of occupation, of the 421 graduates who were traced in the Malawi Labour Market Survey (2009), 320 indicated their occupation and the results show that the dominant trades in descending order were Motor Vehicle Mechanics (55 or 13 percent), followed by General Fitting (42), Bricklaying (39), Carpentry and Joinery (37), Automobile Mechanics (23), Plumbing (22), Electrical Installation (22), Auto Electrical (18), Painting and Decoration (17), and Fabrication and Welding (15).

It is worth pointing out that there is some mismatch between the type of graduates in Table 25 and skills demanded by industry. For instance, motor vehicle mechanics that are not in great demand by industry make up the majority of graduates, while water plant operators, who are the most demanded by industry, are not appearing on the list on graduates.

For the period 2004 to 2007, Engineering, Science, and ICT – which are necessary for the diversification of the economy – record low enrolments (Figure 7) as compared to say the social sciences. In fact, the number of students enrolling in engineering at the Polytechnic, and science at Chancellor College changed little during the period 2004 to 2007. Engineering actually saw a slow decline in enrolment.

Table 25. Distribution of traced TEVETA graduates by occupation of training

Occupation	Number	Percentage
Motor Vehicle Mechanics	55	13
General Fitting	42	10
Bricklaying	39	9
Carpentry and Joinery	37	9
Automobile Mechanics	23	5
Plumbing	22	5
Electrical installation	22	5
Auto Electrical	18	4
Painting and Decoration	17	4
Fabrication and Welding	15	4
Electronics	5	1
Secretarial and Administration	4	1
Vehicle Body Repairing	3	1
Food Production	3	1
Refrigeration and Air Conditioning	3	1
Carpentry	2	0
Wood Machining	2	0
Instrumentation Mechanics	1	0
Other	7	2
Non-response	103	24
Total	423	100

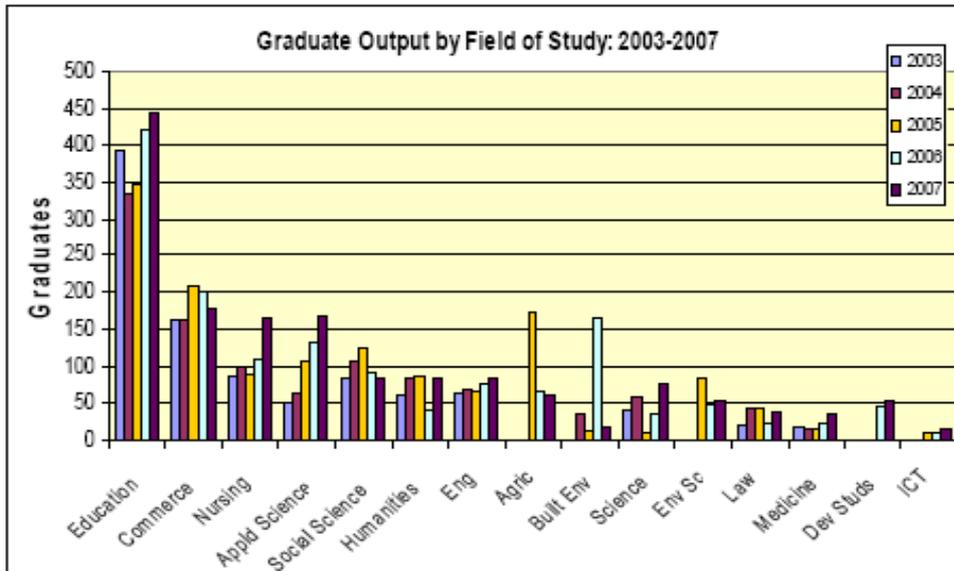
Source: Malawi Labour Market Survey, 2009

A positive development is the increase in enrolment in Applied Science, Medicine and Environmental Science. Enrolment in Applied Science at the Polytechnic has been increasing since 2003. Enrolments in Medicine have also been increasing over the same period. Tourism (which has the potential to improve that industry in Malawi) and Health Science were introduced in the last three years and have the potential to increase in enrolment. So far, there have been no graduates from these fields, so their employability has not yet been measured.

Given the critical shortage of science teachers in Malawi, it is instructive to examine the distribution of enrolments in education between the Bachelor of Arts Education and Bachelor

of Science Education degrees. The total enrolment in the Bachelor of Science Education comprised only 22.9 percent of the total education enrolment and 5.3 percent of the total university enrolment for 2008. The Bachelor of Science (Technical Education) offered at the Polytechnic comprised only 9.3 percent of the total education enrolment. The low enrolment in the Bachelor of Science Education is symptomatic of the problems facing science education in the country. Malawi needs to look at innovative ways of addressing the challenges it faces in science education if it is to improve in this field.

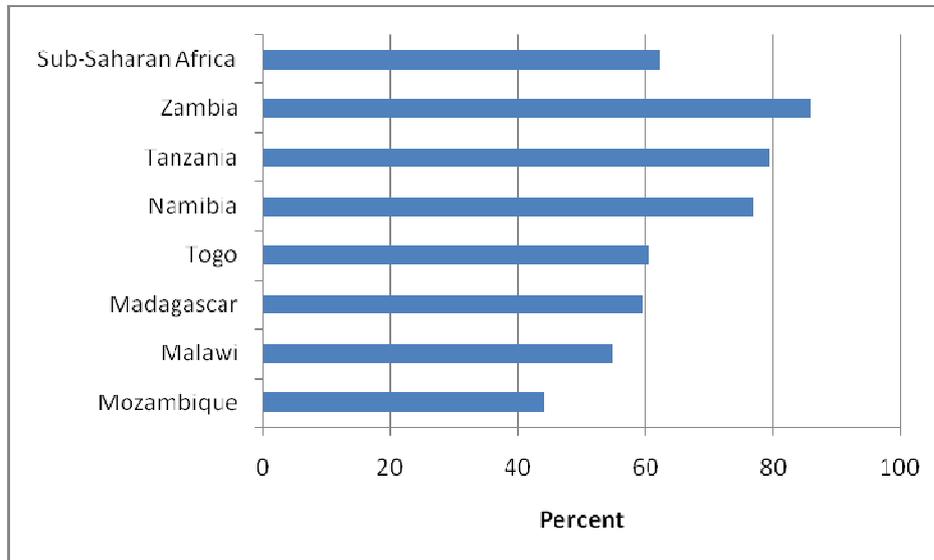
Figure 7. Graduate output by year of study



Data Source: University Office, CSR

Education in Malawi suffers from poor quality. Primary school completion rates for primary school are at 55 percent; among the lowest of the comparator countries for which there is data for 2006 or 2007 (Figure 8). With Zambia's completion rate of 86 percent, Tanzania close to 80 percent, and average Sub-Saharan Africa at 63 the gap could not be more glaring. However, it is somewhat better than Mozambique.

Figure 8. Primary school completion rates in a selection of countries (2006-2007)



Source: African Development Indicators (2010).

According to the Southern African Consortium for Monitoring Educational Quality (SACMEQ) scores, the number of children who reach a minimum level of mastery in English reading in primary school was reduced by 50 percent from 1998 to 2004, and in 2004 it was barely nine percent (Country Status Report, 2008). In mathematics, 98 percent of students did not possess skills beyond basic numeracy and none of them had skills beyond competent numeracy. Compared to other countries, Malawi thus fared poorly, being at the bottom of all the SACMEQ countries in English reading and next to last in mathematics

The tests show that Malawi provides low quality of primary schooling. The decline in English reading may be partly explained by the introduction in 1994 of fee-free primary policy, which led to an increase of lower performing students in the system. Nevertheless, examples of other countries who improved both quantity and quality in primary education at the same time show that the fee-free policy is not the only factor affecting the decrease of quality in Malawi.

One reason is that Malawi is characterized by a severe lack of teachers at the primary level, as shown by its high student teacher ratio, which was 78:1 in 2007 (Table 26). And worse, the period 2005-2008 saw the student teacher ratio rising, probably due to a combined increase in student enrolment and pupil retention and a reduction in the number of teachers. Compared to other countries the ratio is very high, the only Sub-Saharan country for which there is data that have a clearly higher ratio is the Central African Republic (98), while Rwanda and Mozambique are at about the same level (African Development Indicators, 2010).

Teacher qualification is also a major challenge. The student-to-qualified-teacher ratio has been rising steadily over the same period (see Table 26), from 83:1 in 2005 to 90:1 in 2008. It should be pointed out that in an effort to increase teacher training, the existing five teacher training colleges are being expanded to increase the number of primary school teachers, and a new college in Liwonde is being constructed.

Table 26. Pupils teacher ratio in all Primary schools 2005-2008

Year	Pupil Teacher Ratio	Pupil Trained Teacher Ratio
2005	71	83
2006	76	84
2007	78	88
2008	78	90

Source: Country Status Report 2008

Yet another weakness is that the number of teachers assigned to different schools at the primary school level is erratic. As noted in the Country Status Report (2008), there is little connection between the number of teachers allocated by the government and the number of students. For instance in 1,000-student schools the number of teachers varies from less than 10 to more than 50, making the class size range from 20 to 100.

Technical and vocational education, the TEVET system in Malawi, also faces a number of challenges that negatively affect its quality and equity. The TEVET system is highly diverse, fragmented, and uncoordinated, with multiple private and public provider systems. It is also unfair. As far as the formal TEVET system is concerned, access is biased against girls, those from poorer districts who have left school, and those with lower educational attainment (Country Status Report, 2008).

The quality of TEVET is negatively affected by multiple factors, including inadequate equipment and facilities, a shortage of training material due to financial constraints, a high trainee/teacher ratio, and in particular, deficient practical competences of TEVET teachers coupled with the absence of a systematic TEVET teacher training system. The low quality of training leads to low pass rates in national examinations (50-67 percent). The other challenge that the TEVET faces is the co-existence of the three local qualification systems: trade testing; Malawi (Advanced) Craft (MAC); and Competency-Based Education and Training (CBET), which is implemented by TEVETA. This prevents the development of a unified employer-involved quality assurance system and forces teachers to train on the basis of parallel curricula (Country Status Report, 2008).

On average, all higher education institutions receive more applications than they can accommodate. In 2007, Mzuzu University received over 6,000 applications for 800 places, and Adventist University selected 40 students out of 300 applications. University of Malawi received approximately 4,000 applications in 2008. Of these, about 3,500 passed the entrance examination and 980 were selected, reflecting an absorption rate of 28 percent of those who passed and 24.5 percent of those who applied. Hence, each year universities absorb less than 40 percent of the MSCE graduates from the previous year.

The current lack of infrastructure at both public and private universities has been the single largest constraint on expanding enrolment in higher education. In the public institutions, it was designed for small classes and programs that did not require extensive facilities. As noted in the Country Status Report (2008), a way out of these constraints in addition to introducing non-residential programmes, would be a) to establish distance learning programmes, and b) to take advantage of SADC Protocol on Education and Training, which provides for the education and training of students from member countries in institutions that are available in the region. Under this protocol the students pay local fees.

Education and the labour market

In this section we look at the relationship between education and employment, education and the type of industry people work in, the private rates of return to different levels of education, and the relationship between education and the duration to employment.

Education, employment and type of industry

With an increasing level of education, Malawians are more likely to work in better paying types of employment. Figure 9, shows that wage employment increases with level of education. The share of wage employees increases from an estimated 5 percent among illiterates to as high as 72 percent among those with higher education. Interestingly, there is no discernible pattern between the level of education and self employment. This is probably due to the heterogeneity of the self employed, some are entrepreneurs and others work in the informal sector in order to survive.

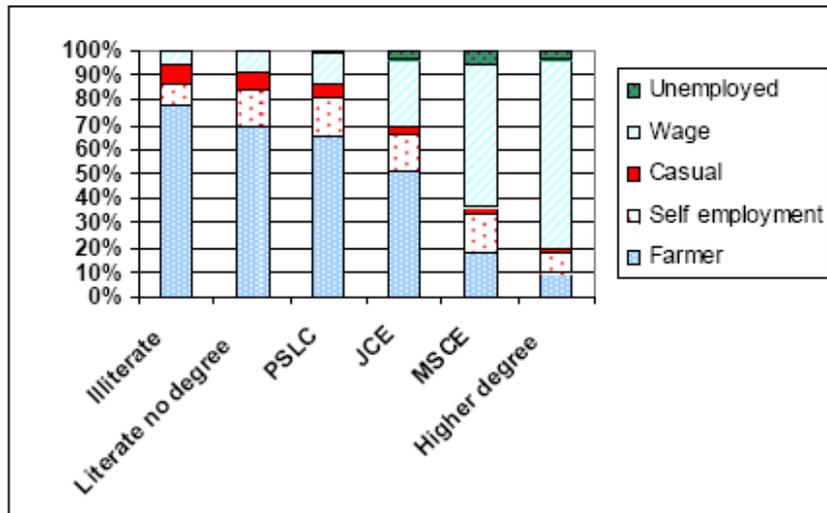
A positive relationship is also seen between unemployment and level of education. However, after controlling for other factors such as sector of employment and geographical location, Castel and Stampini (2009) show that the positive relationship disappears. This suggests that the unemployment among the highly educated is short lived, originating from individual preferences or rigidity in labour market mobility.

Figure 10 depicts the relationship between education and type of industry. Over 40 percent of employees in Finance & insurance have a higher degree. Not surprisingly, it is the sector where remuneration is one of the highest. The proportion with higher education is 11 percent in Electricity & utilities sector. In all other sectors, the shares of employees with higher education are very low; 1.9 percent in Agriculture, 2.7 percent in Construction, 3.6 percent in Manufacturing, percent, and 3.7, percent in Transport.

Private rates of return to education

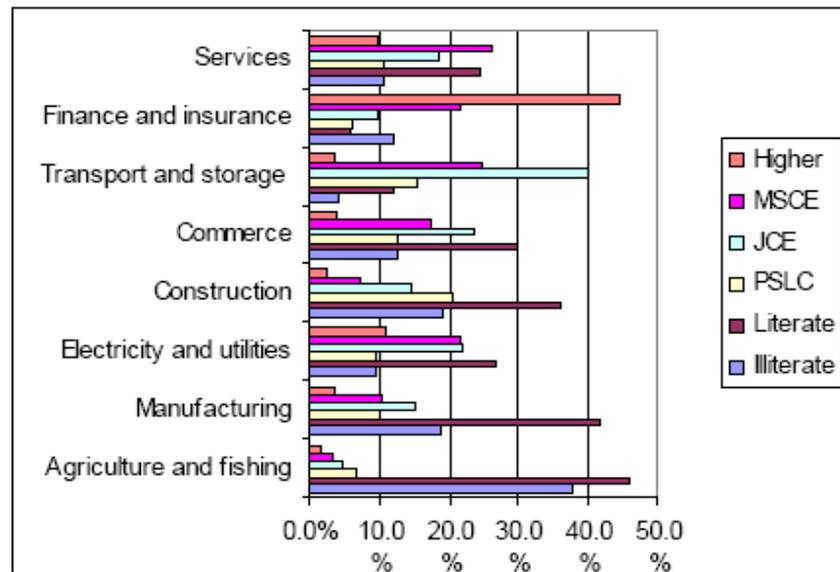
Private rates of return to education (RORE) show the average extra income gained by an individual through additional education in relation to the cost of this education for the individual (including the foregone earnings due to longer studies). In Malawi, RORE are highly skewed towards high education. Returns from various levels of education increase as the levels of education increase from 5 percent from primary level to 65 percent from university education (Figure 11). These are high by African standards. Interestingly, female workers tend to have higher rates of return on education than male workers, particularly at higher levels of education.

Figure 9. Education and employment



Data Source: Castel and Stampini, 2009

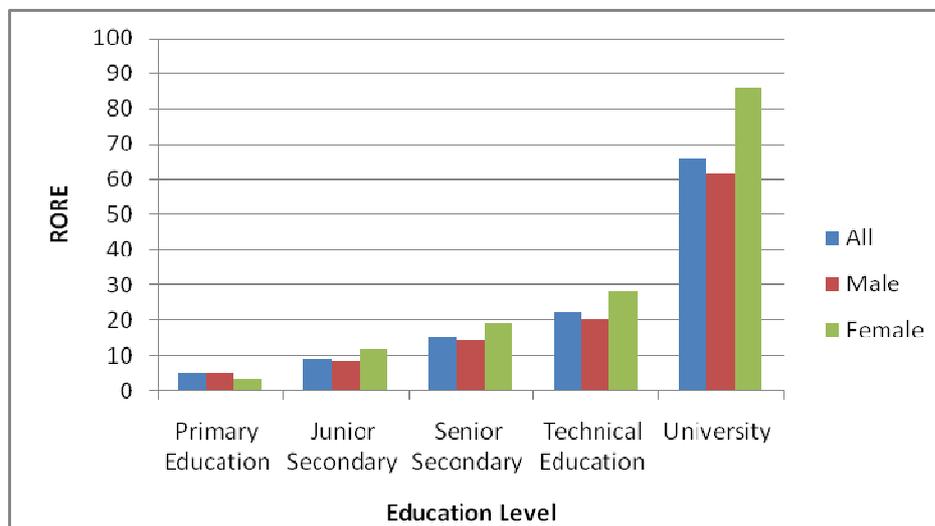
Figure 10. Skills profile by sector of activity



Source: Castel and Stampini, 2009

The very high level of rates of return at higher levels of education reflects severe shortages of skilled and highly educated people, demonstrating the country's urgent need to ensure greater access to education to stimulate growth. The high returns reflect that education is still a rare privilege in Malawi, for which the labour market is prepared to pay a high premium compared to its costs (Country Status Report, 2008).

Figure 11. Private rates of return to education (RORE)



Source: Chirwa and Matita, 2009.

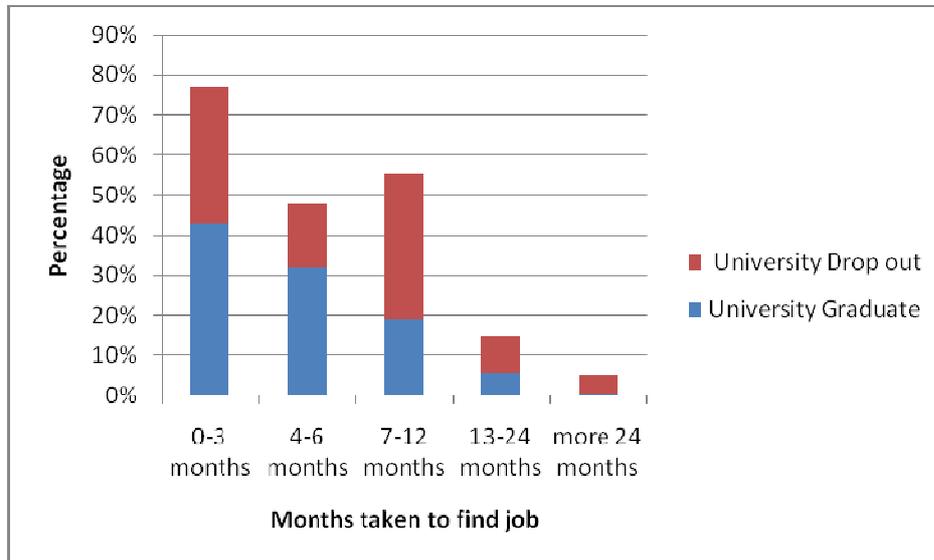
Duration of job search, type of job and education

University education in Malawi is associated with a lower duration of job search compared with those who dropped from university. For example, as Figure 12 shows, 42 percent of university graduates get a job within 3 months compared to just 33 percent for those who dropped from university. A very tiny minority of higher education graduates stay without a job for more than 2 years, compared to 5 percent of those dropped out.

A study by Pfeiffer and Chiunda (2008) shows that 85.3 percent of all high education graduates found employment after graduating from higher education, the vast majority (72.2 percent) in full-time wage employment (Figure 13). They find self-employment to be small (2.1 percent), but a substantial share of graduates work part-time (11 percent).

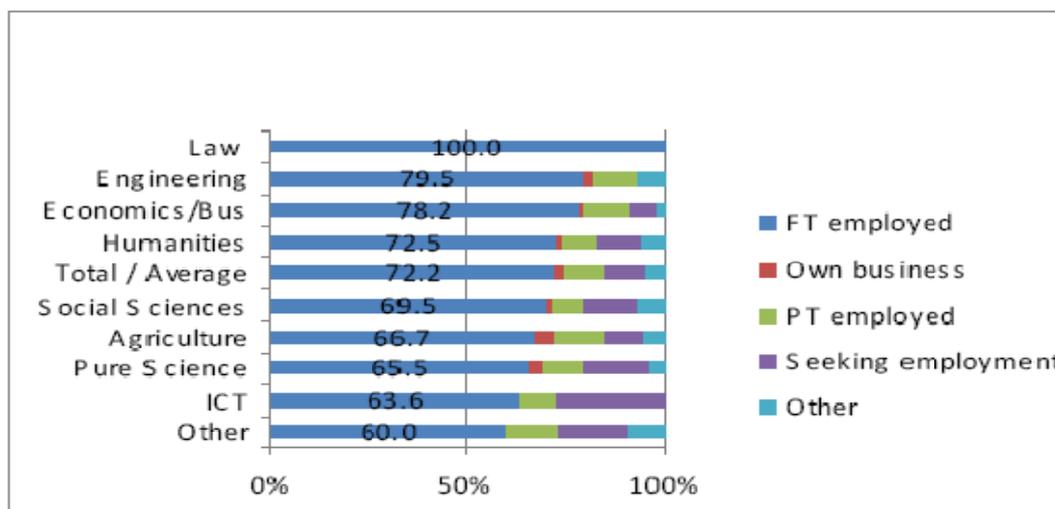
They also find that law fares best by far, bringing all graduates into regular full-time employment; engineering, business/economics, and, interestingly, humanities, show above-average full-time employment rates. ICT, social science, agriculture, and pure science have below-average results. ICT also shows the highest unemployment rate, pointing to a possible saturation in the relevant labour market.

Figure 12. Duration of job search after leaving university, higher education Grads/Dropouts



Source: Pfeiffer and Chiunda, 2008.

Figure 13. Occupational situation of high education graduates by field of study



Source: Pfeiffer/Chiunda 2008 (Annex 9)

In conclusion, with an increasing level of education, Malawians are more likely to work in better paying types of employment. The share of wage employees increases from an estimated 5 percent among illiterates to as high as 72 percent among those with higher education. The level of education varies by sector. Over 40 percent of employees in finance and insurance have a higher degree. In all other sectors the shares of employees with higher education are particularly low; in agriculture, 1.9 percent, construction, 2.7 percent, manufacturing, 3.6 percent, and transport, 3.7, percent.

As the levels of education increase, returns to education increase from 5 percent from primary level to 65 percent from university education. Interestingly, female workers tend to have higher rates of return on education than male workers, particularly at higher levels of education. The very high level of rates of return at higher levels of education reflects severe shortages of skilled and highly educated human resources, demonstrating the country's urgent need to ensure greater access rates to stimulate growth. Returns to education appear to be high by African standards.

The education sector faces major challenges which include; inadequate and poor infrastructure, and lack of qualified teachers. These challenges in turn impact negatively on the quality of education, which in turn affect the quality and employability of the labour force.

Demography and Labour Supply

In a detailed review of African growth challenges, Ndulu et al. (2007) find that delayed demographic transition explains two-thirds of the difference between the average growth rates in SSA and other developing regions. Two factors seem to be important, high dependency ratios and rapid labour force growth. High dependency ratios have implications for income per capita directly, since there are fewer people at working age, but also through the public sector and the households that have to cater for large numbers of children. Rapid growth in the labour force seems to impact negatively on economic growth because employment creation cannot keep up, so youth unemployment increases, leading to political instability. Hence, population dynamics play a core role in the availability and expansion of productive employment.

Population growth in Malawi is rapid. As Table 27 shows, Malawi's population increased by 3 million between 1998 and 2008, i.e. from 9.9 to 13 million. This is 2.8 percent annually. Since the end of the 1970s, Malawi's population has more than doubled, and if the current growth rate continues until 2015, another three million people will be added, raising population to 16 million.

Table 27. Population and inter-census growth rates 1977-2008

Census year	1977	1987	1998	2008
Population	5,547,460	7,988,507	9,933,868	13,077,160
Average growth rate the preceding 10 years (percent)	2.9	3.7	2.0	2.8
Dependency ratio (below 15 and over 64 divided by those aged 15-64)	0.95	1.01	0.91	0.99

Source: Population Census 1977, 1987, 1998 and 2008 (NSO 2002; 2009b)

Table 27 also shows that population growth increased from 2.9 percent annually in 1968-1977 to 3.7 percent in 1978-1987, and that it then declined to 2 percent in 1988-1998. These swings are mainly due to the accommodation of over a million refugees between 1985 and 1995 from Mozambique. During 1998-2008 population growth was 2.8 percent, about the same as in 1968-1977. Thus, it is difficult to determine the trend in Malawi's population growth. Yet, it is likely to be high currently both due high fertility and reduced mortality, child mortality has declined widespread distribution of anti-retroviral therapy (ART) has reduced adult mortality. Moreover, migration from Malawi is not very large, in fact

according to World Bank (2008) there was a net inflow of people until 2005, and 0.7 percent of Malawi's population had migrated. Many of these are skilled workers, so brain drain is of course a problem.

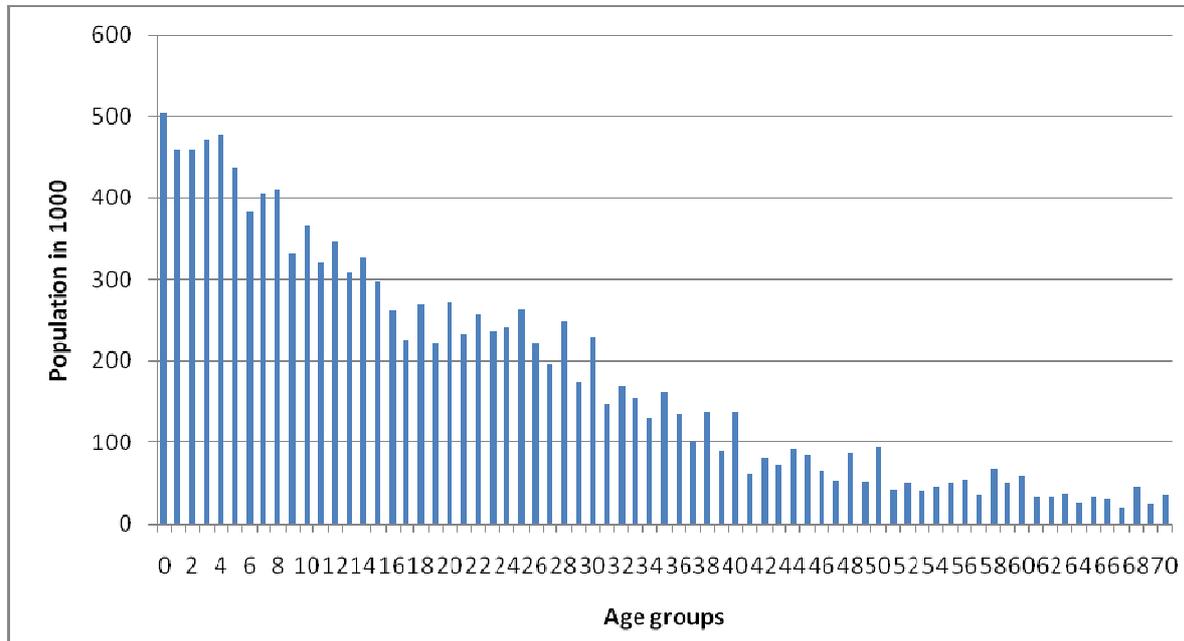
The evolution of the dependency ratio, i.e., the ratio of those below 15 and over 64 divided by those aged 15-64, is also reported in Table 27. It was 0.99 according to the 2008 census. This is very high, some Asian countries have ratios close 0.4. The table also shows that it was clearly lower in 1998, 0.91. The increase seems to indicate a reversal of the demographic transition, since a continuous decrease in the dependency ratio was expected. The explanation is probably a combination of high fertility, and high mortality rates among 15-64 year olds, possibly due to HIV/AIDS. There are no estimates available of the future course of the dependency ratio based on the 2008 census, but it is likely to be high for many years to come unless childbearing drops sharply.

One consequence of the high dependency ratio is that there are many young people and many new entrants to the labour force each year. This means that the number of people at working age, i.e., between 15 and 64, will also grow rapidly. A crude estimate indicates it will increase by about 20 percent from 2010 to 2015, implying roughly another 1,500,000²⁰ people (300,000 per annum). Hence, the demand for jobs and schooling will increase substantially.

The challenge of providing jobs to youths during the next 15 years can also be appreciated by studying the number of people in each age group. This is shown in Figure 14 for age groups 0-70 years. Those under 8 years are over 400,000 in each age group, those 9—15 years are over 300,000, while those over 40 are all fewer than 100,000.

²⁰ Unfortunately there are no official estimates of population growth based on the 2008 census. The increase in the population at working age given is therefore a rough estimate which could be altered by a detailed consideration of age specific death rates.

Figure 14. Population in 1000 by age group 0-70 (in 2008)

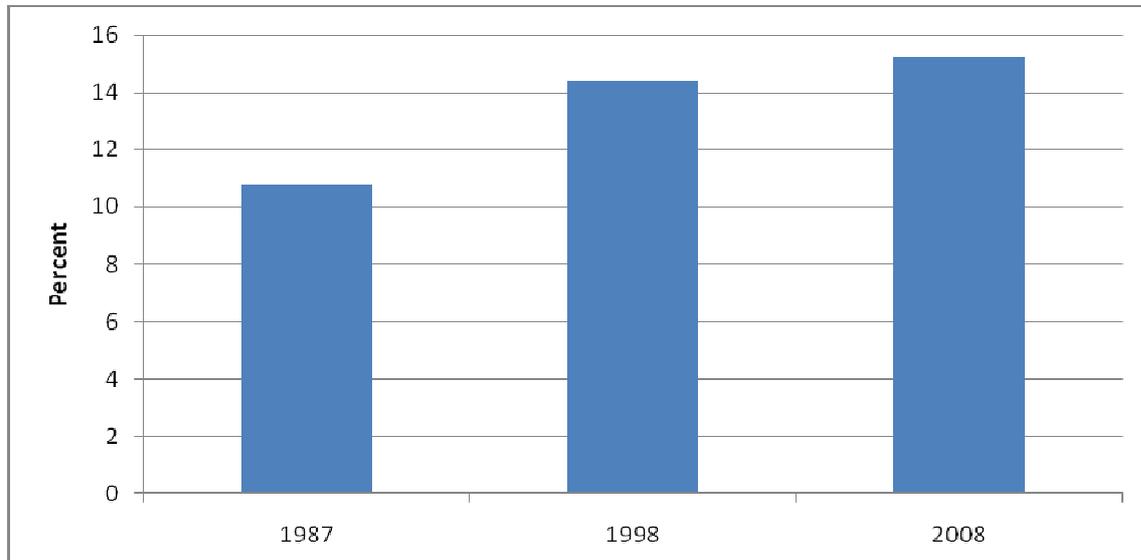


Source 2008 Population Census (NSO, 2009b)

In general, high population growth does not have to pose a serious problem by itself (though a skewed age distribution might be a problem), but in an agricultural-based economy such as Malawi there is a land constraint. If land use cannot be expanded, productivity has to increase just to maintain income per capita. Urbanisation and growth of industrial and service production, and emigration can alleviate the problem, but if the rural population grows rapidly it is difficult to even maintain employment and income. Urbanisation was very rapid 1987 to 1998, as depicted by Figure 15. In fact, it was one of the fastest in the world (United Nations, 2010). However, urbanisation has slowed down during the recent decade, and the share of the urban population only grew by 0.9 percentage points 1998-2008, while it grew by 3.7 percentage points 1987-1998.

Hence, many rural districts had high population growth rates, 3 percent or higher. As a result, population density has increased by 50 percent to 100 percent in the rural areas of Malawi since the end of the 1980s (NSO, 2009b). There is thus no question that in the medium run non-agricultural sectors have to expand in order to create employment and reduce poverty, since labour-land ratios will continue to increase.

Figure 15. Percent of population living in urban areas 1987-2008



Source: Population Census (NSO 2002; 2009b)

Reducing fertility should be high on the agenda, both to reduce limit population growth and to improve the dependency ratio. The 2008 census estimates that the total fertility rate (TFR) is 5.2, down from 6.5 according to the 1998 census. However, TFR was 6.0 and 6.5 according to two recent surveys; Demographic and Health Survey 2004, and Multiple Indicator Cluster Survey 2006 (NSO and OCR Macro, 2005; NSO and UNICEF 2008). There is thus great uncertainty about how fertility is evolving.

There is a debate in the academic literature on the impact of HIV and AIDS on fertility. In two well-known articles, Young (2005; 2007) argues that the epidemic will reduce fertility rates to such an extent that dependency ratios will improve dramatically in countries with high HIV rates, in spite of high prime-age adult mortality. However, more recent studies indicate that this probably is incorrect; Kalemli-Ozcan (2009) and Durevall and Lindskog (2010) find that HIV/AIDS has a small impact on fertility. Hence, other measures are needed, such as improved and expanded family planning and sharply increased access to secondary and tertiary education for girls. Indeed, there is a need for an overall evaluation of the determinants of fertility in Malawi and the experiences of earlier family planning programmes. Chimbiri (2007) provides an interesting analysis of the use of condoms.

In conclusion, rapid population growth and high dependency ratios constitute major challenges, since raising labour productivity and creating jobs for young people entering the labour in the current circumstances are difficult tasks. Fertility therefore needs to be reduced substantially, particularly since mortality rates should be declining sharply due to the distribution of ART, which expanded from 10,000 patients in 2004 to close to 200,000 in 2009 (UNGASS, 2010). It is worrying that population control is not among the goals of Malawi Growth and Development Strategy goals; reducing population growth to 1.5 percent by 2015, as specified in the draft for a new population policy (MEPD, 2006), is an important target that should be adopted. Moreover, the focus on job creation for everybody, not just youth, must be sharpened, by attracting private sector investments both in rural and urban areas.

Economic Growth and Changes in Employment and Wages

An important question is how is GDP growth affects employment, i.e., what the employment growth elasticity is, and how it affects wages. This is difficult to answer, both due to lack of data and because the answer depends on what parts of the economy that contributes to growth, which might vary over time. In this section we focus on the recent high-growth episode, first reporting trends in employment from two data sources, the WMS and the Enterprise Survey of the World Bank. Unfortunately the earliest data are from 2005. We also we provide some information on civil servants, since Government is the by far largest employer. Time series data on wages are even more difficult to obtain, so we report the evolution of real minimum wages and remuneration from various AESs.

Changes in employment

Table 28 shows labour force participation and employment in WMS 2005 and WMS 2008 for economically active over 14 years. The differences between the two points in time should reveal the changes that occurred during the period of rapid growth, adding information from WMS 2006 and 2007 does not alter the picture. A drawback with both surveys is that the definitions of employment and work are very wide, as described above; substantial increases in working hours are not registered and market and household work are not clearly delineated.

Nevertheless, the ratios in the table indicate a substantial improvement in labour force participation for women, while the ratios are about the same for men. Increased demand for labour seems to have resulted in many women entering the labour force, particularly in urban areas, where the share has risen from 53 to 79 percent. In rural areas their share went up from 83 to 88 percent.

Employment rates, on the other hand, are higher in 2008 for all categories; 99 percent in rural areas for both men and women, and 96 and 97 percent in urban areas for men and women, respectively. The largest increases are in the urban areas, particularly for women where the employment rate increased from 64 to 97 percent. The increase is so large that one could suspect that it is a statistical error; however the IHS2 from 2004/5 and the WMS 2007 support the finding of a large improvement in female employment overall, but especially in urban areas.

Table 28. Labour force participation and employment rates 2005 and 2008

Labour force participation rate (employed and unemployed as a proportion of the population 15 years and older)						
	2005			2008		
	Male	Female	All	Male	Female	All
Malawi	86	79	82	84	87	86
Urban	77	53	66	79	79	79
Rural	87	83	85	85	88	87
Employment rate (employed persons as a proportion of the labour force)						
	2005			2008		
	Male	Female	All	Male	Female	All
Malawi	96	93	94	99	99	99
Urban	91	64	84	96	97	96
Rural	96	95	95	99	99	99

Sources: Welfare Monitoring Survey 2005 and 2008 (NSO, 2006; 2009a)

The Enterprise Survey covers formal sector enterprises in manufacturing and services. Two surveys have been carried out in Malawi, in 2005 and 2009 with about 150 firms each time with about half of the firms included both years. Moreover, in 2009 all firms were asked about employment three years earlier.

Table 29 shows that according to the firms included in both surveys, the average number of full time permanent employees increased from 160 to 199, i.e., by 24 percent. And the average number of part time workers, measured in full-time equivalents, increased from 19 to 23.²¹ The recall data confirms that employment has increased; it grew by 33 percent in manufacturing and 21 percent in services.

Table 29. Changes in employment in manufacturing and services 2005-2009

Data	Average number of full time employees ¹		Average number of full time employees ²		Average number of part-time workers ¹	
	2005	2009	2006 (3 years ago)	2009	2005	2009
Manufacturing	160	199	76	101	19 ³	23
Services	-	-	19	23	-	7

Source: The Enterprise Survey 2006 and 2009 (World Bank, 2010b).

The data are for a panel of 75 manufacturing firms surveyed in 2005 and 2009, and for 69 firms in services surveyed in 2009

The data for 150 firms surveyed in 2009 survey

One observation was dropped since it was an extreme outlier. It cotton lint. If included, the average would have declined.

Finally, we have some information about employment in the public sector. Government is by far the largest formal sector employer, and currently there are about 141,000 civil

²¹ The estimates of the average number of part-time workers exclude a very large outlier, a firm producing cotton lint. If included, the average number of part time workers would have declined.

servants (CABS, 2009). However, in 2009 there were 171 000 civil service posts,²² so many of posts were vacant. There have been several attempts to reduce the number of civil servants, but it has increased continually over the last 20 years. There were about 50,000 in 1987, 128,000 in 1998 and 130,000 in 2001 (Durevall, 2002).

Thus, according to the data available the recent high growth rates appear to have coincided with a substantial rise in employment. This is not surprising since large harvests have played a core role in the growth process, which logically raises labour demand in the rural areas. But employment has also grown among the firms in the panel of the Enterprise Survey, as well as among the firms only surveyed during 2009. Nonetheless, the results are highly tentative since there is no information on enterprises that have closed down. Moreover, we do not know how important GDP growth actually was in generating the jobs, or if the jobs are decent and productive.

Changes in wages

The recent high growth rates should have increased wages, as well as employment. Unfortunately, there is a paucity of recent information of wages. Moreover, there are no available time-series data for income by occupation.

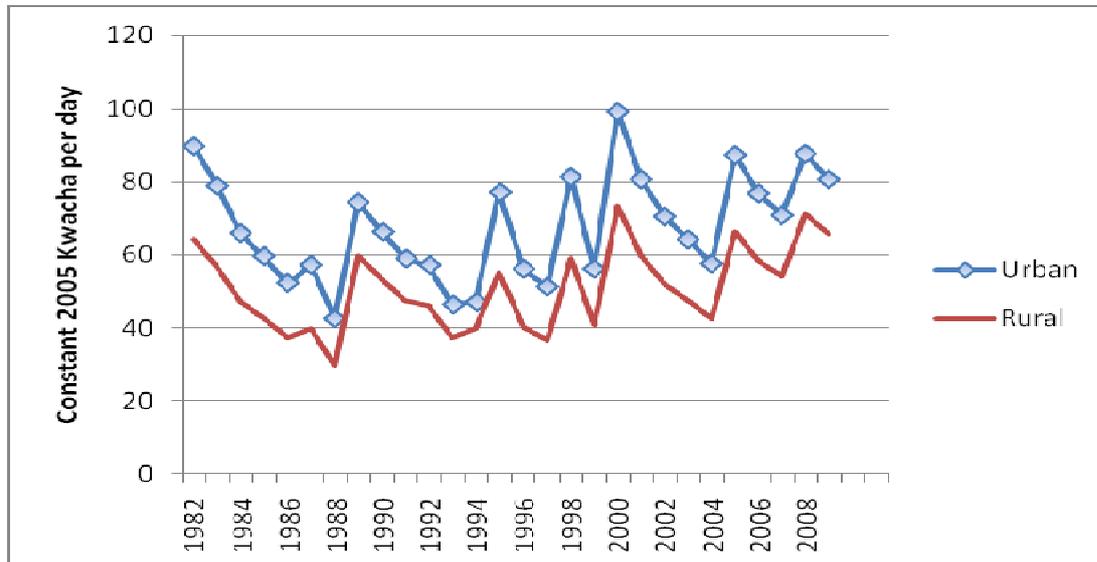
To obtain an idea of how wages have changed over time, we therefore first report real minimum wages for urban and rural areas for 1980-2009 in 2005 constant prices. As evident from Figure 16, the most striking feature of real minimum wages is their volatility, changing in value by 30 percent to 40 percent within periods of three to four years. This is due to the long time periods without adjustment of the nominal rates.

Ignoring fluctuations, there is a visible decline during most of the 1980s, a small increase during the 1990s, and a clear upward shift around 2000, though the peaks are at the same levels as in 1982. There is no increase in minimum wages over the period of rapid growth, 2006-2009.

The large fluctuations in minimum wages obviously affect employees' real income, i.e., buying power, reducing their welfare. However, they also affect firms. If minimum wages reflect actual labour costs, the fluctuations induce large changes in profits in labour intensive sectors.

²² Information on civil service posts was provided by the Department of Human Resource Management.

Figure 16. Real minimum wages for urban and rural areas, 1980-2009 (in 2005 prices)

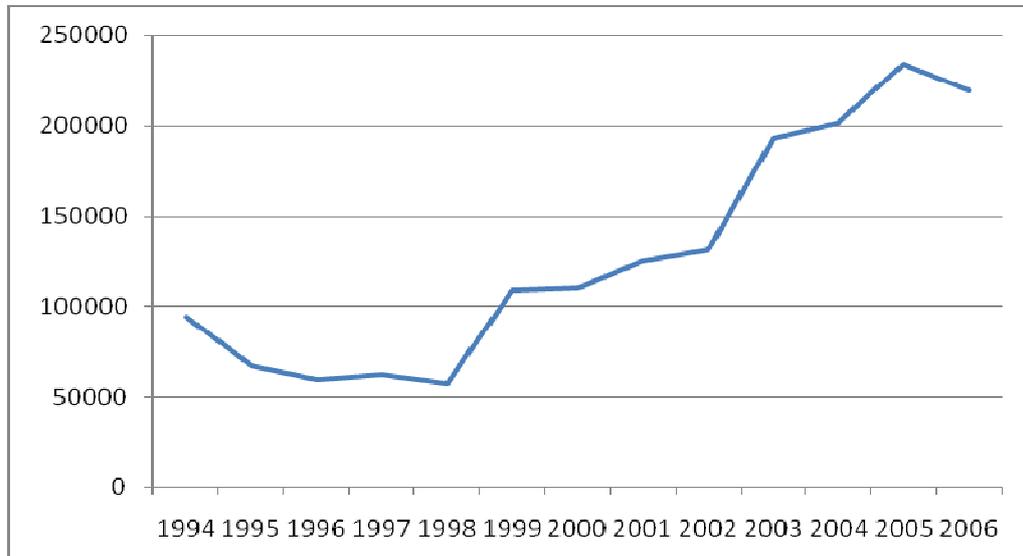


Source: Ministry of Labour and NSO.

The AESs have time series information on wages (remuneration) by sector. Figures 17 and 18 show real average (un-weighted) remuneration per employee for all sectors and for Agriculture & Forestry over 1994-2006 (the 2007 survey results were not available at the time of writing). The series are also in 2005 constant prices. Real remuneration decreased or was stagnant during the 1990s, but then increased substantially. The increase between late 1990s and 2006 was about 300 percent for firms in general and 150 percent for firms in Agriculture & Forestry. It is not clear why wages increased; even though the increase initially coincided with rising GDP per capita, by 2004 GDP per capita was back at the 1994 level. A possible explanation is the increased liberty of labour unions as enshrined in the Labour Relations Act of 1996 to go on strike and the greater recognition of workers' rights as enshrined in the Employment Act of 2000 whose objective is "to establish, reinforce and regulate minimum standards of employment with the purpose of ensuring equity necessary for enhancing industrial peace, accelerated economic growth and social justice".

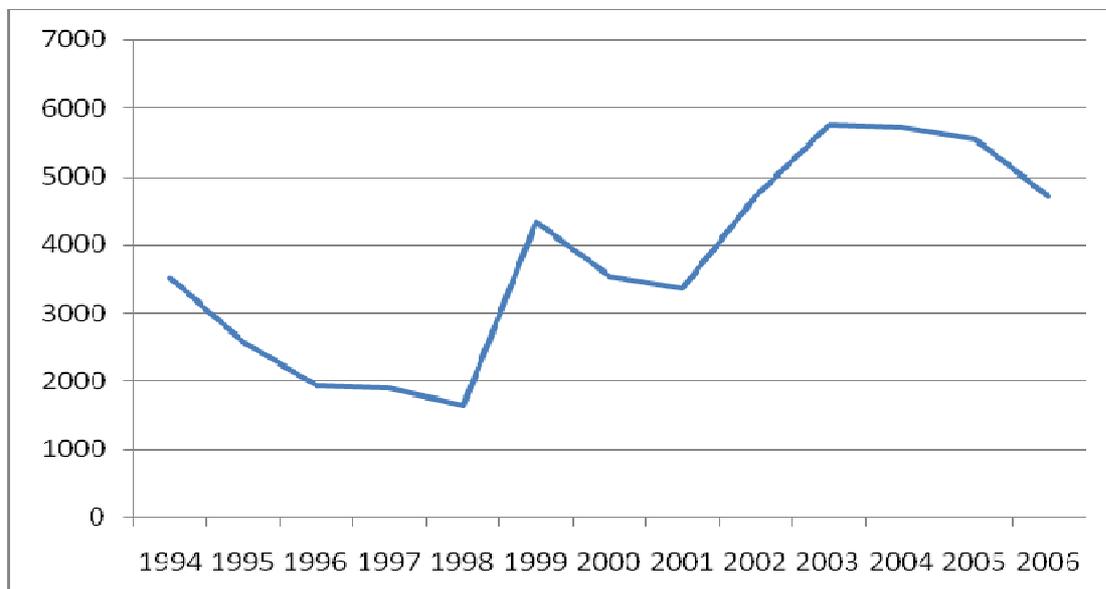
Performance during 2006 was not good, however. Average real wages fell in 2006, including Agriculture & Forestry, which had seen decline since 2004. Hence, more recent information is needed to evaluate if the recent spurt in economic growth has increased real wages.

Figure 17. Average annual remuneration 1994-2006 (in constant 2005 prices)



Source: Annual Economic Survey (NSO, various dates)

Figure 18. Average annual remuneration in Agriculture and Forestry 1994-2006 (in constant 2005 prices)



Source: Annual Economic Survey (various dates)

To conclude, available data on changes in employment thus provide some evidence of a recent increase in employment. Wages, on the hand, only seem to have increased between the end of the 1990s, as indicated by both average real minimum wages and real remuneration in the formal sector, but not since 2005. Unfortunately we only have data up to 2006, so the most recent period with high economic growth is not covered well by the data.

What Explains Growth in Malawi?

Without economic growth, or more exactly, productivity growth, there is hardly any potential for substantial job creation and wage increases. This section thus discusses drivers of economic growth in Malawi. The same issue has recently been analysed by several papers commissioned for the preparation for Malawi Country Economic Memorandum (World Bank, 2009) by the World Bank, DFID, AfDB and MCC. Moreover, MCA has recently carried out a detailed analysis of Malawi's constraints to growth (MCA, 2010). Here we summarise some of the findings relevant for employment creation and take a second look at others.

The most controversial finding of these studies is that maize plays a minor role in Malawi's growth story; maize harvests only generate short-run fluctuations in GDP. Instead exports (primarily tobacco) seem to be the main driver (Lea and Hanmer, 2009; World Bank, 2009). The main argument is that maize has weak multiplier effects, as most of it is consumed by the farmers themselves and their families. Earlier estimates indicate that only 10-15 percent of the maize crop is commercialized and less than 20 percent of the smallholders sell maize (Tango International, 2003; World Bank and Malawi Government 2006). Moreover, since maize usually is not exported, large harvests is claimed reduce the value of the sales. Tobacco, and other exports, are said to have strong multiplier effects: they stimulate demand for inputs, transport and finance, and generate cash income that is spent on goods and services. The weakest link of this analysis is that the vast majority of Malawians cultivate maize, and that large maize harvests, such as those obtained during 2006/2007-2009/2010, can have large income effects on the margin for many smallholders.

To fully appreciate the argument made for the important role of exports, it is necessary to recognize that the real value of exports in domestic currency is determined by three factors, the amount exported, world market prices (PW) and the ratio between the nominal exchange rate (E) and domestic consumer prices (CPI). It is easy to see that the higher the value of exports in foreign currency, the larger is income in foreign currency from sales abroad. Therefore, policy makers usually focus on foreign currency earnings.

The role of the ratio between the nominal exchange rate and consumer prices is not as straight forward. When combined with world market prices we get $(E \times PW) / CPI$, a measure of how much one unit of exports, such as one tonne of tobacco, is worth when measured in terms of domestic consumer goods. A high value of the real exchange rate thus means that the gains from exports can buy many domestic consumer goods. As a result, for a given PW and CPI , a high E , which is the same as a low value of the Kwacha, generates high export revenue measured in real Kwacha. When export earnings are high in domestic currency, exporters' demand for other domestic goods is high, which in turn creates jobs. Moreover, since exporting is profitable, more firms start exporting, generating more foreign exchange.

Although the description above is in terms of exporters, it also applies to firms that produce goods that compete with imports. When $(E \times PW) / CPI$ has a high value, they are competitive, earn high profits, and expand production. Hence, practically the whole industrial sector is affected by $(E \times PW) / CPI$, which is a measure of the real exchange rate.

To show potential drivers of economic growth, we first plot real GDP with real exports. In line with the argument above, exports are measured as the nominal value of exports in Kwacha divided by CPI. Figure 19 shows the relationship for the period 1994-2009, i.e., from the year of the first democratic elections until the most recent year with available data. Both series are indices set to one in 1994 to facilitate the interpretation.

Regression analysis shows that $GDP = 0.6 + 0.54*Export$, and $R^2 = 0.85$. Hence, the correlation between the variables is quite high. The linear relationship between GDP and exports is strong, but only until 2007, since after that GDP grows rapidly while exports decline (Figure 19).

The same relationship is shown by Figure 20 where total exports have been replaced by tobacco exports. This relationship is not as strong, and after 2007, tobacco exports actually decline while GDP increases. Regression gives $GDP = 0.5 + 0.68*Tobacco$, and $R^2 = 0.64$, clearly lower than for exports. One reason why total exports show a tighter relationship with GDP is probably that it has grown faster than tobacco exports since the early 1990s. This is shown by Figure 21. The main products that explain export growth are apparel, cotton, tea, coffee, edible nuts and pulses.

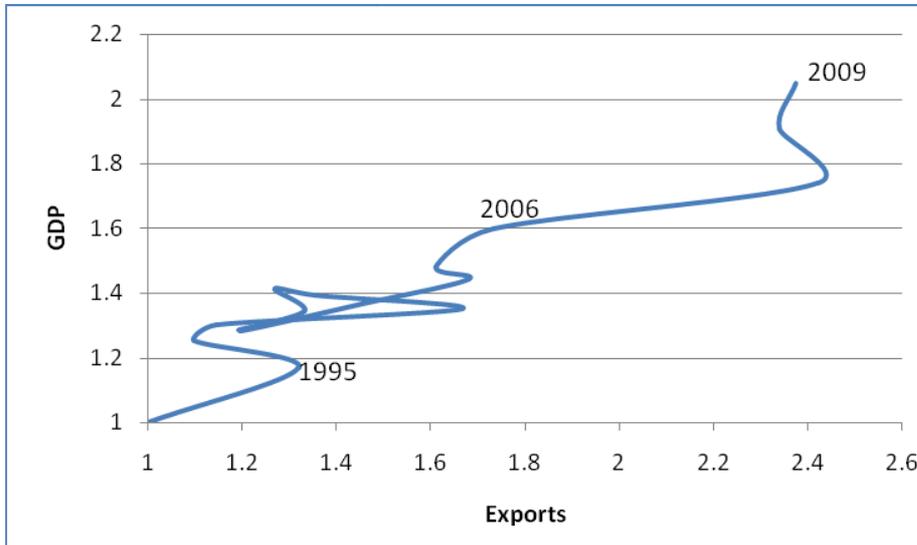
Although exports seem to drive GDP growth – it is unlikely that causality goes the opposite direction – the most recent growth does not seem to be closely linked to exports, at least not tobacco exports. Thus, we draw the same diagram replacing exports with the volume of maize production in Figure 22.²³ The relationship, $GDP = 0.8 + 0.31*Maize$, $R^2 = 0.75$, is not as tight as for exports, but clearly better than for tobacco. Hence, maize production appears to contribute to GDP growth, and it is clearly related to growth during 2007-2009.

One argument against the importance of maize is that prices are determined in the domestic market since maize is usually not traded internationally. Thus, increases in supply have a strong negative effect on prices (Lea and Hammer, 2009; World Bank, 2009). Although there is some truth to the argument, larger maize harvests usually mean higher value. Figure 23 shows this by plotting indices of maize production in tonnes and in real money terms for 1994-2009, corrected for possible overestimation of maize production as in Lea and Hammer, (2009) (see footnote 20). The relationship, which is influenced by government intervention in the maize market, is not very tight but clearly positive, as also shown by the regression, value of maize = $- 1.9 + 4.1*Maize$, $R^2 = 0.59$.

Lea and Hammer (2009) and World Bank (2009) also argue that maize only has short run effects on GDP, mainly contributing to its volatility. One explanation for their finding is that maize production grew very little from the 1960s until mid 1990s, and then growth has been volatile: without persistent growth in maize production it obviously cannot generate economic growth. Figure 24 confirms this by depicting annual maize harvest 1961-2009.

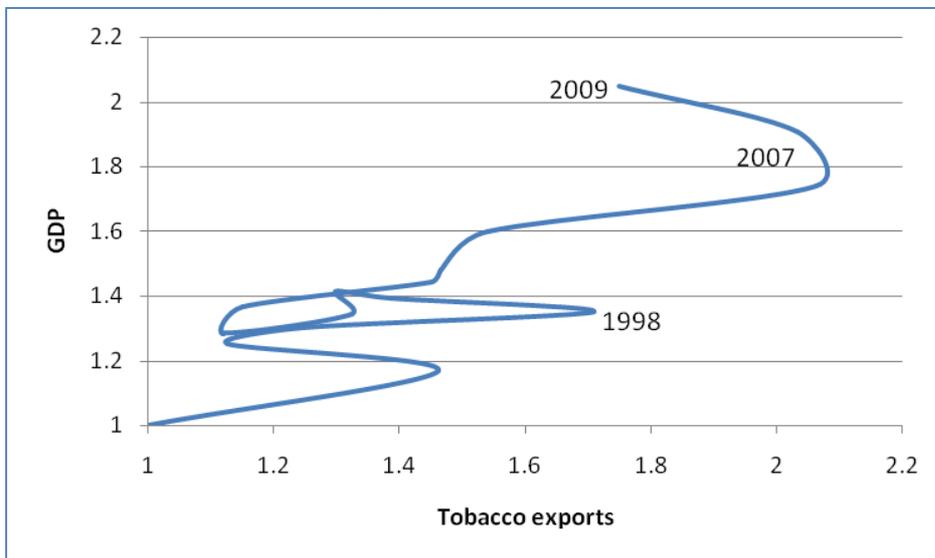
²³ There is some controversy in Malawi regarding the accuracy of the data on maize and other food crops. Lea and Hammer (2009) reduces the crop estimates for maize with 10percent in 2006 and 20 percent in 2007 and 2008. If agricultural production is overestimated, GDP should also be overestimated. Hence we do not use adjusted series for maize, although it would not alter the conclusions.

Figure 19. Indexes of real GDP and real exports. Exports in Kwacha are divided by the CPI. 1994-2009 (1994=100)



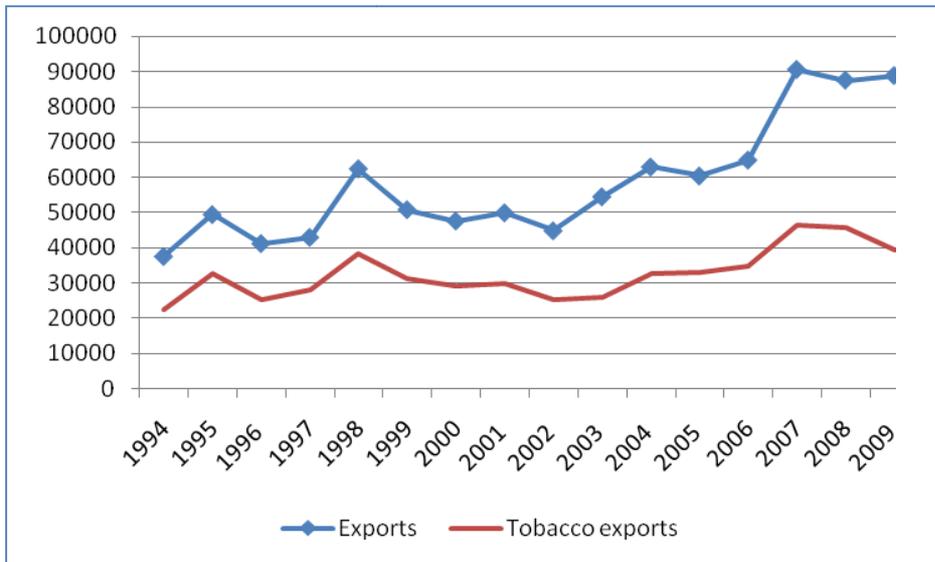
Note: Exports were converted to Kwacha and divided by the CPI. Sources: FAO and NSO webpage.

Figure 20. Indexes of real GDP and real tobacco exports. Exports in Kwacha are divided by the CPI. 1994-2009 (1994=100)



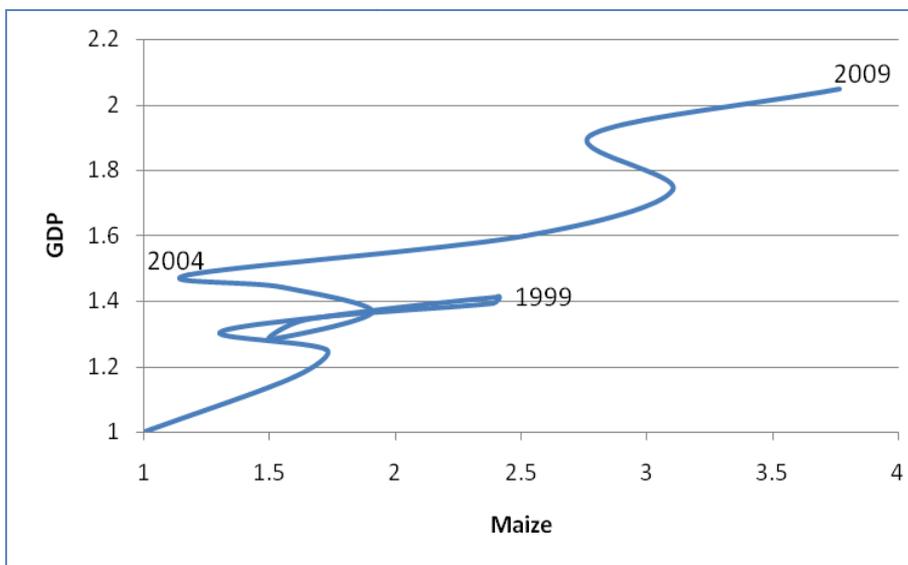
Source: Reserve Bank of Malawi webpage

Figure 21. Total exports and exports of tobacco 1994-2009



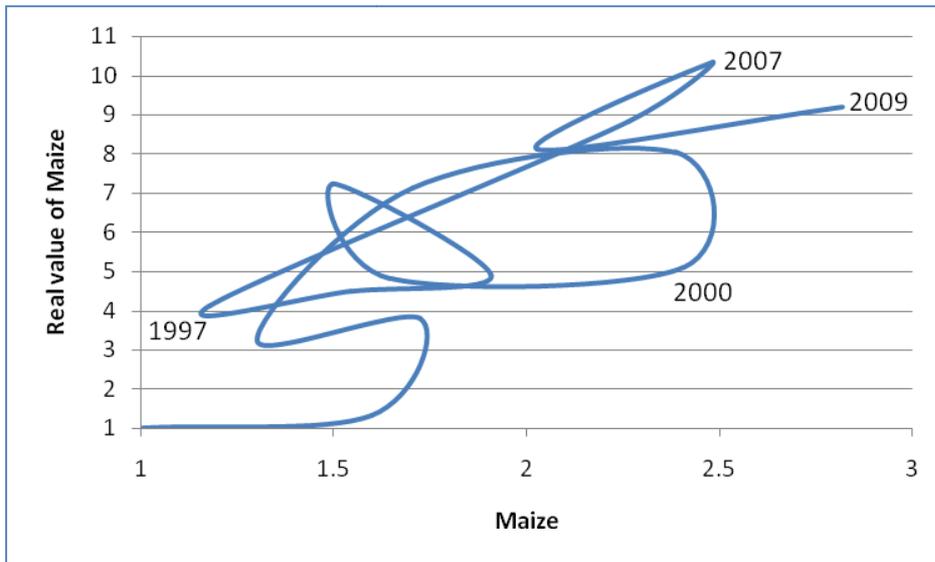
Source: Reserve Bank of Malawi webpage.

Figure 22. Indexes of real GDP and volume of maize, 1994-2009 (1994=100)



Sources: Reserve Bank of Malawi webpage, FAO database and NSO webpage.

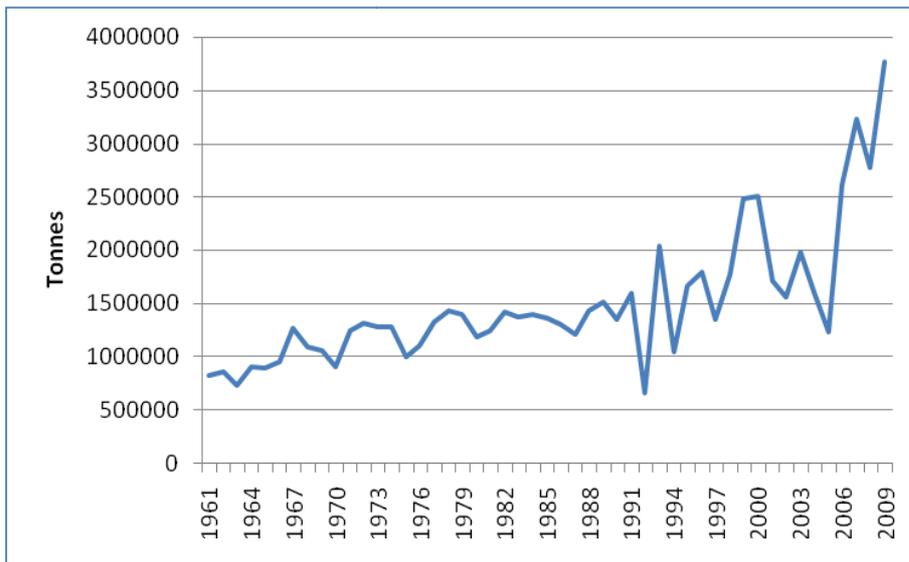
Figure 23. Quantity and real value of maize (1994=1)



Source: FAO database and NSO webpage

Note: The official data on maize production were reduced by 10 percent in 2006 and 20 percent in 2007-2009. The real value was calculated by dividing the nominal value, based on producer prices, by CPI.

Figure 24. Maize production 1960-2009, in kg



Source FAO database

Maize subsidies and economic growth

Alongside with expanding exports in general, maintaining, or increasing, the current levels of maize production should thus be a priority for the government. Although maize yields have increased since the introduction of ASAP, they are still low in many areas. The differences are to a large extent due to use of seed (local or hybrid) and fertilizer, which varies substantially across districts and farms (Holden and Lunduka, 2010a). Thus, there is a potential for many smallholders to increase their harvests substantially. Such an increase would boost both economic growth and food security.

As mentioned above, World Bank (2009a) argues that linkages to the rest of the economy from maize production are too weak to generate sustained economic growth, in contrast to tobacco production. However, the argument is based on past experience and ignores the possibility that maize linkages to growth might become much stronger if high yields translate into high food security. With high food security the scope for commercialization, capital accumulation and diversification increases, which in turn raises income and demand for goods and services in the rest of the economy.

It must be acknowledged, though, that there is a limit to how much maize production should grow. Malawi does not seem to have comparative advantage in exporting maize, so the focus should be on domestic consumption, and possibly some regional trade. In fact, according Keyser and Tchale (2008), recent maize exports to Zimbabwe probably implied that Malawi subsidised Zimbabwean consumers.

Nonetheless, it is not sufficient to increase production to ensure food security; the variation in rainfall and the large number of smallholder with landholdings of less than 0.5 hectares mean that many households are net buyers of maize, particularly during years with small harvests. According to Holden and Lunduka, (2010b), 60 percent of the farmers in their survey were still net buyers in 2009, in spite of the large harvest. Thus, it is essential with demand side management, maintaining maize prices relatively stable in real terms. This has not always been the case; price volatility both across and within years are often large, with changes in prices amounting 50 to 100 percent (Ministry of Agriculture, various years).

Although there is some doubt about the accuracy of the recent data on maize production, it is clear that maize harvests have been large since 2006. For instance, the panel data collected by Holden and Lunduka (2010a) show a strong positive trend over 2006-2009; the mean yield rose from 1440 kg/ha to 2040 kg/ha. The main reason is most likely the expansion of subsidies to smallholders, the AIPS, in combination with good rains. Since AIPS seems to have raised income and generated employment (SOAS, 2008), it must be considered are a very promising policy intervention and its sustainability is a key issue. Interestingly, the usually large harvests in 1999 and 2000 (see Figure 22) also coincided with distribution of inputs to over 2 million households (Ministry of Agriculture, 2009).

Only a few studies evaluate AIPS directly: SOAS (2008) carries out an overall evaluation of the 2006/2007 season, and Holden and Lunduka (2010a, 2010b) analyse several aspects of the programme for 2006-2009. The AISP has evolved over time, and recent ones differ a great deal from the initial ones. For instance, the focus is on food crops only, excluding tobacco. The private sector is also much more involved than earlier, including all suppliers of seed and the large importers of fertilizer check. The system of distributing vouchers has been changed, initially chiefs did it but now Ministry of Agriculture staff handles them. Nonetheless, as described by Holden and Lunduka (2001a,

2010b), distribution and targeting still seem to be weak, a lot of subsidies end up with fairly well-to-do farmers, and a significant smaller share of female-headed than male-headed households have received the full package of fertilizer. Moreover, there is a large second hand market for coupons and fertilizer, which seem to be due to theft or forgery of coupons, not sales from farmers. Accordingly, farmers consider corruption to be one of the major problems of the AISP.

As discussed above, in the ideal case AISP has a multiplier effect that sets off a process of continued growth and job creation by raising incomes and triggering agricultural intensification. Analysing this issue is difficult, but there are some signs of positive indirect effects. The vast majority of the farmers have small landholdings, as reported in Section 3, and many of them do casual work, ganyu labour, on larger farms or work on estate farms. In 2006/2007, the supply of ganyu declined since smallholders had higher income, and demand increased, since the harvests were large. As result, wages for both ganyu and farm workers appear to have risen (SOAS, 2008). There is also anecdotal evidence that the cost for ganyu has continued to be ‘high’ during recent years as well.

Another indirect affect is increases in assets. Holden and Lunduka (2010b) find a substantial build-up in assets from 2006 to 2009 in their panel, indicating improved welfare. National data on livestock, which can be viewed as investments, also show a rapid increase. Data for four types of livestock for 1990-2008 are reported in Table 30. There was clear increase during the past four years, particularly for goats, pigs and sheep. Of course, these increases do not have to be related to AISP, but they are consistent with idea that it generates capital accumulation.

Table 30. Index of live stock in Malawi, 1990-2008

	1990-94	1995-99	2000-4	2005-8
Cattle	1.00	0.87	0.95	1.06
Goats	1.00	1.49	1.93	2.82
Pigs	1.00	1.51	1.77	3.29
Sheep	1.00	1.04	1.23	1.91

Source: FAO database

Note: Index of the number of livestock, set to 1 in 1990-1994

The analysis in this section has thus confirmed earlier findings of the importance of exports for GDP growth in Malawi; tobacco, as well as other exports, seems to be a major determinant of economic growth. However, it has also pointed out the role of maize production, which seems to have a potential to generate economic growth as well. To this should be added that increases in food production are the fastest way to improve food security and reduce poverty in poor countries (Christiaensen et al., 2010).

There is obviously a need for extensive Government support to maintain current high maize production. Moreover, there is a limit on how much maize production can increase both in terms of yields per hectare and return to Government outlays, recent maize exports have mostly likely meant that Malawi has subsidised other countries. If the strategy of boosting maize production should have an impact on economic growth in the medium term, the subsidies have to be sustainable and the indirect effects have to generate increases investment and consumption. Moreover, the subsidies should not crowd out other profitable Government investment (Buffie and Atolia, 2009).

Several studies analyse or discuss subsidies to smallholders in general, and there is also a lot of scepticism (Minot and Benson, 2009). Over the years, many programmes have at the end been unsustainable and failed to raise growth. However, it is also clear that well-designed programmes could be successful, as argued by Doward (2009) and shown in theory by Buffie and Atolia (2009).

Growth Challenges

This section discusses some of Malawi's major growth challenges and the prospects for job creation. Since there are many challenges, the focus is on major medium to long term issues, particularly the role of agriculture. Section 12 describes more direct obstacles to growth, reviewing findings on growth constraints.

It might seem obvious that most of SSA should focus on raising agricultural growth, but this is not the case according to some economists (Collier, 2009; Dercon, 2009a, 2009b). First, the long-held view that countries have developed by increasing agricultural productivity is now being challenged by economic historians; the development of other sectors seem to have been taking place alongside or before the expansion of agriculture in Western countries (Dercon, 2009a).²⁴ Second, the idea that employment should grow in the sector where people currently work is claimed to be incorrect; in many SSA countries the potential for expanding smallholder agriculture is limited since yields are relatively low even in ideal conditions; increased use of fertilizer raises land productivity, but not sufficiently. Third, smallholders often have very small pieces of land, and they continue to become smaller because of population growth in the rural areas. In Malawi, for example, half of the smallholders have less than one hectare, and only 13 percent have more than two hectares (SOAS, 2008). Fourth, a sophisticated marketing system with strong vertical links along the value chain from inputs and credit to sales is needed to raise value added substantially, which might be difficult to establish (but not impossible) with many very small farmers. Hence, Collier (2009a) and Dercon (2009a, 2009b) argue that in most African countries agriculture should be low on the policy agenda and development strategies should aim at expanding other sectors.

Collier (2008) suggests several other development strategies for landlocked countries such as improvements in air and E-services, encouragement of remittances, increased cross border trade through relevant infrastructure investments, and improved coastal access, which mainly depends on policies in neighbouring countries. Although sensible, they seem to be less likely to impact substantially on economic growth and employment in Malawi in the short to medium run.

Moreover, there are several counterarguments to this view when applied to Malawi. Increases in agricultural production are no doubt the fastest way to raise employment and reduce poverty in Malawi, as shown by Christiansen et al. (2010), and this is urgent because of widespread poverty. Another counterargument is that small holdings might not be a

²⁴ This description is not entirely convincing. In Europe massive emigration led to increased returns to labour in agriculture, without increasing production, and in Asia agricultural intensification triggered diversification.

constraint to agricultural intensification and a shift towards market-oriented agriculture. Experiences from both Asia, but also Rwanda, suggest that over time increased employment opportunities in non-farm sectors might make a consolidation of holdings possible (Ronnås et al., 2009).

To substantially increase the number of productive jobs in Malawi, there has to be high economic growth over several years, and it has to generate many jobs, i.e., it should be based on labour intensive production. With a time perspective of five to ten years, agriculture therefore must play a leading role, because it employs the vast majority of the labour force, all the other sectors are too small. This is clearly illustrated by Headey et al. (2010) who provide a simple numerical illustration of the importance of agriculture for job creation. Assume 70 percent of the labour force is in agriculture, and that agricultural growth is slightly more labour intensive than non-agricultural growth. Further assume that agriculture and population have the same growth rate, i.e., close to 3 percent per annum, which is the average for developing countries in the 1990s. In such a situation non-agriculture has to grow by 20 percent to absorb surplus labour, which is much higher than any country has achieved so far.

Hence, a major challenge is to maintain the current, agricultural-based, growth momentum. Here the sustainability of AISP plays a key role. Making AISP viable over the next decade requires consideration of a number of aspects of the programme such as cost effectiveness, crowding out of other essential public expenditures, involvement of the private sectors, and how to design the programme to stimulate diversification. It is also important that the allocation of subsidies is equitable, otherwise tension and conflict might develop over time. The programme seems to have improved over time, but a recent evaluation found serious problems with targeting and corruption (Holden and Lunduka, 2010a, 2010b).

The AISP needs to be complemented with public sector investments, otherwise new constraints in smallholder agriculture are likely to be binding. These investments have to facilitate diversification to more high-value crops for which the income elasticity is higher. This raises the question about labour versus land as constraint on agricultural intensification in Malawi. In general there is labour scarcity at the peak of cropping season, while there is underemployment during the rest of the year (Wodon and Beegle, 2006). Moreover, there are large regional differences. Land is quite abundant in Northern region, while land pressure is severe in Southern region where households often only have 0.1 hectare of land. To this should be added that a third of total arable land is underutilised (Datar, et al., 2009).

The high demand for workers during planting season, roughly December-January, and low demand during other parts of the year has bearings on policy and constitutes a great challenge for job creation. First, the vast majority of the economically active work in agriculture, so Malawi's resources in the form of labour is clearly underutilized, which affects labour productivity and income. Second, farmers list labour as an important constraint to agricultural production, after fertilizer and pesticides, but before land availability (Tango International, 2003). Hence, the recent increase in the availability of fertilizer through the AISP might have made the constraint even more important. Third, labour shortages might limit the scope for diversification, both in agriculture and in other activities

The labour-land problem is thus multifaceted and requires multi-thronged approach. Those with small plots need more land, new technology has to be used to increase labour productivity, and diversification is needed to provide jobs when labour demand in agriculture is low.

There has been no Green Revolution in Africa, partly because the technology does not seem to be available (Dercon, 2009a). However, Malawi has some of the requirements that made the Green Revolution a success, water and densely populated areas. Irrigation is thus one option which could increase both all-year around employment and productivity, as well as improve food security. A minute part of Malawi's agricultural land is currently irrigated, but the Government recently launched the Green Belt Initiative, which is claimed to aim at irrigating 1 million hectares. There should also be ample scope for improving technology in general, only a couple of percent of the households owned a plough, oxcart, ox or donkey (Tango International, 2003, NSO, 2009a). Moreover, there are ample possibilities to both expand the use of fertilizers and yields in some areas (Holden and Lunduka, 2010a), and reduce farm costs of fertilizer use and increase yields through agronomic research in general, since there is a lack of detailed knowledge about how to apply inputs (Minot and Benson, 2009).

Better matching of people and land by resettlement schemes is another option. The great challenge is resettling Southerners, who have little land, to Northern region where this is idle land. There is an ongoing land redistribution programme in Malawi; however, it is restricted to Southern region where underutilised land formerly belonging to estate farms is transferred to households with little land. Although the programme requires large investments, it seems reasonably successful (Datar et al, 2009).

Even though agriculture must play a key role in Malawi, it is vital that the non-agricultural private sector expands rapidly. The reason is that there is now ample evidence economic growth is closely linked to diversification, not specialization according to existing comparative advantage (Imbs and Warciarg, 2003; Hausmann et al., 2007). The current degree of product diversification in Malawi is low, actually among the lowest in the world (Page, 2010), so if Malawi is to become a medium income country, there has to be a focus on diversification by creation of comparative advantage in new areas. The aim should be at expanding activities closely related to existing ones, since it is difficult to jump from one type of industry to another (Hausmann, et al., 2007). Thus agro-processing, for example, is an obvious choice.

Two other sectors with a prospective to generate growth and employment are tourism and mining. Both have expanded recently (Brianchon and Lightfoot, 2009). Tourism is service exports and as such a potentially important for export diversification, as well as job creation. Malawi has a lot to offer tourists, and to some extent the sector does not suffer from the country's landlockedness in the same way as other export sectors. But there are several challenges. First, as many other Sub-Saharan countries, it is perceived as being insecure, probably much more insecure than what it is. Second, there are no coastal beaches and there is a risk of getting bilharzias when swimming in lakes, though there is lack of clarity about how risky it is. Third, service in hotels and restaurants is often not good enough, even in the best facilities. Fourth, Malawi is quite expensive, partly because of the policy of maintaining an overvalued exchange rate. The negative impact of high cost is probably substantial since most of Malawi does not attract the very top-end of tourists, since there are few luxury hotels. Addressing these challenges should have high priority, and a concerted effort by policymakers to improve Malawi as a tourist destination can go a long way.

Mining poses promises but also threats. It can have a strong impact on economic growth, and alleviate the foreign exchange shortage. However, mining can shift the political focus away from agriculture and manufacturing if it expands greatly, increase corruption, and even lead to political instability. Moreover, large export incomes increase the value of

the domestic currency, stifling tradable sectors, such as tourism and manufacturing. This has happened in mineral-rich African countries. As a result, they have grown rapidly but there has been little job creation as mining is capital intensive (Headey, et al., 2010). The expansion of Malawi's mining sector will have beneficial effects in the near future since it is relatively small, but potential drawbacks should be kept in mind, particularly the increased scope of maintaining an overvalued exchange rate.

There is also a need to support urban private sector development, both because productivity and wages are high in cities and because continued migration to cities is inevitable. It is not a coincidence that many well-paid jobs are created in large cities: agglomeration creates scale economies that increase productivity and make the urban business sector dynamic (Page, 2010). The focus should be on removing constraints to investments and growth in general, as discussed in Section 12.

Although established firms contribute to diversification and expansion of employment, individual entrepreneurs who generate both self-employment and employ others play a key role in the process. There is thus a need to train people to become entrepreneurs, or at least to teach them basic business administration. Preliminary evaluations of programmes that teach management skills to small entrepreneurs in Ghana and Kenya show a strong impact (Sonobe et al., 2010). However, it is not enough to train entrepreneurs; credit is also needed to start a business, so access to microfinance, as well as bank loans, has to be expanded.

As shown in Section 10, exports are a main driver of economic growth. Facilitating international trade, which includes domestic infrastructure in terms of roads and transport, should thus be high on the agenda. Malawi Growth and Development Strategy contains an ambitious plan, including an inland port linking southern Malawi to the Indian Ocean via the Shire-Zambezi waterways. The major impediment to improved regional connectivity is probably lack of investments in neighbouring countries. Here donors can play an important role to increase collaboration across countries and help finance investments that mainly benefit Malawi.

Although long-run economic growth often entails migration from agriculture to urban areas, there are many cases where local non-farm sectors have grown rapidly and created employment for the rural population (Headey et al., 2010). In Malawi where the rural labour force is growing rapidly, Government should facilitate private sector investment in agro-based production or similar activities in the rural areas, which then generate employment opportunities. This requires both public sector investments, such as electrification, and a pro-private sector policy that builds confidence among potential investors. Moreover, Government needs to improve marketing and distribution facilities: for instance, Lall et al. (2009) show that the geographical location of tobacco production is closely related to access to markets. World Bank (2009) subsequently suggests investments in feeder roads.

As mentioned earlier, increasing the stock of human capital is a major challenge. It requires heavy investments in the education system, improving access, particularly at secondary and tertiary level, and quality at all levels. This is needed both to increase labour productivity directly, which partly depends on the skills levels of the workers, and to support diversification.

HIV/AIDS is a potential challenge to economic growth, although the negative overall effects in Malawi and elsewhere in Africa so far have not been as large as sometimes predicted (McPherson 2003; Bell et al., 2006). There is of course ample evidence of the harm

inflicted on specific activities, for example many skilled public employees have died of AIDS, but the impact on economic growth per capita appears to be dominated by other factors. One explanation is that there are more important constraints to growth, such as power cuts, high transport costs, etc. This is not to deny that AIDS is a very serious problem because of its effects on people's well being.

The negative effects of AIDS have also been mitigated by the distribution of ARTs to close to 200,000 people (UNGASS, 2010). However, the future is uncertain. If the rate of new infections does not decrease, the number of people needing medicine will continue increasing. Since ART is expensive and mainly financed by aid money, such a development could lead to a collapse of the ART programme. Another threat is that there will be less foreign aid for ARTs due to the fiscal crisis in many developed countries.

Regional/Ethnic inequality is also a serious challenge since it might lead to political instability in the medium term. Care should thus be taken when formulating policies which increase inequalities. Reducing inequalities without creating discontent and increasing tensions further is more difficult, but one strategy is to improve conditions for disfavoured groups without obviously worsening them for others.

A medium to long term challenge is fast population growth, as evident from the data reported in Section 8. Land pressure, and demand for jobs in both urban and rural areas will increase sharply as many young people enter the labour force. Although fast economic growth could alleviate the problem, providing decent work to all will be very difficult, as illustrated by the fact that in 2008 there were 2.9 million Malawians aged 10-19 years and 326,000 aged 60-69 years. There are two other solutions, migration and lower fertility. There will be migration, but hardly enough, and it will contribute to the brain drain. Hence, fertility needs to be reduced. There is no consensus on how to design policies that reduce fertility in a democratic society, or if it is possible, but improved education for women, particularly access to secondary school, expanded family planning, increased availability of contraceptives, and the introduction of pensions, are some tools that seem to have worked in developing countries. Malawi has family planning programmes and contraceptives are available, but there are large variations across districts (NSO and UNICEF, Chap. 9, 2008). Moreover, to some extent the fight against HIV/AIDS seems to have been at the cost of family planning in Malawi, and many other countries.

An important step to fight youth unemployment has recently been taken by adding youth development and empowerment to the Malawi Growth and Development Strategy goals, and establishing a Youth Development Fund that will provide vocational and entrepreneurial skills, among other things.

The risk of youth unemployment is not only a problem for the individuals concerned. Several studies show that when large cohorts of young men fail to get jobs, they tend to cause social instability. In Malawi, the age groups of those under than fifteen years are large and grow for every year; the youngest ones are close to 500,000 each. Creating jobs for all these is a major challenge. There needs to be a substantial increase in secondary and tertiary education, partly to keep them out of the labour force, and partly to prepare them for the job market. For those not attending school, a youth development fund is being established that, among other things, will provide vocational and entrepreneurial skills. Moreover, Ministry of Youth Development and Sports has an overall responsibility to create an enabling environment for all young people by they seem to reach relatively few of them.

Another challenge in terms of achieving sustainable growth that Malawi faces is to ensure sustainable management of key natural resources, and to respond to threats of climate change. Among development economists the notion of *economic growth versus the environment* has been replaced with *economic growth and the environment*. Damage to soil, water supplies, and forests arising from unsustainable methods of production can significantly reduce long term national productivity but will have a positive impact on current national income figures. Thus, better environment stewardship is important to sustain economic growth and development. Recent indications are that Malawi is on course to miss the MDG of environmental sustainability.

Constraints to Employment Growth

As evident from earlier sections, Malawi faces several constraints that inhibit the creation of productive jobs. In this section we first discuss labour market issues, the availability of adequately trained workers and labour regulation. Then we move to growth constraints that affect investment and profitability of firms directly, and have an indirect influence on job creation and wages via labour demand. There exist two recent studies that focus explicitly on growth constraints in Malawi, Lea and Hanmer (2009) and MCA (2010), and several studies that examine related topics (see World Bank 2004, 2007, 2009). We therefore limit the analysis to constraints deemed to be of major importance and don't go through each potential constraint as has become standard in the growth constraint literature (Hausman et al., 2007).

Labour market constraints

Information about how employers in the formal sector view the labour market is available in surveys on the business climate in Malawi. The most recent information is from the Business Enterprise Survey 2009 and Doing Business 2010 from the World Bank and IFC, Malawi Business Climate Survey 2008 and 2009 from Malawi Confederation of Chambers of Commerce and Industry (MCCI), and the Global Competitiveness Report 2010.²⁵ In these surveys firms are asked to rank obstacles to doing business. Since firms are heterogeneous, methods and questions asked differ, and sample frames and sizes vary, the responses differ across the surveys for other than statistical reasons. However, together they should provide a credible picture of the relative importance of various obstacles to do business.

For most enterprise categories, compared to other SSA and low income countries, Malawian firms rank skilled-labour shortages as a serious problem (World Bank, 2010b). A similar message is given by the Global Competitiveness Report 2010, where one third of the firms rank 'inadequately educated labour force' as one of the top five problematic factors, making it end up in the middle of a total of 15 factors (World Economic Forum, 2010).

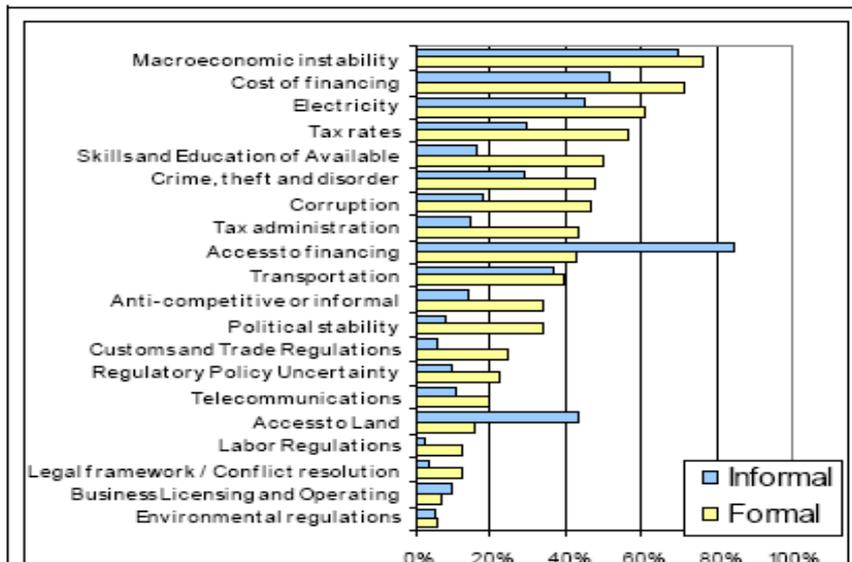
²⁵ Malawi Confederation of Chambers of Commerce and Industry produces an annual survey since 2004. There are The World Bank and International Finance Corporation produce Investment Climate Assessments, Doing Business Survey, and Enterprise Survey and the World Economic Forum compiles Global Competitiveness Survey. It is not always clear what data source is used, but the rankings provided by these surveys are probably entirely independent of each other.

Moreover, in the 2009 Business Climate Survey, manufacturing firms give ‘availability of skilled local work force’ together with six other obstacles the maximum (the worst) score, 10.0 points when ranking a total of 28 obstacles. The average score for all firms is 7.0 points (MCCCI, 2009). And according to the 2009 Business Enterprise Survey,²⁶ 34 percent of the firms in manufacturing and 18 percent of those in services considered skilled-labour shortages a major problem, while about 40 percent of exporters and large firms saw it as a major problem compared to 20 percent among non-exporters and small firms.

There is also a difference in the view of formal and informal entrepreneurs on the shortage of skills (Figure 25). In 2006 about 50 percent of formal entrepreneurs in Malawi considered skills shortage to be a problem compared to about 18 percent for informal entrepreneurs. Put differently, the formal sector firms, rated availability of skills and education of labour force as the fifth most important constraint while the informal sector rated it as the tenth most important constraint.

To some extent responses reflect technology used and products produced by the firms. This is shown by Figure 26, which reports vacancies for different skills by sector. The financial sector, for instance, has a high vacancy rate for investment analysts, partly explaining the high remunerations reported in Section 5. The manufacturing and construction, on the other hand, find it difficult to fill vacancies for technicians.

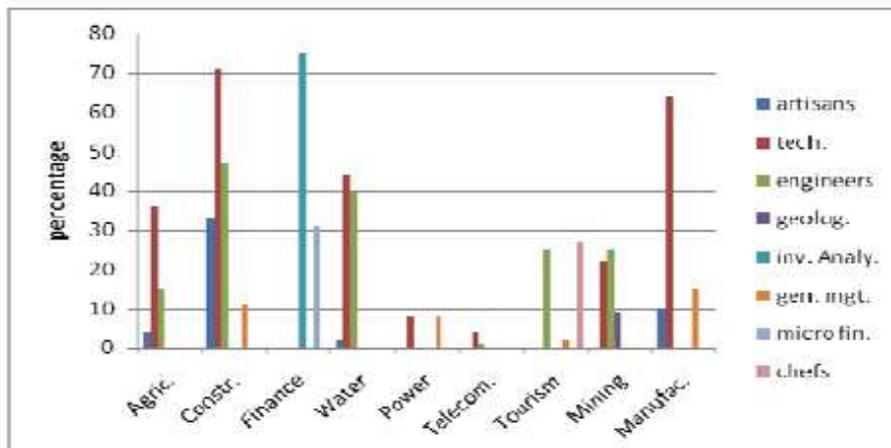
Figure 25. Constraints firm growth and productivity



Source: Investment Climate Assessment, 2006

²⁶ The data reported from the Enterprise Surveys are taken from World Bank (2009) and the Enterprise Surveys homepage, <http://www.enterprisesurveys.org>.

Figure 26. Observed vacancy rate



AfDB Skills Study (2009)

When considering the high vacancy rates shown by Figure 26, a relevant question is what factors are behind the inability of training institutions to produce the required graduates. These range from poor staffing of the training institutions to inadequate teaching and learning facilities. Industry’s reluctance to host students for attachments also contributes to the skills shortage in that some students fail to meet their competency requirements. Another factor is the lack of a comprehensive and sustainable dialogue between universities and other tertiary institutions on the one hand and industry on the other. This interface between industry and training institutions would no doubt go a long way in ensuring that training is up to date, and meeting industry’s needs and demands. The poor funding that most of the training institutions experience can also be blamed for the shortage of skilled labour; insufficiency of funds prevent training institutions from acquiring the state of the art equipment and books that would allow students to be at the frontier of knowledge.

The approach used to obtain information about obstacles mainly consists of asking firms. One of its weaknesses is that firms might not fully comprehend the importance of the obstacles they have adjusted to. Many Malawian firms seem to produce goods or use production techniques that require few skilled workers, and thus might not perceive the lack of skilled workers as a major problem; with more skilled workers they could produce more sophisticated goods or use more advanced techniques, which would raise profits and wages. Such a bias should be reflected in how the composition of Malawi’s labour force compares with other countries. In manufacturing 66 percent of the workers are unskilled in Malawi, while the percentage is 35-45 percent on average in other SSA and low income countries (World Bank, 2010b).

Labour market regulation is a multifaceted concept, affecting both demand and supply of labour. The focus in the surveys is on labour demand, where the constraints are most likely to be. A range of factors related to labour market regulation are addressed in the surveys, and the indicators used give a mixed picture. Labour legislation is considered a major problem by only 2.7 percent of the firms in the 2009 Business Enterprise Survey, which is much lower than in other countries. And ‘Employing Workers Indicators’ of Doing Business gets a score of 44 out of 100 (the worst). According to this indicator Malawi is ranked 92 out of 183 countries. It is clearly ranked better than the average for SSA, but way behind some comparator countries such as Uganda (7) and Rwanda (30). However, in the

Business Climate Survey, 'employment policy and legislation' is ranked as a relatively large obstacle, getting 7.7 points out of 10, worse than shortages of skilled workers. This discrepancy is to some extent due to the inclusion of agricultural firms in the latter survey, since they rank the problem higher than other firms.

The Global Competitiveness Report 2010, which constructs a competitiveness index of 133 countries, casts some light on the conflicting findings. The index has 12 pillars, where one is called Labour Market Efficiency. Malawi is ranked 119 when all 12 pillars are considered, but 55 based on the labour pillar, so Labour Market Efficiency is one of its best pillars. The pillar contains nine indicators. Among these female participation in the labour force has the best ranking, but it is probably due to the large number of females working in agriculture and the informal sector, not in wage employment. The second best indicator is wage flexibility, showing the ease by which firms determine wages; obviously minimum wages are not considered too high. Labour-employer relations and rigidity of employment also get favourable ranks. The three worst indicators are 'firing costs', 'pay and labour productivity' and 'brain drain'. The ranking of 'firing costs' is most likely influenced by the requirement to pay retrenched employees both severance pay and pension.

Firing costs are also a component of Doing Business 2010 'Employing Workers Indicators', reported as 'Redundancy Costs'. It is the component that gets by far the worst score. The costs in terms of weeks salary is 84 (which seems too high), compared to 66 weeks for SSA on average. To some extent, the firing costs will be reduced with the passing of the amended Employment Act and new Pension Act in Parliament, since then employers will only pay either severance pay or pension.

Foreign exchange shortage and exchange rate policy

Malawi's chronic foreign exchange shortages affect economic growth and employment creation in various ways. Basically the shortages are due to the economic structure of Malawi, a heavy reliance on exports of agricultural goods and imports of consumer, intermediate and capital goods. However, macroeconomic policy, particularly exchange rate policy, also matters greatly.

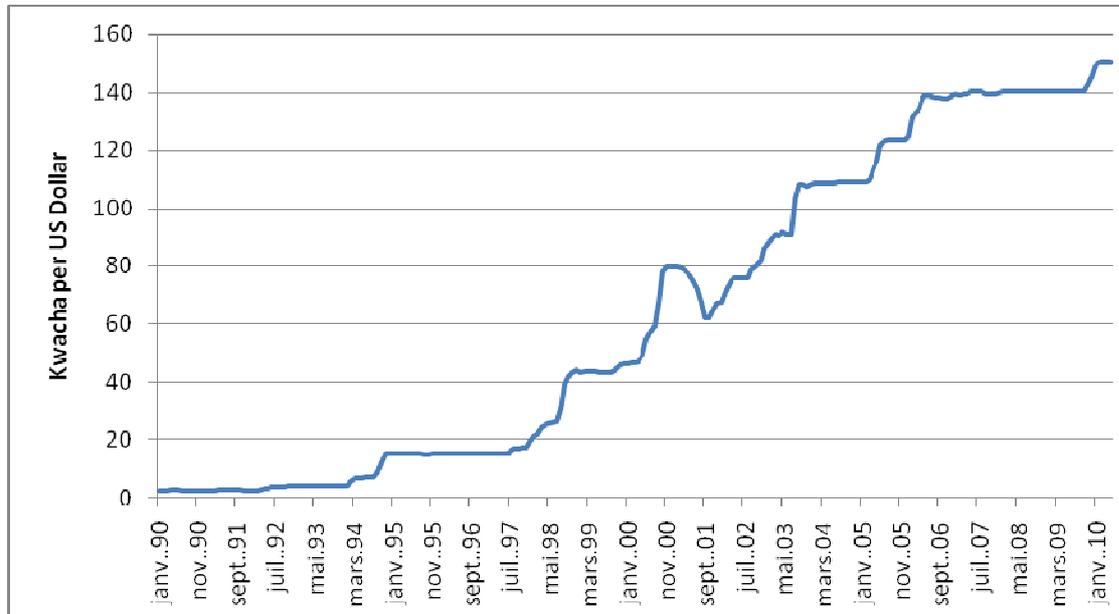
Foreign currency regulation/exchange rate policy is classified as a major obstacle in several business climate surveys. For instance, it is the second most problematic factor in the Global Competitiveness Report 2010. It is also a reason for retrenching workers or reducing working hours (Briançon and Lightfoot, 2009; MCCI, 2010).²⁷ The concern is overvaluation and foreign exchange shortages, while earlier surveys showed that exchange rate instability was a major concern in 1990s (World Bank, 2004).

Malawi has a tradition of attempting to maintain a stable nominal exchange rate, i.e., fixing the value of the Kwacha in terms of US dollars, as Figure 27 shows. For instance, the Kwacha was pegged to the US dollar from 2006 to 2009, after which it was allowed to move

²⁷ Foreign exchange shortage is the main reason for retrenchment according to representatives of Malawi Confederation of Chambers of Commerce and Industry. However, out of 18 reports on redundancies to Ministry of Labour in 2009 only three indicated foreign exchange shortages.

within an unofficial band. However, the policy of pegging the exchange rate has usually not been supported by other macroeconomic policies, so the regimes have not been sustainable, resulting in overvaluation and large devaluations.

Figure 27. Kwacha-US dollar exchange rate January 1990 – May 2010



Source: International Financial Statistics (IFS, 2010) and Reserve Bank of Malawi webpage.

Currently the exchange rate is maintained by administrative means, which de facto implies rationing of foreign exchange sales to the private sector. A manifestation of the need to regulate the market is the closure of most foreign exchange bureaus in 2009. As a result of the rationing, the market is segmented; the black market premium for US dollars was about 30 percent early 2010.

The official purpose of maintaining a stable exchange rate is primarily to reduce inflation, or avoiding price increases that would unequivocally follow a devaluation of the Kwacha (Standard Bank, 2009). For example, prices of basic commodities such as fuel, sugar and salt are directly linked to the exchange rate via their import contents. Devaluation would thus increase the cost of living, and possibly poverty, though it is uncertain how exchange rate changes affect the poor and ultra poor, which is an important area of research. There are also other short-term benefits of avoiding devaluation, it keeps down the cost of Government imports, and favours the middle classes and elite since they are the main consumer of imported goods.

In defence of the exchange rate policy, Government, as well as others (such as Standard Bank, 2009), argue that export supply is not very sensitive to the exchange rate. This might be correct, but it is a short term view and ignores the negative effects on employment and economic growth, as also described in Section 12. Since inflation in Malawi is clearly higher than in most of its trading partners, over time the real exchange rate becomes overvalued when the nominal is stable. And as the real exchange rate appreciates, exporters' profits decline, and they shed workers and reduce wages. The exception is when firms increase productivity to compensate for the exchange rate appreciation, but this is difficult given the

size of the changes of the real exchange rate. Companies that produce for the domestic market suffer in the same way when imported goods become cheaper, as easily can be appreciated from the huge recent increases in imports, from 44 percent of GDP in 2007 to 53 percent in 2008 (IMF Outlook, 2010). However, rationing also affects imports of inputs and spare parts, preventing firms from producing all sorts of goods, which in turn affects employment and exports. To this should be added the problem of loss of foreign exchange: repatriation of foreign exchange earnings are delayed and importers increase their stocks of goods as there is an expected devaluation in the pipeline (Briçon and Lightfoot, 2009). Moreover, individuals will stockpile foreign currency to protect their savings.

Traditionally, economists have considered the equilibrium real exchange as the best option, that is, it should be neither over nor undervalued. There is ample evidence the significantly overvalued real exchange rates hurts the economy (Johnson, et al., 2005). Moreover, the common view is that exchange rate policy can only temporarily influence the real exchange rate, since it is an endogenous real variable.

Recently the argument that developing countries should aim for an undervalued real exchange rate, since it stimulates exports, employment, and economic growth, has been revived (Rodrik, 2008). China is a prime example. In the short to medium run, this can be achieved by increasing the flexibility of the nominal exchange rate, while maintaining reasonably tight monetary policy to alleviate the pressure from inflation (capital flows are restricted so this will not increase the money stock). Then the budget deficits should be kept small to avoid excess demand for domestic goods and public sector borrowing that increases interest rates.

There is no consensus among economists on the usefulness of an undervalued exchange rate yet. However, there is no doubt it is important to avoid abrupt changes in both the nominal and real exchange rate, since uncertainty has a negative effect on economic activity. This means smoothing of exchange rate to remove large seasonal effect and long-run policy consistency. In the medium run the primary goal should be avoiding overvaluation. It is predictability and level of the real exchange rate that matter for business and job creation, not a stable nominal exchange rate (that everybody knows will be adjusted at an unknown date).. With an adequate and reasonably predictable exchange rate, firms would most likely have created more jobs, invested more and diversified more in Malawi. This message seems to be difficult to get through since it is based on counterfactuals, that is, the number of jobs that would have existed with a different policy

Market intervention

Few, if any, markets work perfectly, making it necessary for Governments to intervene in different ways. However, in general the interventions should be in the form of the regulation of standards, safety, health, etc. Interventions that directly affect prices or quantities produced should be avoided as far as possible. Yet, in Malawi it is common to fix minimum prices of some goods. This might have beneficial effects in markets where buyers have market power and minimum prices are set close to competitive market prices. On the other hand, when prices are set too high, the policy is most likely deterring firms from expanding production and new investors from entering the market, thus affecting job creation. Moreover, the intervention might even hurt the sellers, which it is supposed to defend.

Although only a few products are affected directly by interventions (cotton, tobacco and maize), they most likely scare away potential investors in other sectors as well. Accordingly, economic and regulatory policy uncertainty is among the most important obstacles of doing business according to Malawi Business Climate Survey 2009.

Cotton is the most glaring example; one of Government's declared strategic crops in Malawi Growth and Development Strategy and Malawi's fourth most important export crop. In the cotton sector there are about 120,000 smallholder farmers, six ginning companies and three input providers (Keyser and Tchale, 2009). Cotton grows well in dry areas, where there are few good alternatives, so it is important for farmers in some areas of Malawi. The cotton sector was in doldrums for several years but expanded rapidly after 2002 due to a concerted effort by the private and public sector.

Government started setting minimum cotton farm-gate prices in 2006-2007. In the 2007-2008 seasons, Ministry of Agriculture set the minimum price to MK 65 per kilo. It was high by international standards, but it was the lowest price ginners could pay to keep their cotton-buying licence. This helped farmers, who made large profits, while ginners, due to high prices, made very small profits. The following season, 2008-2009, the minimum price was increased to MK 75 per kilo because production costs had increased, in spite of the fact that world market prices had declined. Cotton thus became too expensive for the ginners; the price was 40-50 percent higher than in Mozambique and Zambia (Kopicke and Agar, 2008). As a result, many smallholders were unable to sell their cotton, while others had to sell at MK 30-35 per kg, well below minimum price. Moreover, Cargill, that had entered the Malawian market in 2005, left the country retrenching 411 employees.

Although market interventions can alleviate market failures and reduce poverty, implementing policies that work against market mechanisms is difficult and can have serious side effects that undermine economic activity. It is hard to estimate how many jobs have been lost in the cotton sector, let alone even to get a rough idea of how much investment could have taken place without policy interventions (the counterfactuals). Nonetheless, even if some farmers might have benefitted in the short run, it seems quite certain the interventions are not conducive to the creation of productive jobs in the medium term.

Power

The Enterprise Survey 2006 identified unreliable electricity as the third most important constraint to firm growth and productivity. In more recent surveys, such as the Enterprise Survey 2009 and the Business Climate Survey 2009, it is ranked as this most important constraint. On the other hand, small firms do not view electricity as a problem according to the Enterprise Survey 2009, which might seem surprising. Yet, this only highlights the severity of the problem: most of the small firms do not even use power because their production methods are too rudimentary.

Malawi currently suffers major shortages of generating capacity and power outages. In order to limit the impact of power cuts, there are plans to construct a new hydropower plant and to interconnect Malawi's electricity grid with Mozambique in 2011. The Electricity Supply Commission of Malawi (ESCOM) is the sole provider of electricity in Malawi. Currently its installed capacity is 302MW (95% hydro; 5% diesel) whilst available capacity is only 265MW against an estimated demand of 295MW. Planned investment in Kapichira-II hydropower plant and the interconnection of Malawi's electricity grid with Mozambique

in 2011 should help reduce capacity shortages and load shedding and improve supply reliability. However, demand is growing fast and is projected to reach 325 MW, 478 MW and 757 MW for years 2010, 2015 and 2020 respectively. Given the expected load growth, the planned investment will not be sufficient to meet the projected demand. As such this would lead to more load shedding, discouragement of business investment, and would undermine economic development and efforts to reduce poverty. It would also damage attempts to widen access to electricity among Malawi's population.

The unreliable power supply has adverse effects on employment in Malawi through for example companies losing sales or downsizing, domestic investors postponing investment, or by scaring off foreign investors, and by missing-out on productivity gains through improved production methods in MSEs. The following examples serve to illustrate the adverse effect of the state of power supply:²⁸

- ESCOM couldn't guarantee the quantity of electricity to the Kayelekera uranium mine and as a result Paladin resorted to the importation of diesel generators which is a much more expensive form of energy and results in increased diesel imports which creates additional pressure on international transport as well as foreign exchange. The operations at uranium mines require very reliable power sources which ESCOM cannot guarantee due to insufficient generation capacity.
- Heavy sands extraction never materialized because of the same inability to guarantee power supply. Heavy sands are used in the manufacture of titanium, a light and robust metal, which is, *inter alia*, used in airframe manufacture. Malawi lost out on an opportunity to diversify its export base and the investors moved to Mozambique where power was not a problem. Heavy sands can also be mined at a small scale level and therefore Malawi missed out on an opportunity to empower its citizens who could have benefited from being linked to a large producer of titanium.
- British American Tobacco (BAT) quoted power outages as one of the reason for their departure from Malawi as each power outage was very costly (50,000 cigarettes had to be thrown away with each of power failure). Once the machines stop as a result of power outages, products had to be thrown away and could not be recycled. This problem has also affected the competitiveness of other industries including Unilever, a detergent manufacturer which had to move its major production lines to other countries including Zimbabwe.
- Dairy industry cannot provide consistent quality of milk (outages preclude maintaining constant temperature). As a result losses are high. Rural households in milk-shade areas quoted lack of access to power as one of the major impediments to the growth of the rural-based dairy industries, and hence limits to improvements in rural livelihoods.
- A sugar company failed to start operations in Nkhatabay due to unreliable power supply.
- Plastics: Each time there is a power outage the machines get clogged by molten plastics and result in expensive cleaning operations of equipment. This adversely affects the competitiveness of the sub-sector and consequently the export potential is limited.
- Several potential textile investors have considered investment in Malawi in recent years. Textile manufacture, especially spinning, is a power sensitive operation which requires good quality power (in particular, a consistent power voltage to avoid uneven thread

²⁸ This discussion relies heavily on MCA (2010).

thickness). The cost of unscheduled outages can often be disproportionate to the duration of the outage. For example, the Mapeto textile factory loses 300 to 500 metres of fabric in their finishing/dyeing operation whenever there is a supply interruption. A number of textile factories have closed in recent years, with some of them (e.g. HAPS Garments) citing power supplies as a major reason for closure. A crocodile farm closed for similar reasons.

Median sales losses due to power outages are about 10 percent, the highest among Malawi's comparators. For companies without a generator, median sales losses are of the order of 20 percent, compared to those with a generator whose losses are of the order of 5 percent. Consequently the number of firms with a generator is at 50 percent, one of the highest in the region.

Overall, power infrastructure is poor and impacting on returns to investment and constraining new investments in the country. It has prevented the country's diversification into non-traditional exports (e.g. titanium and on farm processing). A large number of companies have heavily invested in diesel generators, which is a diversion of resources that could be used for investment in other ventures (MCA, 2010). It also impacts on Malawi's competitiveness. In addition, the use of diesel generators puts pressure on foreign exchange, which is meagre at the moment, and it might have an adverse effect on the cost of other imports, including fertilizer.

Finance

Access to and cost of finance is often considered to be a major constraint for doing business. This is also the case in Malawi. In the Global Competitiveness Report 2010, it is ranked as the largest problem among a list of 15 factors by all firms. Nonetheless, the pillar 'Financial market sophistication' is ranked as high as 55 (out of 135 countries), which is surprisingly good. Yet, 'venture capital availability' and 'ease of access to loans' are among the worst in the world. And in the Business Enterprise Survey 2009, close to 50 percent of the firms identify finance as the main obstacle. It is particularly severe for small and medium sized firms (under 100 employees). The same pattern is noticeable in the Business Climate Survey. Moreover, in the study of constraints, MCA (2010) classifies finance as a major constraint.

During recent years Malawi's financial constraints should have been alleviated somewhat. First, Malawi reached the HIPC (Highly Indebted Poor Countries) completion point in 2006, and as a result the debt-to-export ratio dropped from 191 percent to 39 percent. Second, the fiscal performance improved considerably with the change of government in 2004 and the help of reduced debt service of the external debt, reducing domestic debt and debt service. Third, partly as a result of improved fiscal policy, real lending rates decreased from over 30 percent in 2004 to about 15 percent in a few years time, though they are still by international standards (between 12 and 18 percent). Finally, Malawi has had practically uninterrupted IMF programmes since 2005, and foreign aid has increased from around US\$ 500 million annually in 2003-2004 to US\$ 900 million in 2008 (DAC, 2010). Hence, the crowding out of the private sector through Government borrowing has declined and more credit has been made available.

Unfortunately, we only have information on investments up to 2005. Nonetheless, Table 31 shows a sharp increase in investment in 2005, mainly due to expenditures on machinery. Data on credit to the private sector is available and reported in Figure 28 for

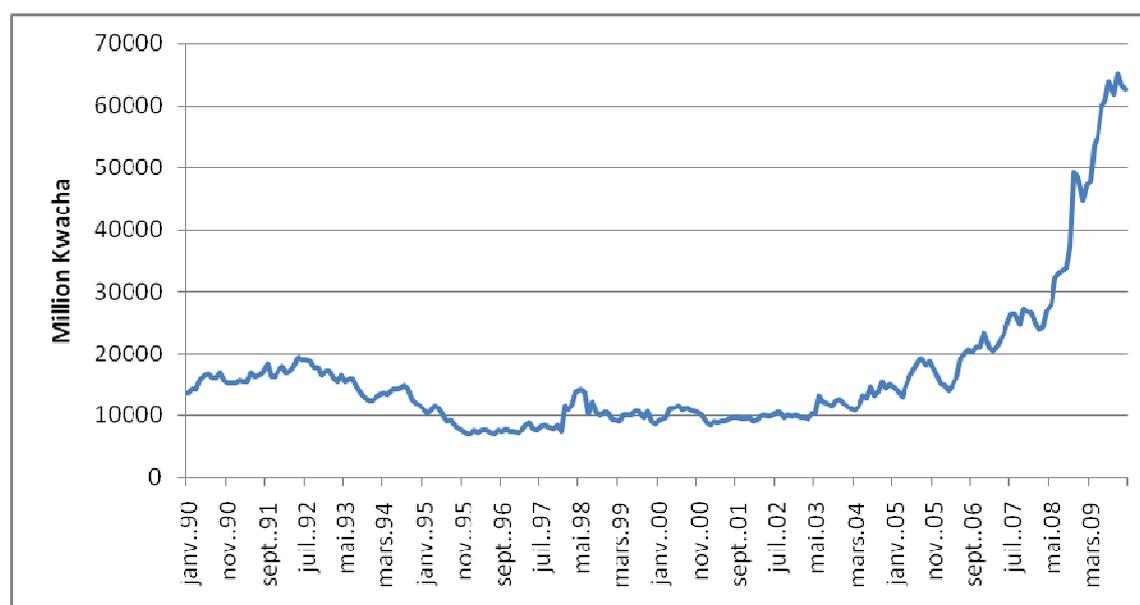
1990:1-2009:12. It supports the suggestion that the credit constraint has been relaxed. Private sector credit, measured in 2005 prices, started to rise in 2005 and practically exploded during 2008 and 2009. Of course, this increase might not correspond to a similar rise in investment demand, since most investments are financed by other means; a large share of the credit has most likely financed imports of consumer goods. However, some of the credit should have gone to investments; bank loans finance between 20 and 30 percent of the investments among medium and large firms according to the Enterprise surveys (World Bank 2010b).

Table 31. Capital formation as a share of GDP, 2002-2005 (in percent)

	2002	2003	2004	2005
Gross fixed capital formation	13.5	14.1	16.2	20.2
Dwellings	1.5	1.3	1.2	1.4
Other buildings and construction	2.5	2.8	2.6	3.5
Transport Equipment	3.5	4.2	4.7	4.3
Machinery	5.9	5.8	7.8	11

Source: NSO (undated).

Figure 28. Private sector credit 1990:1-2009:12 (in constant 2005 prices)



Source: International Financial Statistics, Claims on private sector, monetary survey (IFS, 2010).

A reasonable assumption is that the ranking of finance as a major constraint shows that firms have many profitable investment projects in the pipeline. However, studies have shown that firms probably are not as credit constrained as indicated by surveys (Bigsten and Söderbom, 2006). This is evident when checking how much of their cash flow actually is used for investments. On the other hand, recent experiments with microloans to small firms in poor countries have in some cases shown very large returns on the investments (de Mel et al., 2008). The issue of the role of finance is thus not solved, but to some extent the different results probably depend on firms' current demand and to some extent on the size of the

firms, where small and medium sized firms seem to be much more credit constrained than large firms.

Other constraints

There are many other constraints that influence the business environment, in addition to those above. Firms regularly list crime and theft, corruption, tax rates, water, telecommunications, transport infrastructure, trade tariffs and custom charges, etc., as important obstacles. Interestingly, according to the Enterprise Survey 2009 corruption seems to be a substantially smaller problem than in other parts of the SSA and low income countries. The courts also function quite well in relative terms, but the cost of crime is considerably higher than in other countries.

It is difficult to evaluate the relative importance of the constraints listed in surveys; it is not certain that the rankings made by firms are the correct ones from an employment and growth perspective. And it is beyond the scope of this study to do an extensive analysis of all potential constraints; Lea and Hanmer (2009) and MCA (2010) carry out such studies, analysing constraints in detail. The studies provide more fine-tuned rankings but they basically coincide with those discussed here. Lea and Hanmer (2009) list lack of finance (due to weak financial intermediation), power, education, lack of skills and market interventions as the most important ones. MCAs list is similar. The only obstacle included in their lists not discussed is badly functioning export chains and international corridors. There are distortions in the agricultural value chains reducing profits for farmer, particularly in inputs markets, but in tobacco there are also serious problems with marketing. Moreover, rural accessibility and mobility is hindered by the poor conditions of many roads. In fact, improving feeder roads in areas adequate for tobacco farming could boost production substantially (Lall, et al, 2009).

A related issue is regional infrastructure and barriers to trade, also highlighted by Lea and Hanmer (2009). Regional trade has grown significantly during recent years, probably due to rapid growth in Malawi and its neighbouring countries. Nonetheless, it is still small, particularly exports: only about 20 percent of all exports go to Sub-Saharan African countries. This contrasts with most development countries where regional trade makes up large shares of exports and imports. As a small and landlocked and country, Malawi could benefit greatly from trade with its large and relatively rich neighbours.

Concluding Remarks and Recommendations

The purpose of this report is to assess the challenges and opportunities for enhancing decent work in Malawi. To a large extent this is about generating economic growth, since without growth, there is no potential for sustainable job creation and wage increases. However, growth needs to be labour-intensive, providing jobs to most citizens. Moreover, jobs should be productive, i.e., paying decent wages.

Malawi has had high growth rates and substantial decreases in poverty during recent years, but it needs to address a number challenges and implement a range of policies to sustain the present momentum. There might be some quick gains, but in general sustainable pro-employment growth requires policies that address medium and long term issues in a

consistent way, and puts the country on a path of inclusive job-rich growth. The following are the main areas of recommendations:

Employment at the centre of national policy and monitoring

An essential starting point for Government is to place employment central in the national development strategy (MGDS II) and to strengthen labour market information and monitoring. Three activities to ensure this are recommended, as follows:

- Set agreed **employment targets within the MGDS II**, and consider regularly monitoring the newly agreed MDG Employment Indicators²⁹. This should be coupled with more rigorous tracking and monitoring of these indicators, first through improving the content and consistency of labour/employment questions in national surveys, and providing regular analysis to policy makers. So far, employment issues have played a minor role in Malawi's development strategies and data on employment and wages in Malawi are weak and inconsistent.
- The targets and indicators mentioned above should also be a core part of a new **National Employment Policy**, which sets out the strategic direction for increasing productive employment, and monitoring its progress. The strategic direction should be closely hinged to delivering on the priorities in the MGDS II.
- To track progress, Malawi will need to put in place a **Labour Market Information System**. This should enable monitoring of the policy, targets and indicators mentioned above, but also enable skills matching to meet the growing and changing demands of the labour market. This may require a Labour Force Survey, and strengthening consistency of labour questions across national household surveys however, further innovative methods of monitoring skills demands in the growing private sector also need to be incorporated.

Agriculture

- **Subsidies:** Increasing productive employment and incomes in agriculture will continue to be a cornerstone for development and poverty reduction in Malawi in the years to come. Towards this there is need to continue with Government support to maintain the current high maize production. However, there is a limit to how much maize production can increase both in terms of yields and return to Government outlays. If the strategy of boosting maize production is to have an impact on economic growth in the medium term, the subsidies will have to be sustainable and the indirect effects will need to generate increases in investment and consumption.
- **Infrastructure, and specifically irrigation:** Despite some general scepticism with regard to the sustainability and effectiveness of agricultural subsidies, there is evidence that well designed programmes can be successful, but for this to happen Government expenditures on subsidies should not crowd out other high-return projects such as building roads, power

²⁹ (1) labour productivity (2) employment to pop ratio (3) working poverty (4) vulnerable employment (5) Share of women in wage employment.

- plants, etc. The main weaknesses of the current programme according to a recent evaluation are failures to target the poorest farmers and corruption, and these needs to be addressed.
- Irrigation is one option which could increase both all-year employment and productivity, as well as improve food security. A minute part of Malawi's agricultural land is irrigated, but the Government recently launched the Green Belt Initiative, which aims at expanding the areas under irrigation massively. There is also ample scope for improving productivity; few households own a plough, oxcart, ox or donkey. And fertilizer use, and yields, varies greatly across districts. Moreover, the costs of fertilizer use can be reduced through agronomic research, since knowledge is limited.
 - **Technology and crop diversification:** As availability of inputs increases, other constraints on agricultural production will set in. The obvious ones are related to the availability of labour and land. It is a multifaceted problem and requires a multi-pronged approach. Along with an overall focus on increasing yields and returns to land, new technology is required to increase labour productivity, since there are labour shortages during harvesting time, while those with small plots need more land. Moreover, crop diversification is needed to provide work when labour demand is low, and to increase value added per unit of land. This could enhance the impact of the subsidies.

Land utilisation

Land resettlement schemes can increase the use of underutilized land and increase land plots. The great challenge is resettling Southerners, who have little land, to the Northern region, where there is idle land. The current land redistribution programme is restricted to the Southern region where land from estate farms is transferred to households with little land. The programme seems reasonably successful but is still too small to have a major impact.

There is also a great deal of income inequality in Malawi. The inequality is multifaceted but is particularly high in urban areas, and between urban and rural areas. There are also regional/ethnic differences in income, which probably will constitute a major challenge in the future. Addressing the inequalities is difficult, but the regional/ethnic ones could result in conflict if ignored. On the other hand, too tough redistributive policies could by themselves spur conflict. Hence, Government needs to be cautious.

Productive diversification

There is now ample evidence that product diversification is closely linked with economic development. Malawi is one of the least diversified economies in the world, so diversification, both in and outside agriculture, is a prerequisite for transforming Malawi into a middle income country, which is one of Government's goals. Policies to stimulate diversification thus urgently needed. The focus should be on activities related to existing ones, since it is difficult to jump from one type of industry to another. Government should thus facilitate **private sector investment in agro-based production or similar** activities in rural areas, which would generate employment opportunities. This requires both **public sector investments**, such as electrification, and **pro-private sector policies** that build confidence among potential investors. Moreover, Government needs to improve marketing and distribution facilities, particularly feeder roads.

There are also other constraints that affect diversification and job creation. **Power** shortages are common and recognized as a major problem; it is most certainly affecting jobs

and wages negatively. Lack of **financial capital**, particularly for small and medium sized firms, also seems to be an important constraint. There is a need for more micro finance, as well as increased competition in the banking sector to improve the availability and cost of finance in general. Moreover, there is ample scope for **improving international corridors and export value chains**, including reducing the administrative burden for exporters and transport costs through lower taxes and tariffs.

Yet, the impact of the policies and interventions suggested above will only bear fruit and can only be sustained if there are strategic complementarities with public investment in human resources.

Education and development of human resources

For medium term productivity and job gains, the educational sector must take priority among the competing interests embraced within the MGDS II. The continuing high rate of population growth means continued new entrants to the labour market annually of 300,000 to 400,000. These young people need to be better prepared for the labour market.

Many firms rank “inadequately educated labour force” as a leading constraint in Malawi³⁰, and **shortage of secondary, vocational and university facilities** combined with poor **quality education** of limited relevance to the labour market are main constraint to productivity and increased earnings in Malawi today. The declining performance of the education system and the high prevalence of child labour are of enormous concern. The small share of the population with more than primary education, and the small number of graduates from secondary and tertiary levels of education (including vocational training) must be reversed through more and better managed public resources.

Thus, there should be large investments in education, including vocational training and improved opportunities for women’s schooling after primary school. Curriculums should be adjusted to market demand, both current and expected, such as demand for workers in agribusinesses. There is also a need to reduce child labour, targeting those who work long hours in the first place.

Population policy

One of the most important medium challenges is to reduce population growth. Land pressure, and demand for jobs in both urban and rural areas will increase sharply as many young people enter the labour force. Although fast economic growth could alleviate the problem, providing decent work to all will be very difficult. There are two other solutions, **migration and lower fertility**. There will be migration, but hardly enough, and it will contribute to the brain drain since highly skilled workers are more likely to migrate than

³⁰ Global Competitiveness Report 2010 (World Economic Forum, 2010), Business Climate Survey 2009 (MCCCI, 2009).

others. Hence, fertility needs to be reduced. There is no consensus on how to design policies that reduce fertility in a democratic society, but improved education for women, particularly access to secondary school, expanded family planning and the introduction of pensions, and increasing income earning opportunities are some tools that seems to have worked in developing countries. Malawi has family planning programmes, but there are large variations across districts. Moreover, to some extent the fight against HIV/AIDS seems to have been at the cost of family planning in Malawi, and many other countries.

Exchange Rate Policy

Exchange rate policy is considered a key policy tool for generating/supporting economic growth. Malawi has a tradition of attempting to maintain a stable nominal exchange rate. Such a policy needs to be backed by other macroeconomic policies, or good luck, but in Malawi it has repeatedly resulted in overvaluation followed by devaluation. Currently the exchange rate is maintained by administrative means, which de facto implies overvaluation and rationing of foreign exchange sales to the private sector.

There are some short-term gains from having an overvalued exchange rate, inflation declines and imports are cheaper than otherwise. However, an overvalued exchange rate means lower profits for exporters since their products are valued less when measured in Kwacha, and tougher competition for companies that produce goods that can be imported, since foreign goods are cheap compared to domestically produced goods. As a result, there is less investment and job creation, and lower wages. Moreover, the incentive for diversification and innovation is reduced. If the creation of decent jobs is a policy goal, Malawi needs to reconsider its current exchange rate policy.

Regional and international markets

A related issue is connectivity to regional and overseas markets. There is a long-standing need for improved regional and domestic **trade facilitation** through the creation corridors. Although, many issues can be dealt with locally, improved connectivity can to a great extent only be achieved by close collaboration with neighbouring countries. One suggestion is to work hard to persuade donors to help finance required infrastructure investments in neighbouring countries that mostly benefit Malawi.

Few if any markets work perfectly, making it necessary for Governments to intervene in different ways. Interventions should be in the form of **regulation of standards**, such as occupational safety, quality control, etc. In Malawi it is common to fix minimum prices of some goods. This might have beneficial effects for sellers, but the policy is likely to deter firms from expanding production and new investors from entering the market, thus affecting job creation. Moreover, it might even hurt the sellers, whom it is supposed to defend. Recent interventions seem to have had such effects, thus impacting on job creation in the agribusiness sector. If needed, support to sellers could be achieved through many other means, such as subsidies.

Minimum wage adjustments

Finally, the current policy is to revise minimum wages every three years. As a result they fluctuate greatly when measured in terms what wage earners actually can buy since inflation erodes their real value. Moreover, over the three-year periods, labour cost varies greatly for firms that base their wages on minimum wages. Thus, minimum wages should be revised annually, possibly with help an automatic-adjustment cause to avoid long having negotiations every year. Moreover, compliance of minimum wages should be ensured.

References

- ADB (2009) Skills for private Sector Development, Country Malawi, *Study Report, Lilongwe*.
- Admassie, A. (2002) "Explaining the High Incidence of Child Labour in Sub-Saharan Africa." *African Development Review* 14, no. 2: 251-275.
- African Development Indicators, online, World Bank. www.worldbank.org.
- Agar, J., H. Savani, and L. Thompson (2009) "FinScope Malawi 2008" Report for Mark Trust, Kadale Consultants, Blantyre.
- Annual Economic Report (various issues) National Statistical office, Zomba.
- Arrehag, L., S. de Vylder, D. Durevall and M. Sjöblom (2006) *The impact of HIV/AIDS on Livelihoods, Poverty and the Economy of Malawi* Sida Studies no. 18, Stockholm.
- Bell, C., S. Devarajan, and H. Gersbach (2006) "The Long-Run Economic Costs of AIDS: A Model with an Application to South Africa" *The World Bank Economic Review*, Vol. 20, No. 1.
- Bennell, Paul. (2005). "The Impact of the AIDS Epidemic on the Schooling of Orphans and Other Directly Affected Children in Sub-Saharan Africa." *Journal of Development Studies* 41, no. 3: 467-488.
- Bigsten A. and M. Söderbom (2006) "What Have We Learned from a Decade of Manufacturing Enterprise Surveys in Africa?" *World Bank Research Observer* 21:2, pp. 241-265 (with).
- Blanco Allais, F. and F. Hagemann (2008) "Child labour and education: Evidence from SIMPOC surveys" Working Paper International Programme on the Elimination of Child Labour (IPEC) Geneva.
- Booth, David, Diana Cammack, Jane Harrigan, Edge Kanyongolo, Mike Mataure, and Naomi Ngwira (2006) "Drivers of Change and Development in Malawi", ODI Working Paper 261, Overseas Development Institute, London.
- Briançon, C. and C. Lightfoot (2009) "Malawi: Impact of the Global Crisis" A study for the European Commission.
- Buffie, E.F. and M. Atolia (2009) "Agricultural Input Subsidies in Malawi: Good, Bad or hard to Tell?" FAO Commodity and Trade Policy Research Working Papers No. 28.
- CABS (2009) Common Approach to Budget Support (CABS) Development Partners: Joint Analysis of the Government of Malawi's 2009/10 National Budget, Lilongwe.
- Castel, V., and Stampini, M. (2009), "Education and Employment in Malawi," African Development Bank Working Paper.
- CIA (2010) *World Fact Book*, available at www.cia.gov/library/publications/the-world-factbook.
- Chimbiri A. (2007) "The condom is an 'intruder' in marriage: Evidence from rural Malawi", *Social Science & Medicine*, Vol. 64, Issue 5, pp. 1102-1115.

- Chirwa, E and Matita, M (2009), "The Rate of Return on Education in Malawi," University of Malawi, Chancellor College, Department of Economics Working Paper No. 2009/01.
- Collier, P. (2009) "Growth in African Agriculture: Prospects and Constraints" speech at plenary session at CSAE Conference 2009: Economic Development in Africa, 22nd - 24th March 2009, St Catherine's College, Oxford. Available at <http://www.csae.ox.ac.uk/conferences/2009-EdiA/Panel-GiAAPaC.html>
- Collier, P. (2008) *The Bottom Billion*, Oxford University Press.
- Christiansen, L., L. Demery and J. Kuhl (2010) "The (Evolving) Role of Agriculture in Poverty Reduction: An Empirical Perspective" Working paper 2010/6, UNU-WIDER.
- Country Status Report (CSR) (2009) "Malawi Education Country Status Report" Multi-Ministerial National Team, Malawi.
- DAC (online), OECD Stat extracts, available at http://stats.oecd.org/Index.aspx?DatasetCode=ODA_RECIP
- Datar, Gayatri; Del Carpio, Ximena; Hoffman, Vivian (2009) "Can a Market-Assisted Land Redistribution Program Improve the Lives of the Poor? Evidence from Malawi" WPS5093, World Bank.
- de Mel, S., D. McKenzie and C. Woodruff (2008) "Returns to Capital in Microenterprises: Evidence from a Field Experiment" *Quarterly Journal of Economics*, Vol. CXXIII, Issue 4.
- Dercon, S. (2009a) "Getting the questions right: African agriculture revisited" speech at plenary session at CSAE Conference 2009: Economic Development in Africa, 22nd - 24th March 2009, St Catherine's College, Oxford. Available at <http://www.csae.ox.ac.uk/conferences/2009-EdiA/Panel-GiAAPaC.html>
- Dercon, S. (2009b) "Rural Poverty: Old Challenges in New Contexts" *World Bank Research Observer*, No. 24: 1-28.
- Doward, (2009) "Rethinking Agricultural Input Subsidy Programmes in a Changing World" prepared for the Trade and Markets Division, Food and Agriculture Organization of the United Nations, Washington, School of Oriental and African Studies, University of London.
- Durevall, D. (2002). "Malawi: Economic Growth, Public Sector Reform and Poverty" Country Economic Report 2002:2, Sida, Stockholm.
- Durevall D. and A. Lindskog (2010). "Uncovering the Impact of the HIV epidemic on Fertility in Sub-Saharan Africa: the Case of Malawi", forthcoming *Journal of Population Economics*.
- Eifert, B., A. Gelb, and V. Ramachandran (2008), "The Cost of Doing Business in Africa: Evidence from Enterprise Survey Data" *World Development*, Vol. 36, Issue 9.
- Enterprise Surveys (2006) "Malawi Investment Climate Assessment, Summary" Africa Private Sector Group, Washington, DC: The World Bank.
- FinScope (2008) FinMark Trust and Ministry of Finance, Lilongwe.
- Glick, P. and Sahn, D. (2000) "Schooling of girls and boys in a West African country: the effects of parental education, income, and household structure," *Economics of Education Review*, Vol. 19, pp. 63-87.

- Hausmann, R., Hwang J. and D. Rodrik (2007) "What You Export Matters", *Journal of Economic Growth*, volume 12, no. 1.
- Holden, S. and R. Lunduka (2010a) "Too Poor to be Efficient? Impacts of targeted fertilizer subsidy program in Malawi on farm plot level input use, crop choice and land productivity" Dept. of Economics and Resource management, Norwegian University of Life Sciences.
- Holden, S. and R. Lunduka (2010b) "Impacts of fertilizer subsidy program in Malawi: Targeting, household perceptions and preferences" Dept. of Economics and Resource management, Norwegian University of Life Sciences.
- ILO (2010a) *Malawi Decent Work Country Programme 2010-2010*, Draft. Geneva.
- ILO (2010b) *Malawi Child labour Data Country Brief*, IPEC, Geneva. Available from www.ILO.org.
- Imbs, J. and R. Wacziarg (2003) "Stages of Diversification," *American Economic Review*, vol. 93(1).
- IMF (2010) "Sub-Saharan Africa, Back to High Growth?" Regional Economic Outlook, April, Washington.
- Johnson, S. J. Ostry, and A. Subramanian (2006) "Levers for Growth: Policy Lessons from Earlier Bouts of Growth in Developing Countries" Finance and Development (March), IMF.
- Kalemli-Ozcan, S. (2009) "AIDS, Reversal of the Demographic Transition and Economic Development: Evidence from Africa", updated version of NBER Working Paper 12181.
- Keyser, J. and H. Tchale (2008) "Quantitative Value Chain Analysis" Country Economic memorandum, Vol. II, background paper, the World Bank.
- Kim, S., and Kim, Y. (2000), "Growth gains from trade and education," *Journal of International Economics*, Vol. 50, pp. 519-545.
- Kopicki, R. and J. Agar (2008) "Challenges to Malawi's Agribusiness Sector" Country Economic memorandum, Vol. II, background paper, the World Bank.
- Labour Market Survey (2009), Malawi Labour Market Survey report prepared by JIMAT Development Consultants.
- Lall, S., W. Hyung and T. Munthali (2008) "Infrastructure Investment in Malawi: Insights from a Spatial Analysis" Malawi Country Economic Memorandum background paper World Bank.
- Lea, N. and L. Hanmer (2009) "Constraints to Growth in Malawi" Policy Research Working Paper 5097, the World Bank.
- Malawi Government (2009a) "The Road to Prosperity: The Malawi Economic Miracle". OPC, Lilongwe.
- Malawi Government (2009b) "The Agricultural Sector Wide Approach (ASWAp), Ministry of Agriculture and Food Security.

- Malawi Government and World Bank (2006) "Poverty and Vulnerability Assessment: Investing in Our Future".
- MCA (Millennium Challenge Account) (2010) "Analysis of Constraints to Economic Growth: The Republic of Malawi" Draft, The Millennium Challenge Account, Malawi.
- MCCCI (2009) "The Malawi Business Climate Survey Report", Malawi Confederation of Chambers of Commerce, Blantyre.
- MCCCI (2010) "Fuel shortage hits Malawi" available at <http://www.mccci.org/newsarticle.php?id=34>
- MEPD (2006) "Malawi National Population Policy" draft, Ministry of Economic Planning and Development, Lilongwe.
- Minot, N. and T. Benson (2009) "Fertilizer subsidies in Africa: Are vouchers the answer?," Issue briefs 60, International Food Policy Research Institute (IFPRI).
- Mishra, V., Bignami-Van Assche, S., Greener, R., Vaessen, M., Hony, R., Ghys, P., Ties Boerma, J., Van Assche, A., Khan, S., and S. Rutstein. (2007). 'HIV Infection does not disproportionately affect the poorer in Sub-Saharan Africa', *AIDS*, 21 (supplement 7), s17-s28.
- Ministry of Agriculture (various years) "Annual Agricultural Statistical Bulletin", Lilongwe.
- Muhate, B. (2009) Data on minimum wages, downloaded from <http://basiliomuhate.blogspot.com/2009/04/reajuste-do-salario-minimo-em.html>.
- NAC (2010) "Malawi HIV and AIDS Monitoring and Evaluation Report: 2008-2009" UNGASS Country Progress Report, National AIDS Commission, Lilongwe. Reporting Period: January 2008-December 2009.
- Ndulu, B. with L. Chakraborti, L. Lijane, V. Ramachandran and J. Wolgin (2007) "Challenges of African Growth: Opportunities, Constraints and strategic Directions" the World Bank.
- NSO (National Statistical Office of Malawi) (1995) "Employment and Earnings Survey" Zomba.
- NSO (1996) "Malawi Statistical Yearbook 1995", Zomba.
- NSO (2000) "Poverty analysis of the Malawi Integrated Household Survey, 1997-98" Zomba.
- NSO (2001) "Malawi National GEMINI MSE Baseline Survey 2000" prepared by NSO and Ebony Consulting. Zomba.
- NSO (2002) Census Analytical Report. Zomba
- NSO (2005) Integrated Household Survey 2004-2005, Volume I, Zomba.
- NSO (2006) "Welfare Monitoring Survey 2005", Zomba.
- NSO (2007) "Welfare Monitoring Survey 2006", Zomba.
- NSO (2008) "Welfare Monitoring Survey 2007", Zomba.
- NSO (2009a) "Welfare Monitoring Survey 2008", Zomba.

- NSO (2009b) “2008 Population and Housing Census Results” Zomba.
- NSO (undated) “Malawi National Accounts report 2002-2005”, Zomba
- NSO and MoL (2004) Malawi Child Labour Survey 2002: report of Analysis” National Statistical Office and Ministry of Labour and Vocational Training, Zomba and Lilongwe.
- NSO and OCR Macro (2005) Malawi Demographic and Health Survey 2004 – Final report. Calverton, Maryland.
- NSO and UNICEF (2008) Multiple Indicator Survey 2006: Malawi. Zomba and Lilongwe.
- NYASA TIMES (2009) “Malawi’s labour market imperfections, tribal inequality – Open letter by concerned citizens” Friday, August 21, available at <http://maravi.blogspot.com/2009/08/nyasatimes-malawis-labour-market.html>
- Page, J. (2010) “Should Africa Industrialize?” unpublished, The Brookings Institution, Washington.
- Papageoriou C, Stoytcheva P (2008) What do we Know About the Impact of AIDS on Cross-Country Income So Far? Working Paper No 2005-01 Department of Economics, Louisiana State University.
- Pfeiffer, D and Chiunda, G. (2008) *Tracer Study of TEVET and Higher Education Completers in Malawi, Final Report.*
- Record, R. (2007) “From Policy to Practice: Changing Government Attitudes towards the Private Sector in Malawi” *Journal of International Development*, Vol. 19, pp. 805-816.
- Record, R. and D. Simon (2007) “Determinants and impact of private sector investment in Malawi: evidence from the 2006 investment climate survey” MPRA Paper, No. 3818.
- Rodrik, D. (2008) "The Real Exchange Rate and Economic Growth," *Brookings Papers on Economic Activity*, 2008:2.
- Ronnås, P., E. Scheja and K. Backéus (2008) “Rwanda Forging Ahead: The Challenge of Getting Everybody on Board” ILO and Sida.
- RPED (2006) Regional Programme on Enterprise Development: Malawi Investment Climate Assessment, Africa Private Sector Group, Washington, DC: The World Bank.
- SOAS (2008) Evaluation of the 2006/7 Agricultural Input Subsidy Programme, Malawi” School of Oriental Studies et al. Report for the Ministry of Agriculture and Food Security.
- Sonobe, T., Y. Mano, J. Akoten, and K. Otsuka (2010) “Assessing the Impacts of Management Skill Training in Ghana and Kenya” Paper presented at CSAE 2010 Economic Development in Africa Conference, 21-23 March 2010, Oxford.
- Standard Bank (2009) “Malawi: Kwacha Concerns” Africa Insight, Economics.
- Tango International (2003) “Malawi Baseline Survey: Report of Findings” Prepared by TANGO International, Inc. in collaboration with the C-SAFE M&E team1.

- Tchale, H. (2009) "The efficiency of smallholder agriculture in Malawi" *AFJARE*, Vol. 3, No. 2.
- TEVETA (2009) *Malawi Labour Market Survey: Final Report*.
- UNAIDS (2008) "2008 Report on the global AIDS epidemic, UNAIDS/WHO, Genève.
- UNESCO (2010) Online database, available at www.UNESCO.org.
- UNGASS (2010) "Malawi HIV and AIDS Monitoring and Evaluation Report: 2008-2009" UNGASS Country Progress Report, OPC, Lilongwe.
- United Nations (2010) "World Urbanization Prospects: The 2009 Revision" Department of Economic and Social Affairs, Population Division.
- Werker E, Ahuja A, Wendell B (2006) Male Circumcision and AIDS: The Macroeconomic Impact of a Health Crisis. Harvard Business School Working Paper No 07-025.
- Wodon, Q and K. Beegle (2006) "Labour Shortages Despite Underemployment? Seasonality in Time Use in Malawi" MPRA No. 11083.
- World Bank (2004) Malawi Country Economic Memorandum: Policies for Accelerating Growth. Africa Region.
- World Bank (2007) "Country Assistance Strategy: Malawi", Washington.
- World Bank (2008) *Migration and Remittances Factbook 2008*, the Development Prospects Group of the Development Economics Vice Presidency, Washington.
- World Bank (2009a) Malawi Country Economic Memorandum. Vol I, Report No. 47969-MW.
- World Bank (2009b) *World Development Report 2009: Reshaping Economic Geography*.
- World Bank (2009c) "Malawi: Mineral Sector Review" Report No. 50160-MW, Oil, Gas and Mining Policy Division.
- World Bank (2010a) Doing Business in Malawi. Available at <http://www.doingbusiness.org/ExploreEconomies/?economyid=118>.
- World Bank (2010b) The Enterprise Survey. Available at www.enterprisesurveys.org/ExploreTopics. Accessed 04/07/2010.
- World Bank (2010c) "Migrant Remittance Flows: Findings from a Global Survey of Central Banks" data available at <http://econ.worldbank.org>.
- World Bank and Malawi Government (2006) "Poverty and Vulnerability Assessment: Investing in Our Future" Washington and Lilongwe.
- World Development Indicator (2010) Online database, available at www.worldbank.org.
- World Economic Forum (2010) *Global Competitiveness Report 201*. Available at <http://www.weforum.org/en/index.htm>
- Young, A. (2005). "The Gift of Dying: The Tragedy of AIDS and the Welfare of Future African Generations", *Quarterly Journal of Economics*, 120(2), 423-466.

Young, A. (2007). "In Sorrow to Bring Forth Children: Fertility amidst the Plague of HIV"
Journal of Economic Growth, 12(4), 283-327.

Appendices

Appendix 1: List of People and Organization Met in the Study

- Office of the President and the Cabinet, Mrs P. Zimpita, Director of Policy Research
- Ministry of Industry and Trade, Harrison J.K. Mandindi, Director of Trade, Phil Stevens, Trade Economist
- Employers Consultative Association of Malawi (ECAM), Mrs. Mwale
- Ministry of Development Planning and Cooperation, Cliff K. Chiunda, Director, Development Division
- Ministry of Education, Science and Technology, Dr Kamlongera, Director of Planning Services
- Department of Human Resources Management and Development, Mr Mwamulima, Deputy Director of Research and Planning
- Ministry of Youth Development and Sports, Alick K. Kalima, Deputy Director of Youth
- Ministry of Labour, Minister of Labour, Yunus Mussa, Principle Secretary Ministry of Labour, Andrina F. Mchiela, Deputy Labour Commissioner, Michael C. Mwasikakata, Brain Ngoma, Director of Planning, Directors Meeting on Policy, including Directors and officials from Planning, OSH, and Labour Services
- Ministry of Disabled and the Elderly, Director of Planning, Felix Sapala and Mr. Max S. Nyirenda, Head of Disability
- IMF: Dr. Reza Kibria (IMF/East Africa Regional Training Assistance Programme), and Patrick Grady (Global Economics Ltd, Ottawa)
- UNDP: Basudeb Guba Khasnobis, Sr. Economic Adviser, and Venge Nyirongo, UN Coordinator
- Ministry of Gender, Children and Community Services, Mr. Mphande, Director of Planning
- Royal Norwegian Embassy, Britt Hilde Kjölås, 1st Secretary, Country Economist and Anita Deppe, Local Programme Officer, Governance.
- TEVETA: Yusuf Alide, Ex. Dir., Mr. Hasimi, Dir. Planning, Modesto Gomani, Head, Plan & Mon
- Ministry of Health, Mr. Zimpita, Director of Planning
- Malawi Investment Promotion Agency, Executive Director, J. R. Kaphweleza Banda, Acting General Manager
- National Statistical Office (Zomba), Commissioner (Mr. Machinjili), Chief Statistician (S.Kanyandana), Sr. Statisticians (Angela Msosa, Demography; Derik Zanera, Agriculture and Welfare Monitoring Survey; Mr. Ndawala, Annual Economic Survey; Mr Alick Mponda, International Trade
- Nutrition & HIV, Dr. Mary Shawa, Principle Secretary
- Ministry of Finance, Director of Finance and Administration, Ben Botolo
- Malawi Confederation of Chambers of Commerce, Edna Chamgwera, Development Manager and Albright Mchena, Trade Analyst
- NSO National Accounts, Mrs Lizzie Chikoti, Chief Statistician, Ann-Kristin Braendvang, Project Manager
- European Commission, Alan Mundy, First Secretary, Kelvin Banda, Economist
- National Aids Commission, Blackson Matatiyo, Research Officer
- UNFPA, Gift Malunga, Deputy Representative, Juliana Lunguzi, Programme Officer, Mr Jason Onsembe, Technical Expert
- MCTU
- Ministry of Agriculture
- Ministry of Trade and Industry, Mr Mandinin, Youth, Civil Service (HR Management), OPC
- World Bank, David Rohrbach, Senior Agricultural Economist, and Mr Kwalingana

Appendix 2: Employment in 1998: Information from the 1998 Population Census

The 1998 Population Census provides information about the activities of the working age population, which can be used. It is of course the most comprehensive data source in Malawi, and comparing results with those from the 2008 Population Census, when it becomes publically available, seems like a useful exercise. There are, however, several drawbacks with the information provided. First, in the 1998 Census information is only provided on economic activity for those over 10 years of age, which thus includes children. Moreover, as in most surveys, there is no information on hours worked and a person is conserved employed/working if he or she worked at least one hour during the week preceding the interview.

Nevertheless, there is some useful information, summarized in Table A1 to A3. First, 66 percent of those over 10 years were considered economically active (Table A1). Out of these only 0.7 percent were unemployed. This number highlights the difficulty of using the concept unemployment in Malawi; since poverty is widespread and there is no social security, almost all people work. However, many do not work full time and underemployment is common. Yet, a large share, 34 percent, is also inactive. This number is high because the working age population is defined as those aged 10 and over. Consequently, 75 percent of the inactive are students, the rest are home workers or non-workers (Table A2).

Table A3 shows the distribution of the active working age population over type of main employment. Close to 80 percent work as *mlimi*, i.e. subsistence farmers, while close to 6 percent are self employed, 2.5 percent work in family business, and as few as 12.9 percent are employees. The main gender difference is that 90 percent of the women are *mlimi*, but only 67 percent of the men, reflecting the fact that it is much more common for men to have other jobs.

Table A1. Percentage distribution of working population aged 10 years and over by economic activity

	All active	Working	Unemployed	Inactive	All
Malawi	66	65.3	0.7	34	100
Males	67.4	66.4	1	32.6	100
Females	64.7	64.2	0.4	35.3	100

Source: NSO (2002).

Table A2. Percentage distribution of economically inactive population age 10 years and over

	Non worker	Home worker	Student	Other	All
Malawi	5.7	15.3	75.6	3.4	100
Males	5	2.9	88.5	3.6	100
Females	6.3	26.3	64.3	3.1	100

Source: NSO (2002).

Table A3. Working population in 1998; percentage distribution age 10 years and over

	Mlimi	Employee	Family bus. worker	Self employed	Employer	All
Malawi	78.6	12.9	2.5	5.8	0.2	100
Males	66.8	21.2	2.8	8.8	0.3	100
Females	90.2	4.8	2.1	2.8	0.1	100

Source: NSO (2002).

Notes: Mlimi is the Malawian term for smallholder. It is reported separately from Family Business Worker and Self Employed since it includes the vast majority of the working age population.

Appendix 3: Labour Market Institutions and the Structure of Education in Malawi

1. Labour Market Institutions

Institutional Framework

There are three key players in the labour market in Malawi namely; the government through the Ministry of Labour, the Employers Consultative Association of Malawi (ECAM), and the Trade Unions. The Ministry of Labour (MoL) initiates industrial relations legislation, acts as a labour bureau, and also acts as a grievance handling machinery. It also works as a vocational training administrator, inspector of workplaces. It functions as a conciliator, mediator, and an arbitrator of labour disputes. Labour officers visit various places of work to ensure employers observe minimum wages, hours of work, occupational safety, and other conditions of employment. Shortage of personnel, inadequate funding and transport mean that the MoL lacks the necessary capacity for comprehensive labour inspection, monitoring and enforcement of legislation that falls under it. As a result most employees are exploited by their employers through non-observance of conditions of service, occupational safety and other employment regulations.

The Employers Consultative Association of Malawi (ECAM) is the only employers association recognized by government under the ILO tripartite arrangement. It is a member of the International Organization of Employers (IOE). With membership from all sectors, it currently has over 250 corporate members. Its membership is voluntary, and it was established in 1963. ECAM's primary role is to promote and safeguard the interests of employers. It represents employers on the National Tripartite Labour Advisory Council (TLAC), a tripartite body which is the highest negotiation forum on labour issues. ECAM's challenges include members' inadequate technical competence on labour issues, institutional, logistical and financial constraints, and the need for new forms of collaboration with other bodies providing similar services. ECAM's constituents have had to grapple with low productivity levels amidst pressure for maintaining international competitiveness on the one hand, and the need to reward their workers appropriately.

Workers have the legal right to form and join trade unions. Union membership is low, however, given the small percentage of the work force in the formal sector (about 12 percent), the lack of awareness of worker rights and benefits, and a resistance on the part of many employees to join unions. Only 13 percent of people employed in the formal sector belong to unions. Unions may form or join federations, and have the right to affiliate with and participate in the affairs of international workers' organizations. There are two union federations, the Malawi Congress of Trade Unions (MCTU) and the Congress of Malawi Trade Unions (COMATU). The MCTU is currently the most representative of the two existing trade union federations. There are 26 registered trade Unions, of which 22 are affiliated to MCTU and two to COMATU respectively, two being independent. MCTU's 22 affiliates account for approximately 200,000 members in different sectors of economy.

Legal Framework

Since the advent of multiparty democracy in 1993, controls over labour markets have been loosened and governmental interventionism significantly reduced. The current legislative mandates of the MoL are stipulated in the Laws of Malawi and derived from some 29 ILO conventions and recommendations that Malawi ratified. The labour legislation in Malawi comprises the Labour Relations Act of 1996 (CAP 54:01); Occupational Safety, Health and Welfare Act, No 21 of 1997 (CAP 55:07); the Employment Act, No 6 of 2000 (CAP 55:01); Workers Compensation Act; and TEVET Act, No 6 of 1999.

- The *Labour Relations Act* (No 16 of 1996) replaced the Trade Union Act of 1958 and the Trade Disputes (Arbitration and Settlement Act (No 20 of 1952)) and heavily drew from ILO Conventions No 87 and 98. This act provides for the formation of trade unions.
- The Employment Act (No 6 of 2000) is comprehensive legislation on employment that drew from and replaced earlier legislation that regulated employment especially the Employment Act, the Regulation of Minimum Wages and Conditions of Employment Act (No 14 of 1964) and Employment of Women Young Person and Children Act (No 22 of 1939 as amended in (1963)). According to its title, the objective of the Act is “to establish, reinforce and regulate minimum standards of employment with the purpose of ensuring equity necessary for enhancing industrial peace, accelerated economic growth and social justice”.
- The Workers’ Compensation Act (No 7 of 2000) makes provision for compensation for injuries suffered or diseases contracted by workers in the course of their employment or for death resulting from such injuries or diseases. It also provides for the establishment and administration of a Workers' Compensation Fund. Although it has yet to be functional, the Workers’ Compensation Fund was designed and envisaged to be a natural springboard for a national social security system.
- The Occupational Safety, Health and Welfare Act (No 21 of 1997) replaced the Factories Act (amended) of 1980 and makes provision for the regulation of conditions of employment in workplaces with regard to safety, health and welfare of employees; for the inspection of certain plant and machinery; for the prevention and regulation of accidents occurring to persons employed or authorized to go into the workplace, and for some related matters.

Dispute Resolution

Industrial Relations Court (IRC) arbitrates over labor disputes between employers and employees. The IRC’s decision “shall have the same force and effect as any other decision of a competent court” (s.75). It is chaired by a legal expert and is composed of an equal number of employers (5) and unions (5). The IRC faces serious challenges. Insufficient human, financial, material and technical resources hinder it from dispensing justice in a timely manner. Furthermore, the IRC and its judgements seem to rank as secondary within the judicial system, thus highlighting a flaw in the enforcement of legal aspects of decent work. The absence of an independent alternative dispute resolution (ADR) mechanism has exacerbated the situation. The MoL in spite of its capacity problems tries to act as an ADR. Additionally, the rapid pace at which employment relationship practices are changing in Malawi and in the world at large, and the inability of local laws to respond to some of the new practices efficiently and effectively, has made workers vulnerable to abuse.

2. Structure of Education

In general, basic education has three main components: Early Childhood Development (ECD); adult literacy, including out-of-school youth literacy; and primary education. In Malawi however, basic education is synonymous only with primary education. Indeed, while ECD is part of infant care and support, adult and out-of-school youth literacy are considered non-formal education. The formal education system in Malawi follows an 8-4-4 structure: eight years of primary education (Standard 1-Standard 8), four years of secondary (Form 1-Form 4), and four years of university-level education. At the end of their primary education, students take the Primary School Leaving Certificate Examination (PSLE), which determines their eligibility for entry into secondary school.

Public school secondary students attend either Community Day Secondary Schools (CDSSs, previously MCDE) or Conventional Secondary Schools (CSSs). At the end of two years of secondary education, pupils take the national Junior Certificate of Secondary Education (JCE), which is followed by the Malawi School Certificate Examination (MSCE) two years later.

Tertiary education is provided by an array of educational institutions, including primary and secondary teacher training colleges, technical and vocational training schools, and university colleges. For university entrance and for the secondary teacher training college, an MSCE certificate is required. For primary teacher training, the policy is to take MSCE graduates, but those who passed the JCE may also be accepted. Technical and vocational training can start after either JCE or MSCE.

Primary, secondary, teacher, and higher education levels fall under the authority of the Ministry of Education Science and Technology. ECD in Malawi falls under the authority of the Ministry of Women and Child Development and contains programs for children from birth to age five. Its main purpose is to protect children's rights and foster full cognitive, emotional, social, and physical development. Examples of ECD activities include opening preschool centres, recruiting caregivers, and providing instructional materials and some nutrition. ECD services are categorized into two levels. The first—baby care centres for children aged 0–2 years—is usually offered by the private sector. The second level—for children aged 2–5 years—is either provided by the private sector (preschools/nurseries) or the public sector (community-based childcare centres), and the government contributes by training caregivers and sometimes providing instructional materials.

Adult literacy tries to give adults (aged 15 years and older) a second chance at learning opportunities that may have been missed when they were young. The programs teach the specialized knowledge, skills, and attitudes that are needed to independently engage in active citizenship. Improving adult literacy in Malawi involves opening adult literacy classes, recruiting instructors, and providing teaching and learning materials. It also involves giving adults opportunities for post-literacy activities that may include easy reading booklets, skill training, and information about small-business management. These programs are free but provided by both governmental and non-state entities, including NGOs and private-sector and faith-based organizations.

Appendix 4: Surveys and Data on Employment

Below we present surveys and data sources on employment in Malawi.

Surveys	Years	Note: Employment/Labour
Census	1977, 1987, 1998, 2008	NSO (every decade) Occupations, employment, emigration in addition to demographics
Business Enterprise Surveys	2006, 2009	World Bank, Firm data on employment and labour costs
National Gemini Survey (enterprise)	2000	NSO (one off survey), data on micro and small enterprises
Quarterly Employment Inquiry	Up to 1993	NSO MoE/TEVETA
Labour Market (demand) Survey	2008	Immediate and long term skill demands based on a questionnaire to industries.
Employment and earnings surveys	Annually to 2000	NSO. Stopped due to poor quality business register; register under construction and this may resume in 2011
Welfare Monitoring Survey	2005, 2006, 2007, 2008	NSO, annually, (subset of IHS) data on employment and sectors
Integrated Household Survey (IHS)	2004/2005, 2010	NSO, 12,000 households Every 5 years, Data on income, occupations, hours of work, etc.
Demographic and Health	1996, 2000, 2004, 2010	NSO/ Min of Health, Household survey, focus on women. Data on occupations, days of work lost to illness, wealth, etc.
Agricultural Census	2006	NSO/Min of Agric Data on full range of agricultural work
Labour Force Survey	2010/2011	NSO/ Min of Labour Questionnaire not yet available
Annual Economic Survey	Annual	Aggregate information about medium and large scale formal firms
FinScope 2008	2008	NSO/ FinScope Data on economic activities and income for individuals

Appendix 5: Tables on Time Use

Table A4. Boys (age 5 to 15) work time by time and categories recorded in IHS2 in rural areas

	Cooking		Collecting		Running non-ag. business	Helping Casual			Total work (mean)	Total work (median)
	laundry, and cleaning	Collecting water	fire- wood	agricultural work		with non-ag. business	part-time & ganyu work	salaried work		
March 2004	0.9	0.9	0.1	2.7	0.2	0.3	0.3	0.3	5.6	0.0
April 2004	1.2	1.0	0.3	4.7	0.1	0.3	0.3	0.1	8.0	3.0
May 2004	0.9	0.9	0.5	2.6	0.3	0.1	0.3	0.1	5.6	0.0
June 2004	1.1	1.3	0.4	2.5	0.1	0.1	0.2	0.1	5.7	0.0
July 2004	1.0	1.4	0.2	1.9	0.1	0.2	0.5	0.2	5.6	0.0
August 2004	1.3	1.4	0.3	3.2	0.0	0.2	0.2	0.2	6.9	0.0
Sept. 2004	1.3	1.2	0.2	2.1	0.1	0.1	0.2	0.2	5.3	0.0
Oct. 2004	0.9	1.0	0.2	3.0	0.0	0.1	0.3	0.0	5.6	0.0
Nov. 2004	1.5	0.9	0.3	4.5	0.0	0.0	0.3	0.1	7.6	2.0
Dec. 2004	0.9	1.2	0.4	7.7	0.1	0.0	0.9	0.1	11.3	4.0
Jan. 2005	0.8	1.2	0.1	2.7	0.0	0.2	0.1	0.0	5.0	0.0
Feb. 2005	0.8	1.2	0.2	3.5	0.0	0.1	0.3	0.0	6.1	0.0
March 2005	1.2	1.0	0.4	2.7	0.1	0.0	0.2	0.2	6.0	0.0

Source: Wodon and Beegle (2006) and IHSII.

Table A5. Girls (age 5 to 15) work time by month and categories recorded in IHS2 in rural areas

	Cooking		Collecting		Running non-ag. business	Helping Casual			Total work (mean)	Total work (median)
	laundry, and cleaning	Collecting water	fire- wood	agricultural work		with non-ag. business	part-time & ganyu work	salaried work		
March 2004	3.6	3.2	0.9	2.2	0.3	0.6	0.3	0.3	11.3	6.0
April 2004	3.8	3.5	1.2	1.2	0.2	0.5	0.2	0.0	13.0	7.0
May 2004	3.0	3.2	0.8	0.8	0.1	0.1	0.2	0.0	9.4	7.0
June 2004	2.7	2.9	0.8	0.8	0.1	0.1	0.4	0.1	8.4	3.5
July 2004	3.3	3.5	1.0	1.0	0.1	0.2	0.5	0.0	9.7	4.5
August 2004	4.0	4.4	0.9	2.1	0.0	0.3	0.1	0.1	12.1	7.0
Sept. 2004	2.9	3.7	0.9	1.2	0.0	0.2	0.0	0.1	9.0	7.0
Oct. 2004	3.3	3.4	1.1	2.2	0.2	0.1	0.1	0.0	10.3	7.0
Nov. 2004	3.2	3.4	0.7	3.3	0.0	0.1	0.0	0.1	10.8	7.0
Dec. 2004	3.0	3.6	1.1	6.9	0.1	0.0	0.7	0.0	15.4	10.5
Jan. 2005	2.5	3.8	0.4	3.2	0.1	0.0	0.1	0.0	10.3	7.0
Feb. 2005	2.3	3.5	0.6	2.9	0.0	0.0	0.1	0.0	9.4	3.5
March 2005	3.2	3.0	0.9	2.8	0.0	0.0	0.1	0.1	10.1	3.5

Source: Wodon and Beegle (2006) and IHSII.

Employment Working Papers

2008

- 1 Challenging the myths about learning and training in small and medium-sized enterprises: Implications for public policy;
ISBN 92-2-120555-5 (print); 92-2-120556-2 (web pdf)
David Ashton, Johnny Sung, Arwen Raddon and Trevor Riordan
- 2 Integrating mass media in small enterprise development. Current knowledge and good practices;
ISBN 92-2-121142-6 (print); 92-2-121143-3 (web pdf)
Gavin Anderson. Edited by Karl-Oskar Olming and Nicolas MacFarquhar
- 3 Recognizing ability: The skills and productivity of persons with disabilities. A literature review;
ISBN 978-92-2-121271-3 (print); 978-92-2-121272-0 (web pdf)
Tony Powers
- 4 Offshoring and employment in the developing world: The case of Costa Rica;
ISBN 978-92-2-121259-1 (print); 978-92-2-121260-7 (web pdf)
Christoph Ernst and Diego Sanchez-Ancochea
- 5 Skills and productivity in the informal economy;
ISBN 978-92-2-121273-7 (print); 978-92-2-121274-4 (web pdf)
Robert Palmer
- 6 Challenges and approaches to connect skills development to productivity and employment growth: India;
unpublished
C. S. Venkata Ratnam and Arvind Chaturvedi
- 7 Improving skills and productivity of disadvantaged youth;
ISBN 978-92-2-121277-5 (print); 978-92-2-121278-2 (web pdf)
David H. Freedman
- 8 Skills development for industrial clusters: A preliminary review;
ISBN 978-92-2-121279-9 (print); 978-92-2-121280-5 (web pdf)
Marco Marchese and Akiko Sakamoto
- 9 The impact of globalization and macroeconomic change on employment in Mauritius: What next in the post-MFA era?;
ISBN 978-92-2-120235-6 (print); 978-92-2-120236-3 (web pdf)
Naoko Otake

- 10 School-to-work transition: Evidence from Nepal;
ISBN 978-92-2-121354-3 (print); 978-92-2-121355-0 (web pdf)
New Era
- 11 A perspective from the MNE Declaration to the present: Mistakes, surprises and newly important policy implications;
ISBN 978-92-2-120606-4 (print); 978-92-2-120607-1 (web pdf)
Theodore H. Moran
- 12 Gobiernos locales, turismo comunitario y sus redes
Memoria: V Encuentro consultivo regional (REDTURS);
ISBN 978-92-2-321430-2 (print); 978-92-2-321431-9 (web pdf)
- 13 Assessing vulnerable employment: The role of status and sector indicators in Pakistan, Namibia and Brazil;
ISBN 978-92-2-121283-6 (print); 978-92-2-121284-3 (web pdf)
Theo Sparreboom and Michael P.F. de Gier
- 14 School-to-work transitions in Mongolia;
ISBN 978-92-2-121524-0 (print); 978-92-2-121525-7 (web pdf)
Francesco Pastore
- 15 Are there optimal global configurations of labour market flexibility and security? Tackling the “flexicurity” oxymoron;
ISBN 978-92-2-121536-3 (print); 978-92-2-121537-0 (web pdf)
Miriam Abu Sharkh
- 16 The impact of macroeconomic change on employment in the retail sector in India: Policy implications for growth, sectoral change and employment;
ISBN 978-92-2-120736-8 (print); 978-92-2-120727-6 (web pdf)
Jayati Ghosh, Amitayu Sengupta and Anamitra Roychoudhury
- 17 From corporate-centred security to flexicurity in Japan;
ISBN 978-92-2-121776-3 (print); 978-92-2-121777-0 (web pdf)
Kazutoshi Chatani
- 18 A view on international labour standards, labour law and MSEs;
ISBN 978-92-2-121753-4 (print); 978-92-2-121754-1 (web pdf)
Julio Faundez
- 19 Economic growth, employment and poverty in the Middle East and North Africa;
ISBN 978-92-2-121782-4 (print); 978-92-2-121783-1 (web pdf)
Mahmood Messkoub

- 20 Employment and social issues in fresh fruit and vegetables;
ISBN 978-92-2-121941-5 (print); 978-92-2-121942-2 (web pdf)
Sarah Best, Ivanka Mamic
- 21 Trade agreements and employment: Chile 1996-2003;
ISBN 978-2-1211962-0 (print); 978-2-121963-7 (web pdf)
- 22 The employment effects of North-South trade and technological change;
ISBN 978-92-2-121964-4 (print); 978-92-2-121965-1 (web pdf)
Nomaan Majid
- 23 Voluntary social initiatives in fresh fruit and vegetables value chains;
ISBN 978-92-2-122007-7 (print); 978-92-2-122008-4 (web pdf)
Sarah Best and Ivanka Mamic
- 24 Crecimiento Económico y Empleo de Jóvenes en Chile. Análisis sectorial y proyecciones;
ISBN 978-92-2-321599-6 (print); 978-92-2-321600-9 (web pdf)
Mario D. Velásquez Pinto
- 25 The impact of codes and standards on investment flows to developing countries;
ISBN 978-92-2-122114-2 (print); 978-92-2-122115-9 (web pdf)
Dirk Willem te Velde
- 26 The promotion of respect for workers' rights in the banking sector:
Current practice and future prospects;
ISBN 978-92-2-122116-6 (print); 978-2-122117-3 (web pdf)
Emily Sims

2009

- 27 Labour Market information and analysis for skills development;
ISBN 978-92-2-122151-7 (print); 978-92-2-122152-4 (web pdf)
Theo Sparreboom and Marcus Powell
- 28 Global reach - Local relationships : Corporate social responsibility, worker's rights and local development;
ISBN 978-92-2-122222-4 (print); 978-92-2-122212-5 (web pdf)
Anne Posthuma, Emily Sims
- 29 The use of ILS in equity markets: Investing in the work force social investors and international labour standards;
ISBN 978-92-2-122288-0 (print); 978-92-2-122289-7 (web pdf)
Elizabeth Umlas

- 30 Rising food prices and their implications for employment, decent work and poverty reduction;
ISBN 978-92-2-122331-3 (print); 978-92-2-122332-0 (web pdf)
Rizwanul Islam and Graeme Buckley
- 31 Economic implications of labour and labour-related laws on MSEs: A quick review of the Latin American experience;
ISBN 978-92-2-122368-9 (print); 978-92-2-122369-6 (web pdf)
Juan Chacaltana
- 32 Understanding informal apprenticeship – Findings from empirical research in Tanzania;
ISBN 978-2-122351-1 (print); 978-92-2-122352-8 (web pdf)
Irmgard Nübler, Christine Hofmann, Clemens Greiner
- 33 Partnerships for youth employment. A review of selected community-based initiatives;
ISBN 978-92-2-122468-6 (print); 978-92-2-122469-3 (web pdf)
Peter Kenyon
- 34 The effects of fiscal stimulus packages on employment;
ISBN 978-92-2-122489-1 (print); 978-92-2-122490-7 (web pdf)
Veena Jha
- 35 Labour market policies in times of crisis;
ISBN 978-92-2-122510-2 (print); 978-92-2-122511-9 (web pdf)
Sandrine Cazes, Sher Verick
- 36 The global economic crisis and developing countries: Transmission channels, fiscal and policy space and the design of national responses;
ISBN 978-92-2-122544-7 (print); 978-92-2-122545-4 (web pdf)
Iyanatul Islam
- 37 Rethinking monetary and financial policy:
Practical suggestions for monitoring financial stability while generating employment and poverty reduction
ISBN 978-92-2-122514-0 (print); 978-92-2-122515-7 (web pdf)
Gerald Epstein
- 38 Promoting employment-intensive growth in Bangladesh: Policy analysis of the manufacturing and service sectors;
ISBN 978-92-2-122540-9 (print); 978-92-2-122541-6 (web pdf)
Nazneen Ahmed, Mohammad Yunus, Harunur Rashid Bhuyan

- 39 The well-being of labour in contemporary Indian economy;
ISBN 978-92-2-122622-2 (print); 978-92-2-122623-9 (web pdf)
Praveen Jha
- 40 The global recession and developing countries;
ISBN 978-92-2-122847-9 (print); 978-92-2-122848-6 (web pdf)
Nomaan Majid
- 41 Offshoring and employment in the developing world: Business process outsourcing in the Philippines;
ISBN 978-92-2-122845-5 (print); 978-92-2-122846-2 (web pdf)
Miriam Bird, Christoph Ernst
- 42 A survey of the Great Depression, as recorded in the International Labour Review, 1931-1939;
ISBN 978-92-2-122843-1 (print); 978-92-2-122844-8 (web pdf)
Rod Mamudi
- 43 The price of exclusion:
The economic consequences of excluding people with disabilities from the world or work;
ISBN 978-92-2-122921-6 (print); 978-92-2-122922-3 (web pdf)
Sebastian Backup
- 44 Researching NQFs:
Some conceptual issues;
ISBN 978-92-2-123066-3 (print), 978-92-2-123067-0 (web pdf)
Stephanie Allais, David Raffe, Michael Young
- 45 Learning from the first qualifications frameworks;
ISBN 978-92-2-123068-7 (print), 978-92-2-123069-4 (web pdf)
Stephanie Allais, David Raffe, Rob Strathdee, leesa Wheelahan, Michael Young
- 46 International framework agreements and global social dialogue: Lessons from the Daimler case;
ISBN 978-92-2-122353-5 (print); 978-92-2-122354-2 (web pdf)
Dimitris Stevis

2010

- 47 International framework agreements and global social dialogue: Parameters and prospects;
ISBN 978-92-2-123298-8 (print); 978-92-2-122299-5 (web pdf)
Dimitris Stevis

- 48 Unravelling the impact of the global financial crisis on the South African labour market;
ISBN 978-92-2-123296-4 (print); 978-92-2-123297-1 (web pdf)
Sher Verick
- 49 Guiding structural change
The role of government in development;
ISBN 978-92-2-123340-4 (print); 978-92-2-123341-1 (web pdf)
Matthew Carson
- 50 Les politiques du marché du travail et de l'emploi au Burkina Faso ;
ISBN 978-92-2-223394-6 (print); 978-92-2-223395-3 (web pdf)
Lassané Ouedraogo et Adama Zerbo
- 51 Characterizing the school-to-work transitions of young men and women
Evidence from the ILO school-to-work transition surveys;
ISBN 978-92-2-123396-1 (print); 978-92-2-123397-8 (web pdf)
Makiko Matsumoto and Sara Elder
- 52 Exploring the linkages between investment and employment in Moldova - A time-series
analysis;
ISBN 978-92-2-122990-2 (print); 978-92-2-122991-9 (web pdf)
Stefania Villa
- 53 The crisis of orthodox macroeconomic policy
The case for a renewed commitment to full employment;
ISBN 978-92-2-123512 (print); 978-92-2-123513 (web pdf)
Mohammed Muqtada
- 54 Trade contraction in the post-2007 crisis
Employment and inequality effects in India and South Africa;
Forthcoming
Marion Jansen, Leanne Roncolato and Erik von Uexkull
- 55 The impact of crisis-related changes in trade flows on employment:
Incomes, regional and sectoral development in Brazil;
Forthcoming
Scott McDonald, Marion Jansen and Erik von Uexkull
- 56 Envejecimiento y Empleo en América Latina y el Caribe;
ISBN 978-92-2-323631-1 (print); 978-92-2-323632-8 (web pdf)
Jorge A. Paz

- 57 Demographic ageing and employment in China;
ISBN 978-92-2-123580-4 (print); 978-92-2-123581-1 (web pdf)
Du Yang and Wrang Meiyang
- 58 Employment, poverty and economic development
in Madagascar
A microeconomic paper;
ISBN 978-92-2-1233985 (print); 978-92-2-1233992 (web pdf)
Gerald Epstein, James Heintz, Léonce Ndikumana and Grace Change
- 59 The Korean labour market
Some historical macroeconomic perspectives;
ISBN 978-92-2-123675-7 (print); 978-92-2-123676-4 (web pdf)
Anne Zooyob
- 60 Les accords de partenariat économique et le travail décent
Quels enjeux pour l’Afrique de l’ouest et l’Afrique central?;
ISBN 978-92-2-223727-2 (print); 978-92-2-223728-9 (web pdf)
Eléonore d’Achon, Nicolas Gérard
- 61 The great recession of 2008-2009
Causes, consequences and policy responses ;
ISBN 978-92-2-123729-7 (print); 978-92-2-123730-3 (web pdf)
Iyanatul Islam and Sher Verick
- 62 Rwanda forging ahead
The challenge of getting everybody on board;
ISBN 978-92-2-123771-6 (print); 978-92-2-123772-3(web pdf)
Per Ronna, Elina Scheja, Karl Backeus
- 63 Growth, economic policies and employment linkages in Mediterranean countries
The cases of Egypt, Israel, Morocco and Turkey;
ISBN 978-92-2-123779-2 (print); 798-92-2-123780-8 (web pdf)
Gouda Abdel-Khalek
- 64 Labour market policies and institutions with a focus on inclusion, equal opportunities and
the informal economy;
ISBN 978-92-2-123787-7 (print); 978-92-2-123788-4 (web pdf)
Mariangles Fortuny and Jalal Al Hussein
- 65 Les institutions du marché du travail face aux défis du développement: Le cas du Mali ;
ISBN 978-92-2- 223833-0 (print) ; 978-92-2-223834-7 (web pdf)
Modibo Traore and Youssouf Sissoko

- 66 Les institutions du marché du travail face aux défis du développement : Le cas du Bénin ;
ISBN 978-92-2-223913-9 (print) ; 978-92-2-223914-6 (web pdf)
A. Honlonkou, D.O. Ogoudele
- 67 What role for labour market policies and institutions in development?
Achieving flexibility and security in developing countries and emerging economies;
ISBN 978-92-2-124033-4 (print); 978-92-2-124034-1 (web pdf)
Sandrine Cazes and Sher Verick
- 68 The role of openness and labour market institutions for employment dynamics during
economic crises;
Elisa Gamberoni, Erik von Uexkull and Sebastian Weber
- 69 Towards the right to work
Innovations in Public Employment programmes (IPEP);
ISBN 978-92-2-124236-9 (print); 978-92-2-1244237-6 (web pdf)
Maikel Lieuw-Kie-Song, Kate Philip, Mito Tsukamoto and Marc van Imschoot
- 70 Youth employment in the European Union, Canada and the United States
Policies for youth labour market recovery;
ISBN 978-92-2-124378-6 (print); 978-92-2-124379-3 (web pdf)
Niall O'Higgins
- 71 El impacto de la crisis económica y financiera sobre el empleo juvenil en América Latina
Medidas des mercado laboral para promover la recuperación del empleo juvenil
ISBN 978-92-2-324384-5 (print); 978-92-2-324385-2 (web pdf)
Federio Tong

Employment Sector

For more information visit our site:

<http://www.ilo.org/employment>

International Labour Office
Employment Sector
4, route des Morillons
CH-1211 Geneva 22

Email: edempdoc@ilo.org