



Case Study Report

Material wellbeing, education and employment



ONE FOOT ON THE GROUND, ONE FOOT IN THE AIR Ethiopia's delivery on an ambitious development agenda

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Acronyms

ADLI	Agricultural Development Led Industrialisation	LFP	Labour force participation
CSA	Central Statistical Agency	MDG	Millennium Development Goal
ECA	Ethiopian Economic Association	MSE	Micro and small enterprise
EDRI	Ethiopian Development Research Institute	NLA	National learning achievement
EFME	Ethiopian Federal Ministry of Education	OFSP	Other food security programme
EPRDF ERHS	Ethiopian People's Revolutionary Democratic Front Ethiopia Rural Household Survey	PASDEP	Plan for Accelerated and Sustained Development to End Poverty
EUSS	Ethiopian Urban Socio-Economic Survey	PPP	Purchasing power parity
FDI	foreign direct investment	PRSP	Poverty Reduction Strategy Paper
FDRE	Federal Democratic Republic of Ethiopia	PSNP	Productive Safety Net Programme
GER	Gross enrolment rate	PTR	Pupil-teacher ratio
GEQIP GDP	General Education Quality Improvement Project Gross domestic product	SDPRP	Sustainable Development Poverty Reduction Strategy (Ethiopia)
GTP	Growth and Transformation Plan	SME	Small and medium enterprise
JoGGs	Job Generation and Growth (World Bank decomposition	SNNPR	Southern Nations, Nationalities, and Peoples' Region
00003	tool)	TVET	Technical-vocational education and training

Abstract

Ethiopia stands out as one the few countries in Africa on track to meet most of the Millennium Development Goals. This is an impressive achievement for a country that started out with some of the lowest levels of human development in the world leading up to 2000. This case study looks at progress achieved in material wellbeing, education and employment, areas that have strong mutually reinforcing links, and where Ethiopia has shown particularly strong performance over the past 10 to 15 years.

The cross-cutting factors that have led to Ethiopia's progress include: an ambitious and multidimensional policy approach which aims for equitable poverty reduction; embedding education policies into broader economic planning; and forward-looking policies for the structural transformation of the economy.

A number of challenges remain for Ethiopia, as this transformation is far from complete. The depth and breadth of chronic poverty that remain will still be very challenging to tackle. And while more children are attending school, the quality of education that they receive has not improved, nor have gains in attendance fully extended to higher levels of education. Lagging manufacturing growth, inefficiencies and limited competition also mean that the economy hasn't fully transformed.

But there are important lessons to be drawn for the country going forwards. Ethiopia's experience demonstrates the effectiveness of centring government policy on a single unifying goal – poverty reduction – and how a multidimensional approach can begin to encourage ministries to work more comprehensively and consistently. It also shows the importance of integrating social sectors into broader economic planning and that high rates of pro-poor spending also benefit the economy. Ethiopia exemplifies how long-term planning and a clear division of responsibilities can build the foundation for broader transformation. Although the country has not yet reached the level of change needed, a clear strategy is in place and the 'stepping stones' are being laid. Ethiopia has made remarkable progress in lifting people out of extreme poverty, achieving some of the fastest rates in the world

Source: World Bank (2014) *World Development Indicators.* Washington DC: World Bank.



Ethiopia has seen an unprecedented acceleration in access to primary education

Source: EFME (Ethiopian Federal Ministry of Education) (2013) Education statistics annual abstract 2005 E.C. (2012/2013 G.C.), Addis Ababa, Government of Ethiopia. All figures refer to gross enrolment.







Source: Benin, S., B. Yu (2012). 'Complying with the Maputo Declaration Target: Trends in public agricultural expenditures and implications for pursuit of optimal allocation of public agricultural spending'. ReSAKSS Annual Trends and Outlook Report 2012. Data from 2010. 1. 2000/01–2009/10 2. 2004/05–2009/10

This has led to...



+9,000 farmer training centres² (one per village)

Ethiopia runs the largest social protection programme in Africa, mobilising 1.5 million households to stabilise food supply and build community assets

Source: Lieuw-Kie-Song, M. (2011) 'Integrating public works and cash transfers in Ethiopia: implications for social protection, employment and decent work'. Working Paper 84. International Policy Centre for Inclusive Growth.



1. Introduction



1.1 Why explore progress in Ethiopia?

Ethiopia has progressed from having one of the lowest levels of human development and highest poverty rates in the world to displaying some of the fastest rates of progress across multiple dimensions of wellbeing. It is one of the few countries in Africa on track to meet all of the Millennium Development Goals. Ethiopia has seen an unprecedented acceleration in access to primary education, and secondary enrolment is more recently on the rise. At the same time progress in formal employment is beginning to take shape as the working population in the informal sector has more than halved since 1990.¹

Also striking is the fact that, over the past decade, while many countries saw inequalities increasing, Ethiopia has maintained one of the lowest levels of income inequality among low- and lower-middle- income countries: it is ranked 12 among 84 countries with available data and 3 in sub-Saharan Africa according to World Bank Gini coefficient estimates.² All this has happened while Ethiopia's economy grew at an average of 11% per year over the past 10 years – not only the fastest growth rate in Africa but also among the highest worldwide.³

Reporting progress in development is challenging given the complexity of factors that may be driving progress and also due to the fact that we are often discussing an incomplete project. Persisting challenges are very real, and in telling the story of Ethiopia's progress it is by no means meant to imply that Ethiopia's challenges have been overcome. Considering Ethiopia's low starting point, even with this remarkable progress, it is still a country of low income and low human development. Significant governance challenges also remain, and while this case study does not go into depth on these issues, this is not to

- 1 According to data collected by the Ethiopian Ministry of Labour and Social Affairs.
- 2 The Gini coefficient is an imperfect measure of inequality, in particular it is not sensitive to extremes in the income distribution.
- 3 The only countries to have grown at a higher rate, averaged over the past 10 years, are Qatar, Macao, Azerbaijan and Iraq.

suggest they are not important factors underpinning and potentially limiting progress.

However, the exceptional progress that Ethiopia has made in the past 10-15 years offers some important lessons for countries looking to scale up the ambition of their development agendas. Both the multidimensional nature and equitable distribution of this progress present a unique opportunity to understand how these often difficult balances can be struck, even under trying conditions.

This case study is centred on progress in economic material wellbeing in Ethiopia, measured by reduction in income poverty, and two key contributors to material wellbeing, education and employment. It begins by describing what progress has been made in Ethiopia in each of these dimensions of wellbeing individually, an analysis of how progress across these dimensions has been mutually reinforcing, followed by an investigation into the broad-based activities that have driven progress in wellbeing in a multidimensional way.

1.2 Multidimensional progress in Ethiopia Why multidimensional progress?

It is now widely recognised that development means much more than simply economic growth and rising incomes. The Human Development Index, the Multidimensional Poverty Index and, indeed, the Millennium Development Goals (MDGs) are all testaments to this recognition. However, while much thinking has been devoted to analysing and measuring disparities that overlap and thus lead to deeper deprivations in wellbeing (see for example Alkire and Foster, 2011; Collier, 2007), the inverse – multidimensional progress – has received considerably less attention (Lenhardt et al., 2015).

Integrating policies across sectors, government ministries and varied groups of stakeholders is often easier said than done. Tensions between development goals can easily arise, such as in the allocation of government resources, and planning for mutually reinforcing gains from sectorspecific policy initiatives is rarely straightforward. There is much yet to be understood about the positive linkages between progress in different sectors and how this can be capitalised on to achieve developmental outcomes greater than the sum of their parts.

This case study explores the factors behind Ethiopia's multidimensional progress over the past decade in order to contribute to the discussion of how countries can work towards broad-based development objectives in a multisectoral, multi-stakeholder manner.

We analyse multidimensional progress in Ethiopia through a threefold approach that explores the gains the country has made in terms of:

- simultaneous progress in three dimensions of wellbeing: material wellbeing (with a focus on income poverty reduction), education and employment
- how this progress across the three dimensions has been mutually reinforcing
- the broad-based activities that have driven progress in a multidimensional way.

Each of these three dimensions of wellbeing is an important contributor to overall human wellbeing in its own right, and there are also clear linkages between them. In particular, education and employment have strong associations with economic material wellbeing; education can provide the skills and confidence required to improve one's economic situation; and employment is an income generating activity that can contribute to other aspects of material wellbeing as well as subjective wellbeing. So while there are a number of linkages between these dimensions of wellbeing and others, we have chosen to study the particular relationship between economic wellbeing (measured by income poverty) and its closely associated dimensions of education and employment.

Progress in Ethiopia

A recent report tracking progress towards meeting the MDGs in sub-Saharan Africa found Ethiopia to be among the 'trailblazers' of the subcontinent (ONE, 2013). Ethiopia has seen one of the largest declines in extreme poverty in sub-Saharan Africa, from 63% in 1995 to 37% in 2011 (World Bank, 2014a). Unlike most countries in sub-Saharan Africa, Ethiopia is projected to be on target to meet MDG 1 of halving the proportion of people in extreme poverty by 2015 (United Nations in Ethiopia, 2015).

At the same time, amid outstanding economic growth, Ethiopia has managed to maintain one of the lowest levels of income inequality in the developing world, its Gini coefficient declining from 0.40 in 1995 to 0.34 in 2011. Furthermore, a panel survey conducted in Ethiopia between 1989 and 2009 found positive change in people's subjective wellbeing, with the proportion of people perceiving themselves as poor declining from 33% to 11% over the 20-year period (Dercon et al., 2011).⁴

Progress in education has also been exceptional. Ethiopia has seen an unprecedented acceleration in access to primary education, from just 26% gross enrolment in 1994/95 to 95% in 2012/13. Secondary enrolment is also on the rise, reaching 34% in 2013; that Ethiopia is now approaching the sub-Saharan African average is impressive considering it started with one of the lowest rates in the region.

Ethiopia has also made remarkable progress in employment quantity and quality, with urban unemployment decreasing from 26% in 1999 to 16.5% in 2013 and overall underemployment dropping from

⁴ The global food-price spike of 2008, which resulted in some of the highest food-price inflation in Ethiopia, has been found to have had a negative impact on urban people's subjective wellbeing (Alem and Köhlin, 2014). This is discussed further in Section 2.1.

48% to 28% between 1999 and 2005, though substantial challenges in achieving stable, high-quality employment remain (Broussard and Tekleselassie, 2012). No employment progress is without challenges. While data are limited, anecdotal evidence shows signs that long-run employment progress may be being undermined by employment performance since 2005, particularly in rural areas, highlighting the difficulty of sustaining employment progress, even with high economic growth rates.

Progress in Ethiopia has not been without criticism, and concerns have been raised around governance, including restraints to civic participation, limitations on the activities of civil society organisations and restricted political competition, including electoral inconsistencies and restrictions on political opposition (UNDP, 2014; Freedom House, 2014; Human Rights Watch, 2015). While this case study focuses largely on the government-initiated policies that have contributed to progress in the areas of poverty, education and employment, it does not cover the wider debate on governance more broadly.

Ethiopia's development planning has recognised the need for a multidimensional approach to policy formulation and implementation, and poverty reduction has been at the core of government policy, with sectors like education and employment seen as key drivers in achieving this goal. The Ethiopian Sustainable Development Poverty Reduction Strategy (SDPRP) 2002/03-2004/05 explicitly cites sectoral linkages such as human capital development, agricultural productivity and economic growth as goals with common ends and therefore requiring complementary planning.

In preparation for Ethiopia's first Poverty Reduction Strategy Paper (PRSP) published in 2002, extensive consultations were held in all regions with diverse actors, including villagers, religious leaders, civil society, women's groups and local officials, helping to place poverty reduction on national and district-level agendas (UNDP, 2005). Ethiopia was also one of the first countries to integrate the MDGs into their PRSP process and has been identified as having had comparatively strong national ownership of the PRSP process. In many other African countries the process was initially imposed by donors, with limited buy-in from national governments, let alone sub-national governments and civil society groups (UNDP, 2005).

The subsequent Plan for Accelerated and Sustained Development to End Poverty (PASDEP) 2005/06-2009/10 pursued eight 'pillar strategies', which put economic growth and private sector development alongside the social aims of the MDGs as part of the same inclusive national drive. It pushed for stronger links between agriculture and industry. This was repeated by the following Growth and Transformation Plan (GTP) 2010/11-2014/15. We highlight these integrative efforts in this paper. Many countries claim such synergies in their planning processes, but few actually implement them successfully.

Discussions carried out for this study with senior Ethiopian policy-makers suggest that multisectoral development planning has been a core strategy since at least 1995, when Prime Minister Meles took office. A look back at how these policies were designed, and their core achievements and shortcomings, offers an opportunity to improve understanding of how multidimensional development planning can work in practice.

1.3 Methodology and structure of the report

As part of ODI's Development Progress project, three case studies have been completed which seek to understand how multidimensional progress has been achieved in different country contexts. The case of Ethiopia focuses on an analysis of the country's progress in material wellbeing, education and employment. The case of Ghana explores its multidimensional progress in political voice, health and education, and an analysis of Ahmedabad, Gujarat, in India assesses the city's progress in reducing urban poverty and increasing access to water, sanitation and political voice.

To track progress across multiple dimensions over time, the Development Progress project has used a deviationfrom-fit method to measure countries' performance across eight dimensions of wellbeing. This determines which countries have 'deviated' from their starting points in 1990 to achieve a higher rate of progress than we might have expected (see Samman, 2012). This approach shows that Ethiopia has made considerable progress in five of these dimensions, having scored among the top 20 countries in: material wellbeing, social cohesion, education, health and political voice.⁵

In particular, Ethiopia's progress in material wellbeing stood out as the fifth largest reduction in \$1.25 per day poverty measured by deviation-from-fit, which was achieved alongside comparatively low levels of income inequality. These two features of Ethiopia's progress motivated the selection of material wellbeing for analysis. Ethiopia's strong performance in education and employment was also evident from comparative analysis, both of which are known contributors to material wellbeing. These three dimensions were therefore selected to examine the relationship between progress in these closely associated dimensions of wellbeing as well as to narrow the scope of the analysis.

The selection of Ethiopia as a multidimensional case study was further supported by a study conducted by the Oxford Poverty and Human Development Initiative

⁵ Indicators used to establish these rankings are: \$1.25/day poverty rate, share of income help in the bottom 10%, urban slum population, Global Hunger Index (material wellbeing); intergroup cohesion, Gender Inequality Index, civic activism, Gini coefficient (social cohesion); primary enrolment, primary completion, school life expectancy, pupil-to-teacher ratio (education); under-5 mortality, maternal mortality, child stunting, measles immunisations (health); polity score, share of women in parliament, political voice (World Governance Indicator), Press Freedom Index (political voice).

which found that Ethiopia had experienced one of the most marked declines in the intensity of multidimensional poverty among countries for which longitudinal data are available (Alkire and Roche, 2013).

For this study, a team of researchers based in the UK and Ethiopia undertook an extensive literature review, analysed quantitative and qualitative data and held interviews with more than 20 experts in Ethiopia, including academics, senior policy-makers, civil society representatives and international donors. The majority of interviews were conducted in Addis Ababa, so regional perspectives are not necessarily reflected in these interviews.

Following this Introduction, the report is structured in five further sections. Section 2 explores the nature of progress in material wellbeing (with a focus on poverty reduction), education and employment in Ethiopia, particularly over the past 10 years. Section 3 analyses some of the key factors that have contributed to progress in each of these dimensions. Section 4 explores the common drivers that explain progress across different sectors. Section 5 identifies some of the future challenges to material wellbeing, education and employment in Ethiopia. Finally, Section 6 considers lessons to be learned from Ethiopia's experience for other low-income countries looking to accelerate progress in these areas, and also assesses insights for all countries looking to mitigate increasing inequalities.

2. What progress has been achieved?



Ethiopia has often been recognised as one of the poorest countries in the world. With a history mired by internal and regional conflict and major humanitarian crises such as the 1984 famine, Ethiopia's story of progress is a relatively recent one. Although Ethiopia still ranks comparatively low on a number of human development indicators, the rate of progress has been impressive. Given that Ethiopia is also one of the few African countries on target to meet the MDGs suggests an analysis of how it has achieved this may provide lessons for other countries. This section examines the progress that has been achieved in material wellbeing (focusing on income poverty in particular), education and employment over the past 20 years and begins to unpack the mutually beneficial progress achieved in these closely associated dimensions of wellbeing.

2.1 Progress in material wellbeing

Ethiopia has experienced some of the fastest improvements in poverty reduction in the world, albeit from a very high base. GDP per capita has steadily climbed over the past 10 years from a low of \$110 in 2002 to \$498 in 2013, more than quadrupling in 11 years (World Bank, 2014a). Dramatic drops in income poverty, particularly in rural areas, combined with impressive progress in other dimensions of wellbeing, such as nutrition, child mortality, access to improved drinking water, sanitation

'Incomes have improved; you can see this by the new houses in town, more vehicles, families sending their kids to school and people opening bank accounts' – Farmer in Oromia

and electricity, are indications that material wellbeing in Ethiopia is on a very positive trajectory.

What is unique about Ethiopia's poverty reduction is that income inequality has for the most part been maintained at low levels, while many other countries undergoing rapid poverty reduction and high economic growth have seen inequality increase. In China, for example, where the largest poverty headcount reductions have been achieved, the Gini coefficient has increased from 0.32 in 1990 to 0.37 in 2011. In Ethiopia, the Gini has *declined* during this period of significant poverty reduction and high economic growth, from 0.40 in 1995 to 0.34 in 2011.⁶ This implies that material gains have been made even at the lower end of the income distribution; gains among poorer Ethiopians will be highlighted in the analysis below where possible.

Defining material wellbeing

Material wellbeing is a broad concept encompassing household income, consumption and assets, among other indicators of welfare. In its simplest form, material wellbeing can be measured by household income or consumption, from which poverty lines are calculated. Ethiopia's national absolute poverty line is set at 3,781 birr per capita (US\$224 in 2011 prices) (World Bank, 2015). The poverty line indicates the minimum money required to afford enough food to sustain the minimum required caloric intake (set at 2,200 kilocalories per adult) and additional non-food items.

The World Bank's \$1.25 a day poverty line is applied in each country using PPP (purchasing power parity). This means that, rather than measuring household consumption per adult against \$1.25 in birr (via standard exchange rates), local prices are taken into account (based on food and non-food items). The international poverty line is thus set in Ethiopia at around 3,781 birr per year, or 10.36 birr a day (World Bank, 2014a).

But there are important distinctions to be made between different measures of material wellbeing. It is possible, for example, that while household incomes rise, average consumption decreases (which could be the result of inflation or an external shock, such as a widespread drought) or that household assets increase without an associated increase in incomes (perhaps through government transfers). Distinctions between these different measures of material wellbeing are important in distinguishing the various causes of observed changes in material wellbeing in the Ethiopian context (Box 1).

Consumption

In 1982, when Ethiopia's poverty headcount ratio was first calculated, the country stood out as one of the poorest

Box 1: Measures of material wellbeing applied in this case study

The following measures are commonly applied indicators of material wellbeing. Many other measures could be considered, such as food security and access to housing, but the following two broad measures have been designed to capture quantitatively the most general and comparable elements of material wellbeing. Their common use is not necessarily indicative of their conceptual appeal, so much as their ease of measurement and generalisability. It would be more accurate to measure these aspects of material wellbeing at an individual rather than household level to capture intrahousehold variability, although the limitations of survey data rarely allow for this (Vijaya et al., 2014).

Household consumption: typically measured by calculating the value of the 'bundle' of goods required to meet basic needs, including food and non-food items. Consumption measures of material wellbeing are often preferred to income measures as they more accurately reflect a household's ability to meet its basic needs, with income being only one of the factors determining whether it is able to meet those welfare requirements, or not (World Bank, 2014c).

Household assets: the sum of all household assets. These might include housing, land, livestock, televisions, radios and vehicles. Asset holdings are an important indicator of material wellbeing, not just in terms of the functions they fulfil, but also as 'stores of value' which can be sold in times of economic duress or leveraged as credit, indicating the household's resilience to shocks (Shepherd et al., 2014). They are also indicative of the household's ability to move beyond a hand-to-mouth existence, suggest that a form of saving is taking place, and are indicative of accumulation and therefore a gradual and progressive move out of poverty.

in the world, with 69% of the population living below \$1.25 per day. This placed Ethiopia slightly below the low-income-country average of 67% and well above the sub-Saharan African average of 53% in 1981 (among the limited surveys that were available). In 1995, when Ethiopia's poverty rate was next surveyed, very little progress had been made with only a 6% decline over those 14 years to 63%.

But between 1995 and 2011 dramatic changes were seen. This period saw Ethiopia's poverty rate fall faster than both low-income-country and sub-Saharan African averages (Figure 1). Poverty reduction in rural areas has been particularly impressive, and Ethiopia's rural poverty

⁶ Inequality has shown an increase from 2005, when the Gini coefficient was estimated to be 0.30. Interviewees cited rises in urban inequality for this increase. This is confirmed by the recent World Bank Poverty Assessment of Ethiopia (World Bank, 2014b). Recent research from Wellbeing, Illbeing Dynamics in Ethiopia (WIDE) also finds inequality to be on the rise in rural areas. This is discussed further in Section 3.1.





Source: World Bank, 2014a

rate is among the lowest in the East Africa region (Figure 2, overleaf). Urban poverty reduction has lagged behind, however, having increased between 1995 and 1999 from 33% to 37%, before declining to 26% in 2011 (Figure 3, overleaf). Ethiopia's relatively higher urban poverty rate compared with other countries' has been associated with the government's historical focus on rural areas, until recently overshadowing development in urban areas.⁷

During the period when much of this poverty reduction was achieved, the Gini coefficient for Ethiopia declined from 0.40 in 1995 to 0.29 in 2005, before increasing again to 0.34 in 2011 (World Bank, 2014a). Ethiopia's Gini coefficient has also remained one of the lowest in the region after its peak in 1995 (Figure 4, page 17).

The falls in income inequality can perhaps best be seen by looking at the regional distribution of poverty across Ethiopia. Figure 5 (page 17) based on data from the Ethiopian Household, Income, Consumption and Expenditure Surveys, shows a remarkable convergence of poverty rates across all regions, though with some marked increases for rates in Afar and Gambela around 2000, which have since declined again, with all regions settling in 2011 between 30% and 36%. Section 4 discusses some of the factors behind this convergence, including social protection programmes that target marginal areas and equitable budget allocation through the decentralised governance system.

Further evidence from the Ethiopia Rural Household Survey (ERHS), a unique seven-wave panel survey,⁸ confirms that mean consumption per capita did increase between 1994 and 2004, from 70 birr (approximately US\$14 at the exchange rate of the time) to 93 birr (US\$18.6 in real 1994 terms) per month, but then declined again, to 60 birr (US\$12) in 2009⁹ (Table 1, page 17). This reversal to 1990s consumption rates is concerning, and some of the potential causes are discussed below.

The annual rate of increase in consumption between 1994 and 2004 of 2.6% has been found to correspond roughly to the average annual growth rate of GDP per capita of 2.1% (Dercon et al., 2011). The decline in average consumption between 2004 and 2009 does not, on the other hand, reflect GDP growth rates over the same period, as these remained positive. Neither does it correspond with other sensitive indicators of wellbeing, such as child

⁷ Interview, government official.

⁸ Although not nationally representative, this survey does provide an opportunity to examine trends over time among households sampled repeatedly over a period of 15 years.

⁹ The high consumption noted in 1997 has been attributed to seasonality error as this survey was conducted after a particularly good harvest, when consumption is higher than might normally be expected. The rapid increase in consumption between 1995 and 1997 may also be explained by a 'rebound effect', as local economies were just emerging from two decades of decline and the post-Derg/EPRDF policies had not yet had much effect (interview, C. Dom).





Source: World Bank, 2014a





Source: World Bank, 2014a





🗕 Ethiopia 🌑 Tanzania 鱼 Rwanda 🔍 Uganda 🗨 Sudan 👁 Kenya

Source: World Bank, 2014a



Figure 5: Regional poverty rates in Ethiopia, 1996-2011

Table 1: Mean consumption per capita (birr), 1994-2009

	Mean consumption per capita
1994	70.1
1995	61.6
1997	90.9
1999	88.1
2004	92.7
2009	59.9

Source: Dercon et al., 2011

Source: World Bank, 2014b

Figure 6: Child stunting in Ethiopia



Source: WHO, 2015

stunting, which continuously declined over the period, from 68.1% in 1992 to 40.4% in 2014 (see Figure 6).

Dercon et al. (2011) observe that this decline in mean consumption does correspond with a significant decline in the Gini coefficient over the same period, concluding that the decline in mean consumption can be disproportionately attributed to a decline in the consumption of wealthier households. They also suggest that the decline can be partially explained by localised droughts in Tigray and the Southern Nations, Nationalities and Peoples' Region (SNNPR), contributing to lower consumption in those areas (the poorer areas in Tigray are also over-represented in the ERHS sample), and also that the global food-price spike of 2008 had an impact on net food purchasers¹⁰ in Ethiopia. Inflation also rose significantly between 2007 and 2008, from 17.2% to 44.4% (World Bank, 2014a).

The food-price spike in 2008, which saw prices in Ethiopia rise by a shocking 92% on the previous year, was felt particularly strongly by net food purchasers in both urban and rural areas. Alem and Söderbom (2010), using the Ethiopian Urban Socio-Economic Survey (EUSS), show that food-price inflation was the most common shock faced by urban households (94%), followed by rising energy costs (74%). Their study also found that households headed by a casual worker were particularly affected. Although a food subsidy programme was implemented by the Ethiopian government during the food-price spike, it was ineffectively targeted and so failed to mitigate the

Table 2: Asset ownership measured by ERHS, 1994 and 2009

Asset	1994 (%)	2009 (%)
Oxen	13	49
Hoes	59	86
Radios	7	49
Mobile phones	-	13

Source: Dercon et al., 2011

impacts faced by poorer urban households. Despite these recent shocks, the broader trend has been one of a decline in urban poverty, falling from 35.1% in 2004 to 25.7% in 2011 (World Bank, 2014a).

Further evidence from Ulimwengu et al. (2009) finds significant variability in food prices and food market integration across Ethiopia's regions, so the distribution of food-price effects on consumption is far from uniform. This should be considered when evaluating aggregate trends in consumption.

Assets

The ERHS reveals an increase in household assets in rural areas, which, as noted above, may indicate not only improved household welfare, but also increased resilience of households in the face of shocks. Table 2 shows nearly 50% of households owning oxen in 2009, a near quadrupling from 13% in 1994, and 86% of households owning hoes, an increase from 59%, showing a strong increase in the ownership of productive assets by farm households. Nearly 50% of households also owned a radio by 2009 – a significant increase from 7% in 1994.

A study by Vigh (2011) reveals that asset ownership does, however, remain highly volatile over time, with the sale of assets forming an important way of coping with economic shocks in rural Ethiopia. Dercon et al. (2011) also find that the chronically poor in Ethiopia continue to lack assets, keeping them at a persistent disadvantage and leaving them more profoundly vulnerable to shocks than other groups.

There remain significant challenges for Ethiopia to get to 'zero poverty', not least the country's vulnerable climate and still high, though now declining, rate of population growth. However, a better understanding of Ethiopia's recent progress may not only contain lessons for how the country can address the challenges that lie ahead, but also offer insights for other high-poverty countries and countries that might wish to reduce poverty and inequality simultaneously.

¹⁰ Households are defined as 'net food purchasers' when they buy more food staples on the market than they sell for a given season or a year.

2.2 Progress in education

There have been huge improvements in primary enrolment in the past 20 years, and these have been evenly distributed, both spatially and in terms of gender. Numbers in secondary education have also boomed in absolute terms, but enrolment rates have not matched government targets, partly because of a lack of secondary schools in rural areas and a high dropout rate at primary completion stages. Enrolment in tertiary education has also increased rapidly, with a high proportion of vocational and technical courses. Quality at all levels has, however, not improved and has fallen by some measures.

Primary access¹¹

With one of the lowest enrolment rates in the world in the 1980s and early 1990s, Ethiopia has managed to expand access to primary education at an extraordinary rate (Figure 7), leaving the country on course to achieve universal primary enrolment within the next few years (Engel and Rose, 2010). From 1991 to 2007, Ethiopia achieved an average increase of 3.1% annually in the net primary enrolment rate. Nearly four out of five primaryschool-aged children were not in school in 1992, but today this has fallen to under one in five, a remarkable achievement in just two decades.

Over the course of the 1990s and the early 2000s Ethiopia managed the fastest increase in primary enrolment rates of any country in Africa. This is a remarkable feat for a country emerging from famine and conflict in the 1990s and with a rapidly growing population (a 3% annual growth rate for 1990-2010, according to the World Bank (2014c)). In recent years, the rate of improvement has predictably slowed, as the 'low-hanging fruit' for enrolment have been picked and efforts to increase access have spread to more difficult, remote locations and harder-to-reach families. The most recent Ministry of Education statistics nonetheless show net enrolment in primary education having reached an impressive 86% in 2012/13 (EFME, 2013).

The gross enrolment rate (GER) (Figure 8, overleaf), a measure which includes overage pupils, has levelled out even faster in recent years. This indicates that the primary-school age structure is approaching an appropriate setting, with children more often studying in their correct year-group. However, with Ethiopia's apparent intake rate¹² for primary education still as high as 144% in 2012/13, a large number of overage students are clearly still enrolling in primary schools.



Figure 7: Net primary enrolment – average annual absolute increases, 1991-2006/07

Source: Steer et al., 2010

- 11 Primary school has an official entry age of 7 years and a duration of eight grades. Secondary school is divided into two cycles: lower secondary consists of Grades 9 and 10; upper secondary consists of Grades 10 and 11. Preschool education is intended for ages 4-6. Primary education is, by law, free and compulsory, whereas the pre-primary and secondary levels are not. Students sit for certificate examinations at the end of Grades 8, 10 and 12.
- 12 The apparent intake rate is calculated as the number of new entrants in the first grade of primary education, irrespective of age, as a percentage of the total number of children in the country of official primary admission age (age 7 for Ethiopia) in a given year. This worrying anomaly could be due to an underestimate of the 7-year-old cohort, to a stubbornly large backlog of overage children, or to a mix of both factors.



Figure 8: Gross enrolment ratio in primary education, 1990-2012

Source: World Bank, 2014a

Figure 9: Lower secondary gross enrolment rate (%), 1999-2013



Source: UNESCO (2014) and EFME (2013)

Secondary access

The rapid rise in primary enrolment and a (slower) subsequent improvement in primary completion rates are helping to fuel an increase in secondary enrolment. Secondary education has been slower to develop, however, and in 2012/13 the GER for secondary education (Grades 9 and 10) was still just 38.4%. This is a long way from the government's current goal of achieving universal completion of lower secondary education by 2025 (EFME, 2010). In absolute terms, Ethiopia has still managed to increase enrolment in secondary education from less than half a million in 1996/97 (EFME, 2005) to just under over 21.9 million in 2012/13 (EFME, 2013).

Figure 9 compares Ethiopian lower secondary GER to the average for sub-Saharan Africa. Ethiopia outpaced improvements in the region for several years, but the gap then widened again after 2006. This slowdown may be partly due to the cap the government places on access to upper secondary schools, limiting the numbers who would see enrolling in Grades 9 and 10 as a worthwhile investment.

Much of the secondary enrolment bottleneck is due to the urban concentration of secondary schools. More than 85% of secondary students are enrolled in urban areas. At Grades 11 and 12, seen as preparation for higher education, the urban share is almost 95%. Ethiopia's predominantly rural population is not well served by the existing urban, 'big-school model' of secondary education (see next section). As of 2009/10, the average general secondary school had more than 1,150 students enrolled. This concentrated, urban model has also contributed to





Source: Steer et al., 2010

Note: The figure shows average annual rates of absolute progress (left) and female-male ratio in net primary enrolment (right).

distortions to equity in secondary access (discussed below). Encouragingly, the latest five-year government education policy is planning to extend more than 3,825 mainly rural primary schools, providing them with Grades 9 and 10, lower secondary education (EFME, 2013).

Equity in access to education

Gender equity

As shown in Figure 10, Ethiopia displays one of the highest rates of improvement in gender disparity in primary enrolment globally (Steer et al., 2010). The gender parity index, measuring the ratio of girls to boys enrolled, has improved from just 0.66 in 1991 to 0.94 in 2012/13 (EFME, 2013). In Grades 9 and 10 girls actually outnumber boys, thanks to better primary school completion rates. In Grades 11 and 12, however, boys outnumber girls again. A dearth of female teachers at this level, as well as the long distances and associated difficulties of travel required to attend secondary schools, continues to limit accessibility among girls (Joshi and Verspoor, 2012). Furthermore, prevailing gendered social norms make girls less likely to have access to formal education and more likely to be married as children (Jones et al., 2014). However, a recent surge in the proportion of

Grade 11 places awarded to girls, from 27% in 2007/08 to 44.4% in 2012/13, suggests the gap may be closing.

Urban-rural, income and regional disparities

Only 32% of rural households are within a 10 km radius of a secondary school (Jennings, 2011). Poorer families are less likely to fund daughters to rent accommodation near school, due to the risk of sexual exploitation (Jennings, 2011), which helps to drive the higher levels of gender disparity in rural areas. This, along with the sheer lack of rural schools, contributes to low rural enrolment overall. In 2011 just 11% of enrolments in Grades 9 and 10 were in rural areas. Disparities in access to education for children of different income backgrounds predictably also rise as one goes up the school system. At primary school level, the share of children from the lowest quintile attending is over half that of the highest quintile. In secondary schooling, however, children in the highest quintile are seven times more likely to attend than those from the lowest quintile (CSA, 2014). This nonetheless represents considerable improvement on past performance.

The infographic on page 23 shows average years of education among women in each Ethiopian region in 2000 and 2011. Nationally, from 2000 to 2011, average years of women's schooling increased from 1.1 to 2.9. In 2000,

only the richest quintile reported an average of more than one year of schooling, whereas by 2011 all wealth groups in both rural and urban areas were reporting *at least* one year of schooling. Lenhardt (2015) found a 6% reduction in inequality in the years of education completed by women and girls in this period, across all regional/ethnic and rural–urban groups. However, inequalities still exist. Average years of schooling among women in rural Tigray is still less than 1, against a sizeable 7.2 in the region's urban areas. Nationwide, the urban–rural divide is still very much apparent for women and girls. The probability today of not completing *any* schooling is still 39% higher among rural women from the Somali region than the national average (Lenhardt, 2015).

Improvements in regional disparities have generally been relatively swift. In the Somali region, an outlying and relatively poor division of Ethiopia, the primary school GER increased from just 32.7% to 96.9% between 2007/08 and 2012/13, an extraordinary achievement. However, Afar, another of Ethiopia's poor regions with low human development indicators, has been much slower to catch up and achieves a primary GER of only 50.5%. Disparity in secondary enrolment across the regions is much more marked. It is worth noting that the population of these two regions is largely nomadic, requiring the government to provide mobile school services, which is an impressive achievement.

While Ethiopia has managed to raise national secondary GERs to 38.4% and 9.5%, for Grades 9 and 10 and Grades 11 and 12 respectively, Afar manages just 7.4% and 2.4%, and Somali 11.5% and 4.5%. These regions are now making rapid progress, though, with Somali achieving the highest rates of growth in secondary enrolment in the country in the past five years (EFME, 2013).

Education quality

There is wide consensus that improved access has not been reflected in similar improvement in attainment. In fact, rising enrolment rates are seen by many to have led to a decline in the quality of education provided in Ethiopian schools. A large national programme, the General Education Quality Improvement Project (GEQIP), is dedicated to improving teaching and learning conditions in schools through a teacher development programme, curriculum support and textbooks as well as supporting improved management planning and budget capacity (World Bank, 2014f).¹³

The National Learning Assessments (funded by GEQIP) show declining education outcomes over recent years. Figures 11 and 12 (page 24) show Grade 4 and Grade 8 students achieving lower or unchanged results in all subjects covered by the assessments. The repetition rate in primary education has also more than doubled, from a recent low of 3.7% in 2003/04 (EFME, 2008) to above 8% in recent years (EFME, 2013). Some of this increase reflects a school-level reversal, in many parts of the country, of an earlier automatic-promotion policy in the first four grades of primary. Therefore, the increased repetition rate may merely document an underlying but previously hidden quality problem, rather than reflecting its worsening.

Growing student numbers worldwide usually mean larger class sizes and a stretch on resources, especially if expansion occurs rapidly. Surprisingly, however, the pupil–teacher ratio (PTR) in Ethiopian primary schools fell during this period from 60 to 49. The average pupil–section ratio¹⁴ (adjusting for double-shift use of classes) also fell, from 70 in 2000/01 to 54 in 2012/13 (EFME, 2013). Although these reductions are commendable, class sizes are still larger than they should be for effective learning. Quality of learning, and resultant scores in national tests, are unlikely to improve while class sizes remain so high.

Rapid increases in enrolment have also brought in students from the poorest backgrounds. They face the greatest challenges in succeeding at school, having greatest pressure to spend more time on average on the family farm, fewer resources for purchasing school materials, longer journey times to schools, and fewer educated role models at home. With no specific policy in place to tackle the needs of this group, it is unsurprising to see average test scores in Ethiopia flatlining or falling.

Tertiary education

In keeping with the greater numbers leaving Grade 10 and Grade 12, technical-vocational education and training (TVET) and university education systems in Ethiopia have expanded rapidly. In 2012/13, over 700,000 students were enrolled in university undergraduate programmes, though enrolment was highest among men (70%), and there were over 300,000 TVET students in the country, with enrolment largely equal between men and women (EFME, 2013). Enrolled TVET students include those who have failed to pass Grade 10 or Grade 12 graduation exams and are therefore unable to secure, or even compete for, a university place. The expansion of vocational training, in theory, provides wider and better labour market opportunities for such students. Ethiopia has a far higher number of TVET students, as a percentage of enrolments in upper secondary education, than most comparable lowand middle-income countries (Joshi and Verspoor, 2012). However, the comparative level of funding devoted to TVET has been falling sharply, as discussed in Section 5.

¹³ GEQIP is supported by the World Bank, Education for All, UK Department for International Development, the Netherlands Ministry of Foreign Affairs and a number of other bilateral donors.

¹⁴ The pupil-section ratio is often used in Ethiopia as many schools run multiple shifts for classes, across morning and afternoon slots. The same teachers may teach classes across the shifts. The ratio thus shows the average number of students in each shift class.



Figure 11: Grade 4 – mean scores of students, 2000-2012



Source: statistics extracted from National Learning Assessments, National Educational Assessment and Examinations Agency, 2004, 2008, 2010, 2012





Source: statistics extracted from National Learning Assessments, National Educational Assessment and Examinations Agency, 2004, 2008, 2010, 2012

Box 2: Measures of employment

Quantity of employment is measured by labour force participation rates and unemployment rates. Unemployment rates tend to be lower in developing countries, where insufficient social safety nets mean that most people cannot afford to be unemployed; instead underemployment and low quality of employment are bigger problems.

Quality of employment is measured through the shares of paid employment, contributing family workers and own-account workers. The latter two categories constitute 'vulnerable employment' because these workers are less likely to have formal arrangements ensuring continuity of work and social protection. Low-quality employment is generally associated with low wages, but can also manifest in the form of:

- informal employment generally associated with lack of social protection, low wages, non-decent labour conditions and lower opportunities for skills accumulation and learning
- underemployment when a worker would be willing to work more (provided that she or he is working less than 40 hours per week)
- productive employment defined as employment yielding sufficient returns to labour to allow workers and their dependants a level of consumption above the poverty line. Productive employment entails social protection and higher salaries in addition to greater opportunities for learning and skills accumulation (World Bank, 2012; Szirmai et al., 2012). Productive employment creation is related to the direction and pace of structural change.

The achievement of near-universal primary enrolment in Ethiopia, despite still-rapid population growth, and with regional and gender equity, is a remarkable success story. This is now allowing for much more widespread enrolment in secondary and tertiary education. Yet rural–urban divides and quality concerns still serve to hamper progress in expanding higher tiers of education to all of Ethiopia. We discuss these challenges in Section 4.

2.3 Progress in employment

As in material wellbeing and education, Ethiopia's progress in employment began from a low starting point. However some significant gains have been made, including a 10% decrease in urban unemployment, the maintenance of a particularly high labour force participation rate, a near halving of the informal share of urban employment and a near halving of youth underemployment. A number of challenges remain and economic transformation is still

Table 3: Indicators of labour force participation andunemployment rates, 1991-2013

	1991	1994	1999	2005	2007	2013
LFP rates						
Total	68.3	77.9	80.5	84.5	74.4	
Urban			77.0	73.0	61.0	
Rural			84.0	89.0	78.0	
Unemployment						
Total	1.3	3.1	8.1	5.0		4.5
Urban			26.0	21.0		16.5
Rural			5.0	3.0		2.0

Sources: LFP rates: World Bank, 2014a (national estimates); urban and rural: Broussard and Tekleselassie, 2012, and MOLSA, 2013. Unemployment rate: KILM online and CSA, 2013a; urban and rural: CSA, 2013b

far from complete in Ethiopia, but recent trends show a positive trajectory according to most measures of employment. Box 2 (previous page) defines key measures of employment.

Ethiopia also features as one of the few African countries that have achieved growth-enhancing structural change, according to McMillan et al. (2013). Despite this, 75% of the Ethiopian population is still employed in the agricultural sector and there has been no noticeable increase in non-farm and off-farm employment in rural areas (de Vries et al., 2013). Livelihoods among poorer rural Ethiopians (the majority) therefore remain largely tied to self-employment in agriculture. This evidence suggests that, as in other sub-Saharan African countries, Ethiopian economic growth has not created sufficient new productive employment opportunities (ILO, 2013).

Quantity of employment

Labour force participation (LFP) rates are very high in Ethiopia, which has meant unemployment has historically remained low.¹⁵ Despite an increase from 1994 to 1999, unemployment decreased and reached the rate of 4.5% in 2013 (Table 3). Unemployment figures are particularly low in Ethiopia, as in most of sub-Saharan Africa, and caution should be taken when analysing these figures as the definition of employment is generally very broad. In the case of Ethiopia, persons who were working and/or available to work for at least half of the year are classified as employed. Rural unemployment is particularly low at 2% in 2013, and given the larger share of rural population, low overall unemployment figures largely represent the rural situation. Unemployment tends to be higher in urban areas, but there has been a sizeable decrease, from 26% in 1999 to 16.5% in 2013.

While high LFP rates (low unemployment rates) are not surprising in developing countries, LFP rates are extraordinarily high in Ethiopia. Ethiopia has the sixth highest LFP rate in the world: in 2009, the average for sub-Saharan African countries was 71% and for least developed

Table 4: Labour force participation and unemployment in selected African countries (%), 1990-2010

	LFP rates					Unemployment rates			
	1991-1995	1996-2000	2001-2005	2006-2010	1991-1995	1996-2000	2001-2005	2006-2010	
Ethiopia	71.8	80.5	84.5	74.4	2.2	8.2	5.4	4.5	
Kenya		82.1	63.9			9.8			
Mozambique		83.9	86.0			2.2			
Rwanda		85.9	84.8		0.3	0.6	0.9		
Sudan	49.9	51.3		39.5				12.7	
Tanzania	86.6		82.4	84.8	3.6		4.3	2.9	
Uganda	69.3		76.1	78.7	1.0		2.9	4.2	
SSA average	70.3	70.3	70.3	70.6	7.5	7.6	7.4	7.0	

Source: World Bank, 2014a

Notes: The values shown are 5-year averages. Sub-Saharan African (SSA) average refers to developing countries only. All estimates but the SSA average are computed on national estimates. SSA averages are computed on data from ILO estimates.

15 LFP rate is defined as the ratio of the labour force (employed plus unemployed) to the working-age population.

Table 5: Wage and vulnerable employment (%), 1994-2013

	1994	1999	2005	2013
Wage employment				
Total	5.7	8.2	7.9	10.0
Public employment		2.9	3.2	4.4
Private employment		4.3	2.9	4.2
Urban		39.5	42.8	45.1
Rural	2.3	3.5	3.6	3.9
Contributing family workers				
Total	51.1	47.0	50.3	48.7
Urban		14.0	15.0	15.3
Rural	55.0	51.0	54.6	55.0
Own-account workers				
Total	39.5	43.5	40.9	40.1
Urban		42.2	40.3	39.3
Rural	39.6		41.0	40.3

Sources: Wage employment: WDI online and CSA, 2013b; urban: CSA, 2013b; rural: EEA, 2005, and CSA, 2013b. Contributing family workers and own-account workers: Rizzo, 2011, and CSA, 2013b; urban: CSA, 2013b; rural: CSA, 2013b, and EEA, 2005

countries was 74% (Broussard and Tekleselassie, 2012). Table 4 shows Ethiopia's growth in LFP rates as ranking third among a sample of sub-Saharan African countries; only Mozambique and Rwanda had slightly higher LFP rates between 2001 and 2005. Apart from during the period from 1996 to 2000, unemployment rates were also lower in Ethiopia than the sub-Saharan African average. Compared with the countries displayed here, however, Ethiopia had among the highest unemployment rates.

Quality of employment

Wage employment in Ethiopia increased from 5.7% in 1994 to 10% in 2013, although it still represents a very small share of total employment (Table 5). The share of public employment in wage employment also increased, representing 35% in 1999 and 44% in 2013 of total wage employment. The persistence of low rates of wage employment is mainly due to the extremely low rates in rural areas. This is associated with the nature of occupations in rural areas, where the vast majority of the population is engaged in their own farming activities, explaining the high shares of contributing family workers and own-account workers. In urban areas, employment is equally divided between wage employment and own-account workers. By contrast, in

rural areas, more than 50% of the employed population contributes to family work and roughly 40% are own-account workers.

Statistics for unemployment, the share of employment in the informal sector, and the share of working poor (those employed but still falling below the \$1.25 or \$2 a day poverty lines) all improved significantly in Ethiopia between 1999 and 2011 (Table 6). Informal employment in urban areas decreased from 51% in 1999 to 26% in 2013 and the share of extremely poor workers dropped from 52% in 1999 to 35% in 2005.¹⁶ However, underemployment increased from 2005 to 2011 in urban areas and informal employment is still high, especially in rural areas.¹⁷ In terms of quality of employment, it is important to note that high shares of vulnerable and informal employment are associated with lack of social protection and job security.

Despite marked improvements, the shares of vulnerable and informal employment in Ethiopia have remained relatively high when compared with other sub-Saharan African countries. In 2005 the Kenyan share of wage employment was 29%, in Rwanda 24%, in Uganda 19%, as against Ethiopia's 8% (World Bank, 2012).

¹⁶ The informal sector is defined as units of production within unincorporated enterprises owned by households. Informal sector employment is defined as all jobs in informal sector enterprises, or all persons who were employed in an informal enterprise, irrespective of their status in employment and whether it was their main or secondary job.

¹⁷ Due to data availability, an analysis of recent trends in rural underemployment and informal employment is not possible at this stage.

Table 6: Underemployment and informal-sector employment, 1999-2013

	1999	2003	2004	2005	2009	2011	2013
Underemployment							
Total	48.0			28.0			
Urban	54.0			34.0	50.0	48.0	
Rural	47.0			27.0			
Informal sector							
Total	72.8						
Urban	50.6	47.8	45.2	38.5	35.8	33.3	25.8
Rural	86.9						
Working poor (\$1.25)	52.1			34.9			
Working poor (\$2)	83.9			73.1			

Sources: Underemployment: Broussard and Tekleselassie, 2012. Informal sector: MOLSA, 2013; urban: MOLSA, 2013, and CSA, 2013b; rural: UNECA, 2007. Working poor: KILM

Note: ILO defines the unemployed as those who are available and ready to work but have worked less than the normal duration of work. Broussard and Tekleselassie, 2012, exclude the last requirement in their definition of underemployment.

	1999	2005	2009	2011	2013
Unemployment					
Total	11.1	7.4			6.8
Urban	38.0	29.0	26.0	23.7	21.6
Rural	7.0	4.0			3.1
Informal employment					
Total	94.0	91.0			
Urban	65.0	45.0	39.0	38.0	
Rural	98.0	96.0			
Underemployment					
Total	50.0	25.0			
Urban	54.0	30.0	48.0	47.0	
Rural	49.0	25.0			
	1010	2010			

Sources: Unemployment: CSA, 2013a; informal employment and underemployment: Broussard and Tekleselassie, 2012

Table 8: Educational attainment of unemployed urban youth

		1999			2011	
Educational level	Male	Female	Share female	Male	Female	Share female
No schooling	5.22	15.99	0.86	4.47	16.11	0.88
Primary or less	39.92	40.23	0.68	28.17	32.32	0.70
Not completed lower secondary	21.19	17.60	0.63	10.76	9.45	0.64
Completed lower secondary	28.31	22.95	0.63	28.04	23.13	0.62
Higher education	4.47	2.29	0.51	28.53	18.75	0.57
Other	0.88	0.94	0.69	0.02	0.25	0.96
Total	100.00	100.00	0.67	100.00	100.00	0.67

Source: Broussard and Tekleselassie, 2012, p. 26

By contrast, improvements in the share of the working poor population compare favourably against other sub-Saharan countries. In 2005 the share of working poor, calculated at \$1.25 per day, stood at 35% in Ethiopia, compared to 43% in Kenya, 65% in Zambia, and 34% in Senegal (World Bank, 2012).

Youth unemployment

Like overall unemployment, youth unemployment is greatest in urban areas, and has consistently declined between 1999 and 2013, from 38% to 21.6%. Even more striking has been the reduction in formal youth underemployment, which halved between 1999 and 2005, from 50% to 25% (Table 7, previous page). More recent figures, however, show that while informal employment in urban areas continued to decrease after 2005, underemployment increased from 30% in 2005 to 47% in 2011. Data on underemployment in rural areas only dates to 2005 so it is not possible to observe more recent trends there.

The youth unemployment rate has been in line with the sub-Saharan African average, at around 7.5% until the mid-2000s then decreasing to 7% in the second half of the 2000s.¹⁸ The majority of unemployed youth in urban areas have some education and the share of unemployed youth completing higher education has risen dramatically, from 4% of males and 2% of females in 1999 to 29% of males and 19% of females in 2011 (Table 8). This might reflect a higher willingness to wait for adequate jobs among

higher-educated (and possibly higher-income) youth. At the same time, this might also be due to a relative scarcity of high-skilled jobs. So despite considerable progress, there remains a problem of youth unemployment in urban areas (especially among the most educated) and a severe problem of low-quality employment in rural areas. This is explored further in Section 4.

Economic structural change

Economic structural change refers to the movement of productive resources from traditional low-productivity sectors (low-input agriculture) to internationally competitive high-productivity sectors (manufacturing and formal sector services, such as the financial and ICT sectors).¹⁹

Table 9 shows the evolution of the sectoral shares in GDP in Ethiopia from 1990 to 2010: the contribution of agriculture to GDP decreased from 59% in the early 1990s to 42% at the end of the 2000s, with much of this movement going to the services sector.

Translated into employment, mining, construction, business services and manufacturing have contributed most to job creation (Figure 13). In the early 1990s, employment in the mining sector grew more than in other sectors, though from a very low base, but from the mid-1990s onwards, trade and business services, construction and manufacturing have expanded at the highest rates.

Employment growth in the agricultural sector has been minimal and agriculture still maintains the lowest labour productivity among sectors (Table 10, page 30),

18 Data from World Development Indicators (World Bank, 2014a).

¹⁹ Modern services refer to a subsector of services characterised by higher knowledge and technological content. Typically, these services are ICT-intensive and require skilled labour (e.g. computer services, insurance and other business services).





Source: de Vries et al., (2013)

Table 9: Sectoral shares in GDP (%), 5-year averages, 1990-2010

	1990-1995	1995-2000	2000-2005	2005-2010
Agriculture	59.1	50.4	45.5	42.1
Industry	10.0	11.4	12.8	12.6
Mining	0.5	0.5	0.5	0.4
Manufacturing	4.3	5.2	5.2	4.9
Utilities	2.1	2.0	2.1	1.9
Construction	3.0	3.7	5.0	5.3
Services	30.9	38.2	41.7	45.3
Trade services	12.6	14.5	14.7	17.0
Transport services	3.7	4.2	5.2	5.2
Business services	6.3	7.2	8.8	10.5
Government services	5.8	9.0	9.8	9.8
Personal services	2.6	3.3	3.2	2.8

Source: authors' elaboration based on Africa Sector Database (de Vries et al., 2013)



Figure 14: Labour productivity growth by sector, 5-year averages, 1991-1995 to 2006-2010

Source: de Vries et al., (2013)

Table 10: Average labour productivity by industry (constant 2005 birr), 5-year averages

	1991-1995	1996-2000	2001-2005	2006-2010
Agriculture	1,624.2	1,530.2	1,515.6	2,087.7
Mining	6,087.3	5,657.6	5,258.3	4,973.1
Manufacturing	5,645.2	4,822.3	4,119.3	3,579.3
Utilities	64,538.6	66,841.7	69,226.9	72,994.6
Construction	29,961.2	22,474.2	16,858.1	12,855.2
Trade services	8,544.8	8,215.8	7,899.4	7,730.0
Transport services	24,784.1	29,424.7	34,934.1	42,252.4
Business services	152,056.7	138,248.3	125,693.8	116,277.4
Government services	6,226.2	8,454.6	11,480.7	15,891.9
Personal services	2,490.7	3,025.9	3,676.1	4,550.1
Total economy	2,437.6	2,602.0	2,810.9	3,876.0

Source: authors' elaboration based on the Africa 10-Sector Database

Box 3: Decomposing productivity growth

McMillan et al. (2013) decompose productivity growth into two main components: (i) labour-productivity growth within sectors; and (ii) structural change, i.e. the shift of labour between sectors with different labour productivity levels. Structural change is described as growth-enhancing (the component of structural change is positive) if labour primarily migrates from lower- to higher-productivity sectors, or growth-reducing otherwise. To perform this analysis for Ethiopia, this section uses the World Bank's Job Generation and Growth (JoGGs) Decomposition tool.*

Ethiopian GDP per capita growth is decomposed into: (i) the contribution of changes in labour productivity (within-sector component, in the terminology of McMillan et al.); (ii) the contribution of structural change; and (iii) the contribution of changes in employment. The latter measures the impact of employment changes on GDP per capita. This captures the link between employment growth in a certain industry and changes in GDP per capita. Table 11 presents the results of this decomposition analysis. For comparison purposes, we include also results for Uganda and Cambodia.

The results show that GDP per capita grew more in Ethiopia than in Cambodia and Uganda. The service sector has been the largest contributor to economic growth in both Ethiopia and Uganda. By contrast, in Cambodia, industry and services contributed almost equally to economic growth.

In Uganda, growth was largely due to within-sector increases in output per worker. In Ethiopia, however, the structural change component made the largest contribution to GDP growth, which was also higher than in the other countries (102% versus 19% in Uganda and 48% in Cambodia).

Compared with Uganda and Cambodia, Ethiopian industry contributed little to economic growth (20% versus 36% in Cambodia and 47% in Uganda). The small contribution of industry to economic growth is mainly explained by the negative contribution of labour productivity (-29%). By contrast, both the employment and the structural-change components made positive contributions, meaning that manufacturing employment growth and structural change towards manufacturing were growth-enhancing because part of the employment growth was due to movements of workers from lower-productivity industries, such as agriculture.

In agriculture, productivity growth had a very large positive contribution to GDP growth (60%). The structural-change component was also positive (but not as large). The positive contribution of the structural-change component indicates that the movement of employment out of agriculture (a sector with lower productivity compared with other sectors) and into higher-productivity sectors (industry and services) positively contributed to GDP growth. However, the negative effect of employment growth was so high (-74%) that it offset both the within-sector and structural-change components, leading to an overall zero (or, to be precise, slightly negative) contribution of agriculture.

All components of services, by contrast, contributed positively to economic growth: productivity growth and increased share of employment together contributed roughly 26% of total per capita growth. Given its above-average productivity and the shift of labour towards this higher-productivity industry, the structural-change component of the service sector is the highest observed in this group of countries.

* The JoGGs uses data on value added (in 2005 constant US\$), total employment and employment shares by sector, and population data from the World Development Indicators. Changes are calculated from 1994 to 2005.

Country	Within-sector component (%)				Employment (%)			Struc	Structural change (%)				Total (%)			
	Agr	Ind	Ser	Total	Agr	Ind	Ser	Total	Agr	Ind	Ser	Total	Agr	Ind	Ser	Total
Uganda (2003-09)	-6	64	32	90	-27	-5	18	-14	11	-12	20	19	-22	47	70	95
Cambodia (1998-2012)	24	10	-10	24	-30	17	19	5	14	10	24	48	9	36	33	77
Ethiopia (1994-2005)	60	-29	11	42	-74	14	15	-46	15	36	51	102	0	20	77	98

Table 11: Decomposition of GDP per capita growth, Ethiopia, Cambodia and Uganda

Source: authors' elaboration based on JoGGs results, rounded to the nearest whole number Note: Agr: agriculture; Ind: industry; Ser: services.

but gains have recently been made in agricultural labour productivity, which has been a major preoccupation of the latest government strategy (discussed in Section 3.1). What also emerges from the data is the very low level of labour productivity of manufacturing, although this may also hide wide differences between widespread low-tech manufacturing and a small but emerging modern manufacturing sector. The industry with the highest productivity is business services, where labour productivity is 32 times higher than in manufacturing.

Figure 14 (page 30) shows data on labour productivity growth by industry from 1991 to 2010. Labour productivity growth in the agricultural sector has been among the highest since the 2000s, while in the manufacturing sector it is negative but slowly increasing. Utilities, transport and government services are also experiencing positive labour productivity growth; construction, trade services and business services are experiencing negative but rising growth.²⁰

Analysis from McMillan et al. (2013) (elaborated in Box 3, previous page) shows that in Ethiopia, the structural-change component of growth was larger than the within-sector component, meaning that while shifts into the industrial sector lowered average output per worker within the sector, it nonetheless reflected movements from lower-productivity sectors, resulting in an overall positive impact on productivity in the economy.

To conclude, structural change towards services has been one of the main determinants of economic growth in Ethiopia. While structural change towards services has been growth enhancing, the role of industry is still limited. On the one hand, the results of this analysis are in line with Rodrik's (2014) prediction that African countries will not necessarily achieve growth by industrialising, but rather that agriculture or services could be the engine of African countries' growth. On the other hand, manufacturing is an important sector for development. Manufacturing is generally more productive and more capital- and technology-intensive than other sectors and has stronger linkages with the rest of the economy.²¹ Recent empirical evidence confirms that manufacturing is an engine of growth in developing countries (e.g. Szirmai and Verspagen, 2011).

In Ethiopia, manufacturing may still be underdeveloped and in need of policies that can address its major bottlenecks to further employment and productivity growth, and create conditions for industry to drive economic growth. While this transformation cannot be seen in the data presented in this analysis, more recent data point to an expansion of manufacturing (e.g. Martins, 2014), while a recent study by the World Bank (2015) also showed that between 2000 and 2011 the expansion of the service sector has not been as poverty reducing as manufacturing.

²⁰ Trade services are defined as wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods, hotels and restaurants; transport services are defined as transport, storage and communications; business services as financial intermediation, real estate, renting and business activities; government services as public administration and defence, education, health and social work; and personal services as other community, social and personal service activities and activities of private households.

²¹ For a review of this literature, see Szirmai, 2012.

3. What are the factors driving change?



The progress that has been shown in education, employment and material wellbeing can be explained partly by factors within each of these dimensions independently, and also by broader initiatives that have addressed these areas in a comprehensive way. This section examines those factors which have driven progress within each dimension, though these are not entirely mutually exclusive, and Section 4 will discuss the broader factors that have contributed to mutual benefits across dimensions, with a particular focus on how education and employment have contributed to improved material wellbeing.

3.1 Drivers of poverty reduction

High and sustained economic growth, particularly in agriculture

Ethiopia's near unprecedented growth rate can be attributed to a number of factors, including the country's social and political stabilisation in the mid-1990s, a favourable investment climate relative to many neighbouring countries and conducive government policies facilitating this growth while also encouraging diversification with an eye towards structural transformation (AfDB, 2010; FDRE, 2011). According to the International Monetary Fund, among countries with over 10 million people, only China and India will have grown faster than Ethiopia between 2011 and 2015.

'The turning point was an attitude change that we are a people able to tackle poverty. We have the confidence and the power' – Senior government official



Figure 15: Contributions to poverty reduction among different sectors, 1996-2000 to 2005-2011

Source: World Bank, 2015

In line with the Ethiopian government's overarching goal to reduce poverty, much of its growth strategy has been centred on its Agricultural Development Led Industrialisation (ADLI) strategy, with a view that the country's poorest people are concentrated in this sector (see Box 4 for an overview of ADLI in Ethiopia). A recent study by the World Bank confirms the efficacy of this strategy by finding that the agricultural sector has contributed more than any other sector to poverty reduction since 1996. It estimates that agricultural growth led to reductions in poverty of 4.0% per year on average between 2005 and 2011 (Figure 15).

A suite of government policies have targeted inefficiencies in the agricultural sector, not just in terms of improving productivity as described in Section 2, but also in facilitating the flow of benefits from agricultural growth towards the poor. With access to markets being one of the primary constraints faced by smallholder farmers, rural road construction is one of the main pillars of the ADLI strategy and the government has invested heavily in expanding the rural road network across Ethiopia. The country's road density has increased from 29 to 44.5 km per 1,000 km² between 2000/01 and 2009/10, and the average time it takes to reach an all-weather road has been reduced from about 7 hours in 2000/01 to 3.7 hours over the same time period (IFAD, 2015).

The government has also invested heavily in its agricultural extension (advisory services linked also to input supply) programme and maintained a strong presence of government extension agents across the country. Between 2004/05 and 2009/10, 61,785 agricultural extension agents were trained and 9,265 farmer training centres were established, one in every village (GDF, 2011). Although some finance for agricultural extension has been contributed by donors, the Ethiopian government has provided a large share of the investment from its own resources. This means that the government has been able to maintain a great deal of independence over its agricultural extension programmes, whereas most other African countries saw their extension programmes

Box 4: ADLI in Ethiopia

Ethiopia's ADLI strategy is centred around the aims of agriculture supplying commodities for exports, domestic food supply and industrial output and the expansion of the market for domestic manufactured goods. The basic premise of the strategy is that growth in the agricultural sector will spur growth in other sectors. Features of the strategy include:

- commercialisation of smallholder agriculture through product diversification
- shifting to higher-valued crops
- promotion of niche high-value export crops
- support for the development of large-scale commercial agriculture
- effective integration of farmers with domestic and external markets;
- tailoring interventions to address the specific needs of the country's varied agro-ecological zones.

One key element of the strategy is the deployment of agricultural extension workers to every *kebele* of the country in order to transfer skills and information to farmers, supported by an extensive TVET programme in agriculture and the establishment of farmer training centres (UNECOSOC, 2010).

retreat under the terms of market liberalisation (Berhanu and Poulton, 2014).

Ethiopia stands out in terms of investments in agriculture in Africa. Agricultural spending in Africa as a whole has declined since 1990, from 5.9% of GDP in 1990 to 2.7% in 2013. In 2003, African governments signed the Maputo Declaration, agreeing to allocate at least 10% of national budgetary resources to agriculture and rural development policy implementation within five years. Only 14 countries have met or exceeded this commitment, and Ethiopia is among the seven countries that have exceeded the target most years (Benin and Yu, 2012). Since 2005, Ethiopia has consistently allocated over 15% of total national expenditure to agriculture.

Although urban poverty reduction has been comparatively slow, progress has been made since 2005 in reducing the proportion of urban households in poverty. Although the services sector has been the fastest growing sector in urban areas, recent studies have found that growth in services is strongly correlated with growth in agriculture. So although services do not appear to be poverty reducing independent of growth in agriculture, by combining with agriculture they have in fact contributed to poverty reduction (Vargas Hill and Tsehaye, 2014; World Bank, 2015).

Growth among small and medium enterprises (SMEs) has also been identified as a key driver of poverty

reduction in urban areas. Again, growth in SMEs has been found to be strongly correlated with growth in agriculture. According to the World Bank's recent poverty assessment, 64% of businesses were established using funds from agricultural production and these businesses were most active in the months of harvest and immediately thereafter (World Bank, 2015: 90). This suggests that rural households use investment in urban SMEs to increase the value of returns from agriculture and also potentially use such investments to spread risk.

Social protection

Ethiopia's Productive Safety Net Programme (PSNP) is the largest social protection programme in Africa and a key driver of poverty reduction; it has also prevented impoverishment. PSNP was introduced in 2005 as a response to the inefficient use of food aid, which was then being used to resolve periodic crises resulting in food shortages, and also to address chronic food deficits in the country's poorest areas. Box 5 provides more detail about the PSNP.

The PSNP targets the most vulnerable areas and households in order to increase rural poor families' long-term resilience to food shortages. The programme provides unconditional, predictable transfers (in cash or food) in periods of food deficit and requires adult ablebodied household members to participate in communal productive activities, such as rehabilitating land and water resources and developing community infrastructure, such as roads, schools and clinics. Given the work component, this is considered a 'food for work' programme in which the social protection and work components are combined, explaining the programme's designation as 'productive'.

The programme operates in eight regions: Afar, Amhara, Dire Dawa, Harare, Oromia, SNNP, Somali and Tigray. In 2010, roughly 1.5 million households participated in the PSNP (approximately 10% of the country's population). The programme is mainly donor-funded and its budget represents 1.2% of Ethiopia's GDP (Lieuw-Kie Song, 2011). A recent study by the World Bank (2014b) estimated that PSNP transfers have reduced poverty by 7% since 2005. By increasing agricultural-input use, the PSNP improved agricultural productivity in rural areas and so contributed to poverty reduction.

Graduation from the PSNP is the long-term goal of the programme and is measured by food security and household asset indices (set at the community level). According to these criteria around 500,000 people have graduated from the PSNP since 2005, however improvements in food security have tended to lag behind improvements in asset holdings and some regions have seen fewer graduates than anticipated, among other operational limitations (Hoddinott, 2014). Also in terms of women's participation in the programme, despite the integration of gender-specific vulnerabilities to the programme's design, there are concerns over whether women's participation has been meaningful and has served to confront unequal

Box 5: The Productive Safety Net Programme

The Ethiopian government and a consortium of donors implemented the Productive Safety Net Programme (PSNP) as a response to chronic food insecurity in 2005. Its objective is not only to prevent asset depletion in chronically food-insecure households but also to build community assets. It aims to bridge food gaps that arise when food production and other sources of income are insufficient.

Public works and direct support are two key elements of the programme. The public works element pays selected beneficiaries US\$0.75 per day for their labour on projects designed to build community assets. The direct support element is intended to provide cash or food transfers for labour-scarce or disabled households.

There are other social protection measures, collectively called the Other Food Security Programme (OFSP), which are designed to encourage households to increase income generated from agricultural activities and to build up assets. Beneficiaries of OFSP can receive at least one of several productivity-enhancing transfers or services. While the PSNP is large and covers about 7 million chronically food-insecure households, the OFSP is limited in coverage.

gender relations rather than simply to 'focus on numbers' (Jones et al., 2010).

In urban areas, the Integrated Housing Development Programme has also driven poverty reduction, not only in the provision of affordable housing for the poorest, but also in terms of employment creation. Since 2006, 100,000 housing units have been constructed housing half a million residents, while at the same time creating employment opportunities for more than 200,000 residents organised by 3,000 SMEs (Keffa, 2014).

Remittances

Ethiopia is among the highest recipients of remittances in sub-Saharan Africa. Inflows to the country have increased dramatically in recent years, from US\$46 million in 2003 to \$624 million in 2012 (World Bank, 2011), although the actual volume of remittances could be between US\$1 billion and \$2 billion annually when accounting for informal remittance channels (Geda and Irving, 2011).

Early migration waves in the 1970s and 1980s were among well-educated, predominantly urban Ethiopians, while more recent waves of migration have included the less well-off and rural residents (Geda and Irving, 2011). Common destinations for emigrants from Ethiopia include neighbouring countries, the United States, Europe and the Middle East. A recent study by Andersson (2014) finds that remittances are more common among households with educated household members and households whose head is self-employed. Andersson's study finds a positive relationship between the receipt of remittances and consumption assets, and no measurable impact on the accumulation of productive assets. The study also finds that there is a positive and significant relationship between the remittances and household subjective wellbeing.

3.2 Drivers of education progress

Education placed at the heart of the government's economic strategy

The explicit goal of the 'universalisation of primary education' has been hard-wired into every national development plan since 1995. The goal was devised when participation rates were low and inequitable, even by regional standards, but persists today, even when universal primary enrolment has effectively been achieved, and remarkably evenly throughout the country (see Section 2). The close linking of education planning to successive development strategies for nearly two decades was both deliberate and consistently implemented. Ethiopia needed citizens able to solve problems, adopt new technologies, become entrepreneurs, take on civic responsibilities and unite under a common language, and the key route to this from the outset has been mass education.

Unlike in many other countries, the expansion of education infrastructure and teacher training and deployment has therefore not been a separate initiative, owned mainly by education officials, in competition with other resource and planning priorities. Instead, it was always seen as a vital, time-bound and protected component of the headline strategy of agriculture-led modernisation.

This cluster of interventions in education was always designed to be mutually reinforcing. Progress in education was intended to support farming improvements. For example, younger, more literate and numerate farmers have sometimes been targeted for specific extension advice and additional land, and other inputs are allocated preferentially to them.²² Farms in Ethiopia with educated household members achieve higher yields, opt for a higher-value crop mix, and are more likely to adopt improved soil- and water-conservation practices and to take up value-adding rural service activities alongside farming (Weir and Knight, 2000). We discuss the evidence basis for this in Section 4.

'Education *is* our national human resource development plan' – Government minister

Scale of ambition and investment

The sheer scale of national ambition and implementation for universal basic education is hard to overstate. Working upwards from an extremely low base towards the goal of achieving 100% net primary enrolment meant that new or expanded schools had to be built in virtually every village cluster (*kebele*), within a maximum radius of two hours' walk. A massive school-building programme across the country has acted as both an enabler of increasing enrolment, providing the facilities to educate and sometimes house students, as well as an influence on demand, inspiring more and more parents to send their children to school in their locale.

From the start of the first Education Sector Development Plan (ESDP I) in 1997, there was a 190% increase in the number of primary schools in operation to 2012/13.²³ Many of these are in rural, remote regions and over 80% of all primary enrolment is now in rural areas. Just over 19,000 primary schools were built in two decades from 1992 to 2012 and the number of secondary schools, although slower to expand, grew more than fivefold over that same period (EFME, 2000; 2013). A major new programme of extending over 3,800 primary schools, to allow them to include lower secondary education, Grades 9 and 10, is planned in the latest five-year education plan.

This massive effort has been nested within a longterm commitment to spend 60% of the national budget (including on-budget aid, which has been very high for basic services over the past decade) on investments and just 40% on recurrent costs – proportions likely to require gradual rebalancing in future.²⁴ Moreover, 70% of the capital spend was, and still is, deliberately concentrated in just five sectors (education, health, water supply, transport infrastructure and agricultural inputs and services), of which education has systematically been among the three largest components.

These commitments were supported through a period of unprecedented growth (discussed above) globally, with ten consecutive years of GDP growth around 10% and a tax effort rising to around 13% of GDP (in 2013). This produced a huge increase in public revenues. Nominal

- 23 Calculations based on several Education Statistics Annual Abstracts.
- 24 Interview, Ministry of Finance and Economic Development.

²² Interview, Ministry of Agriculture. However other sources and community-based surveys make clear that larger farmers, typically of an older and lesseducated generation, remain the main beneficiaries of these services.
public expenditure²⁵ rose over threefold, from 40 billion birr (\$USD 4 billion) to 133 billion birr (\$USD 13.6 billion)²⁶ in just four fiscal years, 2008-2011.

Looking ahead, the enrolment rate at lower secondary (Grades 9 and 10) has not moved significantly above 40% in the past five years, though absolute numbers entering secondary education have more than doubled, with the huge momentum of demographics and primary access expansion. School dropout rates at the end of Grade 5 (primary cycle) and Grade 8 (basic) remain a serious problem. The physical distance from villages to towns, where secondary schools are clustered, and other social obstacles remain deterrents for a majority of pupils who would otherwise be able to progress. There are also related parental concerns about children 'losing touch' with their families and communities, and these may continue to restrain demand even if the logistical and cost barriers of moving to towns are resolved effectively.27 Persistent unemployment among educated youth may also deter parents from sending their children to school if the prospect of higher-wage employment is not assured when they graduate.

Undaunted, the government believes it can still achieve universal access through to Grade 10 (and near-universal merit-based advancement into some form of TVET or higher education thereafter) by the planned horizon of 2025, with an interim goal of 75% by 2020, the end of the second Growth and Transformation Plan (GTP2).²⁸

The underlying vision of universal access therefore still drives the search for solutions. For instance, by attaching a Grade 9-10 module to at least one in five primary schools at *kebele* level, this continues the historical thrust of 'bringing education to the people, not the people to education'. In 2015 alone, at least 850 new secondary schools are in the approved state budget.²⁹ While the logistical and financial challenges involved in universal secondary enrolment (and, beyond that, a vastly expanded tertiary-education landscape) in a low-income country still look formidable to outsiders, there is no doubting the government's steadfastness of intent.

3.3 Drivers of employment progress Public works

Ethiopia has made remarkable progress in employment quantity and quality. In rural areas, unemployment has been reduced through new training programmes and the introduction of the Productive Safety Net Programme, in particular its public works component (Broussard and Tekleselassie, 2012). Although the main goal of the PSNP is to improve food security in poor rural areas, the programme has created numerous job opportunities (albeit low paying), with an estimated 1.2 million workers employed annually (Lieuw-Kie Song, 2011).

Public works programmes, especially public housing, spurred job creation in urban areas.³⁰ The Integrated Housing Development Programme, aimed at mitigating a growing housing problem, created new job opportunities and stimulated micro and small enterprises (MSEs) in the construction sector (World Bank, 2009). By ensuring monthly salaries, public works programmes also contributed to the large reduction seen in the proportion of working poor in the population.

Additionally, since the mid-1990s, the Ethiopian government engaged in a number of infrastructure projects, mainly in transport and energy, such as the Road Sector Development Programme and the Renaissance Dam project. The size of some of these projects is so large that they are commonly referred to as 'mega-projects'. These programmes not only created employment and improved living standards, but also had a number of spillover effects. According to a number of interviewees from government ministries, mega-projects stimulated investments and learning of domestic subcontractors and created demand for MSEs in urban areas. They benefited the construction and utility industries and stimulated production in related industries, including cables, furniture, metals, and sanitary items.³¹ By developing infrastructure, they also improved the business environment for firms in all industries. This finding is confirmed by recent empirical research showing that, by increasing market access in formerly isolated towns, the Road Sector Development Programme spurred growth of the manufacturing sector and improved the geographical distribution of manufacturers (Shiferaw et al., 2012).

- 25 To be treated with caution due to persistently high inflation.
- 26 2008 average exchange rate.
- 27 Interview, Ministry of Education.
- 28 Interview, Ministry of Education.
- 29 Interview, Ministry of Education.
- 30 Interview, Ministry of Finance and Economic Development.
- 31 Interviews, Ministry of Urban Development and Construction, National Planning Commission and Ministry of Finance and Economic Development.

Support to private sector development

Limited access to finance has been found to be a prominent barrier to entrepreneurship (Wolday and Woldehanna, 2014; World Bank, 2014d). To mitigate this constraint, foreign exchange and fiscal and financial incentives are offered through the Ethiopian Development Bank to large firms in the manufacturing industries targeted by the Growth and Transformation Plan.³² To reduce the foreign exchange losses related to energy shortages, the government has rationed electricity to some selected industries, to the benefit of exporting industries. While exporting industries have benefited from this measure, they did not benefit enough to compensate for the negative effect on energy-rationed industries. Nevertheless, the government's planned electricity-sector investments are expected to contribute positively to economic growth, by raising the Ethiopian GDP by 6% (Engida et al., 2011).

These incentives are criticised for being insufficient: the collateral-based loan system, lack of expertise in earmarking loans, and foreign currency constraints are still considered binding constraints to private sector development.³³ The need for a financial system capable of making access to finance easier, especially to SMEs, has also been identified as one of the causes of low export dynamism in Ethiopia. The financial constraint on SMEs creates a 'missing middle' phenomenon and reduces the export potential of the country (World Bank, 2014e).

The Ethiopian government, with the support of several donors (e.g. UNIDO and UNDP), is also building a number of industrial and agro-processing parks to provide firms with the necessary infrastructure. These parks are considered a cornerstone of the industrial strategy to stimulate exports and manufacturing growth.³⁴ They are intended to attract foreign direct investment (FDI), and so spur investments and exports, and to create additional and higher-quality employment opportunities.³⁵ FDI can be an

important channel of knowledge and technology transfer for domestic firms.

Urban employment has been stimulated by the MSE support programme implemented since the 2003 Industrial Development Strategy.³⁶ A high proportion of Ethiopian firms are MSEs and their growth explains employment growth, particularly in trade and business services. The MSE development programme created and supported hundreds of thousands of firms (exact figures are disputed).³⁷

Public works programmes and the MSE programme also contributed to the formalisation process, reducing informal employment, with firms formalising in order to accept government support and access to public procurement processes.³⁸ This in principle leads to improvements in job quality, with formal employers obliged to respect labour regulations and standards.

At this stage, there is no empirical evidence that confirms whether, to what extent and through which channels the MSE programme has had a positive impact on entrepreneurship, employment or socioeconomic development in Ethiopia. Moreover, even if MSEs might generate employment in the short run, there is no consensus in the literature on the role of MSEs or SMEs in economic or employment growth (see for example Page and Soderbom, 2012). In Ethiopia, exports, but also domestic production and sales, are dominated by medium and large firms (Sutton and Kellow, 2010), reflecting the very low levels of production of SMEs. This means that, together with policies to enable the creation of new firms, incentives to spur the growth of existing medium-sized firms are crucial for long-term economic growth and industrialisation. While policies so far have not devoted enough attention to this, the government seems to have recognised the existing 'missing middle' issue and is designing policies to tackle it.39

³² Interview with National Planning Commission.

³³ Interview with Addis Ababa Chamber of Commerce.

³⁴ Interview with Ministry of Industry.

³⁵ Foreign firms generally pay higher wages and are more willing to provide training to their employees than domestic firms (interview, Addis Ababa Chamber of Commerce).

³⁶ Interview with Association of Ethiopian Microfinance Institutions, National Planning Commission, Micro and Small Enterprise Development Agency and Addis Ababa Chamber of Commerce.

³⁷ Interview with the Micro and Small Enterprise Development Agency.

³⁸ Interview with Ministry of Finance and Economic Development.

³⁹ Interview with Ministry of Industry.

4. What is behind the multidimensional nature of Ethiopia's progress?



In addition to explaining the progress achieved in the areas of material wellbeing, education and employment individually, this case study also seeks to understand how Ethiopia has simultaneously addressed multiple challenges in wellbeing at an accelerated rate compared with other countries in Africa. To that end, this section outlines the broader multisector approach of the past 20 years and examines some of the key programmes and policy strategies that have contributed to broader change across sectors. The evidence presented in this section highlights explicit efforts on behalf of the Ethiopian government to integrate development strategies across sectors and at different levels of government.

4.1 An ambitious multidimensional approach centred on poverty reduction

One of the key factors contributing to Ethiopia's progress in multiple dimensions of wellbeing over the past 20 years has been the single unifying principle of poverty reduction, which is at the core of government planning. A strong statement on poverty reduction was made by the

'The government has a developmental framework that it follows religiously and it has agencies working in priority areas' – Senior international official

government in the 2002 Sustainable Development Poverty Reduction Strategy (SDPRP) and resonates through all subsequent government strategies:

'For some countries, economic growth is the primary policy goal, and poverty reduction is to be achieved through measures complementary to growth. This is not the approach of the Ethiopian government. Poverty reduction is the core objective of the Ethiopian government. Economic growth is the principal, but not the only, means to this objective.'

The 2002 SDPRP process was seen as a welcome exercise for the government of the time given that poverty reduction was already top of the agenda. Despite increasing political control by the Ethiopian People's Revolutionary Democratic Front (EPRDF), Ethiopia has built a strong structural and legal foundation for effective local governance (Dickovick and Riedl, 2010).

The Ethiopian government has set very ambitious development targets, not least the goal of reaching middleincome status by 2025, with correspondingly ambitious projects for meeting those targets. For example, Ethiopia's PSNP is the largest social protection programme in Africa, with over 7 million participants at of cost of around US\$250-350 million per year (The IDL Group, 2007). The public works component of the PSNP, as described above, along with additional public investments, has also contributed to major infrastructure developments with direct social benefits. It is important to note that these initiatives have been primarily funded through donor assistance.

Other major pro-poor government investments include road-building in particular. Over the past 15 years the road network coverage in Ethiopia has more than doubled, increasing access to markets and public services in more marginal areas (European Commission, 2014). While Ethiopia is a top recipient of aid for infrastructure, the government has also invested heavily from its own resources, spending a quarter of each year's infrastructure budget on roads and earmarking US\$4 billion over the next 10 years under the Road Sector Development Programme (FDRE, 2015).

The Integrated Housing Development Programme launched in 2005 is another major government investment with poverty reduction at the core. This programme set the target of constructing 400,000 housing units. While this was only half met by 2010, and the impacts on the poorest have not been fully realised, this has been recognised by UN-Habitat's Cities Alliance as an ambitious initiative.

4.2 Decentralisation and the delivery of services

This period of progress in wellbeing coincides with Ethiopia's transition to a more decentralised governance system, devolving powers from central government to regions and *woredas* (districts). As the country emerged from civil conflict in the 1990s and power was consolidated by the opposition forces to the former Derg dictatorship, the 1995 constitution introduced a unique ethnic federalist system with devolved political, fiscal and administrative powers to nine regions (based on ethnic nationalities) and the EPRDF took control of central government (Dickovick and Riedl, 2010).

The ethnic tensions that have fuelled conflict throughout Ethiopia's history largely motivated the design of this unique system, and the devolution of power was established as a political compromise among divided groups. In addition to longstanding tensions between Ethiopia's diverse ethnic groups is a rural–urban divide between the capital, Addis Ababa, and the rural population. These divides have developed over a long political history in Ethiopia, but they also manifest in socioeconomic inequalities, as shown in Section 2 in terms of income and education inequalities.

One empirical study measured regional disparities in education service delivery before and after decentralisation, finding that the largest improvements in education after decentralisation occurred in some of Ethiopia's poorest regions. For example, the aggregate budget for education in SNNPR increased 44% in remote woredas and only 9% in woredas less than 50 kilometres from a zonal capital (Garcia and Rajkumar, 2008: xv). The narrowing of gaps in education outcomes was also observed after decentralisation in terms of gross enrolment rates, Grade 8 examination pass rates and pupil-teacher ratios. A 2012 Young Lives report (Abebe, 2012) on efforts to improve school management and administration at the local level also confirms that good progress has been made in this regard, while recognising remaining challenges that have constrained the process of devolving critical decision-making to the school level and persisting funding constraints.

Decentralisation has sought to bring decision-making power on social and economic affairs to local areas, though like any transition to a more decentralised system, this transition has not been evenly rolled out. There are concerns that the system does not devolve enough power to the woreda level, particularly in terms of fiscal powers, and the EPRDF maintains considerable political authority. Overall, however, Ethiopia's decentralisation 'experiment' has fared quite well compared with other countries (USAID, 2010). Some interviewees for the current paper noted that one purpose of the maintenance of central power was to ensure that the broader national objective of poverty reduction filtered through all levels of government. Many cited the policy performance matrix, which forms part of the GTP strategy, as an effective feedback mechanism for all levels of government to ensure that policy outcomes contribute to the national povertyreduction agenda.

4.3 Harnessing education to improve agricultural productivity and reduce poverty

As discussed in Section 3, successive phases of the government's Growth and Transformation Plan, centred on 'agriculture-led industrialisation', were intended to boost land productivity by an integrated, multi-pronged approach. This would involve a massive injection of the traditional mechanisms of agricultural extensions and inputs and rural infrastructure development, but also, and crucially, universal education. This, to begin with, would be up to primary (Grade 5) and basic (Grade 8) levels.

Essential to the knowledge-based agricultural modernisation was the idea that younger generations of educated farmers would adopt improved farming inputs and techniques faster and more sustainably. Indeed, extension activities and supplies of inputs were increasingly targeted at recently educated young farmers, and information was focused on the children of farmers through education so that it could pass on to other members of the household.⁴⁰

There are a number of channels through which additional education can credibly improve farm productivity and thus lead to higher rural incomes and poverty reduction. Education of the farming family head or 'manager' enables and allows for better choices of output and input mix, the confidence to opt for a higher-value crop mix and the adoption of improved soil- and waterconservation practices. Education of other ex-student workers on the farm assists managers in their choices and can also enable these workers to source non-farm income to pay for farm improvements and act as a risk buffer. Importantly, this can all lead to external effects, as knowledge is passed across the community, including to farms headed and operated by less-educated families, who can emulate the practices of educated 'model' farmers.

Cross-country studies before the 1990s typically found significant relationships between education and

agricultural productivity, but more recent studies have displayed a mixed picture. However, one major piece of work (Reimers and Klasen, 2013) assessing 95 developing countries from 1961 to 2002 has been able to show that these recent studies were flawed by using poor proxies for educational achievement, such as enrolment and literacy. Using the more appropriate indicator of years of educational attainment, they identified a major, distinct effect of schooling on farm output. Output is seen to increase on average by approximately 3% per year of additional schooling achieved. Improvements tended to be higher in situations where more advanced farm technology is already available to spur rising productivity.

Empirical evidence from Ethiopia is not recent but is consistently positive. Admassie and Asfaw (1997) found educated farmers to be more efficient than those without education. Mirotchie (1994) found that *primary* schooling had a significant effect on productivity in Ethiopia, much more so than secondary schooling. Weir (1999) finds in a study of 14 Ethiopian villages producing cereals using traditional methods that there are significant positive returns to additional years of schooling in terms of crop output. The same study also found that social benefits of schooling – raising the average additional attainment in the village rather than the individual household – have an even greater effect on farm productivity. This is primarily through the spread of better knowledge (Box 6, overleaf).

The many direct and indirect effects of education on agriculture must however be seen in a context of other simultaneous changes. Rural livelihoods have also been greatly affected by rapid upgrading of road, water and electricity infrastructure, as well as urbanisation and shifting relative prices of crops and other commodities, which boosted incentives to produce for the market. It is very difficult to disentangle all these effects and attribute a definitive role to education, especially in the shorter term. Undoubtedly, improved education lays the foundation for longer-term reinforcing gains.

Box 6: The effects of education on farmer productivity in Ethiopia

Using ERHS data from 14 villages across Ethiopia, Weir (1999) studied the impact of education on the rural economy to determine whether any measureable benefits can be observed at the household and community levels. Among household heads who are farmers, returns were greatest for those who had attained at least some upper primary schooling (Grades 4 to 6) but fell off thereafter. This shows that even basic primary education can provide the knowledge required to enable farmers to adopt advanced farming methods. Ethiopia's rapid progress in primary enrolment and completion (described in Section 3.2) has thus provided the skills and knowledge needed to achieve poverty-reducing increases in agricultural productivity of the kind that indeed occurred in subsequent years.

Weir's findings do allude to a concern for Ethiopia – that further educational attainment, beyond Grade 6, fails to advance farmers' productivity. This is hypothesised to be due to the adherence to relatively traditional farming. This adds to Reimers and Klasen's (2013) findings, along with a number of studies conducted in the 1980s and 1990s (most prominently Foster and Rosenzweig, 1996), that returns to schooling, across the world, have been greater in countries where farming is more technologically advanced.

Looking ahead, these findings suggest that even higher returns to education could be reaped, as the technology frontier shifts. This has been the Ethiopian government's clear intent for a number of years and the focus of its extension and input programmes. It should gain momentum as newly educated cohorts in the country become managers of farms themselves. They will then become the users and publicists for more advanced tools and technologies. Ethiopia's land-use institutions, including preference in land rentals given to young and educated farmers, are said to facilitate this shift.^{*}

* Interview, Ministry of Agriculture. As mentioned earlier, nonetheless the current largest users of government agricultural services remain typically larger/richer/older, and often less-well educated, farmers. But this balance across generations will likely shift.

5. What are the challenges?



Ethiopia's progress over the past two decades has been remarkable, but has it been transformative? Can we expect this rate of positive change to continue and be sustained in the medium to long term? Ethiopia's low baselines in per capita income and human development in the mid-1990s meant that the task of transforming the country was to be a major one, phased over decades not years. While progress in the three dimensions considered in this report has been significant and sustained through institutionalised policies over the past 15 years, there remain some important milestones to meet in the coming years to achieve transformation.

5.1 Improvements in wellbeing for the poorest are limited

While the chronically poor have benefited from many of the initiatives promoted by the Ethiopian government and donor community identified above, the challenge remains to fully incorporate the poorest into Ethiopia's exceptional growth trajectory. A lack of physical assets, limited access to education, and remoteness have prevented chronically poor households from engaging in activities that could lead to improved material wellbeing, leaving them 'permanently behind' (Dercon et al., 2011).

Between 1996 and 2005, growth in consumption among the bottom 10% of the income distribution was higher than for the rest of the income distribution, meaning that the chronically poor did benefit over this period. However, this trend reversed between 2005 and 2011, and the poorest saw consumption losses of 0.5% per year (World Bank, 2015). A critical finding from the latest Poverty Assessment is that while growth in Ethiopia was pro-poor between 2005 and 2011, some households today are substantially poorer than any household in 2005. The report does not identify any causes for this troubling trend, citing a lack of panel-data to establish which households have lost income over this period (World Bank, 2015).

'Human development and infrastructure are the stepping stones. These will maintain the growth momentum' – Senior government official

Research from the Chronic Poverty Research Centre found that chronically poor households in rural areas tend to be landless or farming small plots, possess few assets and are food insecure, while in urban areas, limited education and access to savings and credit are common constraints (Brown and Teshome, 2007). With the exception of issues related to land, the majority of these drivers of chronic poverty are indeed target areas of the government's pro-poor agenda, as discussed above. This suggests that further evaluation of these policies is needed to identify the persisting barriers for the poorest households. Such evaluations are taking place, as in the case of the PSNP, and the design of the next growth and transformation plan is taking learning from these evaluations into account, according to government officials interviewed for this study.

5.2 Quality of education and the sustainability of education expansion to higher levels

Fewer than half of the minority of students proceeding beyond Grade 5 (2010) complete primary education (Joshi and Verspoor, 2012). Of those who go on to take the Grade 10 national learning achievement (NLA) exams, 77% fail to achieve the prescribed minimum benchmark of 50% in each test. In Grade 12, the corresponding proportion is between 38% and 64% (depending on the subject) (USAID, National Learning Assessments, 2014). Given that Grade 12 is already a highly selected group, failure on this scale is disappointing. There are also large gender disparities – although enrolment of girls has rapidly increased in very recent years and come close to matching that of boys in Grades 11 and 12 (EFME, 2013), boys tend to outperform girls in testing by some margin (Joshi and Verspoor, 2012).

There have been suggestions (illustrated by matching NLA Grade 10 tests to South African Grade 12 science tests) that the Ethiopian secondary curriculum is set too hard. This may be driven by the aim of allowing only the best one-fifth of students into Grade 11-12 and into tertiary education, rather than providing meaningful secondary qualifications for the other four-fifths. This raises the question of whether there is an excessively 'elitefocused' style of secondary education. This may need to be addressed if wider secondary completion is desired. Beyond this, poor learning outcomes may be a result of teacher quality, but there is undoubtedly a very large agenda of teacher pre-service and in-service training in the country. Success has already been established in bringing down pupil-teacher ratios in secondary education, from 43 in 2007/08 to just 28.7 in 2012/13 (EFME, 2008; 2013). The large-scale multi-donor GEQIP programme is dedicated

specifically to improving quality within Ethiopian schools and demonstrates awareness of the importance of quality and its subsequent effects on dropouts and retention. This focus will have to be continued if Ethiopia is to support sustained increases in enrolment and learning outcomes.

The consequence of lower-quality education – a lack of skills among the workforce, and hence limited 'trainability' for enterprise-specific tasks – is well known in Ethiopia.⁴¹ The government is concerned about the skills attainment of Ethiopian students in relation to industry and is heavily committed to TVET schemes as well as supporting a range of incentives to boost skills development within firms, including tax support for in-house and dual training and apprentice investments.

The financial burden of attaining (near) universal secondary education by 2025, the current strategic objective, is huge. Ethiopia already devotes 25% of all government expenditure to education (EFME, 2013). Yet fewer than 4 in 10 secondary-age students are currently enrolled. At present, 95% of provision is governmental, with any alternative secondary schooling (fee-paying and charitable initiatives) mostly based in Addis Ababa.

The current Ethiopian cost structure is not favourable for expansion of secondary education. The ratio of per-student secondary-to-primary costs is double that of countries that have succeeded in expanding and universalising secondary enrolment (Joshi and Verspoor, 2012). It is even higher than that of other countries that have yet to make this leap in education (Joshi and Verspoor, 2012). Ethiopia's ratio of tertiary to secondary costs is even further out of line, measuring several times greater than the ratio for more successful countries.

While TVET represented a quarter of all tertiaryeducation spending in 2003/04, this had fallen to under a tenth by 2007/08. This is partly because TVET can be delivered by private providers, but it also reflects the major increase in attention and spending devoted to university education. Public expenditure on higher education nearly doubled between 2003/04 and 2007/08 (Ravishankar et al., 2010). Since 2004/05, the number of public universities has increased from 8 to 33. The number of private higher-education institutions has also grown, reaching 66 institutions in total (EFME, 2015).

With rapid expansion comes concerns about how quality may be affected (see Section 5.2). The choice of subjects and streams in TVET and university is still heavily 'steered' by the central administration, with quantitative labour-force projections influencing decision-making. Employers have little involvement in the process (Joshi and Verspoor, 2012). Such relatively mechanical approaches, based on inherently uncertain labour-market perspectives, 5 to 10 years into the future, have been widely discredited

⁴¹ Ethiopia receives surprisingly good scores in the World Bank's Enterprise Survey for its proportion of unskilled workers and the proportion of firms identifying labour skills as a major constraint (World Bank, 2011). This is likely to be the result of the survey's focus on larger manufacturing and services firms – of which there are still very few in Ethiopia.

in recent decades in industrialised countries, and complemented or substituted progressively by more adaptive processes, with greater private-sector inputs and taking more note of actual student demand.

This rapid increase in higher education spending may be regressive. Secondary education has been squeezed, receiving less than 10% of the public education budget in 2009/10 (compared with around 30% or more in countries such as India and Indonesia (EdStats average for 2007-2009)). For 2010-2015, the government planned to spend nearly three times as much on TVET and university education as on secondary education (EFME, 2010-2015). This is despite the vastly greater number of secondary students compared with those in higher education and a clear need for budget allocations to go to the building of rural secondary schools. The per-student spending ratio for tertiary versus secondary education in 2009 in Ethiopia was 23, and for tertiary to primary students it was 66 (Joshi and Verspoor, 2012).

This has prompted model-based projections (Joshi and Verspoor, 2012) that, without significant reforms, Ethiopia would need to devote at least 6% of GDP (about a third of the national budget at current expenditure shares) to public education to fill the gap in enrolment. This is unlikely to be feasible even with optimistic fiscal projections. However, a somewhat lower rate of increase of spending, peaking at 5.2% of GDP (still high by international standards), coupled with cost-saving and cost-sharing reforms, could succeed in plugging this gap (Joshi and Verspoor, 2012).

Within these recommended reform packages, however, is a steady expansion of the scope of non-governmental service provision, including through voucher-type and other public-private partnership mechanisms. The most recent World Bank Education Public Expenditure Review highlights the growth of private providers of TVET opportunities, a factor that might encourage the government to reallocate its spending from this sector to lower levels of education. It recommends in general 'slowing down the pace of public investment in higher education, so as to ensure adequate space for recurrent inputs and to improve the quality of investment spending' (Ravishankar et al., 2010). This is in reference to the skewed level of spending towards tertiary over school-level education, as noted above.⁴²

Given the increase in private providers of education, care will be needed to avoid exacerbating inequalities in existing take-up of secondary and TVET options. Possible strategies could include partnerships involving staff secondments and options of student loans and graduate taxes, which we understand will be assessed objectively.⁴³ Understandably, these 'mixed' solutions of public and private spheres remain politically controversial. The fiscal burden towards expanding secondary education is real though, and flexible solutions will be needed to overcome it.

5.3 Incomplete transformative change limiting progress in material wellbeing

Ethiopia has made progress in employment quantity and quality, but there are still issues of unemployment in urban areas and low-quality employment in rural areas, both limiting the extent to which this progress has contributed to material wellbeing for the poor. These patterns are related to structural change from agriculture to services, spurred by productivity growth in the agricultural sector. This direction of structural change was only partially sought by the government. There are two main factors behind Ethiopia's limited structural change: limited manufacturing growth, and inefficiencies and limited competition.

There are clear reasons for entrepreneurs to prefer to invest in services rather than manufacturing: services are less capital intensive, and returns to investments are much quicker. Due to the starting point of many Ethiopian entrepreneurs, a rapid cultural shift towards modern entrepreneurial ventures and long-term investments is hard to make. However, many leading manufacturers in Ethiopia began life as traders and then decided to set up a manufacturing arm. Traders possess detailed knowledge of their markets, allowing them to identify niches of potentially successful import-substituting goods and to develop distribution networks (Sutton and Kellow, 2010). If this strategy has produced successful manufacturers in the recent industrial history of Ethiopia, it could be expected that part of the service boom observed today might transform into a future larger manufacturing industry.

The second factor limiting structural change is production inefficiencies and competition. Most Ethiopian small businesses are family businesses. They are not used to striving for efficiency because protected domestic markets have long allowed them to produce with low efficiency and high prices. These firms are also not used to selling in the international market.⁴⁴ Ethiopia has one of the lowest ratios of merchandise exports to GDP, a small number of exporting firms (half as many as Kenya), and low exporter turnover, meaning that few firms exit the export market, but neither are firms entering it. Large, established firms dominate production and exports, while young SMEs are financially constrained and so limited in their growth possibilities.

⁴² A recent World Bank study (Patrinos and Montenegro, 2014) covering 139 countries shows that private returns to education are highest at primary level; this effect is greatest for low-income countries. This adds weight to the argument for encouraging Ethiopia to divert more funding towards lower levels of education.

⁴³ Interview, Ministry of Higher Education.

⁴⁴ Interview, Ministry of Industry.

International competitiveness is also hampered by various regulatory burdens and an overvalued exchange rate that erodes Ethiopian exports' competitiveness (World Bank, 2014e). Corruption also affects competitiveness and Ethiopia scores 32% for control of corruption according to the Worldwide Governance Indicators (where 100% performance implies best practice). This is higher than Kenya and Nigeria, with 13% and 9%, respectively, though considerably lower than Rwanda or Botswana at 72% and 79%, respectively (WGI, 2014).

Binding constraints to international competitiveness are often industry or firm specific (Dinh et al., 2012). The government's plan to open the domestic market to foreign competition in the near future will require firms to become more competitive to enter foreign markets and to 'fight' competition from foreign products in the domestic market.⁴⁵

Apart from these factors, there are other structural and industry-specific obstacles to further manufacturing expansion. Manufacturing growth requires faster growth in agricultural productivity, to allow labour to shift to manufacturing (World Bank, 2014d).⁴⁶ However, manufacturing productivity is low and decreasing (being not much higher than agricultural productivity, which is rising). Low productivity in manufacturing is at least partly explained by lack of industry-specific skills and knowledge, as exemplified by the case of the leather industry described in Box 7.^{47,48} Issues of poor quality also affect other industries, such as textiles and garments, food processing or steel (Sutton and Kellow, 2010; Dinh et al., 2012). Firm-level managerial skills are also likely to influence firms' productivity (Dinh et al., 2012).

Regulatory constraints (time needed to get a licence, and procedures for customs clearance) and poor logistics and infrastructure hinder investments in manufacturing.⁴⁹ This is confirmed by the World Bank's Doing Business indicators, which show that starting a business in Ethiopia takes less time and is simpler than in sub-Saharan Africa on average, but the cost of starting a business is much higher (World Bank, 2014d).

Structural impediments to further progress in material wellbeing through employment

Structural-change dynamics can explain the observed unemployment in urban areas (especially high for educated youth) and low-quality employment in rural areas. Employment has increased in manufacturing, trade, and

Box 7: Obstacles to manufacturing growth – the example of the leather industry

Together with garments and textiles, agroprocessing, and metal and engineering, the leather and footwear industry was among the priority industries identified in Ethiopia's first Growth and Transformation Plan (2005). The leather industry has been growing tremendously since the mid-1990s, with export value increasing from around US\$35 million in the early 2000s to US\$130 million today. The main exports also changed from semiprocessed and raw materials to finished products – footwear and gloves. The industry composition also evolved, shifting from state to privately owned.

Low labour costs, the availability of raw materials and policy incentives attracted foreign enterprises from China, India, Turkey, Italy, the UK and Germany. Export incentives such as duty-free imports of inputs and capital goods were introduced to promote the industry. Despite this progress, further development of the leather industry seems to be slowed down by structural bottlenecks and low quality of raw materials (skins and raw hides). This is explained by old-fashioned and inadequate animal husbandry practices. These quality issues are confirmed by the Enterprise Map developed by Sutton and Kellow (2010).

This problem has been partly addressed by series of animal vaccinations and provision of extensive services and the establishment of the Leather Industrial Development Institute to improve skills in the industry. This shows that more extensive policy coordination among different ministries is necessary and that policy outcomes can be severely affected by entrenched structural and behavioural factors.*

* Interview, Leather Association.

business services. Construction is not labour-intensive, and so is not likely to be a driver of job creation. Manufacturing, instead, is considered a powerful engine of job creation.

This would help to explain the high unemployment rates in urban areas. In rural areas, agriculture still provides employment to the largest share of the population and diversification into services is likely to represent only a secondary source of income for households. Job quality in the agricultural industry is quite low because agriculture is a low-productivity sector that offers low and unstable incomes.

- 46 Interview, National Planning Commission.
- 47 Interview, National Planning Commission.

48 Several government interventions already aim to improve competitiveness of the manufacturing sector by strengthening domestic capabilities (e.g. introduction of the *kaizen* production system and the establishment of an industry-specific research institute).

49 Interview, UNDP.

⁴⁵ Interview, Ministry of Industry.



Figure 16: Type of employment by industry, 1999 and 2005

Source: Martins, 2014, p. 32

Moreover, agricultural productivity growth has already reduced the number of workers that the sector absorbs. If the desired additional increases in agricultural productivity materialise, more and more workers will have to find a job outside the agricultural sector. This could potentially increase unemployment in rural areas, if alternative job sources do not develop.

In urban areas, unemployment is particularly severe among the highest-educated (and especially the youth). Low-value-added manufacturing activities, which are likely to characterise the manufacturing industry today in Ethiopia, do not require abundant skilled workers. The same applies to construction and trade services. Business services, instead, are likely to generate employment for skilled workers and are already doing so. The fact that unemployment is still high among the educated youth might hint at an insufficient job-creation potential of business services.

These challenges are extremely difficult to tackle and require a threefold strategy that combines further support to agricultural productivity, expansion of labour-intensive manufacturing industries and creation of additional sources of skilled labour (e.g. higher-value manufacturing niches). This strategy would allow rural workers to move to the expanding manufacturing sector, maintain competitive labour costs and at the same time create new job opportunities for both low-skilled and higher-skilled workers in urban areas.

Part of this strategy is already in place. For example, through industrial parks, the government is seeking to

attract FDI in a number of labour-intensive manufacturing industries. This strategy, however, has not yet produced the expected results. The policy of industrial parks could also be used to stimulate technology transfer and linkages with local micro, small and medium enterprises. This would likely require a higher number of skilled workers and would attract higher-value-added manufacturing activities. Another channel through which skilled workers could be absorbed is by seeking quality upgrading in traditional industries like food processing, textiles and leather. As discussed, these industries suffer from severe quality issues. Improving the skill profile of workers could increase employment opportunities for skilled workers and help to solve existing quality problems.

Hence, employment dynamics are intrinsically connected to the patterns of structural change that Ethiopia has experienced in the past two decades. Growth-enhancing structural change away from agriculture and into traditional and modern services and limited structural change towards manufacturing have improved labour quality and quantity, but still leave a large portion of the population in lowquality jobs.



6. What lessons can we learn?



Ethiopia's stability and consequent ability to make longterm plans and investments in education, agriculture, infrastructure and regional integration over the past 20 years has allowed Ethiopia to make the leaps in development that we report above. Granted, some critics consider this very stability a by-product of repressive practices, or at least of the restricted contestability of national and local politics. Nonetheless, Ethiopia's experience over the past two decades contains significant lessons that can be applicable in different country contexts. We group these lessons below into four categories.

The integration of sectoral policies can be facilitated through a clearly stated overriding goal of broad-based poverty reduction. Successive national development plans from the mid-1990s onwards have targeted rapid mass improvement in rural income and related social indicators, especially through huge investments in education, health, water supply, rural roads, input supply and agricultural extension, as described in this report. Such interventions, and the larger-scale infrastructure projects which followed, were always framed as means to the end of broadbased poverty reduction through rural income growth. Distributional concerns were, and remain, centre-stage, even though average income growth was also targeted. Not surprisingly, given this premise, Ethiopia is a regional exemplar of relatively stable, low levels of inequality, despite over a decade of extremely fast income growth.

Reversing Ethiopia's most glaring starting handicap, the sheer depth and breadth of poverty inherited from the 1980s was consciously turned into both the single overriding political imperative and the centrepiece of the new economic strategy. The population, overwhelmingly rural, could not withstand many more years of chronic poverty, punctuated by crises of drought, crop failure and inflation. Moreover, failure to raise basic living standards and reduce vulnerability across all major parts of the country, long divided ethnically, linguistically and climatically, might well put intolerable strain on the cohesion between regions in the newly federated state. Therefore, progress also needed to be broad-based and equitable.

A consistently implemented series of economic development plans is needed to support this goal, with priority for public investment in pro-poor sectors. The national economic strategy in its various phases has consistently relied on relatively high levels of public investment maintaining an approximate 60/40 split between investment and consumption expenditure in central government. Moreover, in line with the pro-poor growth focus noted above, a small number of 'priority sectors', including health, education, water, rural roads, agricultural support and electrification, were given absolute priority, receiving allocations of up to 70% of this substantial public investment budget.

This very high investment share is seen as needing to come down progressively as recurrent cost requirements to support prior investments, especially in the social sectors, inevitably rise, as will urban needs. However, this deliberate concentration on pro-poor investments and especially on massive intensification of rural infrastructure has been a powerful plank of the strategy since the beginning.

Long-term planning with a clear division of responsibilities can build foundations for broader transformation. During interviews, frequent reference was made to the 'stepping stones' approach: think big for the long term (as in, 'become a middle-income country by 2025'), but set clear intermediate targets (usually over five years, the normal Plan horizon) and then build momentum to carry from one phase through to the next. Intervening setbacks are considered, corrective action is taken and, where necessary, enabling policies are altered, without deflecting from the ultimate goal.

For example, the goal of universal secondary education is unshakeable. The current preference is to rely entirely on state-run schools for this expansion. If this approach cannot achieve the necessary pace, provision of state finance in some form for additional places in privately managed schools will be considered. Likewise, vocational training has long been the preserve of specialised state colleges. But enterprises are now increasingly encouraged, for example through tax allowances, to support apprenticeships in other ways. Such means/end distinctions ('keep the objective firmly in view, be flexible on implementation') were often alluded to.

Ethiopia is one of several large developing countries with a federal structure, including provincial parliaments and several tiers of local administration. Decentralisation is governed by explicit and well-understood processes, including a devolved budget formula that includes built-in correctives for regions that are measurably disadvantaged in terms of service coverage in different areas. This allows an element of local flexibility and yet reinforces the strong emphasis on achieving and maintaining equity across regions.

Continuous debate and coordination between sectoral policies and levels of government are required to address multidimensional challenges. The national Growth and Transformation Plan includes a policy performance matrix with key deliverables by all the relevant central and regional authorities, with explicit benchmarks. Ministers with widely different portfolios (such as agriculture, higher education, finance and planning), when interviewed, were able to refer in consistent language to benchmarks in each others' areas, and explained how these efforts fitted together. Similar feedback loops occur across different levels of government through the systems established to monitor activities at different levels of the decentralised system.

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