



COUNTRY PRIVATE SECTOR DIAGNOSTIC

CREATING MARKETS IN ETHIOPIA

Sustaining Progress Towards Industrialization



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CONTENTS

<i>Acknowledgments</i>	<i>vi</i>
<i>Abbreviations</i>	<i>vii</i>
<i>Executive Summary</i>	<i>ix</i>
01 A PIVOTAL TIME FOR REFORM	2
02 A STRATEGY FOR GROWTH AND POVERTY REDUCTION THROUGH EXPORT-LED INDUSTRIALIZATION	5
Strong Growth But a Narrow Base for Industrialization	8
03 EXPORT PERFORMANCE	11
04 A KEY ROLE FOR THE PRIVATE SECTOR IN DRIVING BROADER-BASED GROWTH AND JOB CREATION	14
05 SUBSTANTIAL OPPORTUNITIES TO UNLEASH PRIVATE INVESTMENT THROUGH REFORM OF ENABLING SECTORS AND ADDRESSING CROSS-CUTTING CONSTRAINTS	20
06 THE ENABLING SECTORS	31
Logistics	31
ICT/Telecommunication	33
Finance	39
Energy	45
Transport	48
Health	50
Education	53
07 CONCLUSIONS	56
APPENDIXES	
A Economy-Wide Private Impact Quantification (EPIQ) Model	58
B World Bank Group Lending and Advisory Services and Analytics Programs	60
<i>Notes</i>	<i>64</i>

BOXES

5.1	Broadening the base of industrial development: The Example of Fruits and Vegetables	28
6.1	The potential impact of reform of logistics services: Scenarios from the EPIQ model	34
6.2	The potential impact of reform of telecommunications services: Scenarios from the EPIQ model	40

FIGURES

ES.1	The Jobs Challenge and a Shifting Age Structure	x
ES.2	Low and declining exports to GDP ratio	xi
2.1	Total employment by sector	8
2.2	Subsector contribution has remained consistent	9
3.1	Low exports growth	12
3.2	Low number of export markets	12
3.3	Small number of exporting firms and extremely small value of exports	13
4.1	Operational Firms	15
4.2	FDI inflows	15
4.3	Distribution of manufacturing firms	16
4.4	Licensed foreign manufacturing investment projects by region	16
4.5	Top employing sectors engaged in by private sector companies	17
4.6	Crop farming was the largest contributor to GDP	18
4.7	Firms that use services extensively are more productive and export more than medium or low users	19
5.2	It is costly to start a business in Ethiopia ...	22
5.1	Key challenges to be addressed in facilitating private investment	22
5.3	... and complying with regulations is time-consuming	22
5.4	Overall logistics performance is lagging behind peers ...	25
5.5	...and documentary requirements are high	25
5.6	Challenges affecting firms from being operational	26
5.7	Challenges faced while operational	26
5.8	Challenges faced while operational	27
5.9	Challenges affecting firms from being operational	27
B6.1.1	Producer Price Changes of Selected Goods and Services	34
B6.1.2	Change in Quantity of Exports: Selected Goods and Services	34
B6.1.3	Growth of Ethiopia's Exports	34
B6.1.5	Poverty Rate	35
B6.1.4	Real GDP Growth	35
B6.1.6	Income Share of the Bottom-40 Percent	35
B6.3.1	Mobile Penetration	40
B6.3.2	Real GDP Growth	40
B6.3.3	Exports Growth	40
B6.3.4	Poverty Rate	41
B6.3.5	Shared Prosperity of the Bottom-40 Percent	41
6.1	Total Health Expenditure	51
6.2	Trends in Health Financing by Source	51

6.3	Enrollment trends by levels of education	53
6.4	Education spending as a share of government expenditure	53

MAP

4.1	Distribution of manufacturing employment by district	17
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TABLES

ES.1	Recommendations	xix
6.1	Proportion of firms financing investment entirely from internal funds	43
B.1	Description of ongoing IFC lending program	60
B.2	Description of ongoing FCI ASA/RAS activities (IFC and WB)	61
B.3	Advisory Portfolio	63

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ABBREVIATIONS

AAA	Analytical and Advisory Activities
AGOA	African Growth and Opportunity Act
BOT	Build-Operate-Transfer
BRT	Bus Rapid Transit
CBE	Commercial Bank of Ethiopia
CCF	Commodity Collateralized Financing
COMESA	Common Market for Eastern and Southern Africa
CPSD	Country Private Sector Diagnostic
DBE	Development Bank of Ethiopia
DPO	Development Policy Operation
DSA	Debt Sustainability Analysis
EEP	Ethiopian Electric Power
EEPCo	Ethiopian Electric Power Corporation
EEU	Ethiopian Electric Utility
EFMHACA	Ethiopian Food, Medicines and Healthcare Administration and Control Authority
EPIQ	Economy-wide Private Impact Quantification
ESLSE	Ethiopian Shipping and Logistics Services Enterprise
ETA	Ethiopian Telecommunication Agency
EU	European Union
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GTP	Growth and Transformation Plan
GVC	Global Value Chain
HERQA	Higher Education Relevance and Quality Agency
HSTP	Health Sector Transformation Plan
ICT	Information and Communication Technology
IGAD	Intergovernmental Authority on Development
INSA	Information Network Security Agency
LPI	Logistics Performance Index
MFI	Microfinance Institution
ML	Merchandise Loans
MoFEC	Ministry of Finance and Economic Cooperation
NLS	National Logistics Strategy
NEP	National Electrification Program
NGO	Non-Governmental Organization
NPL	Non-Performing Loan
NTMs	Non-Tariff Measures
OECD	Organisation of Economic Cooperation and Development
PSFA	Pharmaceuticals Fund and Supply Agency
PPP	Public-Private Partnership
SACCO	Saving and Credit Association
SMEs	Small and Medium Enterprises

SOE	State-Owned Enterprise
TA	Technical Assistance
TVET	Technical and Vocational Education and Training
US	United States
VAS	Value-Added-Services
WBG	World Bank Group
WHO	World Health Organization
WTO	World Trade Organization

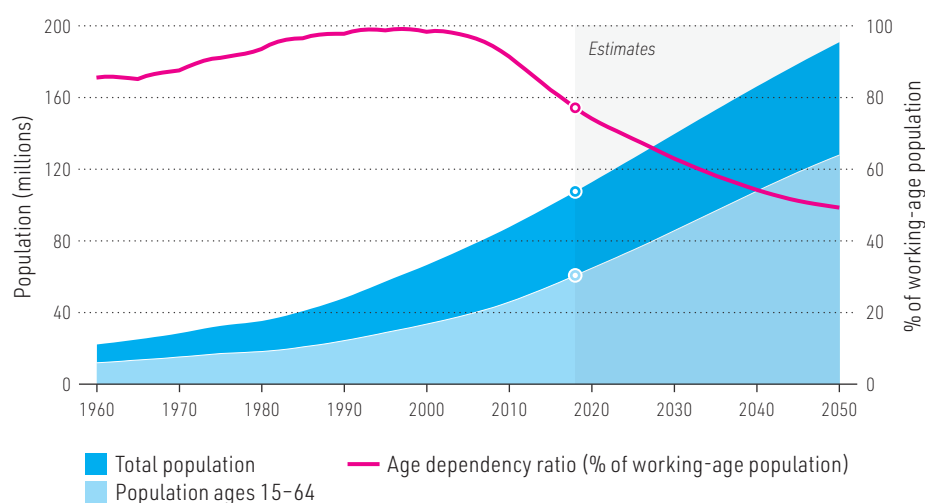
EXECUTIVE SUMMARY

A PIVOTAL MOMENT FOR REFORM

Ethiopia has made impressive strides along its developmental path. It has sustained average economic growth of around 10 percent over the past decade, making it one of the fastest-growing economies in the world, while also achieving substantial progress in social and human development. Poverty declined from 55.5 percent in 2000 to 26.7 percent in 2016. Other social indicators outpaced developing country peers, including on infant and child mortality and primary school enrollment rates. Real gross domestic product (GDP) continued to expand in 2017 (10.9 percent) and 2018 (estimated at 8.9 percent of GDP), and the country remains a favored destination for foreign direct investment (FDI) in Africa. However, the growth model that has driven these results is now under stress; the macroeconomic situation has become more fragile, exports have stagnated, and the global environment is turning less favorable.

Job creation is now the critical development challenge, raising the importance of the private sector agenda. More than 20 million Ethiopians remain in extreme poverty and finding employment for the projected 2 million new annual entrants to the labor market over the next decade presents an urgent need to create productive jobs to drive inclusive economic transformation. If productive jobs can be created, then Ethiopia's youth can become a dynamic force for economic growth, but without new job opportunities, unemployment and poverty will increase. In creating markets and increasing private sector participation, market constraints need to be addressed in ways that lead to attractive investment opportunities for the private sector, while also delivering continued poverty reduction and inclusiveness.

After more than a decade of sustained public sector-led growth, the government is revising its growth strategy to allow for a much greater role for the private sector in driving growth and job creation. This is opening up opportunities for considerably more private sector investment in the economy. Recently announced reforms, includ-

FIGURE ES.1 THE JOBS CHALLENGE AND A SHIFTING AGE STRUCTURE

Source: World Development Indicators database.

ing the opening of key enabling sectors in telecoms, energy, aviation, and logistics for private foreign participation, signal a new phase for private sector development. These reforms offer not only vast opportunities for investment and job creation in the private sector itself, but also increasing competition and efficiency in these backbone services that will facilitate private investment throughout the economy and support greater competitiveness and dynamism.

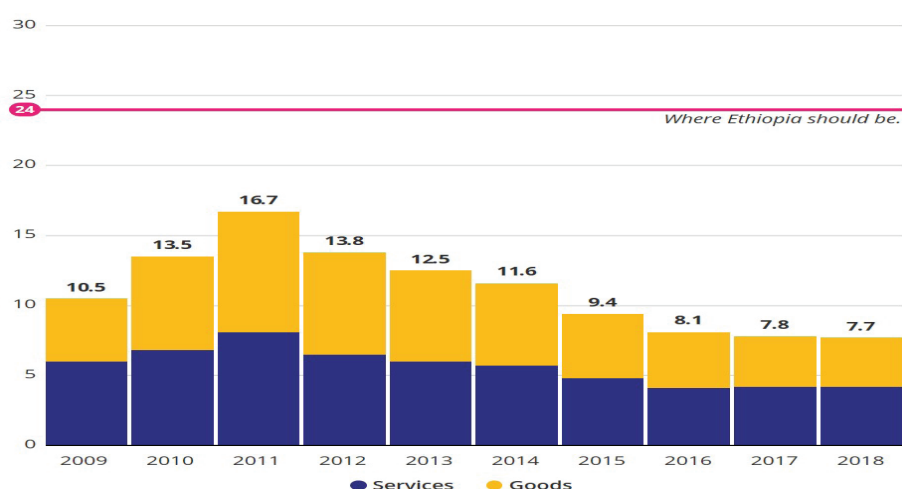
Broadening the base for job creation beyond light manufacturing toward a wider range of high productivity agricultural and services activities will help to overcome the uneven spatial distribution of manufacturing jobs across the country. While there is some evidence of manufacturing growth starting to reduce poverty in urban centers, its contribution to overall employment remained constant at less than 10 percent over the past three years. Employment in services grew strongly between 2008 and 2013, but the share of the total has increased only marginally in recent years. The agriculture sector, which currently employs 70 percent of the population, will not be able to sustain the level of workforce growth expected over time. Nevertheless, continued productivity growth and product upgrading (for example, adding greater value to products such as coffee through washing, grading, and, ultimately, roasting) are essential and can contribute significantly to increasing exports.

Ethiopia has a number of advantages that it can leverage to attract the investment needed for job creation. These include rapidly improving transport and energy infrastructure, low labor costs, a large and growing domestic market, cheap power, an ideal climate, and preferential market access to the European Union, the United States and other major markets. Ethiopia is also pursuing a more active approach to regional economic integration, through the Common Market for Eastern and Southern Africa (COMESA) and the Intergovernmental Authority on Development (IGAD), and has recently signed the Framework Agreement of the African Continental Free Trade Area. Greater stability in the Horn of Africa, enhanced by the recent détente between Ethiopia and Eritrea, and the start of peace talks, will further increase the size and attractiveness of the regional market centered around Ethiopia.

The importance of these changes is enhanced by the increasing challenges facing the state-led model of development that has driven growth over the past 15 years:

- MACROECONOMIC AND DEBT SUSTAINABILITY.** Ethiopia's growth over the past decade has been primarily driven by public investment and agricultural growth. This has been based upon a policy framework of external financing, keeping government consumption low, and heterodox mechanisms, including financial repression that suppressed interest rates and directed credit to public infrastructure, an overvalued exchange rate that cheapened public capital imports, and direct central bank financing of the budget. The resulting structural external imbalances and indebtedness present an increasing risk to macroeconomic stability and threaten long-term growth. Stagnant exports and the maturing of non-concessional borrowing contracted over the past five years resulted in a deterioration of the 2017 Debt Sustainability Analysis (DSA) indicators, with the risk of external debt distress now assessed as "high". The management of foreign exchange will remain a key task for the government. Tighter fiscal and monetary policies can reduce macroeconomic imbalances, but the foreign exchange position will remain fragile in a context in which it is planned to move toward a more flexible exchange rate management regime to maintain external competitiveness. Experience from other countries demonstrates the critical importance of a competitive exchange rate during economic transformation.
- WEAK EXPORT PERFORMANCE.** Despite having preferential market access to the European Union, the United States, and other major markets, exports have yet to take on the mantle of an engine of growth and job creation, especially in manufacturing. Ethiopia's exports of goods and services have declined substantially over the past eight years, and now account for less than 10 percent of GDP. This is less than half of what is expected for a country of Ethiopia's size, location, and level of development. On the one hand, this suggests that exports are being severely constrained, and addressing

FIGURE ES.2 LOW AND DECLINING EXPORTS TO GDP RATIO



Source: NBE and MoFEC.

these constraints is likely to unleash sustained export growth given the underlying potential. Exports remain dominated by primary commodities (coffee and oilseeds account for almost half of exports), and there has been little increase in the share of manufactures.

- **GLOBAL TRENDS IN TECHNOLOGY.** The export-led industrialization strategy may also be challenged by technological change, including the wider application of robotics, and threats to the open international trading regime that are increasing the vulnerability of industrialization strategies globally. Technological advances (in industrial automation, advanced robotics and Internet of Things) are provoking a new Industrial Revolution through integration of cyber and physical systems, raising the bar again for locations to be competitive. In addition, industrial agglomerations such as in China are becoming more “sticky” as new technologies offer economical ways to offset rising labor costs at the lower end, while offering opportunities to build on existing manufacturing eco-systems at the higher end. These developments may be narrowing the “window” in which Ethiopia can exploit older technologies and capitalize on its current competitive advantage of low labor costs. However, the increasing spread of digital technologies can also improve efficiencies across a range of sectors and deliver new products, such as mobile money, that can transform access to finance.
- **THREATS TO THE OPEN GLOBAL TRADING SYSTEM.** Tensions in the global economy are increasing and may stifle growth of international trade. Ethiopia’s exports of apparel are currently dependent on preferential access to the US market under the African Growth and Opportunity Act (AGOA). However, there are movements toward greater integration in Africa through the Africa Continental Free Trade Agreement, which may open up new opportunities for Ethiopia’s goods and services exports.

The purpose of the Ethiopia CPSD is to support the transition to a private sector-driven growth model that advances the country’s development objectives and, in particular, delivers the necessary jobs. By assessing the landscape of the private sector in the country, its investment, and export performance, the CPSD identifies specific constraints to enabling the potential of the private sector as a driver of productivity growth and job creation. In doing this, it identifies investment opportunities that could materialize in the short term, and the reforms that are needed to enable these opportunities to emerge. It also discusses how specific actions by the public sector, in collaboration with the private sector, in filling gaps in public investment, reforming business regulations and trade policy, addressing market failures, and enhancing the efficiency of key backbone services/sectors, while tackling gender inequalities, could fully unleash the potential of private sector investment.

AN EMERGING PRIVATE SECTOR FACING A RANGE OF CROSS-CUTTING CONSTRAINTS TO COMPETITIVENESS AND COORDINATION FAILURES IN GOVERNMENT

The private sector in Ethiopia remains nascent. The state continues to play a heavy role through state-owned enterprises (SOEs) in key areas of the economy, including telecommunications, finance, energy, logistics and transport, as well as in manufacturing. Public sector investment still accounts for a significant share of the country's overall investment and there remains significant opportunities for growth in the private sector to leverage the country's key sources of comparative advantage: low labor costs, relatively cheap power, preferential access to regional and global markets, and an ideal climate.

The development of industrial parks and the provision of quality infrastructure have been the main focus of the government for attracting private sector investment. Industrial parks have aimed at attracting foreign investment in specific export-oriented manufacturing sectors, such as textiles and apparel, leather and leather products, agro-processing, chemicals, and electronics. The government has also been investing heavily to improve infrastructure, including for energy and transport. This approach remains a key element in achieving the country's development objectives and has played an important role in bringing attention to the constraints to broader private sector investment.

There are many openings for the private sector to become the jobs driver of the economy. Extensive opportunities in the domestic and export markets can be realized if key cross-cutting constraints that make it difficult for firms to invest and compete are addressed. Many of these challenges are well known and subject to numerous initiatives undertaken by the government. Others will need a stronger focus in future policy concerns. But all impact firms' competitiveness and growth, and ultimately jobs.

There is increasing evidence that a small number of high-growth firms typically accounts for a high proportion of job and output growth, and drives spillovers to other firms and sectors.¹ Contrary to popular conceptions about the importance of new start-ups in driving growth, most high-growth firms have been in business for at least a couple of years before embarking on a high-growth trajectory, they are often larger than the average firm at the beginning of a high-growth episode, appear in many sectors (not necessarily in high-tech industries), and operate in different types of locations, although proximity to infrastructure plays an important role in facilitating high growth. Furthermore, high growth today for a firm does not necessarily mean that it is more likely to grow rapidly in the future. Indeed, most high-growth firms tend to be "one-hit wonders."

Innovation, agglomeration and network economies, managerial capabilities and worker skills, linkages to external markets, and financial development all contribute significantly to increasing the probability of a firm experiencing a high-growth episode. Efforts by policymakers to target specific firms are often misguided and most likely unsuccessful. The evidence suggests that rather than searching for potential firms, what is more important is a broader reorientation of policies to support firms' growth through: (i) removing distortions in product and input markets to ensure

that resources are allocated to where they can be used most efficiently; (ii) providing a framework that encourages firm-to-firm spillovers—including policies related to land use, transport policies that lead to agglomeration, policies to attract high-quality FDI and connect firms to export markets that can encourage learning and quality upgrading, and investments in science and technology parks and clusters leading to knowledge spillovers; and (iii) policies to strengthen firms’ capabilities to enhance innovation, improve managerial practices and access to technology, and help them to acquire critical skills and management capacities.²

Of particular importance in complementing the support for manufacturing/export-led development is increasing foreign and domestic private sector investment to enhance the efficiency of key enabling sectors, especially logistics, telecoms, finance, and energy. Key issues are:

a. MODERNIZING THE LOGISTICS SECTOR TO REDUCE HIGH TRADE COSTS AND INCREASE THE RANGE OF SERVICES TO SERVE AN EXPANDING INDUSTRIAL BASE. High cost and low-quality logistics undermine the growth potential of export-led manufacturing and diversification through the upgrading of the agriculture sector. While Ethiopia has invested heavily in transport infrastructure, the cost of shipping is much higher than in comparator countries. Logistics services, such as distribution, packaging, warehousing and inventory management, which are necessary to serve modern manufacturing and agricultural supply chains, are missing or inadequate, undermining export competitiveness. Logistics facilities, such as dry ports and container freight stations, are areas where value-chains intersect and so inefficiencies tend to be compounded throughout the economy. The concentration of activities means that they can also become hotspots for job generation.

b. REDUCING COSTS AND INCREASING THE PENETRATION OF ICT AND TELECOMMUNICATIONS SERVICES. Ethiopia has one of the lowest ICT development rankings in the world, and the participation of the private sector in both primary and downstream ICT services is very low. Mobile penetration remains among the lowest in the world, with only 42 percent of the population using mobile voice services in 2018, compared with 51 percent in Kenya and 49 percent in Sub-Saharan Africa as a whole. This is despite Ethio Telecom’s aggressive roll-out of telecoms infrastructure in recent years, which has provided the base for improved connectivity and accessibility. Nonetheless, inefficiencies in the operation of the state monopoly and high costs for users have impacted the development of ICT services, especially in rural areas. This in turn has constrained the development of ICT applications in other sectors, such as the use of mobile money, and dampened the role of new ICT technologies in generating jobs.

c. IMPROVING ACCESS TO CREDIT FOR THE PRIVATE SECTOR. Just 16 percent of the private sector uses finance from banks for its activities, compared with Kenya where the comparable figure is 41 percent. Private sector credit amounts to only 9 percent of GDP, in contrast to the 20 percent median for Sub-Saharan Africa. This reflects that the financial sector remains shallow and under-developed. In the 2017-18 Global Competitiveness Report, Ethiopia was ranked 109 out of 137 countries in terms of financial market development. The two state-owned banks dominate the banking sector and the credit market is skewed toward SOEs. In contrast to a decline in overall

domestic credit and private credit over the past 10 years, SOEs' credit as a percentage of GDP more than tripled from 5.2 percent in 2007 to 17.2 percent in 2016. This constrains private sector investment, particularly by SMEs, and limits the ability of local firms to develop linkages with incoming foreign investors, and to develop the capacity necessary to export successfully to overseas markets.

d. ADDRESSING THE SIGNIFICANT UNMET DEMAND FOR ENERGY, DESPITE AN ABUNDANCE OF POTENTIALLY LOW-COST SUPPLY. Rich in renewable resources, Ethiopia has the second-largest power system in Sub-Saharan Africa. However, despite significant investments in transfer capacity, the country also has a significant access deficit, as the household electrification rate remains low and supply is unreliable. While public resources have been spent in network expansion, the necessary 'last-mile' investments have not yet been made, and there is a wide disparity in access between urban and rural areas. Nevertheless, the urban network also requires upgrading, as do transmission and distribution assets. The sector is now starting to see strong interest in off-grid projects from private companies.

The government has recognized the weaknesses in the key enabling sectors and is developing strategies to increase competition and enhance efficiency through greater private sector participation, including a role for foreign partnerships in certain sectors. The reforms are being supported by the World Bank Group's recent Development Policy Operation (DPO) and technical assistance (TA).

Results from a model of the Ethiopian economy (EPIQ) suggest that reforms in enabling sectors would increase competitiveness and reduce poverty, but income inequality could be exacerbated. Increased competition would contribute to declining prices for many goods and services, and lead to higher output and exports. Increased efficiency would also contribute to higher wage growth and poverty reduction, but could add to increases in income inequality, necessitating complementary interventions to ensure shared prosperity. These would likely include a focus on improving connectivity, access to finance, and training and education in rural areas, to ensure that the rural poor are able to benefit from the job opportunities that greater private sector participation in the economy will bring.

Magnifying the impact of improved efficiency in enabling sectors and facilitating private investment throughout the economy requires attention to the overall policy framework and the functioning of critical input markets. In terms of the policy framework that determines economic incentives, the priority issues that, if addressed, could unleash private investment, are as follows:

- **BUSINESS REGULATORY ENVIRONMENT IS RESTRICTIVE.** Ranking 161 out of 190 economies in the Doing Business 2018 indicators, Ethiopia's regulatory framework is complex and costly. A key challenge is the excessive use of licenses, compounded by the frequent use of onerous or unnecessary competence certification requirements. Taken together, these create a substantial barrier to business startups and expansion. The administrative burden for firms to exit in the case of failure, and the processes of tax administration and customs procedures, are equal challenges for the private sector, especially domestic firms, compounded by a lack of consultation and understanding between the public and private sectors.

- **REGULATORY IMPEDIMENTS CONSTRAIN ACCESS TO FOREIGN EXCHANGE.** The priority allocation of foreign exchange by Ethiopian banks to imports of “essential goods,” including fuel, fertilizers, raw materials, and spare parts, among others, as well as for servicing approved foreign currency loans, is hampering the operations of other enterprises, service to their customers, and their credit standing.
- **BARRIERS TO ENTRY CONSTRAIN WOMEN ENTREPRENEURS.** Female-owned/managed firms in Ethiopia face more constraints in accessing finance. Nearly half of female-managed firms identify access to finance as a major constraint compared with 19 percent of male-managed firms. Many growth-oriented female entrepreneurs in Ethiopia are unable to graduate from group borrowing to larger, individual loans that can fuel business growth, and remain an underserved market.
- **RESTRICTIVE TRADE POLICIES CREATE A BIAS AGAINST EXPORTING.** Imports tariffs are high relative to comparator countries. Cumbersome and costly import and export procedures hamper trading firms. Ethiopia is one of a very small group of countries that are not members of the WTO and it is forgoing the transparency and predictability that membership brings, which in turn provides confidence to investors and trading firms over a range of trade and trade-related policies.
- **A LACK OF PRO-COMPETITIVE REGULATIONS PREVENTS THE CREATION OF A LEVEL PLAYING FIELD BETWEEN STATE AND PRIVATE OPERATORS.** While Ethiopia has privatized hundreds of SOEs, they and endowment companies³ continue to play a significant role in key sectors of the economy, limiting competition and crowding out the private sector. With regards to the functioning of input markets, namely land, labor, and capital, the key issues are as follows:
 - **LIMITED ACCESS TO CREDIT, FINANCE, AND LAND HINDER GROWTH OF LARGE ENTERPRISES AND SMES ALIKE.** The financial sector remains shallow and under-developed. Private sector use of domestic banks to finance operations is limited. The banking sector is highly concentrated and foreign participation in the financial sector is not permitted. Inadequate lease terms, and an unclear regulatory framework around land allocation and leasing are major barriers to firm entry.
 - **A SHORTAGE OF CRITICAL LABOR SKILLS LOWERS FIRM PRODUCTIVITY.** While it has one of the highest school enrolment rates in Sub-Saharan Africa, the quality of education is a key issue. With high drop-out rates, the system is not providing the next generations of the youth with the skills and knowledge required in a modern industrial economy. Access beyond primary schooling remains a major concern, with secondary school enrollment rates at just 31 percent. There is also a shortage of middle-level management and experienced technical staff, which presents a key challenge for innovation. A key task is to increase the participation of poor children in secondary and higher levels of education, and re-orientate education spending and subsidy policies to promote more inclusive access to education and training. Constraints on female participation in the labor force need to be addressed, especially in traditionally male-dominated growth sectors, such as transport and logistics.

- **BUILDING AN INDUSTRIAL WORKFORCE.** Industrial firms, especially those in the industrial parks, are facing high levels of labor turnover. In principle, rising demand for labor as a country industrializes should improve wages and working conditions across the economy, making work in industrial firms an attractive alternative to previous opportunities. But, in the early stages of industrialization, as in Ethiopia, it may take time and considerable effort with regard to training and awareness-raising to clarify the opportunities and risks that industrial jobs offer to workers relative to the informal work they have been used to. Furthermore, industrialization and urbanization are bringing additional challenges to Ethiopia in terms of the provision of housing, social services, and transportation.

Progress in addressing these issues throughout the economy and realizing the opportunities for private sector investment is constrained by a lack of capacity and coordination in government. The current focus on industrial parks is providing spatial-specific solutions to some of these constraints, but the broadening of the industrialization process and increasing non-farm activities in rural areas will require that capacity weaknesses and coordination failures between different ministries and agencies of government, and between federal, regional and local governments, are resolved. These limit private sector investment in the following ways:

- **POLICIES AND REGULATIONS ARE SUBJECT TO DIFFERENT INTERPRETATIONS BY DIFFERENT INSTITUTIONS, CREATING UNCERTAINTY FOR INVESTORS.** Laws and regulations are also subject to frequent change, especially as internal working rules (circulars) are not made public. The most frequent changes in regulations are seen in tax and immigration. Furthermore, there are issues around the consistency and evenness in the application of policies between SOEs and the private sector, which has created uncertainty over the competitive conditions.

- **WEAK VERTICAL AND HORIZONTAL COORDINATION IN AND BETWEEN INSTITUTIONS LEADS TO MISALIGNMENT, A LACK OF COMMUNICATION, SLOW DECISION-MAKING, AND INVESTOR FATIGUE.** This reflects in part weak technical capacity in ministries to support private sector firms. Firms spend considerable time building relationships with government officials to advance decision-making. Enforcement of tax and customs rules across sectors is inconsistent, and a major driver of informal transactions. Investors still find themselves having to deal with multiple institutions with regard to the operations of their firms/investments, leading to high transaction costs.

An example of the impact of this lack of coordination between federal, regional, and local authorities on emerging sectors is that in 2017 access to the waters of a crucial canal (Tibila Irrigation Canal) was cut off by the local government, severely affecting fruit and vegetable producers in that region. Large areas of arable land could not be irrigated, and production was lost. Despite assurances received from the central government, the reality on the ground can be very different when it comes to the availability of water.

WAYS FORWARD—BROADENING ETHIOPIA'S PRIVATE SECTOR DEVELOPMENT STRATEGY

While early results in terms of attracting global investors appear encouraging, the CPSD suggests a broadening of the strategy, while achieving macroeconomic stability, to meet the jobs challenge along the following lines:

- 1. FOCUS ON MAXIMIZING FINANCE FOR DEVELOPMENT IN KEY ENABLING SECTORS.** To sustain Ethiopia's development path, key reforms in strategic sectors such as telecommunications, energy, and logistics are critical to enhancing competition, increasing efficiency, and moving toward a more sustainable model of infrastructure financing.
- 2. FOCUS ON FEASIBLE ENTRY POINTS IN MANUFACTURING, WHILE EXPLORING GROWTH OPPORTUNITIES IN NON-TRADITIONAL, AS WELL AS TRADITIONAL, SECTORS.** Prospects for continuing job creation in the labor-intensive light manufacturing sector remain, but can be accompanied by a strategy to exploit opportunities in a range of traditional and non-traditional sectors, such as tourism and ICT. This would drive diversification of both products and markets, with more focus on neighboring and regional markets. This requires not only addressing the cross-cutting constraints to private sector investment, reform of enabling sectors, and better institutional coordination, but also interventions to overcome sector-specific constraints, such as access to improved seeds and cuttings, fertilizer, and other agrochemicals in agro-processing subsectors, such as fruits and vegetables. Particular opportunities arise from leveraging the digital economy, especially if combined with an opening of the finance sector, which could greatly increase access to financial services for a large segment of the population.
- 3. FOSTER LINKAGES WITHIN THE DOMESTIC ECONOMY.** To enhance the impact of investment in the industrial parks, and increase foreign investment and participation in enabling sector such as logistics, more linkages are required between large manufacturing and services firms, and the local economy and SMEs in the services and trade activities that dominate the economy and employment. Such linkages are critical for spreading productivity gains to deliver long-term shared prosperity.
- 4. INCREASE THE ROLE OF SERVICES IN THE PRODUCTION PROCESS.** Services (finance, ICT, logistics, distribution, health, legal, education, etc.) are crucial not only in a supporting role to industry, but also to build resilience and to provide a “search engine” for new growth drivers beyond light manufacturing. Reform efforts to address inefficiencies and a lack of competition in strategic service sectors are critical.

Moving forward, it is important to develop a shared vision of the national development strategy between the government and the private sector. Ethiopia is emerging from a system that has created a great deal of mutual skepticism between the public and private sectors. In implementing a strategy that delivers a broader base for job creation, the government and the private sector will need to work together to identify critical priorities, define a system to notify and overcome institutional failures in government that limit investment, and cooperate to resolve constraints in specific sectors that are

holding back expansion. A first step is to define and disseminate a common vision of the development strategy to provide a framework for more effective cooperation, and to identify priority measures. The design of these measures should ensure that they are both expanding markets and creating jobs. The key recommendations for such measures emanating from the CPSD are presented in table ES.1.

TABLE ES.1 RECOMMENDATIONS

Taking measures to promote private sector investment in key enabling sectors

1. Define a road map to implement the National Logistics Strategy and devise a regulatory framework for the sector suitable for greater private sector competition.
2. Build the capacity of the relevant agencies and authorities to manage the process of increasing competition in the telecoms sector, and enable consideration of strategic options for Ethio Telecom, updating existing legislation and drafting relevant regulations.
3. Define a strategy for increasing the use of digital technologies throughout the economy, identifying implications for the education and training sectors.
4. In the energy sector, implement a multi-year reflective tariff framework for improving cost recovery; adopt a comprehensive improvement plan to enhance operational efficiency to reduce technical, commercial and collection losses from EEP and EEU; and implement a debt-restructuring plan for the sector.

Streamlining the regulatory and policy frameworks for investment and trade

1. Streamline business licensing requirements, simplify procedures, clarify mandates of different agencies and improve inter-agency coordination.
2. Implement a strategy to overcome gender-related restrictions that:
 - Undermine female entrepreneurship, including equal access to finance, inputs, knowledge (such as extension services for farmers), and distribution networks; and
 - Limit female participation in labor markets, including access to childcare facilities, a lack maternity/paternity pay, and challenges in working in growth sectors such as energy, transport, logistics and ICT.
3. Review import tariffs and explore measures that mitigate the impact of reducing the average tariff on revenues.
4. Undertake a review of regulatory requirements to import and export, and:
 - Cull regulations that do not have a clear and justified purpose; and
 - Implement measures to improve the implementation of regulations to reduce the time to import and export, including the application of standards and conformity assessments.
5. Fast track WTO accession with the aim of joining before the end of 2020 to enhance the reform program, and provide a clear signal to domestic and international investors of a legal commitment to a transparent and predictable trade regime.
6. Implement regulations, and build surveillance and enforcement capacity, to ensure a level playing field for competition in key sectors between private sector firms and SOEs.

Improving the functioning of input markets

1. Reduce restrictions on the share of land that can be rented.
2. Reform labor laws to put in place a system that is consistent with a modern industrial economy.
3. To enable wider access to cheaper sources of finance:
 - Ease current regulations on deposits of, and access to, foreign exchange for exporters, as well as the ability to borrow in foreign currency for the non-exporting domestic private sector;
 - Ease caps on interest rates for FDI entering the country; and
 - Sign the convention on the Recognition and Enforcement of Foreign Arbitral Awards to enable the mobilization of larger private sector investments through public-private partnerships (PPPs).



01. A PIVOTAL TIME FOR REFORM

Ethiopia is at a key point in its political and economic reform. The state-led model of development that has driven growth over the past 15 years is facing increasing challenges. Under a new Prime Minister and government, greater political freedoms are being accompanied by a recognition of the need to provide greater space for private sector involvement in the economy. The government is seeking a shared vision with the private sector toward achieving the primary economic goal of structural transformation through industrialization. With little experience of crowding in the private sector, the focus in the coming years will be on putting in place the basic legal and regulatory framework for a market-driven economy, with attention to reforming priority sectors, especially those that have the greatest potential to drive job creation and poverty reduction.

Job creation is a major challenge given the rapid shift in the age structure of the Ethiopian population. Ethiopia's demographic transition has been more rapid than elsewhere on the continent, as fertility rates fell from 7.0 children per woman in 1995 to 4.6 in 2016. The working-age population remained constant at around 50 to 51 percent from 1985 to 2010, and is projected to peak at 67.5 percent in 2055. While this demographic transition can reap huge benefits for enhanced economic growth, it also poses the daunting task of finding employment for the projected 2 million annual

entrants into the labor market over the coming decade. The number of young workers (age 15 to 29) will increase by 8.5 million by 2025.

Creating jobs in rural areas—where the majority of the youth live—is of most importance. Employment outcomes in urban areas have been on a positive trend over the past decade. Unemployment among the urban youth has declined sharply. The proportion of the urban youth with post-secondary education has increased more than six-fold (from 4 percent in 1999 to almost 25 percent in 2016).⁴ Meanwhile, the rural youth remain largely uneducated and predominantly engaged in unpaid household labor. Almost 30 percent of the uneducated rural youth are not in education, employment, or training. At the same time, increasing land scarcity is undermining the traditional way for the rural youth to become economically independent—through obtaining land from parents. Average crop area per holder declined from 1.00 hectare in 2005 to about 0.85 of a hectare in 2015. The average age of farmers is also increasing. Whereas in 2005, 23 percent of all farmers were under the age of 30, this had declined to less than 18 percent by 2015, illustrating the difficulty faced by young people in rural areas in transitioning into employment and adulthood. Hence, improving access to land and expanding employment opportunities beyond farming will be key to the prospects of the rural youth.

The agriculture sector currently employs more than 70 percent of the population and is not expected to be able to sustain this level of workforce over time, necessitating structural change and a fundamental shift of labor into higher productivity sectors. This jobs challenge takes place in a context where only 12 percent of workers in Ethiopia work in formal employment. The remaining 88 percent of workers are either self-employed or unpaid family workers. Recent growth in industry and services has contributed little to poverty reduction, which has been driven mainly by growth of the agriculture sector. Thus, it will be imperative to not only rapidly increase formal sector employment but also to increase the linkages between the formal private sector and small enterprises in farming, services, and trade. An increase in the scale of manufacturing, including agro-processing and value addition in agricultural-based exports, will be critical. Agro-processing tends to increase incomes for farmers and at the same time generate jobs for rural non-farm workers.⁵ The location of agro-processors in rural towns contributes to growth of secondary towns and cities, which can drive poverty reduction and provide an alternative to the main city for migrants leaving farms as rural productivity rises.

The government is revising its growth strategy to allow for a much greater role for the private sector in driving growth and job creation. The government recognizes the increasing importance of the private sector in generating the jobs that are needed. This is opening up opportunities for considerably more private sector investment in the economy. A key element of the government's approach is to attract large-scale foreign direct investment (FDI) in export-oriented light manufacturing sectors through the rapid expansion of a series of industrial parks.

Recently announced reforms, including the prioritized opening of key economic sectors in telecommunications, energy, aviation, and logistics for private foreign participation, signal a new phase in Ethiopia's economic transformation. This shift needs to improve fiscal management, mobilize private sector investments, introduce reforms to improve the investment climate, and reduce key constraints to job creation and competitiveness. Ethiopia is implementing these reforms in the face of an extreme

shortage of foreign exchange and an increasing debt challenge. A policy priority is to sustain increased exports both by adding value to current primary exports and fostering greater diversification in manufacturing and services. A more vibrant and export-oriented private sector is key for job creation and sustained growth.

Ethiopia has a number of advantages that it can leverage to attract the investment needed for job growth. These include large infrastructure investments, low labor costs, cheap power, an ideal climate, and preferential market access to the European Union, the United States, and other major markets.⁶ Ethiopia is also pursuing a more active approach to regional economic integration, through the Common Market for Eastern and Southern Africa (COMESA) and the Intergovernmental Authority on Development (IGAD), and has recently signed the Framework Agreement of the African Continental Free Trade Area. Greater stability in the Horn of Africa, enhanced by the recent détente between Ethiopia and Eritrea, and the start of peace talks, will further increase the size and attractiveness of the regional market centered around Ethiopia.

In creating markets and increasing private sector participation, market constraints need to be addressed in a way that not only leads to attractive investment opportunities for the private sector but also guarantees continued poverty reduction and inclusiveness. GDP per capita was estimated at \$768 in 2017, making Ethiopia the 20th poorest country in the world. Labor earnings remain low (monthly median wage earnings amounted to \$165 in 2016). The poverty rate in 2016 was 23.5 percent, meaning that more than 20 million Ethiopians still live in extreme poverty. While income inequality in Ethiopia is low, it is important that the framework for private sector development ensures that investment does not exacerbate poverty, and spatial and gender inequalities. Critical in this regard, as this CPSD discusses, will be improving access to land and to credit, especially in rural areas, addressing gender inequalities that limit women in taking advantage of available job and business opportunities, improving connectivity and access to markets, and facilitating the mobility of labor from rural areas to towns and cities.

02. A STRATEGY FOR GROWTH AND POVERTY REDUCTION THROUGH EXPORT-LED INDUSTRIALIZATION

The government's Growth and Transformation Plan (GTP)—a five-year economic strategy document—currently guides its development agenda. The GTP II (2016–20) envisions Ethiopia as a lower middle-income country by 2025 through the realization of structural economic transformation. The specific goals of the plan are to: (i) create 2 million jobs in medium and large-scale manufacturing businesses by 2025; (ii) increase the contribution of manufacturing to overall GDP from the current level of under 5 percent to 18 to 20 percent; and (iii) ensure that the manufacturing sector accounts for 50 percent of exports by 2025. The key drivers of the vision identified in the GTP II are: (i) leveraging private investment, including FDI; (ii) implementing measures that enhance export competitiveness and diversification; (iii) developing industrial parks; (iv) providing quality infrastructure; and (v) offering skills development.

A key instrument for the government's industrial policy and transition to manufacturing is the development of industrial parks. Ethiopia's industrial parks are aimed at attracting high-quality—particularly foreign—investment in specific manufacturing sectors that can contribute to export growth, enter global export markets, and

better integrate the country with the global economy. Industrial parks are preferred in Ethiopia as a gateway to FDI because they have the advantage of lowering entry and operational costs. While much of the ongoing work around industrial parks development and operation is spearheaded by the government, the sector opened up for private sector investment (including FDI) in 2014. Currently, the government has two operational industrial parks (Bole Lemi I and Hawassa), which are fully leased out to investors. In addition, Mekelle and Kombolcha industrial parks, inaugurated in early July 2017, are largely occupied by manufacturing tenants. Others, such as Dire Dawa, Adama, Bole Lemi II, Kilinto, Jimma, Debre Birhan, and Bahir Dar industrial parks, are at different phases of construction. While Eastern private industrial park is now fully operational, an additional nine private parks, such as CCCC Arerti, Eastern, Velocity, Huajian, George Shoe and CCECC Dire Dawa, are under construction. Key sectors prioritized for development include textiles and apparel, leather and leather products, agro-processing, pharmaceuticals, chemicals, and electronics. Most of the existing/operational industrial parks focus on the garment sector.

The government is investing heavily to improve infrastructure, especially in energy and transport. For example, the first phase of an extensive program to build a modern railway network extending more than 5,000km has been implemented. The priority route—the first one to be built—is the line linking Addis Ababa to the Port of Djibouti, the main corridor for more than 90 percent of Ethiopia’s trade. The new railway line should have a significant economic impact through an ability to move large volumes of cargo in and out of the port, and by potentially reducing transit time to six hours from the three days it currently takes by road. It is expected that the investments in rail transportation will provide significant economies of scale, which will result in lower transportation costs, fewer accidents, and fewer environmental emissions. Investments are being made in the road corridor to Djibouti and in the network that will link industrial parks to the main transport corridors within Ethiopia.

While the industrialization strategy is showing impressive initial results, it faces a number of challenges that suggest it needs to be integrated into a broader approach to private sector development and job creation:

- First, technological change, including the wider application of robotics, and threats to the open international trading regime, are increasing the vulnerability of industrialization strategies globally. This risk can be mitigated through further diversification of both products and markets, with a greater focus on neighboring and regional markets.
- Second, to enhance the impact of investment in the industrial parks, it is important to facilitate greater linkages between large manufacturing firms and the local economy and SMEs in the services and trade activities that dominate the economy and employment.
- Third, services (finance, ICT, logistics, distribution, health, legal, education, etc.) are crucial not only in a supporting role to industry, but also to build resilience and to provide a “search engine” for new growth drivers when light manufacturing falters. However, many modern services remain underdeveloped in Ethiopia. Services that are considered strategic by nature are allowed to operate only as strict public monopolies (for example, the telecoms, utilities, and air and sea transport sectors), or through limited domestic private ownership (for example, the finance

sector). Other service subsectors, such as professional services or health services, are undervalued relative to their potential contributions to competitiveness and value addition. As a result, they have seen limited support and development. Traditional services, such as distribution services, tend to operate in a heavily regulated environment that prevents competition and innovation, including by prohibiting the presence of foreign services suppliers and investment.⁷

- Fourth, in the current macroeconomic environment the affordability and financial sustainability of the required investments and existing debts are proving difficult to maintain in the context of the state-driven model. Fiscal, monetary, exchange rate, and structural policies have generated persistent inflation, an overvalued currency, large external current account imbalances, foreign exchange shortages, and an elevated risk of debt distress. The rapid expansion of public infrastructure investment is reaching its limit in terms of external debt sustainability, and the crowding out of the private sector in the credit and foreign exchange markets. Persistent external imbalances have contributed to an elevated risk of external debt distress. Steps by the government to accelerate reform of SOEs to improve governance, management, accountability, and financial performance are key in strengthening the overall financial sustainability of the economy. The government is implementing measures to address the country's elevated risk of debt distress. It has prioritized investment in the allocation of public funding and curbed non-concessional borrowing, the fiscal deficit will be reduced, and monetary policy will be managed to achieve single-digit inflation. Tighter fiscal and monetary policies will reduce macroeconomic imbalances, but the foreign exchange position will remain fragile in a context in which it is planned to move toward a more flexible exchange rate management regime to maintain external competitiveness.

The government has recognized that the public sector alone cannot carry the burden of improving and expanding sustainable infrastructure provision in Ethiopia. PPPs have been identified as a mode of infrastructure service delivery and a source of private sector investment that the government would like to promote. The Ministry of Finance and Economic Cooperation (MoFEC) has taken on the responsibility of developing a PPP program to promote and sustain private sector participation in the delivery of infrastructure services in Ethiopia. The government has implemented several PPPs in the energy, telecoms, and irrigation sectors. Four recently activated PPP projects encompass an investment of more than \$124 million, and more are being negotiated.

The PPP legislation is comprehensive and includes provisions for approvals and oversight by the PPP Board, permitted procurement methods, and the content and implementation of the project agreement. Affordability, sustainability, and value for money need to be demonstrated for projects to be considered as PPPs. Procurement through open single or two-stage bidding is encouraged, with provisions for competitive dialogue and, under certain circumstances, direct negotiation. Challenges include: (i) the need to build the capacity of the MoFEC, the PPP Directorate and contracting authorities; (ii) the availability of foreign currency to reimburse investors; (iii) sufficiency of revenue streams; and (iv) creating opportunities for PPPs in sectors outside the government's priorities of energy and transport. The government is seeking to ensure the successful implementation of a few initial projects before expanding the PPP program. A governing board comprised of seven members from the public

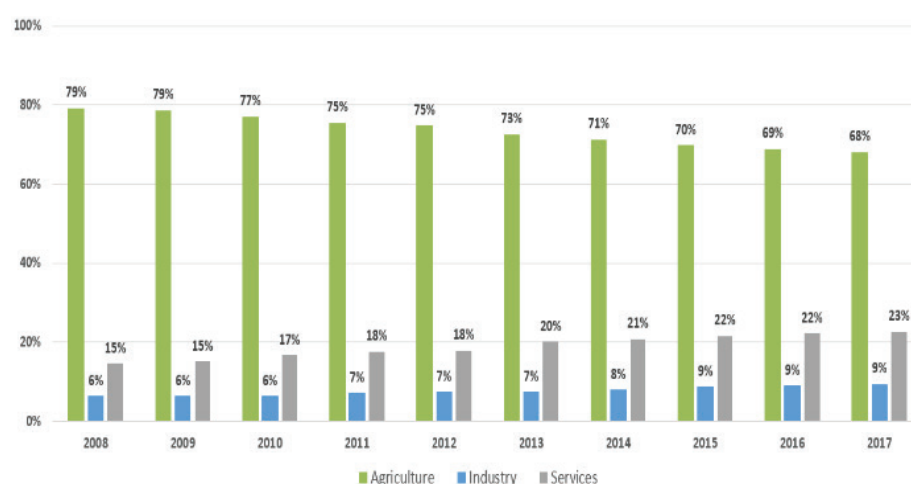
sector and two from the private sector has now been established to enforce the PPP Proclamation and facilitate projects. Currently, feasibility studies have been conducted for seven hydropower, six solar and three road projects. Both local and international companies have been invited to bid for the solar projects.⁸

STRONG GROWTH BUT A NARROW BASE FOR INDUSTRIALIZATION

Ethiopia has sustained an average growth rate of around 10 percent over the past decade, leading to a significant reduction in poverty. This strong and sustained growth performance contributed to a decline in the poverty rate from 44 percent in 2000 to 23.5 percent in 2016. Growth has primarily been driven by public investment in agriculture and infrastructure. Of the three major sectors, industry registered strongest growth, driven largely by growth in the construction sector fueled by public expenditure on mega-infrastructure projects. This is unlikely to prove sustainable over the medium term. A great deal of focus is being placed on manufacturing. However, its contribution to industrial output has decreased from 34 percent to 25 percent in the past five years. The agriculture sector has grown strongly, but its overall contribution to GDP has declined. Since 2013, the share of agriculture in GDP has declined from 43 percent to 36 percent, while that of industry has increased from 12 percent to 22 percent. The share of services has fallen slightly from 45 percent to 42 percent.

Despite rapid economic growth, the country has experienced very slow structural transformation. The agricultural share of employment decreased from 78 percent in 2005 to 68 percent in 2017, but remains very high. Agricultural growth has driven reductions in poverty, bolstered by pro-poor spending on basic services, and increasingly effective rural safety nets. While there is some evidence of manufacturing growth starting to reduce poverty in urban centers, structural change has been absent from Ethiopia's story of progress. The contribution of manufacturing to overall employment

FIGURE 2.1 TOTAL EMPLOYMENT BY SECTOR



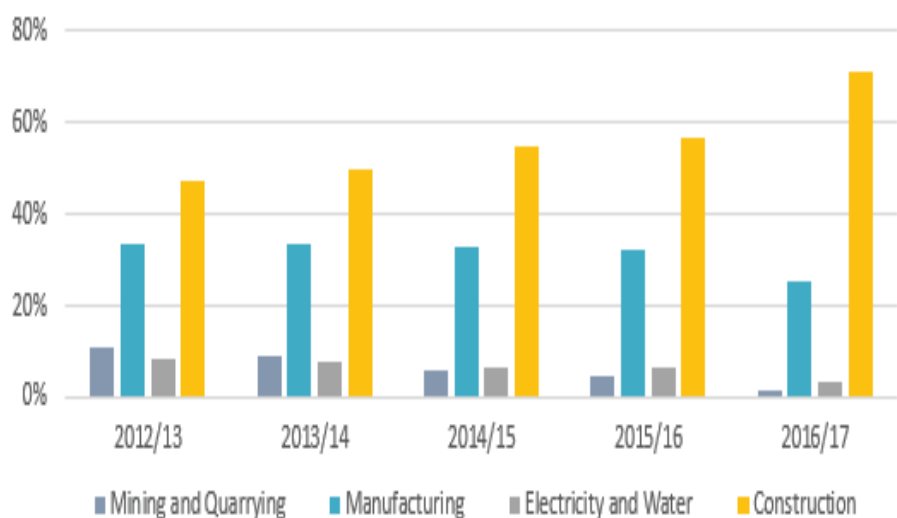
remains less than 10 percent of the total, and has remained constant over the past three years. Employment in services grew strongly between 2008 and 2013, but the share of the total has increased only marginally in recent years.

In 2016, about 10 percent of workers in Ethiopia were wage-employed in the non-farm sector. The public sector, government, and SOEs account for about half of total non-farm wage employment, compared with 32 percent for low-income Sub-Saharan Africa in general. Five other sectors each account for 11 percent of non-farm wage-employment: construction, manufacturing, financial and business-oriented services, transport and communications, and community and family-oriented services. Trade-related activities are less important than in comparable countries in Africa, accounting for only 5 percent of non-farm wage employment compared with an average of 14 percent of non-farm wage employment in low-income African countries. Over 80 percent of non-farm wage employment is in the formal sector.

Industry and employment structures differ substantially between rural and urban areas. In rural areas, employment remains dominated by agriculture and unpaid work, while non-farm activities have made few inroads into rural areas. Despite significant investments in roads, rural accessibility remains low, constraining the development of markets for non-farm activity. Limited access to markets and low demand for goods and services are the most frequently cited constraints for non-farm enterprise operators in rural areas. Urban areas look completely different, with wage-employment being the dominant type of work, followed by self-employment in small businesses.

Construction continues to dominate the industrial sector, while the share of manufacturing in industry has declined. The main driver of growth in the industrial sector has been construction. The share of construction in industrial GDP has increased from just over 40 percent in 2012/13 to over 60 percent in 2016/17.⁹ This was driven by large infrastructure projects for energy and transportation, as well as the rapid expansion of residential and commercial property in the main cities, especially Addis Ababa. The other major contributor to industrial activity is the manufacturing sector,

FIGURE 2.2 SUBSECTOR CONTRIBUTION HAS REMAINED CONSISTENT



but its share of GDP has stagnated and overall the sector remains small, contributing only around 5 percent of total GDP. The importance of mining and quarrying has declined substantially over the past five years.

03. EXPORT PERFORMANCE

Ethiopia's export sector is particularly small. Exports of goods and services account for less than 10 percent of GDP (see figure ES.2), significantly below the 24 percent expected from a country the size of Ethiopia at its level of development. The value of services exports, driven in large part by transportation services and especially air transport, now exceeds the value of goods exports. Both goods and services exports as a share of GDP have stagnated in recent years and Ethiopia's export performance has lagged well behind countries such as Vietnam.

A range of indicators that attest to Ethiopia's poor export performance include the following:

- Ethiopia exports fewer products and accesses fewer overseas markets than comparator countries. In 2016, Ethiopia exported 231 different products (out of a total in the classification used of 4,750) compared with 708 products exported by Kenya, 756 by Bangladesh, 2,802 by Vietnam and 3,106 by Malaysia. Clearly, Ethiopia is lagging in the diversification of its exports.
- Exports remain dominated by primary products (coffee and oilseeds account for almost half of all exports), and there has been little increase in the share of manufactured products such as textiles and apparel. Even current exports are sold in fewer markets than comparator countries. Ethiopia exports to 78 countries, while Kenya has 96 export markets, Bangladesh 118, Vietnam 136, and Malaysia 137. Ethiopia is reaching only 1.43 percent of the total overseas market opportunities that exist for the products that it currently exports (and this has declined from 2.05 percent in 2012).¹⁰ This compares with 2.62 percent for Kenya, 4.88 percent

for Bangladesh, 11.27 percent for Vietnam, and 12.53 percent for Malaysia.

- The combination of a narrow export base and a limited number of overseas markets translates into low export value.

Ethiopia's export sector lacks dynamism relative to comparator countries. The structure of Ethiopia's exports in terms of firms, products, and destination countries has remained exceptionally stable compared with countries at a similar stage of economic development (Brulhart et al., 2018).¹¹ Ethiopia is characterized by lower rates of firm entry into exporting, and the average lifespan of a given firm-product-destination export link is significantly above the international average. This lack of dynamism and innovation in Ethiopian export industries has become more pronounced over the past decade. A key factor seems to be the high fixed costs to exporting that constrain entry into exporting and learning by exporting. The initial volume of exports on entry by Ethiopian firms is much larger than that of other comparable countries, and exports by Ethiopian firms then tend to grow more slowly. When fixed costs are high, exporting will only be viable if a relatively large volume can be shipped from the beginning. Brulhart et al. (2018) also suggest that some of the lack of dynamism in exports may be explained by foreign exchange shortages and certain government incentives forcing firms to maintain export links even at an operational loss.

Few manufacturing firms export and, while average manufacturing production and sales have increased significantly, average exports have stagnated. Between 2009 and 2016, the average value of production in manufacturing increased fivefold and average sales rose by almost 600 percent. On the other hand, the average value of manufacturing exports per firm, while increasing between 2009 and 2013, has subsequently declined. This raises questions about the policy framework for exports and whether this has led to an environment in which firms are more comfortable to sell in the domestic market rather than face the challenges of competing in international markets.

FIGURE 3.1 LOW EXPORTS GROWTH

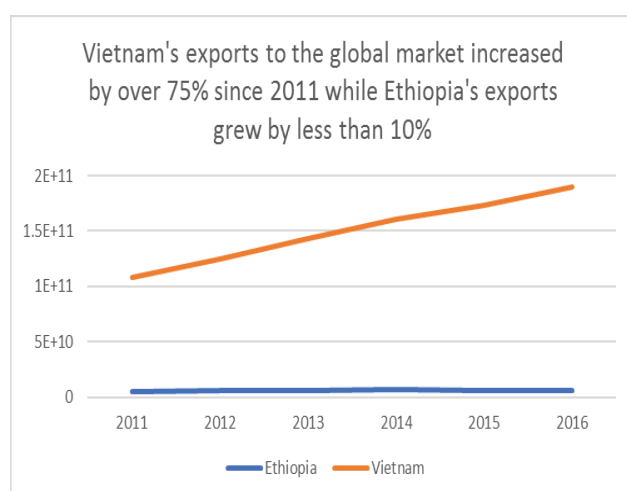
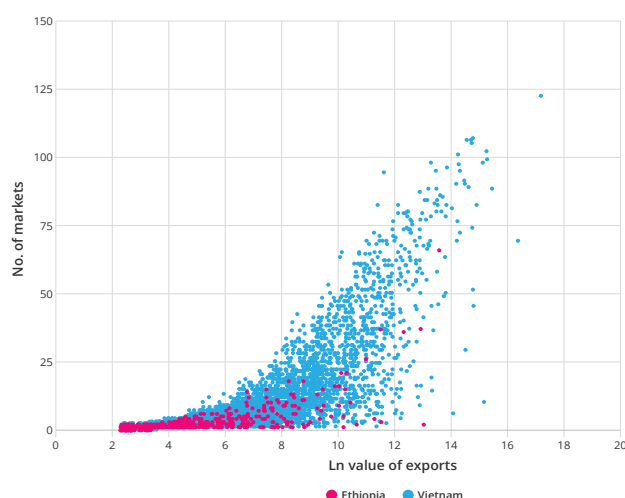


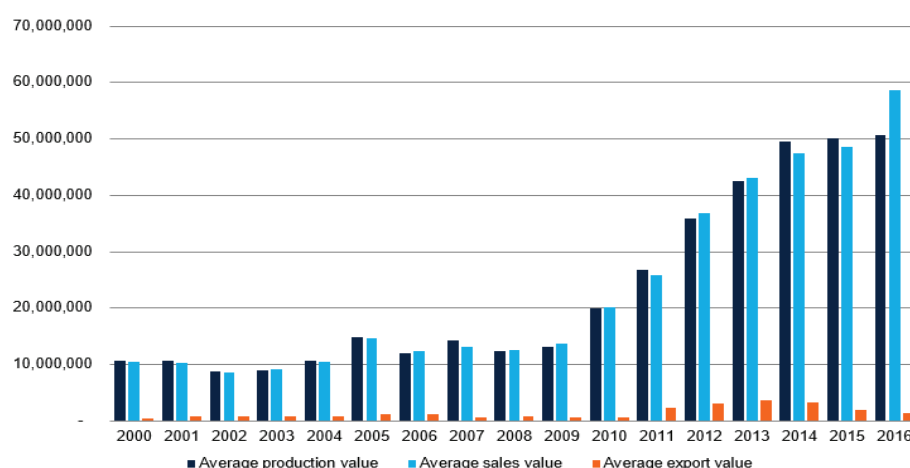
FIGURE 3.2 LOW NUMBER OF EXPORT MARKETS



Nevertheless, there is enormous untapped potential for export growth, from both adding value to existing exports and from greater diversification.¹² Semi- or unprocessed agricultural goods continue to dominate Ethiopian exports, despite the long-term objective of value addition. Ethiopia exports green beans, over two-thirds of which are sun-dried. Countries such as Rwanda have invested in coffee-washing stations and the necessary connectivity to allow exports of washed beans, which earn a higher mark-up. Similarly, the roasting of beans can increase their value by 200 percent, yet there is almost no roasting in the country, which the European importers do instead. Ethiopia exports substantial numbers of live animals, while exports of processed meat earn significantly higher returns, and allow hides and skins to be retained for the leather industry. Oilseeds, pulses, and spices are largely exported raw. While the government is seeking to diversify into manufactures, there are also enormous opportunities to increase the export of agricultural products, such as *teff* and processed products such as *teff* flour and *ingera*. Exploiting the potential for exports of these products could have substantial benefits for farmers and rural communities.

Ethiopia's services exports are higher than those of comparator countries at similar levels of development. This is driven by Ethiopia's success in exporting transport services. Once export of transport services is excluded, the share of services exports in GDP is no longer an outlier for a country at Ethiopia's stage of development. Hence, Ethiopia's performance in services exports further highlights the degree to which Ethiopia under-exports goods. Other developing countries in which a large trade expansion has driven growth typically owe their success to growth in goods exports, which has also not been the case for Ethiopia. Nevertheless, there are opportunities for Ethiopia to further expand exports of services and beyond transport services. For exports, the tourism sector has been identified as having strong growth potential with the potential benefits of bring investment and employment to a range of locations in the country to support more balance growth.

FIGURE 3.3 SMALL NUMBER OF EXPORTING FIRMS AND EXTREMELY SMALL VALUE OF EXPORTS



04. A KEY ROLE FOR THE PRIVATE SECTOR IN DRIVING BROADER-BASED GROWTH AND JOB CREATION

The state continues to play a heavy role in the economy of Ethiopia. Public sector investment in Ethiopia still accounts for a significant share of the country's overall investment and there remains huge scope for growth in private sector investment. The country's rapid growth over the past decade has been driven by public investments in critical infrastructure, including transport, energy, and social services. This has pushed the share of public investment in GDP from 5 percent in the early 1990s up to an average of around 15 percent in recent years. This approach worked well during the period of growth acceleration, as SOEs were used as vehicles for public investment to close the infrastructure gap. While Ethiopia has privatized hundreds of SOEs, they continue to play a considerable role in key areas of the Ethiopian economy, including in telecoms, finance, energy, logistics and transport, as well as in manufacturing, leaving little space for the private sector by crowding out credit markets and access to foreign exchange. For example, while improving access to fertilizers is critical for the development of a flourishing export agribusiness sector, procurement and distribution of fertilizers is dominated by one single SOE.

Despite the significant presence of the public sector, FDI has been on a strong upward trend for the past five years. According to the UNCTAD World Investment report (2018), Ethiopia became the destination for the largest amount of FDI in Sub-Saharan Africa, with an inflow of \$3.6 billion in 2017. The country is perceived as an attractive investment destination, and major investors have seized the opportunity to set up production facilities in the industrial parks. For instance, the Bole Lemi I industrial park is fully leased to 11 investors and is operational, focusing on footwear and garment exports, with 13,000 jobs being created. The recently operationalized Hawassa industrial park has received commitments from 25 investors (foreign and domestic) and is expected to generate about 60,000 jobs and \$1 billion in exports when it becomes fully operational. The investor pipeline for the recently completed Mekelle and Kombolcha industrial parks has led to almost full subscription of the spaces in these facilities. Of the five private sector developed and operated industrial parks, three are already exporting (one fully operational and two partially operating while under development).

Foreign investments are larger on average than domestic investments in terms of capital invested but smaller in number. Of the total licensed investment projects undertaken in 2016/17, 424 (90 percent of the total number of projects) were domestic with capital of Br 3.3 billion, while there were 43 projects with foreign investment capital of Br 602 million. Hence, foreign investment projects had on average around twice as much capital as domestic investment projects. Cumulatively, FDI accounts for 13 percent of all licensed investment projects, but has invested 56 percent of the total capital. These foreign firms have also generated over 2.5 times the amount of employment generated by domestic private sector firms. The domestic private sector has invested much more heavily in agriculture than foreign firms.

The manufacturing sector is dominated by private firms and firm location is concentrated in just a few regions. Private firms account for 97 percent of the total number of firms in manufacturing, with a relatively small number of large firms

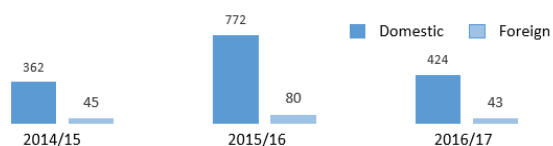
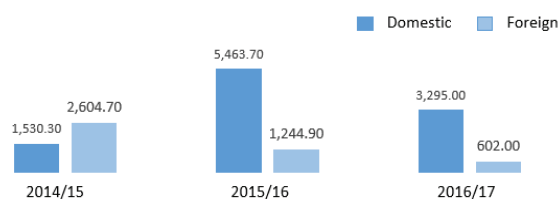
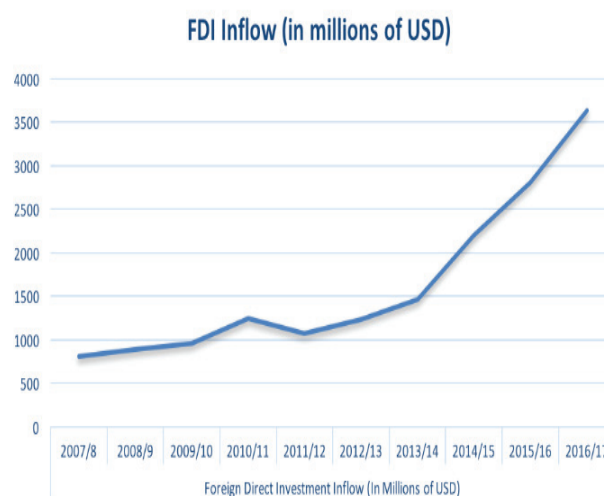
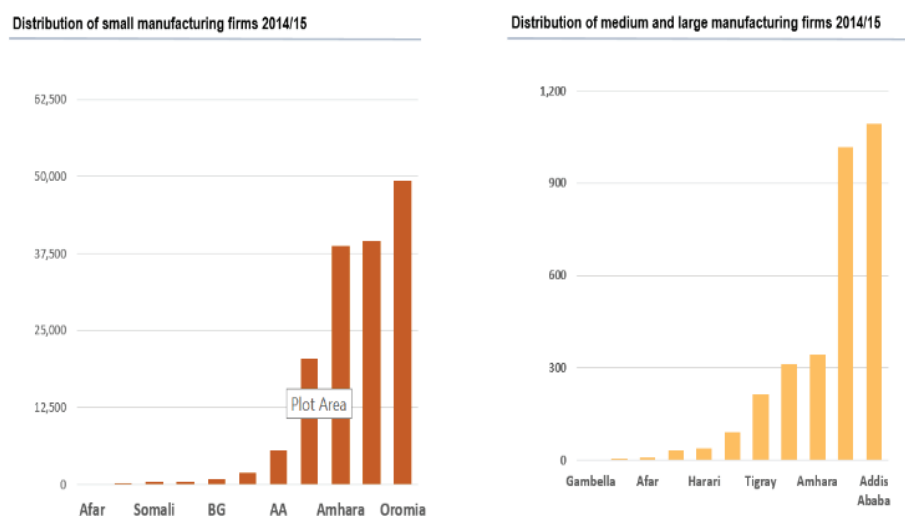
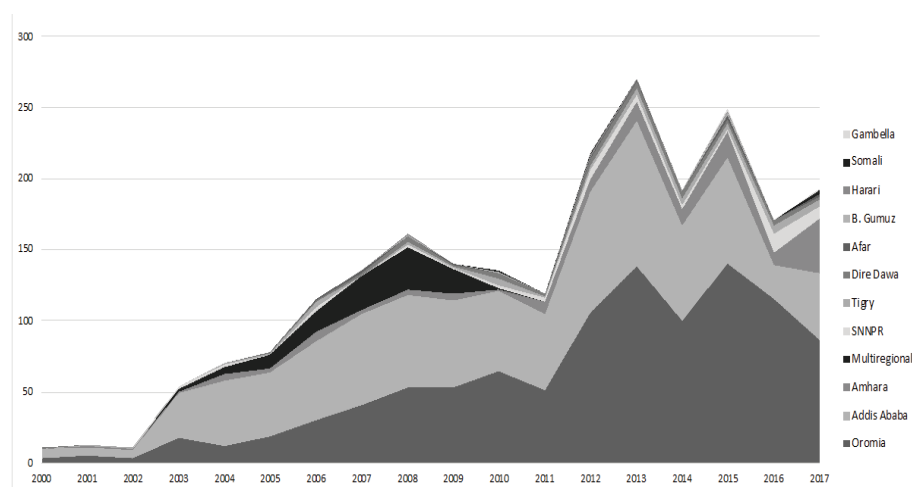
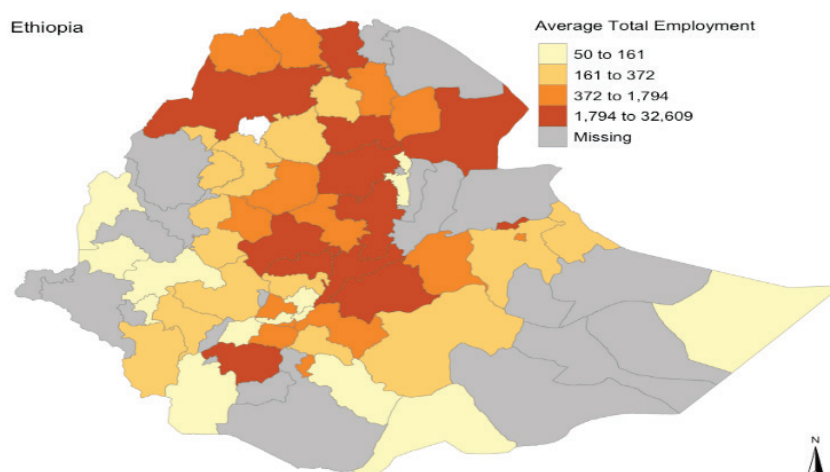
FIGURE 4.1 OPERATIONAL FIRMS
Number of operational private investments

Capital of private operational firms

FIGURE 4.2 FDI INFLOWS


FIGURE 4.3 DISTRIBUTION OF MANUFACTURING FIRMS

accounting for most manufacturing production. There are over 150,000 small manufacturing firms and just over 3,000 medium and large firms. The number of medium and large manufacturing firms has increased rapidly from around 1,000 in 2006. Small manufacturing firms are located mainly in Oromia, Tigray, Amhara and SNNPR, with little presence in other regions. These four regions are the location for 94 percent of small firms. Large and medium-sized firms are mostly concentrated in Addis Ababa and Oromia. These two regions are the location for more than two-thirds of medium and large manufacturing firms.

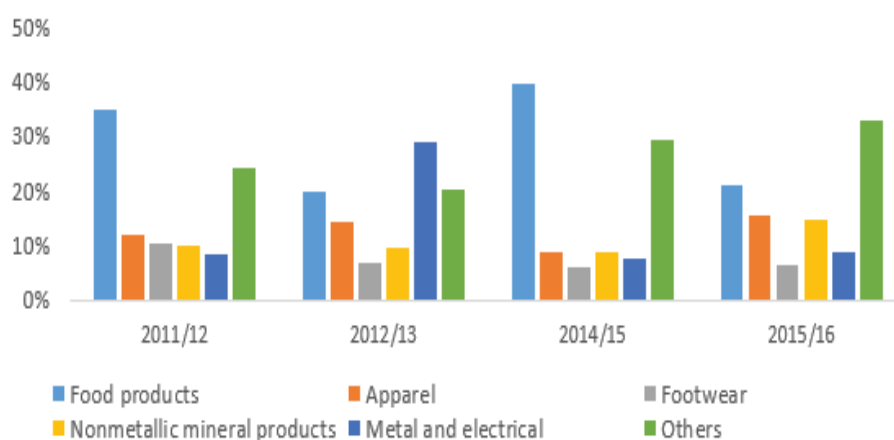
As a result, manufacturing employment is not evenly spread across the country. In some districts, there is very little employment in manufacturing. This trend is also

FIGURE 4.4 LICENSED FOREIGN MANUFACTURING INVESTMENT PROJECTS BY REGION

MAP 4.1 DISTRIBUTION OF MANUFACTURING EMPLOYMENT BY DISTRICT

reflected in the spatial distribution of FDI, which is heavily concentrated in Oromia and Addis Ababa. This suggests that policies should be tailored at the regional level to identify and address barriers that are discouraging manufacturing investment. The greatest opportunities are likely to be in agro-processing given the dominance of agriculture in these regions. Nevertheless, some regions may have few advantages to attract manufacturing, and policies may need to be tailored toward enhancing the mobility of workers in those regions to move to regions where investment in manufacturing is taking place.

Within manufacturing, food products is the largest subsector in terms of employment. Nevertheless, its share has decreased as other sectors, including apparel and

FIGURE 4.5 TOP EMPLOYING SECTORS ENGAGED IN BY PRIVATE SECTOR COMPANIES

non-metallic mineral products, have risen. Among SOEs in the manufacturing sector it is also the food products subsector that accounts for most employment.

The agriculture sector has grown rapidly in the past decade, driving poverty reduction. The sector is dominated by crop farming, which accounts for 60 percent of sector output, followed by animal farming contributing 20 percent of agricultural GDP. Agricultural growth has been driven by strong yield growth and increases in area cultivated, which increased by 7.0 and 2.7 percent per year in 2004–14, respectively. Significant increases in the adoption of improved seeds and fertilizer played a major role in sustaining higher yields.

There are substantial opportunities to create jobs in agribusiness but existing barriers to investments need to be removed. An example of a successful agribusiness sector is that of floriculture, which along with fruit and vegetable farming has created more than 180,000 jobs over the past 15 years. The vast majority of the jobs created in the cut flower sector are filled by women and, due to the labor-intensive nature of these jobs, most of the employees are from the youth. This can be expanded and replicated in a number of other agribusiness subsectors including horticulture, meat, and meat processing. The challenges include increasing access to inputs (fertilizer, seeds, pesticides, farm machinery), improving supply chain linkages with aggregators and processors, expanding access to finance and land, addressing a range of sector-specific investment climate barriers (standards, certification, logistics), and attracting FDI.

More intensive use of services inputs is associated with higher productivity in manufacturing firms. Services are key activities in their own right, and important direct generators of employment, but are often critical inputs into the production of other goods and services. Evidence from the manufacturing sector suggests that firms that use services more intensively in production exhibit higher levels of labor productivity. In addition, firms that use services intensively tend to export more than other firms. Of particular importance to broader private sector development and sustained growth are efficient backbone services such as energy, finance, logistics and telecommunications.

FIGURE 4.6 CROP FARMING WAS THE LARGEST CONTRIBUTOR TO GDP

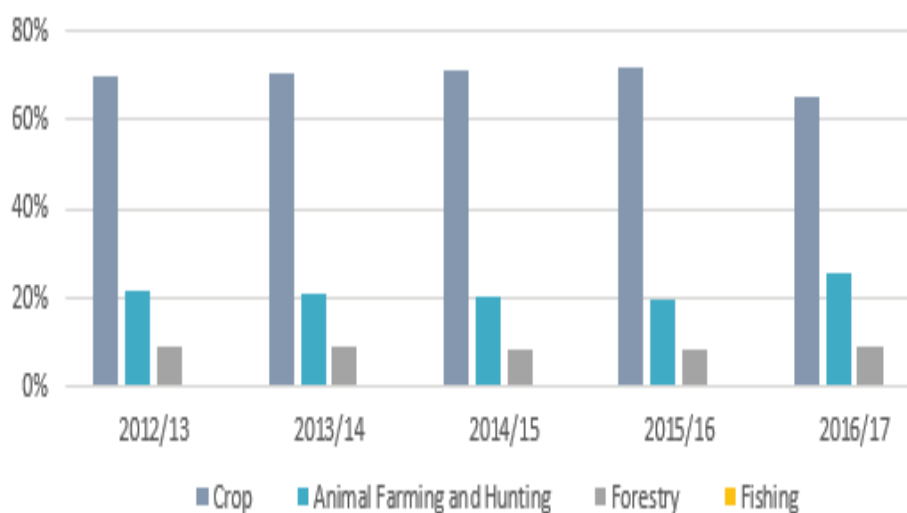
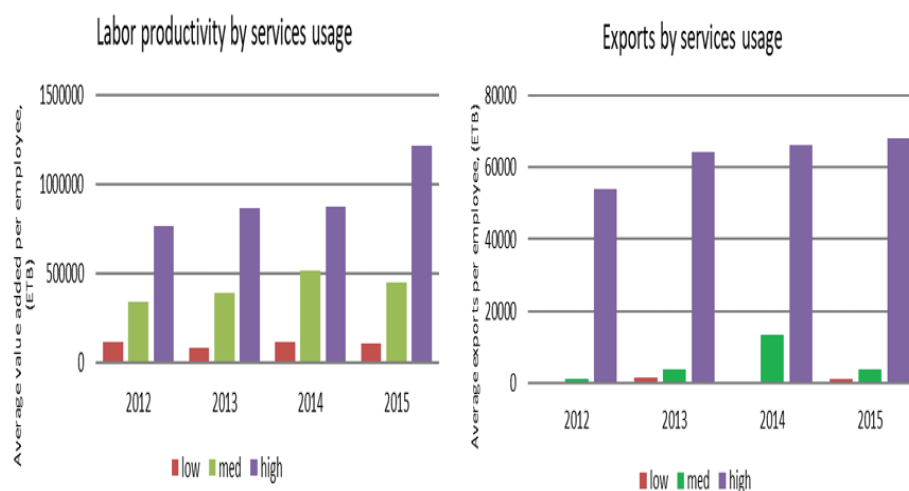


FIGURE 4.7 FIRMS THAT USE SERVICES EXTENSIVELY ARE MORE PRODUCTIVE AND EXPORT MORE THAN MEDIUM OR LOW USERS



05. SUBSTANTIAL OPPORTUNITIES TO UNLEASH PRIVATE INVESTMENT THROUGH REFORM OF ENABLING SECTORS AND ADDRESSING CROSS-CUTTING CONSTRAINTS¹³

The shift to a growth model in which the private sector plays an increasingly important role in investment and job creation will require that a range of regulatory and policy constraints to private sector development are addressed. The main challenges facing the private sector in Ethiopia can be grouped into three broad areas that need to be addressed to create markets, stimulate competition, and leverage greater private sector investment, as follows:

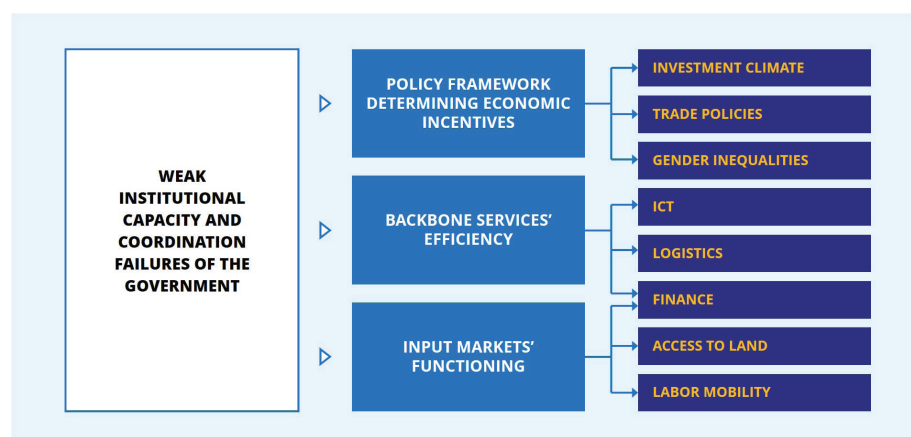
1. The efficiency of key backbone services and, in particular, logistics, telecoms, energy, finance, health, education, and transport;
2. The policy framework that determines economic incentives, including the business environment, trade policies that distort decisions on where to invest, and gender inequalities that undermine the potential of women-owned (or managed) enterprises; and
3. The functioning of input markets—land, labor, and capital.

Successfully addressing these challenges will require greater capacity and enhanced coordination within and between the different layers of government. The key issues that limit private sector investment and growth are:

- **POLICIES AND REGULATIONS ARE SUBJECT TO DIFFERENT INTERPRETATIONS BY DIFFERENT INSTITUTIONS, CREATING UNCERTAINTY FOR INVESTORS.** Laws and regulations are also subject to frequent change, especially as internal working rules (circulars) are not made public. The most frequent changes in regulations are seen in tax and immigration. Furthermore, there are issues around the consistency and evenness of application of policies. For example, unequal application of policies and rules for SOEs compared with the private sector has created unfavorable competition conditions, resulting in unequal access to finance, land, and foreign currency. The focus on FDI and promoting the export-led model has conflicted with some of the national private sector development policies, in particular those seeking to advance the development of SMEs.

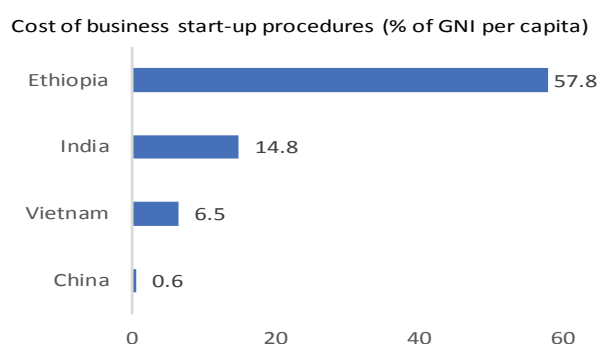
- **WEAK VERTICAL AND HORIZONTAL COORDINATION IN AND BETWEEN INSTITUTIONS LEADS TO MISALIGNMENT, A LACK OF COMMUNICATION, SLOW DECISION-MAKING, AND INVESTOR FATIGUE.** This reflects, in part, weak technical capacity in ministries to support private sector firms. Investors perceive that considerable time has to be spent building relationships with government officials to advance decision-making. Enforcement of tax and customs rules across sectors is inconsistent, and a major driver of informal transactions. The “one-stop-shop” model, and the “plug-and-play” model do not currently function well. Investors still find themselves having to deal with multiple institutions regarding the operations of their firms/investments, leading to high transaction costs.

Hence, figure 5.1 shows an overarching commitment to improve the capacity of government to address the challenges faced by the private sector, coupled with efforts to ensure effective and coordinated responses across ministries and agencies, and between central, regional and local governments, is required to govern progress on the three key pillars of policy reform. The persistence of coordination failures within

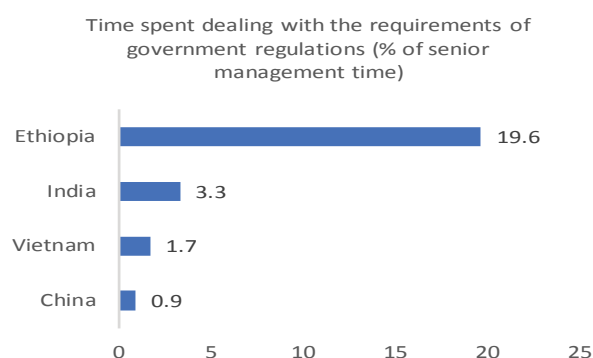
FIGURE 5.1 KEY CHALLENGES TO BE ADDRESSED IN FACILITATING PRIVATE INVESTMENT

government will limit the impact of progress in reforming these key policies. This report proceeds with a summary of the main challenges relating to the policy framework and the functioning of inputs markets. The following section then provides an in-depth discussion of the current situation and ways forward in the key enabling services sectors.

Private sector development is constrained by a restrictive business regulatory environment. Ethiopia ranks 161 out of 190 economies in the Doing Business 2018 report, and 108 out of 138 countries in the Global Competitiveness Index. The regulatory framework is complex, imposing constraints on business registration, licensing, operation, and closing. The key pieces of legislation that require streamlining and updating to put in place an enabling environment for Ethiopian businesses include: Commercial Code of Ethiopia, Commercial Registration and Business Licensing Proclamation, Trade Competition and Consumers' Protection Proclamation, and Investment Proclamation.

FIGURE 5.2 IT IS COSTLY TO START A BUSINESS IN ETHIOPIA ...

Source: Doing Business 2018 report.

FIGURE 5.3 ... AND COMPLYING WITH REGULATIONS IS TIME-CONSUMING

Source: WB Enterprise Surveys.

A longstanding concern of the business community has been the existence of too many and over specified business licenses requiring multiple licenses for closely related activities. The excessive use of licenses is compounded by the frequent use of competence certification requirements to obtain licenses where certification is required on whether or not a business has the capacity and capability of operating. Taken together, these create a substantial barrier to business startups and expansion. Recent reforms have led to a significant reduction of business licenses (by 30 percent) and the requirements of competence certificate (by 50 percent). The administrative burden for firms to exit in the case of failure, and the process of tax administration and customs procedures, are equal challenges for the private sector, especially domestic firms, compounded by a lack of consultations and understanding between the public and private sectors.

Women face particular barriers in starting and growing a business. A key challenge is lack of ownership of collateral, which limits access to credit for business financing. This is a major constraint on economic transformation and especially on the ability to increase productivity and value-added in agriculture. There is a substantial gender difference in agricultural productivity of 29.5 percent favoring men. On average, women farmers use fewer inputs. For instance, only 43 percent of female farmers use chemical fertilizers compared with 53 percent of male farmers. And where women farmers use fertilizers, the intensity of use is less than that on fields managed by men. Fertilizer-use intensity is positively associated with agricultural productivity. Recent studies show that women are significantly less likely to receive extension advice. This has contributed to lower usage of improved inputs and lower overall productivity. Ensuring equal access to finance, inputs, knowledge, and distribution networks will help strengthen entrepreneurship among women farmers and inclusive development along value chains. In formal enterprises, there is a very low number of women in top management positions (4.5 percent according to the most recent Enterprise Survey) and firms with majority female ownership account for only 16.5 percent of the total number of firms.

Female-owned/managed firms in Ethiopia face more constraints in accessing finance. According to the 2015 Enterprise Survey, 49 percent of female-managed firms identified access to finance as a major constraint, compared with only 19 percent of male-managed firms. Many growth-oriented female entrepreneurs in Ethiopia are unable to graduate from group borrowing to larger, individual loans that can fuel business growth, and therefore remain an underserved market. A recent study examining the impact of large, individual-liability loans averaging Br 250,000 for women entrepreneurs in Ethiopia found that, after three years, existing firms that received loans grew profits by 25 percent and increased the number of employees by 55 percent, relative to a matched control group that did not access the large, individual-liability loans.¹⁴ When they do access credit and grow, women-owned enterprises are also more likely to hire female employees, reducing gender inequalities in the labor market.¹⁵

Women also face specific challenges in participating in the labor force, and in entering and continuing to work in the key growth sectors. Women face legal constraints, such as a lack of mandatory paid maternity (or paternity) leave, and shoulder a disproportionate share of childcare responsibilities. They also have a more difficult time entering and staying in growth sectors that are largely male-dominated sectors, such as energy, transport, logistics, and ICT. The government's commitment

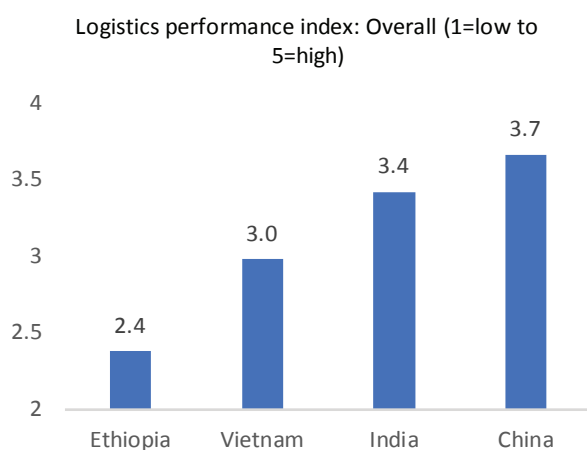
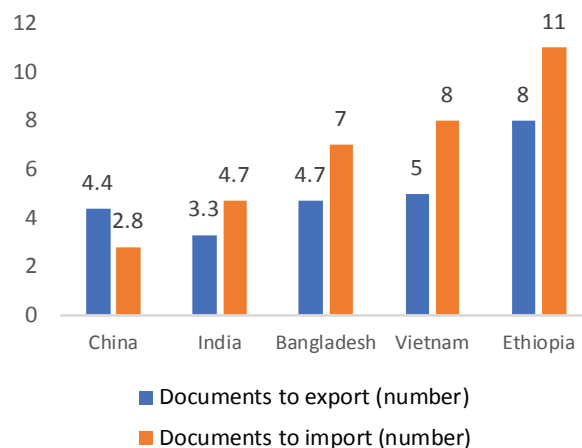
to gender equality also needs to be adopted and implemented by the private sector. There are good examples of investments in childcare facilities in the industrial parks to attract and retain more women, together with childcare support for the workers of the Ethiopian Electric Utility. Concerted efforts have also been made in the energy sector to include gender dimensions in the broader development of the sector with the support of the WBG.¹⁶

On average, Ethiopia continues to levy high tariffs, increasing the cost of imported inputs and consumer products, and creating a bias against exporting.¹⁷ The customs tariff is important for private sector development and export growth, through its impact on the incentives that firms face and on economic efficiency. Tariffs distort incentives toward the production of importable goods and away from exports.¹⁸ Tariffs on intermediate inputs and capital goods can constrain productivity growth by limiting access to the new ideas and technologies contained in those products.¹⁹ In the modern global economy, where importing intermediate inputs is critical to competitiveness in the export of downstream products, tariffs on intermediates that are higher than those levied by competitors can limit the ability of domestic firms to exploit export opportunities from global value chains (GVCs).²⁰ Tariffs on consumer products such as food and clothing affect the cost of consumption. If tariffs are higher on products that form a large share of the consumption basket of the poor, they may exacerbate poverty and inequality. This in turn influences the allocation of resources, job creation, decisions regarding investments in technology, and ultimately consumer budgets and welfare. Reducing high tariffs should therefore be part of a strategy to increase the incentives to export and reduce the cost of consumption.

Trade, and especially exports, is constrained by a range of non-tariff measures (NTMs). A recent survey²¹ found that 96 percent of trading companies in Ethiopia report facing burdensome situations related to the application and implementation of trade-related rules and regulations. Exporters appear to be more affected than importers, with 90 percent of exporting companies reporting facing burdensome NTMs and 56 percent of importing companies reporting such problems. Furthermore, such obstacles impinge more heavily on certain sectors than on others, with leather products being most affected (97 percent) on the export side and agriculture being the most affected sector (67 percent) for imports.²² It is medium and large exporters that report the most frequent difficulties related to NTMs. Among exporters of manufacturing products, measures applied by Ethiopia are the main hurdle, including export clearance procedures, and technical and quality regulations. It is the way in which regulations are applied, and the delays they cause, that is the main challenge.

Ethiopia's exporters face challenges in complying with standards in overseas markets and by lead firms in GVCs in a variety of sectors. Improving the quality of goods and services, and diversifying into sectors where quality matters will be important to enhance and sustain export growth. In this context, the government has identified, and is addressing with World Bank support, developing the national quality infrastructure as essential in supporting companies to become more competitive.

Inefficiencies in logistics impact on the competitiveness of firms trying to access international markets, and are therefore a major constraint to trade. While Ethiopia has invested heavily in transport infrastructure, the cost of shipping a 20-foot container to Germany from Ethiopia is 247 percent higher than from Vietnam, and 72 percent higher than from Bangladesh. Ethiopia was ranked 167 out of 190 economies in the

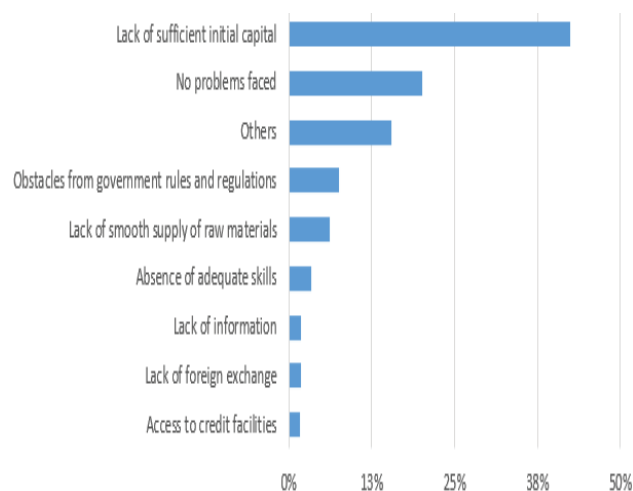
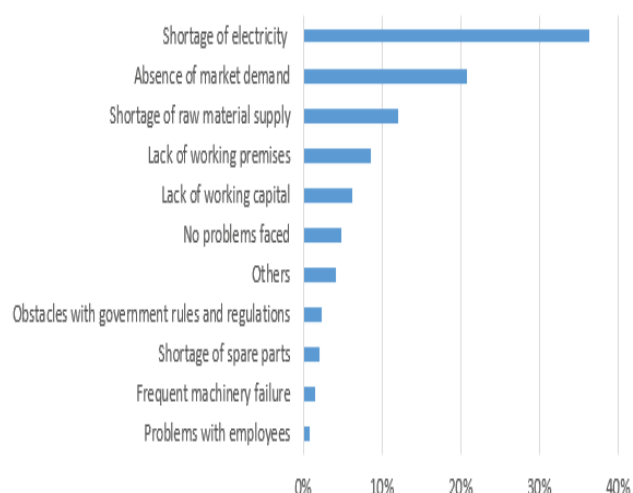
FIGURE 5.4 OVERALL LOGISTICS PERFORMANCE IS LAGGING BEHIND PEERS ...**FIGURE 5.5** ...AND DOCUMENTARY REQUIREMENTS ARE HIGH

“Trading across Borders” component of the Doing Business indicators,²³ and 126 out of 160 countries on the Logistics Performance Index (LPI) in 2016—a deterioration compared with its ranking of 104 in 2014.

High logistics costs in Ethiopia undermine both growth of the export-driven light manufacturing sector and the continuing transformation of the agriculture sector. Firms in Ethiopia face higher inventory costs and longer lead times, which result in a supply chain that is not able to respond to time constraints. As a result, modern manufacturing is particularly difficult for Ethiopian companies to succeed in. Poor quality logistics also limits the use of improved seeds and the wider application of fertilizers in agriculture, and constrains exports of key products, such as sesame, coffee, and a move into exports of processed food. Logistics reform will be essential to allow Ethiopia to fully capitalize on the opportunities generated by the public investments that have been, and are being, made in critical infrastructure, including road, railways, and energy, as well as industrial park facilities.

Small firms report that the main challenge they face related to starting up their business is access to capital. Access to credit and financing continues to be a major issue for the private sector. Private sector use of domestic banks to finance operations is limited. Only 16.4 percent of the private sector uses finance from banks for its activities, compared with Kenya and Uganda, which use about 41 and 21 percent, respectively (World Bank, 2016). Private sector credit amounts to only 9 percent of GDP, in contrast to the 20 percent median for Sub-Saharan Africa. Private businesses have limited awareness of loan policies and procedures.²⁴ This creates recurrent non-compliance throughout the loan process and the perception that loan processes are too long. Requirements for sectors such as agriculture are particularly onerous due to perceived high risk, despite the sector being a government priority.

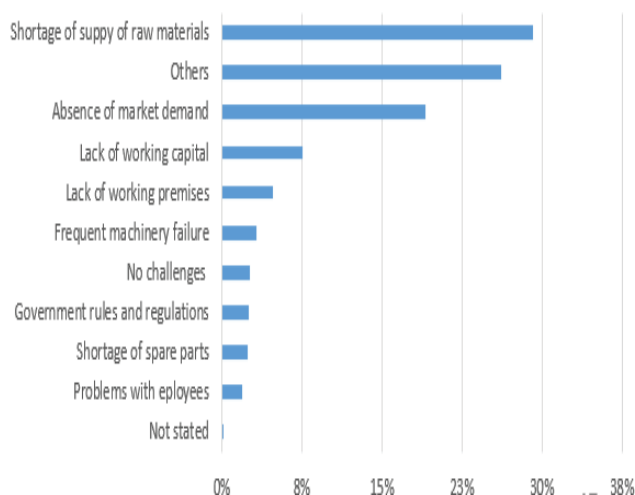
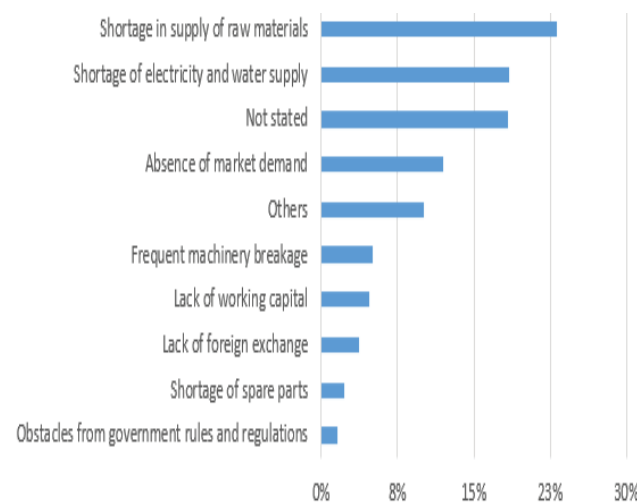
For small firms access to electricity is the main operational constraint. Access to, and the reliability of, utilities remain a major constraint to productivity growth. Frequent power outages, both for manufacturing industries and the services sector, result in loss of customers and market share due to delays in production or service provision. Severe operational delays are caused by difficulties in obtaining trans-

FIGURE 5.6 CHALLENGES AFFECTING FIRMS FROM BEING OPERATIONAL**FIGURE 5.7** CHALLENGES FACED WHILE OPERATIONAL

formers (33 percent of manufacturers). Inadequate power supply forces firms to use costly generators and lower production capacity. This in turn has a major effect on competitiveness and product margins. Poor telecommunication service provision for businesses is still a serious problem, despite strides made in increasing connectivity. Dynamic firms that rely on steady and fast telephone and broadband service provision are faced with underperforming telecoms infrastructure and connectivity issues.

Medium and large firms report that the main challenge they face in starting up, and once operational, is access to raw materials. This attests firstly to weak domestic supply chains such that firms are unable to source the quality and reliability of inputs they require. Hence, strengthening the linkages between downstream producers of finished goods and services, and the firms upstream that provide material and services inputs, is important. Nevertheless, access to imported inputs is critical at this stage of development, providing necessary materials not available in the domestic market. But access to imports is constrained by the burdensome implementation of regulations, constraints on foreign exchange, and inefficient trade logistics. Ethiopia ranks poorly on the Doing Business indicators for time and costs to import. This is particularly so for the time and costs related to documentary compliance. It takes on average more than eight days to comply with the documentary requirements to import in Ethiopia, more than twice the average of four days for Sub-Saharan Africa, and considerably above 3.2 days in Vietnam. In terms of the cost of complying, it is \$750 in Ethiopia, \$284 on average in Sub-Saharan Africa, and \$183 in Vietnam.

A shortage of skilled labor contributes to low factor productivity. There is a shortage of middle-level management, as well as experienced technical staff. This reflects in part a mismatch in the number of appropriate graduates and the need for entry level management staff. This translates into higher operational costs for the private sector (inefficiencies in scaling operations, high training costs, high staff turnover). This in turn can result in an unhealthy poaching culture between businesses, high turnover rates, and a working culture that leads to inefficiencies and an increase in

FIGURE 5.8 CHALLENGES FACED WHILE OPERATIONAL**FIGURE 5.9 CHALLENGES AFFECTING FIRMS FROM BEING OPERATIONAL**

costs. There are also issues concerning the readiness of unskilled labor for work in manufacturing industries.

Modern labor laws are required to unlock large-scale private sector investments and the emergence of a modern manufacturing sector. The current Labor Law came into being more than 14 years ago and relevant government agencies are currently spearheading reforms to accommodate private sector concerns, especially in the manufacturing sector, as well as providing adequate worker protection. Among others, planned reforms envisage modification of workers' probation periods, additional rules to curb worker absenteeism, increasing overtime work, imposing obligations on employers to implement awareness-raising trainings, establishing ad hoc labor relation boards, among others. There is also the issue of rights and obligations of refugees with regard to employment, as existing permit-based employment laws for foreign workers are restrictive. Revision of such rules is in the pipeline in the context of the Jobs Compact Project, which envisages supporting industrial parks that create job opportunities for refugees.

Industrial firms, especially those in the industrial parks, are facing high levels of labor turnover. In principle, rising demand for labor as a country industrializes should improve wages and working conditions across the economy, making work in industrial firms a more attractive alternative than previous opportunities. But in the early stages of industrialization, as in Ethiopia, it may take time and considerable effort with regard to training and awareness-raising to clarify the opportunities and risks industrial jobs offer to workers relative to the informal work they have been used to. Furthermore, industrialization and urbanization are bringing additional challenges to Ethiopia in terms of the provision of housing, health care, and transportation.

Inadequate lease terms, an unclear regulatory framework around land allocation and land lease, and unfair land allocation continue to be major barriers to firm entry into business. There is a limited supply of land to match rising demand, which is compounded by a lack of clear policies for land allocation, leading to corruption or

BOX 5.1 BROADENING THE BASE OF INDUSTRIAL DEVELOPMENT: THE EXAMPLE OF FRUITS AND VEGETABLES

The potential to scale up production and exports of agro-processed goods in Ethiopia is very high, and the fruit and vegetables sector provides a good example of the opportunities and challenges that must be addressed. Growth in the fruit and vegetables sector could help provide new job opportunities, reduce poverty, and drive more inclusive economic growth. Ethiopia is already a large exporter of some fruit and vegetable products to regional markets, such as Somalia and Djibouti, demonstrating the basic capabilities to become a successful global exporter in this sector. Ethiopia has a favorable climate, a variety of agro-ecological zones, low-cost labor, and relative proximity to major regional (the Gulf States) and global (EU) markets.

While there are basic capabilities in the sector, scaling up to more demanding regional and global markets will require efforts to modernize production and address policy, institutional, and infrastructure constraints. The governance structure of most GVCs for fruit and vegetables concentrates power with downstream buyers. This makes their demands de facto requirements for market access and sales. Improvements in cold-chain logistics services have resulted in the production of fruit and vegetable products becoming more globally diffuse. This means that farmers in Ethiopia must compete with farmers across the globe to meet the increasingly strict purchasing criteria set by buyers.

Lessons from the policy and regulatory frameworks that helped foster the development of the floriculture sector can inform how to achieve similar private sector-driven, export-oriented growth in the fruit and vegetables sector. Government revisions to investment policies, incentives for producers to improve inputs (including through imports), and the provision of supporting services were crucial in the development of floriculture in Ethiopia. Similar policy approaches have not been as effective in driving such transformation in fruit and vegetables. Major investments in infrastructure are now in place but additional measures are required to reduce both trade costs and coordination failures between different players along the value chain. This is especially true in federal and regional planning, as well as in the distribution of key imported inputs to farming communities. Uncoordinated approaches undermine competitiveness and limit opportunities to scale up export volumes and diversify into higher value-added market segments. The key challenges include:

- **CUMBERSOME AND TIME-CONSUMING PROCEDURES.** Many of the important administrative steps to import key inputs and equipment require keeping staff in an Addis-based office to maintain a relationship with the relevant government bodies. Securing work permits for expatriates is also a lengthy and cumbersome procedure, which has impacted operations of existing firms.

- **LACK OF COORDINATION BETWEEN FEDERAL, REGIONAL, AND LOCAL AUTHORITIES.** For example, access to water is critical for many producers of horticultural products. In 2017, access to the waters of a crucial canal (Tibila Irrigation Canal) was cut off by the local government, severely affecting fruit and vegetable producers in that region; large areas of arable land could not be irrigated and production was lost. This is a key issue for investors: despite assurances received from the central government, the reality experienced on the ground can be very different when it comes to the availability of water, with interference from local communities and local governments.

The government can support the private sector-driven development of fruit and vegetable value chains in the following ways:

- **REVISE TRADE POLICY TO IMPROVE ACCESS TO, AND THE AFFORDABILITY OF, IMPROVED SEEDS AND CUTTINGS, FERTILIZER, AND OTHER AGROCHEMICALS.** Many exporters report an inability to fulfill orders due to lack of sufficient supply. Improving inputs is one way of improving productivity and yields, increasing the supply of fruit and vegetables. A shift to agro-processing, especially for export markets, will require high-quality inputs and more sophisticated technologies. Therefore, at least in the short term, importing intermediate inputs (including raw materials and services) and capital equipment is necessary.
- **IMPROVE ACCESS TO KNOWLEDGE FOR PRODUCERS BY MODERNIZING AND RETOOLING EXTENSION SERVICES.** Ethiopia has a large extension program, but there is a need for more specialized advice that is tailored to producers' needs and that considers long-term sustainability issues. Land degradation is a serious problem in many areas. Extension services will need to incorporate buyers' requirements and market trends. They should also incorporate good agricultural and manufacturing practices to improve hygiene, handling, storage, and transportation along the value chains.
- **ENSURE THAT THE NECESSARY INFRASTRUCTURE AND LOGISTICS ARE IN PLACE TO FACILITATE EFFICIENT DISTRIBUTION.** To reach beyond local markets, fresh fruit and vegetable exports rely on highly skilled cold-chain logistics services. The further the market destination, the more important the quality of these services becomes. Competitiveness in fresh products will require the further development of appropriate cold-chain storage facilities along the main transport routes within the

(Box continues next page)

BOX 5.1 (CONTINUED)

country, as well as the strengthening of both backward links for key inputs and forward links to buyers and overseas markets.

- **ENSURE THAT THE NECESSARY INFRASTRUCTURE AND LOGISTICS ARE IN PLACE TO FACILITATE EFFICIENT DISTRIBUTION.** To reach beyond local markets, fresh fruit and vegetable exports rely on highly skilled cold-chain logistics services. The further the market destination, the more important the quality of these services becomes. Competitiveness in fresh products will require the further development of appropriate cold-chain storage facilities along the main transport routes within the country, as well as the strengthening of both backward links for key inputs and forward links to buyers and overseas markets.
- **STRENGTHEN THE QUALITY INFRASTRUCTURE ECOSYSTEM TO IMPROVE COMPLIANCE WITH SANITARY AND PHYTOSANITARY TECHNICAL REGULATIONS AND VOLUNTARY STANDARDS.** Improving product safety and quality is imperative for food exports, explicitly perishables. Internationally recognized accreditation and mutual recognition of conformity assessment services will help facilitate market access for exports and strengthen the international reputation of Ethiopian products, including higher-value niche goods.
- **INCLUDE FRUIT- AND VEGETABLE-RELATED LOGISTICS AND AGRO-PROCESSING IN TRAINING AND INNOVATION POLICIES.** New jobs can be created, and entrepreneurship fostered, through collaborating more closely with the private sector, identifying the skills that are needed, and integrating specialized curricula that address skill gaps into technical and vocational education and training (TVET) and other learning institutions. When the necessary skills are not available on the domestic labor market, flexible policies are required that allow professionals and professional services to enter the country. Improved skills will spur innovation and help improve product and process

upgrading, opening up opportunities to move toward higher-value segments of the market.

- **ADDRESS GENDER-SPECIFIC CONSTRAINTS THAT LIMIT WOMEN FARMERS' PARTICIPATION IN EXPORT-ORIENTED VALUE CHAINS.** Recent studies have shown that women are significantly less likely to receive extension advice. This has resulted in lower usage of improved inputs and lower overall productivity. Ensuring equal access to finance, inputs, knowledge, and distribution networks will help strengthen entrepreneurship among women farmers and inclusive development along value chains.
- **PROVIDE CERTAINTY AND CLARITY ON LAND TENURE AND OWNERSHIP RIGHTS.** Improvements have been made in sustainable land management and certification for land rental markets. More will need to be done to clarify how such systems will be supported in the long term. Stakeholders along the value chain reveal continued coordination failures between federal and regional officials when it comes to receiving land from the government. This has negatively affected investment opportunities.
- **FACILITATE EFFECTIVE DIALOGUE AMONG FEDERAL AND STATE GOVERNMENTS, THE PRIVATE SECTOR, AND DEVELOPMENT PARTNERS.** These should address coordination failures and ensure key constraints are overcome through the most appropriate interventions. For example, what are the roles of the federal and state governments in supporting the development of cold storage and distribution relative to investments by the private sector? How can trust between the private sector and the government be increased to facilitate investments that overcome key productivity constraints? How can development partners and donors crowd in private sector finance to catalyze investment in new market opportunities?

favoritism, and a policy that is not inclusive. High land-lease costs are a major reason behind the failure to acquire leased plots and exclude many SMEs from access to land. Lengthy times for land acquisition, which routinely takes several years, prevent businesses from operating or expanding.

While the government's current focus is on attracting large-scale foreign investment into light manufacturing in industrial parks, these reforms should facilitate a broader sectoral range of private sector investment. This is of particular importance in a spatial context and in increasing non-farm employment in rural areas that are unlikely to attract substantial investment in apparel, leather, and other light manufacturing sectors. While growth of industrial parks will exert a strong pull factor for

labor migration from rural areas to the main cities, it is sectors such as agribusiness and related services that offer the best prospects of bringing higher productivity jobs to rural areas.

Realizing the potential for private sector investment in sectors such as agribusiness and services will require the private sector and government to coordinate to resolve sector-specific constraints. Box 5.1 provides an example of the opportunities for broader private sector-driven growth in the agribusiness sector, and the particular case of fruit and vegetables. This case study highlights the importance of dealing with both cross-cutting constraints from, among others, restrictive trade policies and poor logistics, addressing coordination failures among different levels of government, but also sector-specific knowledge constraints that limit supply and productivity growth.

06. THE ENABLING SECTORS

In a major policy change, the government recently announced that private sector participation (domestic and foreign) would be permitted in telecoms, power, logistics, and air transportation. This section looks at the opportunities for private sector investment in these key enabling sectors, as well as in health, education, and finance, the efficiency of which in turn is critical for private sector development throughout the economy. The focus is on those sectors that are being opened up for private sector investment. Particular attention is given to logistics and telecoms, given their key role in defining the competitiveness of modern manufacturing subsectors and as subsectors offering opportunities for strong private sector investment and job creation. The analysis of these two sectors is enhanced by the use of the Ethiopia EPIQ model (see appendix A) to trace the potential impacts of reform and enhanced efficiency from greater private sector participation on key economic variables, including prices, output, exports, poverty, and income inequality.

LOGISTICS

SECTOR BACKGROUND AND PERFORMANCE

The market for logistics in Ethiopia has huge potential to become a multibillion-dollar sector that not only underpins competitiveness but also generates substantial new and high productivity jobs. For example, in Vietnam, the logistics sector is worth more than \$60 billion and there are 1,000 firms providing logistics services. Modern logistics sectors are dominated by third-party logistics providers, whereby

companies that require logistics services outsource their requirements to specialized service providers, and those service providers are given equal access to the core infrastructure (road, rail, shipping, sea, and dry ports) on terms comparable to those in a competitive market. Logistics is a network industry where efficiency is impacted by multiple regulations and requirements defined by a range of regulatory bodies (maritime transport, road transport, rail, ports, customs, finance, etc.), all with different objectives. Hence, regulatory coordination is essential in supporting efficiency in the sector and preventing fragmentation of supply chains.

To improve logistics performance, Ethiopia faces two key challenges. First, the country needs to increase the capacity, efficiency, and quality of existing services, which are focused on transportation and customs clearance. Second, Ethiopia needs to broaden the range of logistics services that are available to serve modern manufacturing supply chains, including distribution, packaging, warehousing services, transport management services, supply chain consulting services, and inventory management. These all call for increased strategic investments in infrastructure and appropriate regulations that allow for dynamic, low-cost but higher-quality services. To this end, the government recently announced that foreign companies would be allowed to invest in Ethiopia through joint ventures (up to 49 percent stake) with local companies in areas including packaging, forwarding, and shipping agency services, as well as the provision of bonded warehouse, consolidation, and deconsolidation services.

The logistics sector is currently dominated by the Ethiopian Shipping and Logistics Services Enterprise (ESLSE). ESLSE provides shipping services, arranges the transfer of goods between Djibouti and Ethiopia, and operates the dry port at Modjo. Current government policy means that ESLSE is the only provider of multimodal services, whereby various transport modes are combined under the responsibility of one single transport operator. It has become increasingly apparent that ESLSE's operational performance is far from best practice across all areas of operation, including shipping, freight-forwarding and terminal and port operations, resulting in both higher costs and lower quality logistics services. The government is now keen to transform ESLSE into a world-class international logistics service provider, suited to a transforming economy.

The government has recently announced that packaging, warehousing, freight-forwarding, and other logistics areas that were previously reserved for Ethiopian nationals, can now be undertaken by firms with 49 percent or less foreign participation. This is an important step toward the provision of efficient logistics services consistent with international standards and comparable to logistics sectors in competitor countries. For example, the revisions to the Investment Law open the possibility for investment that Ethiopia desperately requires in an export cold chain, in order to exploit the country's potential to export large volumes of horticultural products by leveraging the railway. This includes a potential \$40 to \$60 million investment in a cool port (one with cold storage facilities) at Modjo, which is evolving to be the main logistics hub for the country. This would have a significant impact on competitiveness, exports, and job creation.

WAYS FORWARD

Ethiopia has developed a National Logistics Strategy (NLS) that has recently been endorsed by the Council of Ministers. The NLS outlines the key challenges that need to be addressed to transform the logistics sector in Ethiopia. The next step is to define a

roadmap for the implementation of the strategy. A key issue that needs to be resolved, within a context of greater private sector investment in the sector, is reforming ESLSE.

Given its current dominance of the sector, decisions regarding the operation, management, and ownership of ESLSE will influence the overall direction and outcome of the logistics sector reform in Ethiopia. A first level of concern would be to avoid simply transforming ESLSE from an inefficient public monopoly into an inefficient private monopoly that transfers rents abroad, which would be an unambiguous loss of economic welfare for Ethiopia. Furthermore, transformation of the logistics system from one focused on transportation and customs clearance, to a modern multi-purpose multi-service sector that delivers efficient intermodal connectivity and provides a wide range of logistics services will require the participation of a variety of logistics providers beyond ESLSE.

Experience from other countries strongly suggests that SOE reform is best preceded through the establishment of an appropriate regulatory framework. Regulation should focus only on those elements where it is most needed to correct market failures, or achieve public-policy objectives. The sequencing of reforms is often important too, as regulation is in many cases a learning process. In addition, regulations may need to evolve as new services emerge in the market. Lessons from OECD countries suggest that the overall objectives of regulation should be to promote transparency and efficiency, and clearly define the division of responsibilities among different supervisory, regulatory and enforcement authorities. This entails ensuring a level playing field in markets where firms with some degree of government ownership or control compete. There is also a need for clear separation between the state's ownership and regulatory functions, and hence the need for complete independence of the Ethiopian Maritime Affairs Authority (EMAA), the regulator.

Results from the EPIQ model suggest that logistics reform would contribute to increasing competitiveness and poverty reduction, but would not offset the trend toward increasing inequality. Box 6.1 summarizes the main results from a scenario in the EPIQ model, in which reform of the logistics sector leads to a 20 percent decline in the costs of logistics services. An additional scenario allows for increasing FDI. Since logistics is both a sector in its own right and also an input to most other activities, reform has substantial sector- and economy-wide impacts. Logistics reform would contribute to declining prices for many goods and services, and lead to higher output and exports. Increased efficiency in logistics would also contribute to higher wage growth and poverty reduction, but would add slightly to the projected increase in income inequality in Ethiopia. Therefore, additional measures and complementary interventions to ensure shared prosperity would be required.

ICT/TELECOMMUNICATION²⁵

SECTOR BACKGROUND AND PERFORMANCE

While ICT is seen as an integral and essential part of Ethiopia's growth strategy, the country has one of the lowest ICT development rankings in the world. The National ICT policy recognizes the catalytic potential of ICT, both as an industry in and of itself, and as an enabler of socioeconomic transformation. However, according to the ITU's ICT development index, Ethiopia ranks 170 out of 176 countries. A

BOX 6.1 THE POTENTIAL IMPACT OF REFORM OF LOGISTICS SERVICES: SCENARIOS FROM THE EPIQ MODEL

To highlight the potential impact of improvements in the general logistics infrastructure we implement two scenarios in the EPIQ model: one where general logistics costs decrease by 20 percent in 2019 going forward, and another where, on top of this, we assume that the improvement will attract additional annual FDI inflows of 0.6 percent of GDP evenly spread over all sectors of the economy. In both scenarios, the transportation cost reductions are represented by assuming that productivity in the transportation sector increases accordingly. A decrease in transportation costs will decrease the costs of production and marketing of all other industries in the country, and improve their competitiveness. Decreasing prices for domestically produced goods will increase domestic demand, as well as exports, and hence, boost domestic production. Eventually, as productivity increases and employment opportunities are created, higher wages and job creation will result in higher income and lower levels of poverty.

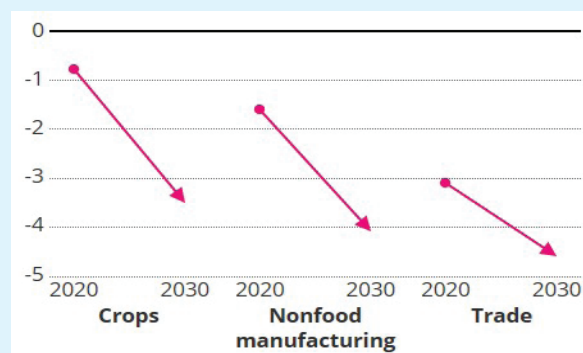
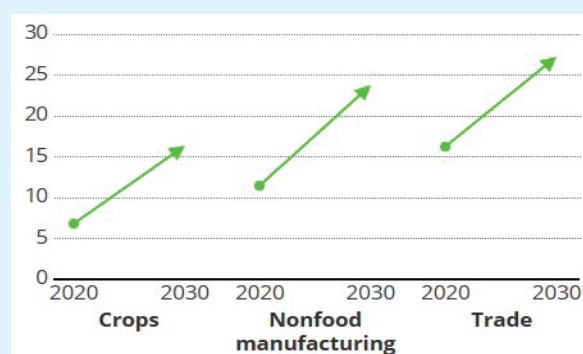
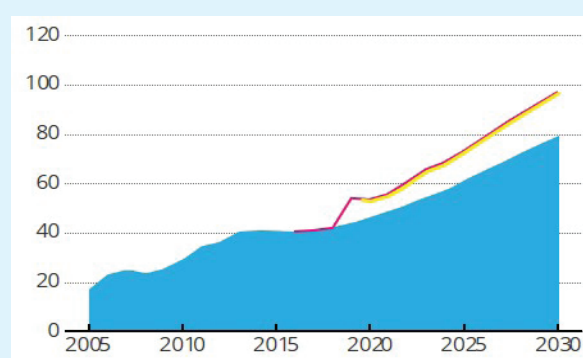
SECTORAL IMPACTS

Decreasing the cost of logistics will lead to lower producer and consumer prices for goods and services. Figure B6.1.1 displays price changes in 2020 and 2030 compared with the baseline scenario without any improvements in logistics. By 2030, prices of crops decline to around 3.5 percent compared with the baseline. Prices of non-food manufactures decline by 4 percent and, since wholesale and retail trade has the largest relative cost share in transport and logistics, the prices of these services will be affected the most, falling by about 3.1 percent initially, and by 4.6 percent compared with baseline values by 2030.

Producer price decreases translate into higher domestic and export demand. Figure B6.1.2 shows how the increase in competitiveness from logistics reform contributes substantially to improving Ethiopia's weak export position and translates into higher export quantities for Ethiopian goods. For example, the model suggests that a 20 percent decrease in logistics costs translates into an increase in exports of between 7 and 16 percent for the goods shown, and that non-food manufacturing exports rise by 24 percent by 2030 compared with the baseline of no improvement in logistics. Lower prices, greater economic activity, and higher incomes lead to a similar picture for domestic demand, with demand for goods and services increasing by between 5 and 10 percent by 2030.

ECONOMY-WIDE IMPACTS

Sectoral improvements in costs and productivity translate into economy-wide impacts. Exports and GDP grow faster in both scenarios than under the baseline, resulting in roughly 20 percent larger overall exports by 2030 (figure B6.1.3). At the same time, GDP, which is projected to grow more slowly over the baseline forecast horizon than in the past, grows faster with the improved logistics

FIGURE B6.1.1 PRODUCER PRICE CHANGES OF SELECTED GOODS AND SERVICES**FIGURE B6.1.2 CHANGE IN QUANTITY OF EXPORTS: SELECTED GOODS AND SERVICES****FIGURE B6.1.3 GROWTH OF ETHIOPIA'S EXPORTS**

(Box continues next page)

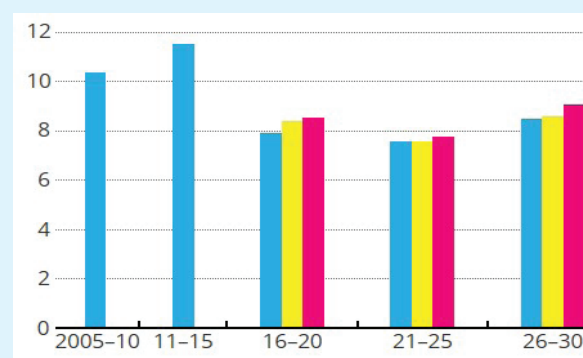
BOX 6.1 (CONTINUED)

program (figure B6.1.4). Under the baseline case, real GDP is projected to grow by an average of 7.6 percent per year in the period between 2016 and 2030. A 20 percent decrease in the cost of logistics is projected to help GDP grow by an average of 7.9 percent per year. If we assume additional FDI inflows, annualized real GDP growth is 8.1 percent over the projected period.

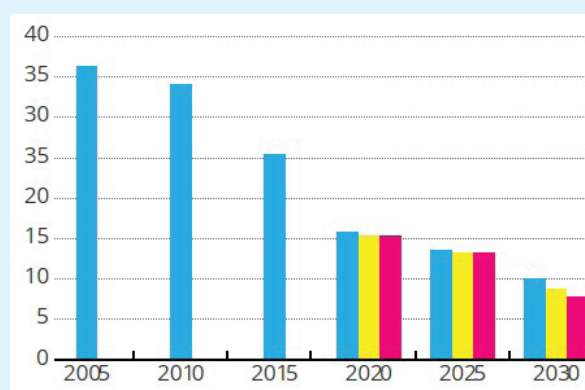
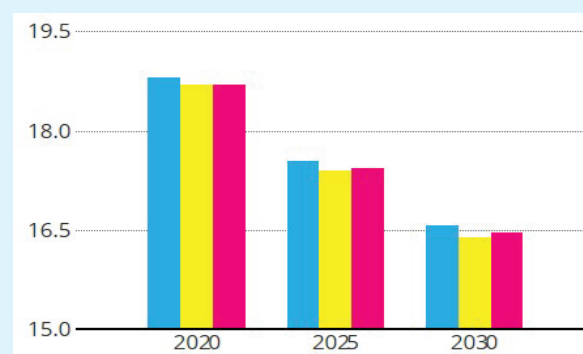
POVERTY AND SHARED PROSPERITY

Stronger GDP growth and productivity improvements lead to faster growth in incomes and reductions in poverty. In the model, wages increase by about 0.3 percent faster annually for all education levels over the forecast horizon than without the reforms and investments in the logistics sector. As shown in figure B6.1.5, the poverty rate continues decreasing over the model horizon. Logistics reforms have the potential to further decrease the poverty rate in 2030 from a forecasted 10.2 to 8.9 percent without additional FDI, and to 8.1 percent with the assumed increase in FDI inflows.

However, logistics reform does not contribute to increasing shared prosperity. The model suggests that improving the efficiency of the logistics sector contributes to increasing average income growth, as well as the incomes of the bottom 40 percent. Indeed, the average income growth rate is larger than that for the bottom 40 percent, and so logistics reform does not offset, but rather contrib-

FIGURE B6.1.4 REAL GDP GROWTH

utes to, the current trend toward increased inequality. This is shown in figure B6.1.6 where the income share of the bottom 40 percent is projected to decline from 18 percent in 2015 to 17 percent under the baseline, and to decline slightly further in the counterfactuals by another 0.2 percent without additional FDI, but by only 0.1 percent with additional FDI. Hence, logistics reform, as with other reform measures, will need to be accompanied by complementary measures that address the trend toward increasing inequality.

FIGURE B6.1.5 POVERTY RATE**FIGURE B6.1.6 INCOME SHARE OF THE BOTTOM-40 PERCENT**

major reason for the sector's poor performance is the low level of telecommunication services penetration. Despite annual subscriber growth of over 80 percent, and with \$3.1 billion invested in infrastructure and service expansion over the past decade, the country's ICT development remains low, especially related to use and skills. Mobile penetration remains among the lowest in the world, with only 42 percent of the population using mobile voice services in 2018, compared with 51 percent in Kenya and 49 percent in Sub-Saharan Africa as a whole. And despite substantial increases

in international bandwidth (+35 percent in 2017), Ethiopia's upstream international connection is still limited, with 0.5 Mbit/s per 1,000 people in 2017, compared with 10 Mbit/s in Kenya. In the fixed broadband market, subscription rates were 0.55 per 100 people in 2017, compared with 0.33 in Kenya and 1.3 for Sub-Saharan Africa.

While substantial investments in infrastructure in recent years, including a \$3.1 billion series of loans from China EXIM Bank, have improved connectivity and accessibility, penetration remains limited and Ethio Telecom faces efficiency challenges. Ethio Telecom claims that its aggressive roll-out of telecom infrastructure in recent years has increased mobile voice coverage (2G) to 97 percent of the population in 2016, and boosted mobile data 3G coverage from 63 percent in 2014 to 80 percent in 2017. 4G coverage also increased from 9 percent in 2015 to 35 percent in 2015. However, there is some doubt about the reliability of these figures in the absence of an independent regulator. Nonetheless, mobile penetration remains among the lowest in the world, with only 59 percent of the population using mobile services in 2017, compared with regional peers such as Kenya and Tanzania mobile penetration rates of 81 and 69 percent, respectively, and to Sub-Saharan Africa's average of 75 percent. Countries in Sub-Saharan Africa with low penetration levels are usually characterized by low accessibility and high prices. Affordability and service levels were converging toward the regional average during the period of Ethio Telecom's management contract with Orange Group, but have since declined on termination of that contract. Furthermore, Ethio Telecom's budget underutilization and lost revenue from fraud affects development in rural areas.

The underdevelopment of the telecoms sector has a knock-on impact on other sectors such as financial services. Although Ethiopia operates a mobile banking service, M-Birr, the take-up is low by regional standards. Only around 0.03 percent of the adult population accessed banking services through mobile accounts in 2017, compared with 73 percent in Kenya, 51 percent in Uganda and 39 percent in Tanzania. It has limited overall account ownership, with 35 percent of people age 15+ having a bank account (including mobile) in 2017 compared with 82 percent in Kenya, 59 percent in Uganda and 47 percent in Tanzania. Since July 2018, Safaricom has been considering setting up its M-Pesa mobile money services in Ethiopia. The country also performs poorly when it comes to e-commerce development (scoring in 2016 16 out of 100, compared with 45 in Kenya and 43 in Uganda), despite mobile apps in first language being available to over 31 percent of the population in 2016, above the average in Sub-Saharan Africa (9 percent) and in Eastern African countries.

The digital economy offers opportunities to enhance the impact on jobs of key growth sectors, including finance, but Ethiopia is lagging on connectivity and the regulatory environment for the spread of digital technologies. The digital economy offers broad development benefits in terms of faster growth, more jobs, and better services. However, for digital technologies to benefit everyone everywhere this requires closing the digital divide, especially in internet access. This is particularly acute in Ethiopia, where the internet penetration rate is just 15 percent compared with 85 percent in Kenya, for example. Experience from other countries suggests that greater digital adoption needs to be accompanied by strengthening regulations that ensure competition in the market, by enhancing workers' skills and addressing constraints in the business environment. Ethiopia continues to levy high import tariffs (an average of 14.4 percent with some taxes as much as 30 percent) on ICT and digital products,

compared with other countries in the region. In Kenya, the average tariff on these products is just 3.75 percent.

The announcement of telecoms sector reform provides for a new direction in private sector participation. Ethiopia is one of the last three countries in the world (along with Eritrea and Djibouti) to have retained a national monopoly in all telecom services. Ethio Telecom's monopoly has stifled innovation and limited the variety of services on offer as a direct result of lack of competition. However, a recent announcement by the Prime Minister in June 2018 of a telecoms sector reform process and the adoption of a telecoms policy paper by the Macroeconomic Committee in August 2018, sets a new direction for policy that embraces private sector participation, market competition, and independent regulation. The government has already opened up the Value-Added-Services (VAS) telecoms sector to competition in early 2018. The regulator in charge of developing telecom services, licensing, and supervising operators is the Ethiopian Telecommunication Agency (ETA).

The government is also seeking to make Ethiopia a prime regional IT hub, for which digital infrastructure will be essential. In 2015, the government inaugurated the Ethio-ICT industrial park on 200 hectares of land in Addis Ababa. The park is designed to boost IT services. Initially involving 20 local and six foreign firms, the park aims to boost this to more than 70 firms; a second ICT hub, to be based in Bahir Dar, Amhara, is also planned. Meanwhile, China is likely to continue to provide substantial support for the Ethiopian ICT sector. At end-2017, the city of Shenzhen opened an office in Addis Ababa as part of efforts to foster cooperation. This is potentially significant, as a number of high-profile ICT firms, including Huawei, ZTE, and the Shenzhen Energy Group, are based in Shenzhen, which is nicknamed China's 'Silicon Valley'. Such firms are well-placed to benefit from the change in Ethiopia's policymaking mindset.

The government's ICT Policy and Strategy outlines broad objectives to enhance the role of ICT in achieving development objectives. The key challenges are to:

- Extend ICT infrastructure throughout the country and ensure it is accessible.
- Build the necessary skilled human resources that are needed for a thriving ICT sector.
- Define the necessary legal framework for the application of ICT, and design and implement appropriate security systems for the prevention of unlawful practices.
- Promote the use of ICT for modernizing the civil and public services to enhance efficiency and effectiveness for service delivery.
- Expand and strengthen the role of the private sector to ensure the rapid development of ICT.

Opening up the telecoms sector to competition will be key to achieving these objectives, but complementary policies will also be needed to grow the sector. The government has recognized the need for greater private sector participation in telecoms and is developing its approach to opening up the sector. But other limitations, including weak regulatory capacity and human resource limitations also inhibit growth of the sector. In doing so, the government's recently announced reform initiatives need to

be backed by a wider role for private sector participation and competition, as well as the development of necessary regulatory institutions.

WAYS FORWARD

Liberalization of Ethio Telecom is the priority, but complementary reforms are needed to attract investment into the sector and enable the digital economy. Private sector participation is expected to enhance the efficiency of telecoms operations by bringing innovation and management skills that would increase the application and impact of new technologies. Ultimately, this structural reform is expected to benefit Ethiopian consumers by improving the quality of access, reducing costs, and offering new services with a significant potential to boost competitiveness, increase exports, create job opportunities, and raise fiscal revenue. The government has endorsed a roadmap for telecoms sector reform that allows for competition and foreign participation in the sector, but additional issues will need to be addressed to ensure successful outcomes:

- **ENSURING AN EFFICIENT LIBERALIZATION PROCESS.** The relevant agencies and authorities need to be prepared for the privatization process by building capacity and in considering strategic options for Ethio Telecom,²⁶ updating existing legislation, and drafting relevant regulations. Issues that need to be addressed include the timing of the privatization process, the mechanism to be used (sale to a strategic partner, initial public offering, sale to institutional investors, etc.), and the design and implementation of a program of support for staff.
- **ENSURING GOOD REGULATORY GOVERNANCE.** ETA will need to be empowered as an independent agency to implement international best regulatory practice and its remit will need to be expanded to the sale of licenses, ensuring non-discriminatory access to public ICT infrastructure and monitoring of market performance and outcomes. The Agency will also have to increase its capacity to effectively cover modern services such as mobile telephony and the internet. An appropriate governance structure for ETA will also have to be defined. One option is the creation of an independent board supported by technical staff, as opposed to the current legislation that provides for a general manager and staff. In parallel, ETA will also have to work with the Information Network Security Agency (INSA) to formulate and adopt regulations regarding information security.
- **ENSURING HEALTHY COMPETITION.** Lessons from elsewhere suggest that privatization should be pursued in parallel with the introduction of competition. Issues that will need to be addressed include:
 - The method for awarding licenses.
 - The way in which operators are granted non-discriminatory access to the backbone network, which will remain under public control. Mandatory infrastructure sharing (e.g., towers) and enabling wholesale carrier neutral broadband providers will ensure low entry barriers and operating costs to new players, thereby reducing final cost to consumers and driving increased mobile penetration.
 - Declaring Ethio Telecom a dominant player, enabling other players to enter the market using a combination of subsidized spectrum, longer license tenors, grad-

ual increase in coverage requirements, mandatory roaming in Ethio Telecom's network, and long-lasting asymmetric access charges are among other options to be considered.

The timing and extent of the opening will be influenced by Ethiopia's negotiations to join the WTO, so enhancing the capacity to negotiate and implement commitments in telecoms will be essential.

Reform of the telecoms sector could potentially have a transformational effect, but ICT and innovation will be held back by institutional weaknesses and public-sector capacity constraints. Low ICT literacy and poor skills levels will remain problematic, although there are moves to improve these in some areas. For example, in early 2018, Ethiopian Airlines set up a joint program with US-based Microsoft to train young ICT graduates and equip them with skills to become ICT professionals and software engineers in the airline industry. Moreover, the absence of an appropriate legal and regulatory framework, the relative lack of telecoms infrastructure, the low level of internet services penetration, and an underdeveloped private sector will all continue to act as constraints on development of the sector, at least in the short term.

Results from the EPIQ model suggest that telecoms sector reform would lower prices and boost productivity in all other sectors. Box 6.2 summarizes the main results from a scenario in the EPIQ model for reform of the telecoms sector, whereby two new competitors enter the mobile telephony and broadband market, leading to a 30 percent decline in the costs of these services. Similar to improvements in logistics, the expanding telecoms sector provides important infrastructure and business services that enable other foreign investments. The wider adoption of ICT technologies leads to improved competitiveness of all sectors, also reflected in a positive impact on exports. These gains also translate into benefits for the poor, and there are deeper reductions in poverty predicted than under the logistics sector scenarios, as productivity increases from telecoms sector reform benefit all other sectors, while the benefits of logistics reforms are focused mainly on transport-intensive manufacturing. Nevertheless, income inequality grows suggesting the need for telecommunication services to spread to rural areas, improving rural livelihoods, and helping shared prosperity.

FINANCE

SECTOR BACKGROUND AND PERFORMANCE

The finance sector remains shallow and under-developed. In the 2017-18 Global Competitiveness Report, Ethiopia scored 3.4 out of 10, and ranked 109 out of 137 countries in terms of financial market development. The finance sector consists of 18 banks, 17 insurance companies, 35 microfinance institutions (MFIs) and five capital goods finance companies. The two state-owned banks (CBE and DBE) dominate the sector, accounting for 65.6 percent of total deposits, and 69 percent of total banking sector assets as of June 2017. The credit market is skewed toward SOEs. In contrast to a decline in overall domestic credit and private credit over the past 10 years, SOEs' credit as a percentage of GDP more than tripled, from 5.2 percent in 2007 to 17.2 percent in 2016. During the same period, the share of SOEs' credit in total outstanding credit surged from 14 percent in 2007 to 54 percent in 2016. In addition to absorbing

BOX 6.2 THE POTENTIAL IMPACT OF REFORM OF TELECOMMUNICATIONS SERVICES: SCENARIOS FROM THE EPIQ MODEL

The government has recently endorsed reforms that foster competition and allow foreign investment in the telecoms and ICT sectors. The reforms aim to generate more competition and innovation, leading to more players entering the market (at least two), while establishing a new and independent regulatory body. The objective is to improve access, lower quality-adjusted prices, increase product offerings, and expand the telecoms infrastructure. As a result, the quality and penetration of mobile telephony, and mobile and fixed broadband services will reach higher levels.

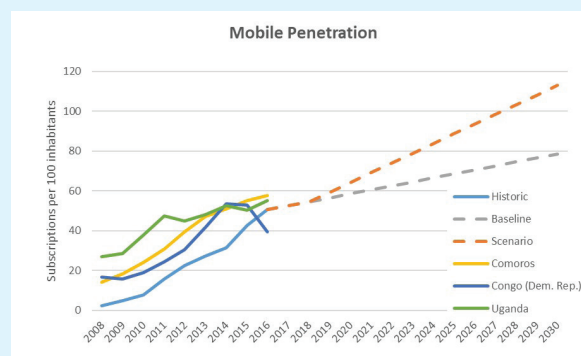
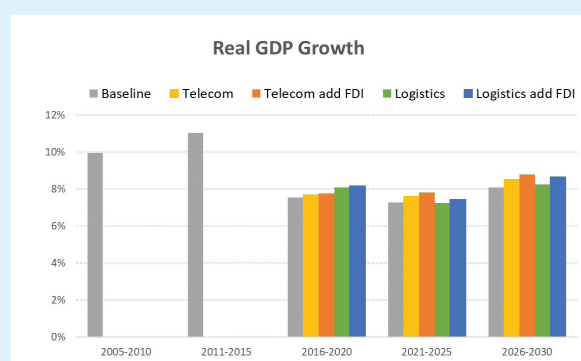
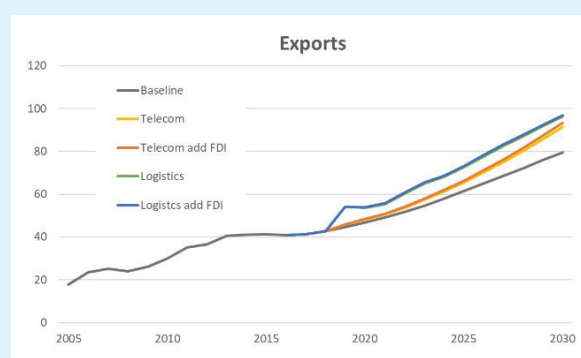
To highlight improvements in competition and innovation, we assume that two new competitors will enter the mobile telephony and broadband market in 2019. As a result, quality-adjusted prices decline, and service penetration rates increase, leading to an increase in productivity in all sectors. To model these effects, we assume that, first, quality-adjusted prices decrease by 30 percent,³⁴ and second, that each competitor invests an amount equal to 0.1 percent of the Ethiopian GDP annually from 2019 onwards to build their capacity and expand the network and services.³⁵

As a result of these new market entries, we further assume that phone penetration will grow more quickly due to higher competition and innovation. In the baseline, penetration growth is kept constant at 2 additional subscriptions per 100 inhabitants per year after 2016. In the scenario, we assume a growth rate of 2 up to 2018, and 4.9 from 2019 onwards.³⁶ As a result, productivity in the economy will increase and TFP will be roughly 9 percentage points higher in the scenarios by 2030.³⁷ The figure displays historic mobile phone penetration in Ethiopia, the Comoros Islands, the Democratic Republic of Congo, and Uganda, including both baseline and scenario assumption over the model horizon.

As in the logistics scenario, we compute two counterfactuals. One as described above, and one counterfactual with additional FDI inflows of 0.6 percent of GDP spread across all remaining sectors. Similar to improvements in logistics, the expanding telecommunications sector provides important infrastructure and business services that enable other foreign investments.³⁸

ECONOMY-WIDE IMPACTS

Reform in the telecommunications sector has the potential to increase the compound annual growth rate (CAGR) of GDP from 7.6 percent over the forecast horizon, to 7.9 percent without additional FDI, and to 8.1 percent with additional FDI inflows. While these growth effects are very similar to the effects of the logistics scenario, the figure highlights an important distinction between the scenarios. Under an improvement of the logistics sector, the growth rate is much higher early on, the CAGR between 2016 and 2020 reaches as high as 8.2 percent, while the reforms in the telecoms sector take more time to catch on, and the CAGR over the same horizon is only 7.8 percent. However, as communication technologies penetrate the

B6.3.1 MOBILE PENETRATION**B6.3.2 REAL GDP GROWTH****B6.3.3 EXPORTS GROWTH**

(Box continues next page)

BOX 6.2 (CONTINUED)

market, productivity increases over time, and the growth rate over the final five years of the model horizon is 8.8 percent under the telecommunications scenario with additional FDI inflows, while it is only 8.6 percent under the comparable logistics scenario.

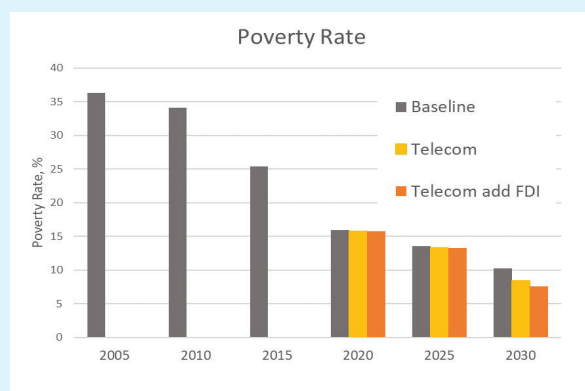
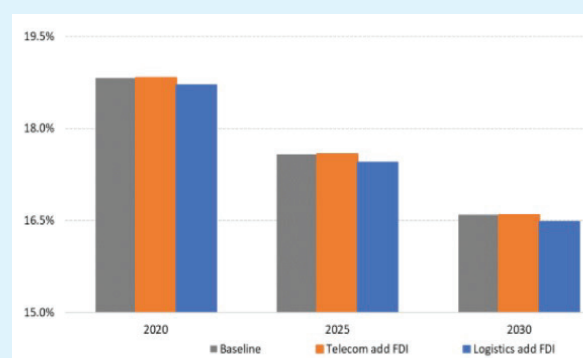
The wider adoption of ICT technologies leads to improved competitiveness in all sectors. This is also reflected in a positive impact on exports. As with the impact on GDP growth, the improvement of logistics infrastructure and services leads to an immediate increase in competitiveness and a rapid increase in exports, while the slower adoption of technological improvements and higher productivity under the telecommunications scenario leads to a slower increase in exports in the early years. However, by the end of the model horizon overall exports under a telecommunications liberalization scenario have almost caught up with that projected under the logistics scenario, while export growth rates are much higher.

POVERTY AND SHARED PROSPERITY

The gains in GDP and labor productivity also translate into benefits for the poor. As it takes time for the benefits of reform to materialize, poverty slowly declines over time. In 2020, poverty rates will be only

0.2 of a percentage point lower than under the baseline. However, by 2030, the poverty rate will decline to 8.4 percent without additional FDI and to 7.6 percent with additional FDI, compared with 10.2 percent under the baseline. This deeper fall in poverty than under the logistics scenarios reflects that the productivity increases from telecoms reform benefit all sectors, while the benefits of logistics reform are focused largely on transport-intensive manufacturing subsectors.

In all years, the income of the bottom 40 percent grows more rapidly than under the baseline but by less than the average income in each of the scenarios. Therefore, in every case, including the baseline, inequality increases while poverty falls. Since the income of the bottom 40 percent grows by between 0.1 and 0.2 percent less per year than the average income growth, the bottom 40 percent's income share declines across all scenarios. Interestingly, while not enough to reverse the trend, the increase in inequality is slightly slower in the telecommunications scenario than the baseline and logistics scenarios. This result is driven by the more equal increase of wages in rural areas compared with urban area wages of primary educated workers. This suggests the need for telecommunications services to spread to rural areas, improving rural livelihoods and helping shared prosperity.

B6.3.4 POVERTY RATE**B6.3.5 SHARED PROSPERITY OF THE BOTTOM-40 PERCENT**

the larger share of the domestic credit, SOEs also hold a substantial amount (\$9.9 billion) of the total external debt (\$21.7 billion) as of end-2016. With this policy preference for financing SOEs, the credit market has tended to crowd out the private sector. Furthermore, the large exposure of the CBE to a single borrower, Ethiopian Electric Power, coupled with unsustainable funding patterns to SOEs, and the recent surge in NPLs of the Development Bank of Ethiopia (DBE) and MFIs poses a significant risk to the financial sector.

Women account for a disproportionate share of the unbanked, and the gap is widening. In 2017, the gender gap jumped to 12 percent, from being virtually

insignificant in 2014. Today, 41 percent of men have an account, compared with 29 percent of women, whereas in 2014 account ownership was essentially even, with 23 percent of men and 21 percent of women with an account. Account ownership among men has nearly doubled in three years, but for women it has increased by only 8 percentage points.

The private credit-to-GDP ratio is lower than in most comparator countries and among the lowest in East Africa. The ratio of private credit-to-GDP declined from 13 percent in 2007 to 11.7 percent in 2016. Conversely, in Sub-Saharan Africa credit to the private sector grew fivefold over the period 2003-14, with an annual increase of 16 percent, doubling its size when measured as a percent of GDP (IMF, 2015). In the Doing Business 2018 ranking on access to credit, Ethiopia stands at a low 173 out of 190 countries. The banking sector accounts for almost the entire finance sector (92 percent of total finance sector assets), and so there is great scope for diversification into a wider range of financial services that would support private sector development. Nevertheless, Ethiopia remains one of the most underbanked countries in the world, with a bank branch to population ratio of 1:23490 as of June 2017. Bank branches are concentrated in major towns and cities. Nearly one-third of bank branches are located in Addis Ababa.²⁷ Hence, the rural poor have little access to formal banking instruments and rely on MFIs or, probably most notably, on informal financing institutions such as saving and credit associations (SACCOs), or informal mechanisms such as *Iqqub*, moneylenders and friends.

The two state-owned banks dominate the system and play a major role in crowding out private sector lending. Private banks are required to invest 27 percent of loans disbursed in bills issued by the National Bank of Ethiopia (NBE) at below both inflation and deposit rates, thereby curtailing liquidity, the ability to price loans, and subsequently growth of private banks. Additional constraints to liquidity for private sector lending include: a NBE directive requiring banks to allocate 60 percent of credit issued to long-term lending, mostly to public sector-driven infrastructure; the Commercial Bank of Ethiopia (CBE) directing a significant portion of its lending to SOEs and the use of its retail deposits to purchase bonds in public enterprises that it is lending to; and the housing finance scheme that is tied to deposits at the CBE.

Ethiopia's microfinance sector, which targets mainly low-income households and micro enterprises, shows considerable promise. The five largest MFIs are owned by regional governments (ACSI, OCSSCO, DECSI, OMFI, ADECSI) and accounted for 84 percent of the total capital, 93 percent of the savings, 89 percent of the credit and 90 percent of the total assets of MFIs as of June 2017. In total, MFIs operate a network of 1,902 branches. Some of the biggest MFIs outperform most of the banks in the country in terms of branch network and capital. For instance, with a capital of \$151 million and a network of 380 branches as of June 2016, Amhara Credit and Saving Institution (ACSI) is better capitalized and has a wider branch network than most of the private banks in Ethiopia.

The financing of infrastructure through the state-owned banks and the lack of competition has limited access to finance by the private sector. Table 6.1 shows that, relative to other countries in Africa, a much higher proportion of firms in Ethiopia are financing investment from internal resources. This suggests that firms in Ethiopia may be credit constrained relative to counterparts elsewhere in the continent and may also reflect the lack of competition in the sector. Cross-country evidence supports

TABLE 6.1 PROPORTION OF FIRMS FINANCING INVESTMENT ENTIRELY FROM INTERNAL FUNDS, %

Country	Working capital	Fixed capital	Country	Working capital	Fixed capital
Ghana	36	25	Malawi	43	51
Kenya	24	36	Tanzania	40	54
Nigeria	23	43	Rwanda	35	58
Uganda	38	44	Ethiopia	69	67
Senegal	48	45	Zambia	46	69

Source: Adapted from Regasa and others 2017.

the conclusion that competition in the banking sector alleviates credit constraints in developing countries by not only leading to less restrictive loan approval decisions but also by reducing borrower discouragement.²⁸ As the government seeks to generate jobs, increase the size of the manufacturing sector, and to drive export growth, modernization of the finance sector is required that will channel financial resources to private sector investments in productive activities.

Although the NBE has made progress in setting up a credit reference bureau, the bureau's ability to facilitate extension of credit to underserved segments, such as individuals and SMEs, remains constrained. Credit bureau coverage in Ethiopia is less than 5 percent of the adult population. The MFI and leasing subsectors are currently not integrated with the bureau for reasons that include operational and technical capacity challenges at the NBE credit bureau, and the lack of a NBE directive mandating the sharing of credit information by MFIs and leasing companies with the credit bureau.

Financial institutions are reluctant to take immovable assets as collateral, limiting the ability of SMEs to gain access to credit. The current secured transactions system of Ethiopia provides a multitude of different and conflicting rules that complicate secured lending over movables. Movable collateral is considered a higher risk because of the lack of a single movable property registry. The heavy reliance of banks on fixed assets as collateral for lending creates issues for short-term financing, particularly for agriculture. The main instrument that banks use for Commodity Collateralized Financing (CCF) is Merchandize Loans (MLs). These are loans against collateral belonging to the borrower usually held in warehouses where inventories are kept under a dual key system, with the bank having control over the warehouse. Most commercial banks have MLs as the main loan type for inventory financing, mostly for manufactured goods (exports and imports) but also for agricultural commodities, particularly for exported goods such as coffee and sesame. MLs account for a very small part of most of the banks overall lending portfolio, usually less than 1 percent, and their share has diminished over time.

Facilitating long-term finance requires a more market-oriented approach that promotes the efficient allocation of scarce financial resources and increases the participation of private financing. The current model of domestic financing of government and SOEs is inefficient and not market-based. Pension funds can only invest in government bonds at negative rates of return, putting them at risk in meeting future

pension obligations. There is no trading and post-trading market infrastructure to facilitate market-based issuance of government securities.

Private insurance markets are almost non-existent in areas outside the main cities, and are constrained by weak rural retail infrastructure, poor quality of products, and a lack of public financial support. Insurance could play a key role in supporting many non-poor households that would not qualify to be in a safety net program but are nevertheless still vulnerable to falling into poverty should an adverse event such as a bad drought occur. Insurance companies have not invested in the network to sell products, such as weather-related insurance, in rural areas and financial institutions that do have the network (such as MFIs) may not have the incentive to offer products such as these if they are perceived as undermining their traditional offerings. Studies suggest that subsidies and improvements in products may also be needed to initially encourage demand. The potential economic impacts on productivity, welfare, and resilience to shocks in poor rural areas from access to tailored insurance products could be substantial.²⁹

WAYS FORWARD

As the sector grows and becomes more sophisticated, the regulatory framework and supervisory practices will need to be upgraded. To enable wider access to cheaper sources of financing a number of key reforms are required, including: (i) easing of current regulations on deposit of, and access to, foreign exchange for exporters, as well as the ability to borrow in a foreign currency for the non-exporting domestic private sector; (ii) easing of caps on interest rates for FDI entering the country, which cause a mismatch of risk-based pricing; and (iii) signing the convention on the Recognition and Enforcement of Foreign Arbitral Awards, also known as the “New York Arbitration Convention” or the “New York Convention”. This will enable the mobilization of larger private sector investments through PPPs. Besides these specific reforms, restrictions on access to new lending instruments such as quasi-equity, mezzanine debt, and preferred shares should be addressed, allowing domestic commercial banks to tap into global trade finance instruments. There is also the need to expand the credit registry to MFIs and leasing companies, and the ratification of the security rights movable property proclamation (the legal foundation for the establishment of a collateral registry). A centralized collateral registry for security interests in movable property should be developed and launched once the legal framework is in place. Regulatory and institutional reforms are required to promote commodity collateralized financing.

Regulatory reforms are also required to develop and strengthen the country’s capital markets. The pre-requisites for a well-functioning corporate bond market need to be put in place, including a secondary market. Support to the mobilization of domestic savings is needed. To this end, policy measures should aim to increase the relatively low usage of mobile money. Steps could be taken to develop a local institutional investor base (local pension funds and insurers), as a way of improving the financial system’s ability to provide long-term capital to the private sector. Policymakers could consider developing pension fund products geared to those employed in the informal economy and consider employing mobile technology to encourage the unbanked to take up these products, make payments into the fund, pay out benefits, and keep holders of pension funds informed of fund performance. Ethiopia could also explore innovative ways to attract institutional investors with large asset holdings elsewhere

in the region to invest in Ethiopia. Such innovative solutions could include enabling and encouraging intraregional cross-border listings by Ethiopian firms and mobilizing remittances from the large Ethiopian diaspora. This should be complemented by appropriate regulations, supporting policies, and financial infrastructure conducive to further expanding the range of non-bank finance available.

In addition to modernizing the state-owned banks, the private banking sector also needs to expand to make banking services accessible to a growing share of the population, and ensure equal access for women. This requires that regulations be amended to remove entry barriers and other operating constraints to private banking development including, among others, maximum shareholding thresholds, and limitations on foreign investment and diaspora shareholdings in financial institutions. Similar opportunities exist in insurance to increase access to a wider range of products.

Simulations show that relatively narrow financial sector reforms would lead to a significant impact on growth and a considerable increase in the size of the private sector in Ethiopia.³⁰ Doubling the supply of funds to the private sector (from one-third to two-thirds of total credit) and allowing real deposit rates to be closer to market interest rates (from 0.01 to 0.025) could lead to a 15 percent increase in output and an almost twofold increase in private investment. Importantly, the increase in tax revenues associated with a more dynamic and larger private sector is substantial and would facilitate continued government financing of infrastructure.

However, such finance sector reforms could increase poverty and inequality if labor is unable to move from agriculture to expanding non-agricultural sectors. Increasing the supply of funds to the private sector benefits the manufacturing sector the most, as entrepreneurs switch from producing agricultural commodities into manufacturing. Overall demand for agricultural products decreases and, as a result, the price of agricultural goods goes down. This leads to a decline in rural households' incomes and an increase in poverty. While the reforms therefore contribute to the structural change of the economy and a shift toward a greater share of manufacturing, it would be essential that complementary measures are introduced to assist the poorest to transition to new off-farm opportunities. These could include removing barriers to labor mobility, improving connectivity of rural areas to encourage location of agro-processing, and expanding social safety nets to address short-term adjustment costs that arise during the transition.

ENERGY

SECTOR BACKGROUND AND PERFORMANCE

Rich in renewable resources, and with a low-cost energy supply, Ethiopia has the second-largest power system in Sub-Saharan Africa, achieving double-digit growth in capacity over the past decade. Of the existing installed capacity, 3,810MW (89 percent) is supplied by hydro, 324MW from wind, and 7MW from geothermal sources. Total capacity is expected to grow to 7,000MW by 2020 and to more than 15,000MW by 2025.

At the same time, it has the third-largest access deficit in Sub-Saharan Africa with significant unmet demand. While the country has undergone a rapid process of electrification, from serving 800,000 customers in 2005 to more than 3 million in 2018,

service delivery remains a challenge. The household electrification rate remains low at 44.3 percent and service is unreliable: just one-fifth of households have electricity available 24 hours a day, seven days a week. Consequently, per-capita consumption of electricity is also low at 70kWh (2014), which is far below the average level of per-capita consumption across all African countries of 500kWh. While public resources have been spent in network expansion, the necessary last mile investments have not yet been made. In particular, there is a wide disparity in the share of households that have access to electricity for eight days or more between urban areas (82.9 percent) and rural areas (10.3 percent). Nevertheless, the urban network also requires upgrading, as do transmission and distribution assets. In 2017, the government launched the National Electrification Program (NEP) to work toward universal access to electricity by 2025. The goal of NEP is to achieve this by reaching 65 percent of the population through grid connection and 35 percent through off-grid solutions with private sector participation. The sector is now starting to see strong interest in off-grid projects from private companies.

The government is making large-scale investments in power generation and transfer capacity, but financial sustainability will be a challenge necessitating private sector participation. Continued strong expansion in both industry demand, from economic activity, and household consumption are expected to drive increasing domestic energy demand, which is currently growing at 15 percent per year. In addition to this increase, the sector has potential to increase exports of electricity to the East African regional market. It is currently the largest exporter in the region, supplying Djibouti and Sudan. Most significantly, Ethiopia and Kenya are constructing the Ethiopia-Kenya interconnection through which Ethiopia is expected to supply 1,000MW. Additional revenues from exports of electricity are expected to reach \$500 million in the coming years. GTP II set a new target to enable the country to become a renewable energy hub for the region and to increase generation capacity. To this end, public resources of more than \$10 billion have been invested in generation (mostly hydropower) and transmission over the past decade, but more investment is needed and the sector's short-term debt is high, at \$6 billion. This fiscal imbalance has been aggravated by an inefficient funding strategy and continued underpricing of electricity that has led to a cost-revenue mismatch for the public sector. Utilities have relied on short-term bonds to finance long-term assets, which has created a cash flow problem with most of the domestically led debt rolled forward. And while the average effective tariff below \$0.03/kWh and fixed since 2006 is among the lowest in Sub-Saharan Africa, domestic and export revenues are not currently sufficient to cover both operating and rising borrowing costs (equivalent to \$0.06/kWh). The private sector is therefore urgently needed to take a central role as financier and implementer of energy services along the entire value chain.

Institutional reform to open the energy sector is underway with private generation initially. The energy sector is first on a list of four sectors that have been prioritized by the government to be opened to private sector participation. The sector is currently dominated by SOEs and the government is initiating reforms to gradually allow entry of the private sector. Power generation is now open, while transmission and distribution services remain firmly in the public sector domain. As part of the reform process, the vertically integrated public utility, the Ethiopian Electric Power Corporation (EEPCo), was split in 2013 into two SOEs, Ethiopian Electric Power (EEP) and the Ethiopian

Electric Utility (EEU). The former focuses on power generation and transmission, while EEU is responsible for power distribution, sales, and customer service. The Ethiopian Energy Authority (EEA) has also been established as an independent sector regulator. It is responsible for licensing and regulatory oversight across the entire value chain, including for private sector entry.

WAYS FORWARD

The continued development of a competitive power market is necessary for Ethiopia to transition to a competitive industrial economy, but it is being held back by regulatory barriers. While the government program to open power generation to the private sector has made progress, private participation in energy transmission and distribution services remains restricted by law. These segments continue to be managed by SOEs. Continued legal, regulatory, and institutional reform is therefore needed, combined with the development of a roadmap for possible unbundling and privatization of selected assets. As the sector continues to move from a public sector-dominated model toward a market with greater private sector participation, the Ministry of Water, Irrigation and Electricity, EEP and EEU will require support in technical and financial planning, and to promote greater use of PPPs in the sector.

Restoring financial sustainability to the energy sector is critical to attracting private sector participation. Before opening downstream activities to the private sector, the government must first tackle the sector's financial fundamentals, which are being compromised by a stagnant tariff regime, lagging operational indicators, and unsustainable debt management. In this regard, the government has recently initiated an ambitious sector reform with the overall goal of supporting a financially sustainable expansion of electricity services that will address the imbalance and inefficiency problems. This will include implementation of a multi-year reflective tariff framework for improving cost recovery; adoption of a comprehensive improvement plan to enhance operational efficiency to reduce technical, commercial, and collection losses from EEP and EEU; and implementation of a debt restructuring plan for the sector.

While private sector engagement in the downstream power and distribution segments of the value chain is being considered for the long term, pilot projects should also be considered now. For example, Build-Operate-Transfer (BOT) financing could be explored for transmission lines, whereby a private entity receives a concession from the public sector to finance, design, construct, own, and operate these for a period stated in the concession contract with the project recovering its investment, operating, and maintenance expenses. BOTs for transmission lines could help reinforce the national grid and help link it to cross-border export lines. Off-grid mini-grids could also be explored providing solar solutions to unelectrified rural households. As part of these, concessions could be granted that allow for horizontal integration into the telecoms business. Today, utility and IT businesses are converging: cellular towers need power and energy operators could produce power for the mini-grid while using the cellular network to meter, bill, and collect.

TRANSPORT

SECTOR BACKGROUND AND PERFORMANCE

To compete in the global economy, firms need seamless access to their supply chains, including through efficient transport services. The majority of Ethiopia's freight transportation takes place by road. In particular, most of the goods transported to and from the port of Djibouti—on which the country as landlocked is heavily dependent—are transported by truck. As of 2018, the road network stood at about 121,000km with a road density of around 100km per 1,000 km². Addis Ababa is also designing the first of several planned Bus Rapid Transit (BRT) routes. In addition to roads, the rail network could provide Ethiopia's manufacturing sector with a quick, reliable route to export markets, while also increasing Djibouti's re-export trade and port traffic. Three railway lines with a total length of 1,339km have been constructed or are close to completion. A standard gauge rail line between Addis Ababa and the port of Djibouti began operation in January 2018. Two Chinese firms—the state-owned China Railway Group and the China Civil Engineering Construction Corporation—built the line and will operate and manage it under a mostly flat fee contract for six years as local workers are trained to take over. A 34km light rail system in Addis Ababa has also been completed and began operation in late 2015. Ethiopia has 20 airports and is planning to increase the number to 25 (a site is currently being selected for a new international airport outside Addis Ababa). The national airline, Ethiopian Airlines, currently carries 9 million passengers annually and flies to 55 destinations in Africa, 18 cities in Europe and North America, and 26 cities in the Middle East and Asia. Ethiopian Airlines also operates a cargo airline and logistics services; the Ethiopian aviation academy; Ethiopian inflight catering services; Ethiopian maintenance, repair, and overhaul services; and Ethiopian hotel and tourism services. Ethiopia also has seven dry ports.

Nevertheless, high costs and low-quality transport services remain a key issue for Ethiopia, as they are limiting the country's competitiveness. The average time spent crossing a border for imported goods was 40 days in 2014/15. Freight handling and administration capacity is low, with the average waiting time at sea ports also reported to be around 40 days. In addition, road congestion has been worsening in Addis Ababa, and at Bole International Airport there are capacity issues linked to the peaking of demand twice a day generated by its hub and spoke model.

To address these bottlenecks, the government is investing heavily in the transport network, but financial sustainability and efficiency represent key challenges that enabling private sector participation could help address. The transport network has been identified as a priority area for investment as part of the GTP II, with current investments of around \$2 billion, and with road-building accounting for one-quarter of the government's annual infrastructure expenditure. However, the existing infrastructure is not recovering its costs and is proving to be financially unsustainable. For example, the government has already asked for an extension of the tenure of its loan provided by the China Exim Bank on the Addis Ababa to Djibouti rail line from 15 to 30 years. Existing airport charges are also too low and there is no peak hours pricing system to incentivize the efficient use of Bole International Airport capacity. Optimizing the capacity of the existing infrastructure is a related constraint. Except for at Bole International Airport, traffic volumes are low at most regional airports,

which require recurrent government subsidies. The existing Addis Ababa to Djibouti rail line is also not currently operating to full capacity. While more than 20 million tons of goods are imported through Djibouti, the rail line's share of this volume is less than 5 percent, despite having the capacity to handle 30 percent of this trade. A key constraint is the lack of a fair road/rail competition regime that needs to be in place for the railway to be able to achieve the volumes needed to cover its operational and maintenance costs. An additional challenge is the lack of performance incentives built into the contract between the two state rail asset holding companies of Ethiopia and Djibouti, and their related public operating company (which is 80 percent owned by Ethiopia). As it stands, the latter does not have to pay infrastructure access fees and must instead pay out any excess revenues generated annually to both companies in the form of dividends.

WAYS FORWARD

Major sections of the transport sector are beginning to be opened up to the private sector, but foreign investment remains heavily restricted. While investment regulations currently prohibit or restrict foreign investment in more than 30 sectors—including transport—the government took the decision in late 2014 to start using PPPs in infrastructure. The necessary policy and legislation were prepared, approved by the Council of Ministers, and ratified by Parliament on January 25, 2018. In addition, a decision was made by the Executive Committee of the ruling coalition on June 5, 2018, to offer both domestic and foreign private investors minority shares in major SOEs that include Ethiopian Airlines. However, the practice of offering minority shares usually incurs heavy discounting from investors.

Immediate opportunities for increased private sector participation in the transport sector should be explored. These are currently concentrated in Bole International Airport and mining-related transport infrastructure. There is also potential for future private sector involvement in BRTs and toll roads—based on mileage-based user fees—if challenges arising from currency convertibility and exchange rate risks can be overcome. The Djibouti Corridor—the country's busiest truck road that carries over 90 percent of Ethiopia's external trade—should also be considered for a PPP using a dollarized import fee-based structure to circumvent issues relating to: (i) the inability of Djibouti's government to finance its share of the corridor rehabilitation through public funds; (ii) Ethiopia's currency convertibility and exchange rates issues; and (iii) the lack of a fair intermodal rail/road competition regime. Extension of the Addis Ababa-Adama expressway from Adama to Dire Dawa is another opportunity, as initial assessments indicate that at least 125km of the 360km corridor carries sufficient traffic to attract private sector investment. Both bus and BRT services would also be potential candidates for outsourcing. For rail, the government could focus on establishing a fair road/rail competition regime, and providing open access for private sector operators to operate trains while collecting access fees.

A review of planned transport investments is urgently needed. Updated infrastructure plans need to be prepared that are based on realistic demand forecasts, as well as the capacity to generate revenues on such demand in accordance with likely economic growth and the ability of public finance to fund infrastructure and any needed subsidies. A revised approach coordinated across transport infrastructure sub-sectors would ensure that over-capacity is checked going forward, while competition

between the various transport modes is optimized. A logistics and transport strategy is currently being prepared by the government that could address these issues. In the near future, the government could focus on expanding the existing airport at Addis Ababa. For this approach to prove successful it would be important to make sure that the increase in passenger volumes and the associated number of aircraft needed, as well as debt (which stood at more than \$3 billion in 2017, close to 100 percent of turnover), is sustainable. In addition, proper regulation and adjustment of flight times by the airport operator or its regulators (i.e., the civil aviation agency) would need to be introduced. The government could also consider introducing a more decentralized approach to leverage the existing regional airports.

HEALTH

SECTOR BACKGROUND AND PERFORMANCE

Ethiopia has achieved progress in improving health outcomes, but the sector continues to face many challenges. As a result of successive health sector development programs implemented since 1997, infant mortality halved from 97 deaths per 1,000 in 2000, to 48 in 2016. However, maternal mortality, despite declining from 871 deaths per 100,000 live births in 2000, to 412 deaths per 100,000 live births in 2016, remains high compared with other Sub-Saharan African countries. Total per-capita health expenditure grew seven-fold from 1995/96 to \$28.7 in 2013/14, but still falls short of the government's \$32.3 target and the \$60 per capita spending recommended by the WHO for delivery of essential health services. Many health facilities do not have basic amenities and there are large disparities in availability of services, and quality across regions and income groups. There is a severe shortage of medical personnel in almost all facilities and the average absenteeism rate is high at 33 percent. Out-of-pocket spending has been a major source of health funding, averaging 37 percent between 1995/96 and 2013/14, and the proportion enrolled in insurance schemes remains low, such that costs remain a barrier to seeking care. Over the same period, the share of government health spending declined, while development partner funding increased.

Studies suggest that the private health sector and pharmaceuticals have been growing rapidly in recent years, but information is lacking on informal providers. While the government is the major provider of health care for the poor, managing 85 percent of facilities, private-for-profit and non-governmental organizations are also important players, managing 14 percent and 1 percent of facilities, respectively. The private-for-profit sector delivers health services through private family planning agencies, private hospitals, clinics, pharmacies, and drug outlets. The private not-for-profit sector includes NGOs and faith-based organizations, but information on the services they provide is less well captured and documented in terms of size of market, pricing, and performance. The annual pharmaceuticals market in Ethiopia is estimated to be worth \$400-\$500 million and growing at rates of 14 to 25 percent per year.

The government is seeking to improve access to essential health services and improve the quality of health care by giving a greater role to the private sector. The Health Sector Transformation Plan (HSTP) 2015-2020 sets ambitious goals to improve equity, coverage, and utilization of essential health services, improve the quality of health care, and enhance the implementation capacity of the health sector at all levels

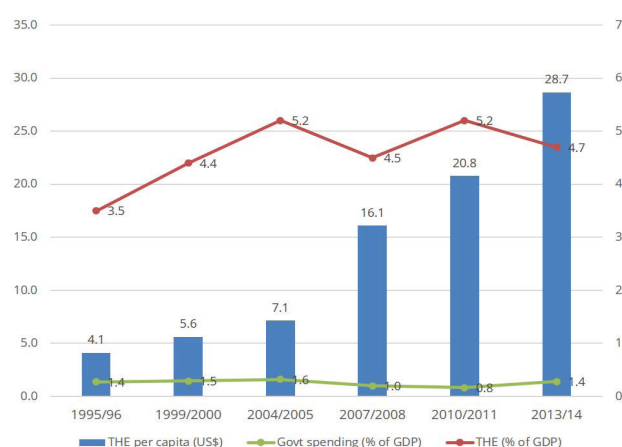
of the system. It aims to achieve universal health coverage through primary health care and, given service gaps, promotes the participation of the private sector. The HSTP proposes increased private sector participation in secondary and tertiary level health services through alleviating human resource constraints and nurturing existing PPPs in the health system. To improve the affordability of care, the government has been working on expanding the country's risk-pooling mechanisms. This includes scaling up community-based health coverage and introducing social health insurance. The government is also actively promoting the manufacture of domestic pharmaceuticals in industrial parks.

WAYS FORWARD

Expanding PPPs would address resource constraints in the sector, as well as improve access to quality health services. While Ethiopia has some PPPs in the health sector, these are mainly in the form of contractual arrangements between the government and private non-profit or private-for-profit organizations in the provision of non-clinical services (e.g., laundry and security), infrastructure-based hospital PPP arrangements, and social marketing (e.g., for family planning). There remain opportunities to expand PPPs to cover the provision of other health services. Actions to strengthen PPPs would include: (i) establishing a dedicated PPP unit; (ii) developing PPP guidelines, operating procedures, and tools; and (iii) developing a legal framework for PPPs. Parliament has approved a PPP Proclamation and the government has issued a PPP Directive to establish a regulatory framework and institutions that manage fiscal risks and enhance transparency, fairness, and sustainability in implementing privately financed projects in infrastructure. Lessons from this experience could inform and facilitate PPP engagements in the health sector.

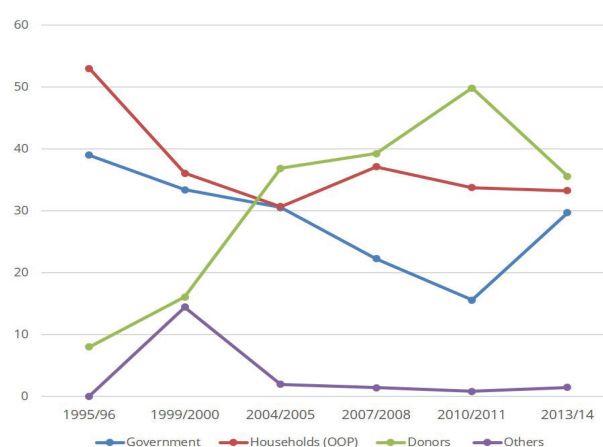
Complementary policy and regulatory reforms would also facilitate the role of the private sector in the provision of health services. Implementing enabling factors to streamline bureaucratic processes that limit market entry; reducing tariffs and

FIGURE 6.1 TOTAL HEALTH EXPENDITURE, 1996/96–2013/14



Source: FMOH, National Health Accounts (various years).

FIGURE 6.2 TRENDS IN HEALTH FINANCING BY SOURCE, 1995/96–2013/14



Source: FMOH, National Health Accounts (various years).

eliminating NTBs that impede access to, or raise the cost of, health supplies; and enabling innovations (e.g., e-health) would support the role of the private sector in the provision of health services. Expanding the coverage of the country's risk-pooling mechanism would also improve the affordability of health care. Preparations for the launch of Social Health Insurance are underway. The legal framework is in place and the Ethiopian Health Insurance Agency has been established with offices at the national and regional levels. It will initially cover government employees and their families, as well as formal sector workers, through a combination of employer and employee contributions.

Scaling-up the health sector workforce, improving the quality of accreditation, and tackling staff absenteeism are critical to boosting the capacity of the sector and raising the quality of health care. While the health workforce density improved from 0.84 to 1.3 per 1,000 of the population between 2008 and 2013 as a result of increased training and education over the past decade, this remains below the WHO minimum threshold of 2.3 per 1,000 of the population required to ensure coverage of essential interventions. While accreditation is mandatory for all higher education and is managed by the Higher Education Relevance and Quality Agency (HERQA), there are several challenges with respect to implementation and the lack of involvement and capacity within the Ministry of Health and professional associations. For example, the National Licensing Exam that was developed and piloted for first degree graduates to assess their competence before professional registration and licensing has not been implemented. Similarly, the standardization and institutionalization of in-service training and continuing professional development is not yet operational due to limited budget, personnel, and capacity. The readiness of higher education institutions to assure the quality of education is also lagging behind. Methods of teaching lack practical learning opportunities and the use of critical thinking skills. While there have been efforts to adopt the use of ICT in tele-education, telemedicine, and electronic health management information systems, including for storing medical records, progress has been limited.

Improving access to raw materials and providing support to standards development, certification, and enforcement would enhance the development of the pharmaceuticals sector. Ethiopia, similar to many Sub-Saharan African countries, has limited resources and the capacity to regulate. A survey assessing Ethiopia's regulatory capacity found more than 60 percent of manufacturers were not compliant with good manufacturing practices. One-third of survey respondents reported that illegal drugs were circulating in the market, and 40 percent reported that they were aware of unauthorized or unlicensed institutions and/or individuals involved in importing and distributing medicines. The Ethiopian Food, Medicines and Healthcare Administration and Control Authority (EFMHACA) is responsible for regulating food, medicines, and health-care services, and is working with the Pharmaceuticals Fund and Supply Agency (PFSA) to reform and restructure its pharmaceutical and regulatory functions.

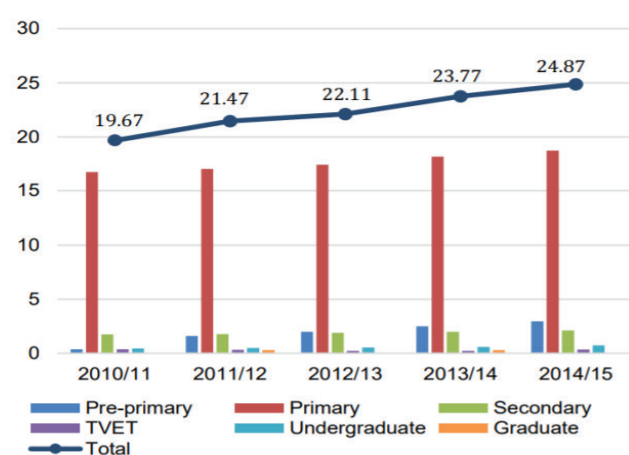
EDUCATION

SECTOR BACKGROUND AND PERFORMANCE

While Ethiopia has one of the highest school enrollment rates in Sub-Saharan Africa, it ranks among the lowest in overall literacy, with weak learning outcomes and high drop-out rates. According to the UN's Education for All Development Index, Ethiopia came second only to Mozambique in terms of its improvement in primary enrollment over the past decade. Between 2001 and 2008, the number of out-of-school children fell by more than 60 percent. Primary education is free (while fees are increasingly common at the secondary level) and the primary enrollment rate is 74 percent (2016), up from less than 20 percent in the 1990s. Despite this progress, fewer than 15 percent of all Grade 2 students can read at the international benchmark level, and access issues persist as overall enrollment at the pre-primary and secondary levels are unmatched by primary level progress. Pre-primary enrollment is 29 percent and secondary enrollment is 31 percent, although these averages mask significant differences in rural versus urban households, as most pre-primary and secondary schools are located in urban areas.

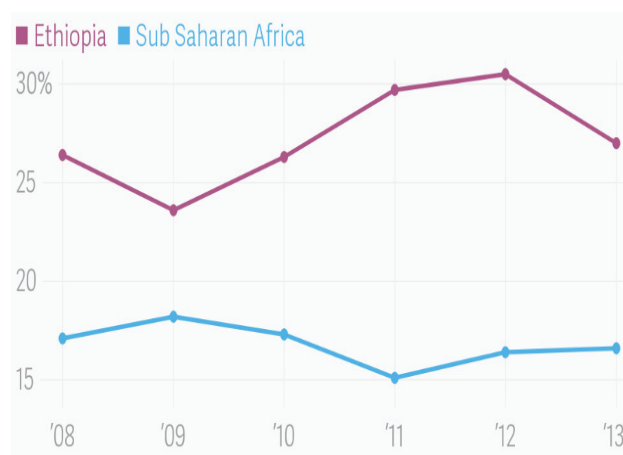
A particular challenge is the low completion primary school completion rate. The overall primary school completion rate is 37 percent. For rural areas it is just 25 percent, so only one in four rural children currently completes primary school. High drop-out rates from primary education translate into lower transition rates to secondary education. Grade 1 drop-out rates are high at 18 percent, with just 71 percent of children starting Grade 1 going on to complete Grade 5. The Human Capital Index, which measures the amount of human capital that a child born today can expect to attain by the age of 18, shows that a child in Ethiopia can expect to complete 7.8 years of schooling. This is in line with the average for Sub-Saharan Africa of 8.1 years, but below the global average of 11.2 years. However, when years of schooling are adjusted for the quality of learning, this is only equivalent to 4.5 years. While gender

FIGURE 6.3 ENROLLMENT TRENDS BY LEVELS OF EDUCATION (MILLION)



Source: UNICEF.

FIGURE 6.4 EDUCATION SPENDING AS A SHARE OF GOVERNMENT EXPENDITURE



Source: UNESCO Institute for Statistics.

parity in primary enrollment has improved substantially, a wide gender gap persists at the secondary and tertiary levels, with males considerably outnumbering females.

School quality is a concern, as most primary and secondary schools currently fail to meet national standards. About 26 and 16 percent of primary and secondary schools, respectively, are rated at the lowest level, with significant regional variation. Populations in rural areas, in particular, as well as the emerging regions, have unequal access to education and the inputs key to learning such as textbooks, school libraries, electricity, and qualified teachers. Access to learning materials is limited by a highly regulated and closed market. There is also a shortage of qualified teachers, with high teacher-to-student ratios (on average 1:80), low qualification rates (65 percent of teachers are unqualified), and a lack of English language proficiency among primary school teachers.

The government has demonstrated a strong commitment to investing in education, but a key challenge is to make the system more progressive to enhance opportunities for the poor. The Education Sector Development Program V (2016-20) aims to ensure improved access to quality education equitably across all levels. Between 2000 and 2013, the country almost doubled its share of the national budget allocated to education from 15 to 27 percent, compared with an average of 18.4 percent for Sub-Saharan Africa as a whole. However, on a per-pupil basis, spending on tertiary is 26 times higher than spending on primary. The relatively low spending on primary education contributes to the high drop-out rate of poor children. So one major challenge is that while the poorest have equal representation in first stage primary they are increasingly under-represented at higher levels, and virtually excluded from technical and vocational education and training (TVET) and higher education.³¹ The 2011 Welfare Monitoring Survey shows that the poorest 20 percent of households comprise only 15 percent of the student population in Cycle 2 primary. By higher education, the poorest comprise just 2 percent of the student population.

Pre-primary schooling and tertiary education segments appear to be the fastest growing for private actors, although there is little information on the role of the private sector in the provision of primary and secondary education. Government schools account for most primary and secondary school enrollment, and the gains in primary school enrollment are in part due to the number of government primary schools tripling between 1996 and 2015. Currently, there are fewer private schools and they typically tend to be costly and concentrated in urban centers.

There is a greater role for the private sector in the provision of higher education, which would also free up resources for publicly provided secondary education. With an increasing working age and decreasing dependent-age population, there is potential to meet growing demand, especially for tertiary education. Ethiopia's tertiary enrollment rate is 8 percent and is in line with the average for Sub-Saharan Africa, but still significantly lower than the world average of 32 percent of college-age adults at university. Over 36 public and more than 100 private universities provide tertiary education, with the latter accounting for about 15 percent of total student enrollment. The government spends about 40 percent of total education expenditures on higher education construction, despite the pressing need to build schools to meet demand for secondary education.

WAYS FORWARD

More information is needed on the challenges faced by the private sector to enter, operate, and collaborate with the government in the education sector, especially at the pre-primary, primary, and secondary levels. The government is already regulating NGOs operating in the education sector under the Charities and Societies Proclamation No. 621 of 2009, but further analysis is necessary to understand the operations of for-profit education institutions at foundational levels. For example, there are more than 1,500 private schools operating in Addis Ababa alone, in a market that has potential for consolidation.

To promote private sector participation in the provision of higher education, a level playing field is needed for accrediting private and public institutions. A key constraint to increased private sector provision of higher education services is a double standard that exists in accrediting private and public actors, which constitutes a barrier to entry in the sector. The accreditation process for private sector higher education institutions in determining whether a private institution may receive accreditation to award degrees requires the Higher Education Relevance and Quality Agency (HERQA) to assess its student numbers, courses, and subjects, as well as resources. In contrast, public universities do not have to undergo this accreditation process, nor do they have to comply with a requirement that all teaching staff comprise 20 percent bachelors' degree holders, 50 percent masters' degree holders, and 30 percent PhD holders.

The government needs to review its spending and subsidies policies on education, and needs to retarget to reduce regional inequalities in access to education services. To enhance the job opportunities of the emerging youth it is essential to reduce primary school drop-out rates and increase the number of poor students participating in secondary and further education. Public expenditure and subsidies for education disproportionately benefit the wealthiest households, with at least 80 percent of government spending on second-cycle secondary education, tertiary education and TVET going to students in the top income quintile.

07. CONCLUSIONS

Leveraging the private sector is critical in driving job creation and realizing Ethiopia's the export potential. The CPSD draws particular attention to the opportunities for private sector investment and greater competition in the enabling sectors, with logistics, ICT/telecoms, finance, and energy holding the most immediate promise. These sectors not only contribute substantially to generating jobs but also transmit the benefits of efficiency improvements and the provision of a wider range of services throughout the economy. This in turn will improve the environment for broad private sector-driven growth. To achieve this, policy actions are required at both the sector level and more broadly to strengthen the macroeconomic framework for growth, improve the business environment, address restrictive trade policies, and the functioning of land, labor, and capital markets.

To ensure that Ethiopia's development objectives are met, private sector-driven growth needs to be broadly based across sectors and contribute to improvements in job opportunities in rural, as well as urban, areas and for women and well as men. The focus on attracting foreign investment in industrial parks in GVCs is an important step toward industrialization and the job-generating potential of sectors such as apparel and footwear. The CPSD suggests that this approach needs to be complemented by: (i) greater attention to facilitating linkages between the industrial parks and the domestic private sector; (ii) addressing the constraints holding back private sector investment in a wider range of high potential sectors, including agribusiness and tourism; (iii) continuing and enhancing efforts to improve the connectivity of rural areas, including effective regulation of newly competitive sectors such as logistics and telecoms to ensure the widest access to such critical services; and (iv) addressing the challenges of

providing an industrial-ready workforce and the services necessary to support such a workforce, though the provision of housing, education, social services, etc.

Scaling-up private sector investment throughout the economy will require that different levels of government work together around an agreed growth agenda to overcome inefficiencies and coordination failures in government. Greater transparency and engagement with the private sector on new laws and regulations, consistency in the interpretation and implementation of existing laws and regulations, and faster and more predictable decision-making would all help to reduce uncertainty and costs for investors. An essential first step would be greater engagement with the private sector around defining a common and shared approach to growth, followed by more extensive advocacy at the different levels of government to disseminate this shared vision.

The World Bank Group (WBG) has an extensive engagement in Ethiopia that is being tailored to support the government in addressing this challenge, and boosting the private sector to exploit the enormous opportunities for investment. This extensive engagement is summarized in appendix B (to be finalized) and encompasses all aspects of WBG instruments, including investment and policy-based lending, technical assistance (TA), and analytical and advisory activities (AAA). An important step in this support is the recently approved Ethiopia Growth and Competitiveness Development Policy Operation (DPO) and the associated TA and AAA that are aligned with the government's priorities for reform of the logistics, telecoms, and energy sectors, and in improving the competitiveness of the economy. A range of other projects are supporting key elements of the government's strategy, including on industrial parks, the quality infrastructure, business reform, and customs modernization.

APPENDIX A

ECONOMY-WIDE PRIVATE IMPACT QUANTIFICATION (EPIQ) MODEL

In 2013, the WBG embarked on a new era in its development agenda by setting twin goals to benchmark the performance of its operations: ending extreme poverty and boosting shared prosperity. Along these lines, IFC launched a pilot modeling initiative—the EPIQ: Economy-wide Private Impact Quantification model—with the objective of linking IFC private sector interventions with the WBG’s twin goals. Following the first pilot implementation in the Philippines, IFC decided to run a second pilot in Ethiopia to test the feasibility of this analytical approach in a low-income country. The development of EPIQ Ethiopia has only been possible through rigorous data gathering and assessment,³² and collaboration and consultations with internal and external colleagues and officials.³³

The EPIQ model is a dynamic, structural, macro-micro representation at the country level, designed with the goal of providing insights on expected macro and distributional impacts of shocks and policies. The model is especially well-placed to investigate the impact of investments, such as increased FDI inflows to the real sector of the economy, as well as tax and transfer program reforms. The modular structure of EPIQ allows it to be applied to a large number of potential impact assessments by developing specific model extensions and applying well-designed scenarios. For the Ethiopian CPSD, extension modules for transport, telecommunications infrastructure and regulation were developed.

EPIQ represents the standard structure and mechanics of the economy: during every time period, households and firms meet and transact in two types of markets. In factor markets, households supply labor and financial capital, where labor is demanded by firms, and savings (together with FDI and government investment) are transformed into physical capital employed by firms. In good markets, the firms, represented by 12 industry sectors, are the suppliers of goods and services that are consumed together with imports by households, used as intermediate inputs by other firms, or are exported. The government collects direct and indirect taxes and other revenues, participates in economic activities by consuming and investing, and makes transfers to households. In all these markets, a price is determined following the signals of supply and demand. Unlike in other structural macroeconomic models, such as most CGE models, prices in EPIQ do not clear markets at all times. Prices are sticky, and therefore might lead to market imbalances, much like in real economies.

EPIQ Ethiopia represents all these interactions over a model horizon from 2005 to 2030, in annual time steps, and measures related outcomes, such as total and sectoral value-added (GDP), wages, household income, poverty, and inequality, to name a few. The assessment on poverty and shared prosperity is only possible because of a specific and outstanding feature of EPIQ: it models the residential sector by representing income and expenditure decisions and outcomes of close to 10,000 different household types. The households differ in the education level of the household head, the number of working age and non-working age individuals, whether they are in an urban or rural location, age of the household head, whether the household receives remittances and/or transfers and how much capital they hold. Based on the households' characteristics, investments and policies will affect them differently. Furthermore, the disaggregation of households allows the model to endogenously compute the poverty headcount and impacts on shared prosperity.

APPENDIX B

WORLD BANK GROUP LENDING AND ADVISORY SERVICES AND ANALYTICS PROGRAMS

TABLE B.1 DESCRIPTION OF ONGOING IFC LENDING PROGRAM

Topics covered	Key objectives/pillars	Amount (\$ millions)	Key dates (board/closing)
1. COMPETITIVENESS AND JOB CREATION PROJECT (P143302)			
Job creation, industrialization agenda, institutional and regulatory framework capacity building, enhancing industrialization linkages to the local economy, skills development.	Job creation by attracting investments and improving competitiveness of enterprises in the targeted industrial zones and their linked domestic enterprises.	250 (+ additional financing 175)	2014/2021
2. ETHIOPIA TRADE LOGISTICS PROJECT (P156590)			
Improvement of infrastructure, enhancing coordination through investments in IT systems, regulatory and institutional capacity support.	Objective is to enhance the performance of the Ethio-Djibouti corridor through improvements in operational capacity, efficiency and range of logistics services at the Modjo Dry Port	150	2017/2022
3. ETHIOPIA: NATIONAL QUALITY INFRASTRUCTURE DEVELOPMENT PROJECT (P160279)			
Institutional Capacity for National Quality Infrastructure Development, Enhancing Private Sector Engagement.	Improve the delivery of quality assurance services to enterprises in the targeted sectors.	50	2017/2022
4. WOMEN ENTREPRENEURSHIP DEVELOPMENT PROJECT (P122764)			
Access to finance skills development, private sector engagement, job creation	Increase the earnings and employment of women-owned enterprises through access to finance and business development services.	50	2012/2019
5. ECONOMIC OPPORTUNITIES PROJECT (P163829)			
Improving Refugee related employment, investment climate reforms, improving labor productivity, fiduciary systems strengthening, safeguard systems strengthening, capacity building and institutional strengthening.	Provide economic opportunities for Ethiopians and refugees in an environmentally and socially sustainable way.	200	2018/2024
6. SMALL AND MEDIUM ENTERPRISES FINANCE PROJECT (P148447)			
Access to finance, SME development, enhancing enabling environment, job creation, capacity building, skills development, enhancing private sector engagement	Increase access to finance for eligible small and medium enterprises in Ethiopia.	200	2017/2022
7. GROWTH AND COMPETITIVENESS PROGRAMMATIC DEVELOPMENT POLICY OPERATION (P168566)			
PPP implementation, financial sustainability, reform of logistics and telecoms sectors, enabling environment for private sector development, financial sector modernization, SOE reform and management.	Maximizing finance for development; boosting competitiveness through a better environment for the private sector; and enhancing public transparency and accountability to promote good governance.	1,200	2019

TABLE B.2 DESCRIPTION OF ONGOING FCI ASA/RAS ACTIVITIES (IFC AND WB)

Topics covered	Key objectives/pillars	Amount (\$ millions)	Key dates (board/closing)
1. IFC AS: ETHIOPIA LIVESTOCK MICRO REFORMS FOR AGRIBUSINESS MIRA (IFC 601053)			
Livestock sector competitiveness	<p>Improve the competitiveness of the Livestock Sector (dairy and poultry) through legal and regulatory reform.</p> <p>Activities: 1. Improve access to quality veterinary drugs and vaccines; 2. Improve the accessibility and the quality of Animal Health Services; 3. Knowledge Management and PPD.</p> <p>Complements Agri GP Livestock Lending Operation expected to become effective in 2018.</p>	2.1	2016/2020
2. IFC AS: ECONOMIC GROWTH AND COMPETITIVENESS PROGRAM (MULTI P'S)			
Regulatory reforms addressing Doing Business Reform, Trade Facilitation, Sub National regulatory SME reforms, Investment Promotion and Tourism	Streamline and simplify high-priority regulations considered burdensome to businesses growth and investment. Improve productivity of business. Five independent projects are expected.	10	2018/2022
3. IFC AS: ETHIOPIA GREEN INDUSTRIALIZATION PROJECT (IFC- 602203)			
Industrial competitiveness in the textile and footwear sectors through the development of environmentally well managed industrial parks.	<p>Growth of the textile and footwear sector is environmentally sustainable and competitive. Industrial parks are the primary tool being used by the government to develop the textile and footwear industries and are central to Ethiopia's industrialization plans.</p>	1	2018/2021
4. WB ASA: FINANCIAL INCLUSION SUPPORT FRAMEWORK (P156978)			
Financial inclusion, access to finance, consumer protection, financial products and services, financial infrastructure; and sovereign disaster risk financing	Contribute to the increased access of financial services for individuals and enterprises and enhance their usage, quality and impact.	3	2015/2019
5. WB ADVISORY: HARNESSING INNOVATIONS FOR FINANCIAL INCLUSION (HIFI) ETHIOPIA			
Payment, Digital financial service, financial inclusion	Expand access to payment services and through that expand access to other financial services in a set of countries, by bringing about a greater shift of large-scale payments like Government payments and remittances to digital payment mechanisms.	4	2015/2021
6. WB ADVISORY: ETHIOPIA PROMOTING INCLUSIVE INSURANCE			
Micro insurance, index insurance	Support the National Bank of Ethiopia in promoting access to insurance services of quality, value and safety for low-income groups and contribute to broader financial inclusion.	1.7	2015/2019
7. SECURED TRANSACTIONS AND COLLATERAL REGISTRY (P601522)			
Access to finance, SME development, enhancing enabling environment, job creation, capacity building, skills development, enhancing private sector engagement	Increase businesses' access to credit (mostly SMEs) by developing a sound legal, regulatory and institutional framework for movable assets-based lending founded on international good practices.	0.81	2016

Topics covered	Key objectives/pillars	Amount (\$ millions)	Key dates (board/closing)
8. SME BANKING (601912)			
Access to finance, SME development, enhancing enabling environment, enhancing private sector engagement	To provide Advisory Services to Banks in Ethiopia	0.3	2017
9. LEASING ADVISORY PROJECT (P600334)			
Access to finance, SME development, enhancing enabling environment, job creation, capacity building, skills development, enhancing private sector engagement	Promote and develop the leasing sector in Ethiopia	1.3	2017
10. CREDIT REPORTING FINANCIAL INFRASTRUCTURE (P602992)			
Access to finance, SME development, enhancing enabling environment, enhancing private sector engagement	To support the development and evolution of Ethiopia's credit reporting system, that is, the National Bank of Ethiopia's Credit Bureau into an effective credit reporting service provider; this being one of the key enablers to improve access to finance for individuals and Micro, Small and Medium Enterprises (MSMEs)	0.3	2018
11. COMMODITY COLLATERALIZED FINANCE (P601298)			
Access to finance, SME development, enhancing enabling environment, enhancing private sector engagement	To promote credit supply to businesses in the agri supply chains and firms linked to industrial parks on the basis of the collateral value represented by their stock of commodity	0.053	2017/2020

TABLE B.3 ADVISORY PORTFOLIO

	Client	Project name and Description
FCI	National Bank of Ethiopia	Ethiopian Leasing Project.
FCI	National Bank of Ethiopia	Ethiopia Credit Information Systems
FCI	National Bank of Ethiopia	The Ethiopia Secured Transactions project
FCI	Ministry of Trade	Ethiopia Investment Climate: Business Regulation.
MTI	Ethiopian Revenue and Customs Authority	Ethiopia Investment Climate: Trade Logistics.
FCI	Ethiopian Revenue and Customs Authority	Ethiopia Investment Climate: Tax administration.
INF	Ministry of Water, irrigation and Energy	Ethiopia Geothermal Strategy
INF	Ministry of Water, Irrigation and Energy	Lighting Africa Ethiopia
FCI	Ethiopia Investment Commission and Ethiopia Ministry of Foreign Affairs	Ethiopia Investment Policy
FIG	AMSME ENAT Bank	SME Banking
ESCG	Corporate Governance	Corporate governance intervention
FCI	Agricultural Transformation Agency, Ethiopia commodities Exchange and Ministry of Trade	Ethiopia Commodity Collateralized Financing
Transaction Advisory Services Department (PPP)	Ethiopian Electric Power (EEP)	Scaling Solar
FCI	Ethiopian Investment Commission/ Prime Minister's Office	Doing Business
FCI	Sub National Governments of Amhara and Oromia	Sub National Investment Climate
FCI	Ethiopian Tourism Organization/ Ministry of Culture and Tourism	Ethiopian Tourism Sector Competitiveness

NOTES

1. Analysis of data from a group of countries including Ethiopia shows that although high growth firms typically comprise less than 20 percent of manufacturing and services firms they create more than half of all new jobs and sales (A. Grover Goswami, D. Medvedev and E. Olafsen (2018) *High-Growth Firms: Facts, Fiction, and Policy Options for Emerging Economies*, World Bank, Washington D.C.).
2. Ethiopia scores poorly in international comparisons of management practices, below countries such as Zambia and Tanzania.
3. Endowment companies, owned and controlled by political parties as regional development organizations, were originally intended to conduct non-trade development activities, but now own enterprises that compete with the private sector and are highly involved in business transactions.
4. World Bank (2017) Ethiopia Employment Report, World Bank.
5. Investments which increase the prices received by farmers can have significant development outcomes. Brenton and Nyawo (2018) find strong evidence that rising prices for teff in rural Ethiopia have been associated with improved child nutritional outcomes in terms of lower rates of stunting and underweight children. Improvements in stunting are linked to better educational outcomes and higher productivity during working life.
6. Ethiopia also enjoys tariff preferences under the Generalized System of Preferences (GSP) in Australia, Canada, Japan, New Zealand, Norway and Switzerland. Likewise, it is granted preferential access by China, India, Russia, the Republic of Korea and Turkey.
7. Ethiopia Economic Update 2018: The Inescapable Manufacturing Services Nexus.
8. The six mega solar projects are expected to cost in the region of \$800 million.
9. The data presented in this report are annual and based on the Ethiopian calendar and hence span two years of the Gregorian calendar.
10. This is the index of export market penetration that compares, for each exported product, the number of countries to which Ethiopia exports that product relative to the total number of countries that import that product, and then sums across all products exported by Ethiopia.
11. Brulhart, M., N. Dihel and M. Kukenova (2018) Stable or Stagnant? Ethiopian Export Dynamics in International Context, mimeo, World Bank.
12. World Bank (2014) 3rd Ethiopia Economic Update: Strengthening Export Performance Through Improved Competitiveness, World Bank, Washington, D.C.
13. This section is based upon evaluations by multiple actors of the business environment (These include World Bank: Ethiopia's Great Run (2016, p.113), World Bank Doing Business Report (2016); Global Competitiveness Report (2017-18); National Business Agenda (2014 and 2017); World Bank Enterprise Survey (2011); CSA LMSMI (2012/13); GHS (2013/14)), review of relevant literature and consultations with the private sector. The conclusions are also derived from analysis of agriculture, industry and services and the key cross-cutting issues that limit private sector development in these broad sectors.
14. Alibhai, Aly Salman; Buehren, Niklas; Papineni, Sreelakshmi. 2018. Better loans or better borrowers? The impact of meso-credit on female-owned enterprises in Ethiopia (English). Policy Research working paper; no. WPS 8511. Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/974551531236525468/Better-loans-or-better-borrowers-impact-of-meso-credit-on-female-owned-enterprises-in-Ethiopia>
15. See Strobbe and Alibhai (2015).
16. <http://www.esmap.org/node/165809>
17. In 2015, the (unweighted) average tariff in Ethiopia was 17.4 per cent, little changed from the early 2000s when the average was 18.8 percent. Only six countries in the world had a higher average tariff. Between 2001 and 2015 China reduced its average tariff to 9.4 per cent. In Vietnam the average tariff fell to 9.5 percent. In India the average tariff fell to 32 per cent in 2001 and 13 per cent in 2015. Morocco reduced its average tariff from 31 to 11.5 per cent. Ethiopia's tariff is considerably higher than those of countries in the region including the EAC countries where the average of the common external tariff is 12.7 percent. Ethiopia's tariff is also more complex with six different bands (0, 5, 10, 20, 30, 35) compared with, for example, the EAC Common External Tariff, which has three bands (0, 10, 25). Excise duties are levied on a wide range of products including textiles and an import surtax

(of 10 percent). Recent analysis (Gebreyesus and Kebede) suggests that the tariff creates a strong bias against exporting—as much as 150 percent for sectors such as footwear.

18. The tariffs that China and Vietnam levied in the early 2000s, similar to that currently levied by Ethiopia, amounted to an implicit tax on exports of around 12 percent (Tokarick (2006)). Therefore, the decline in tariffs in these countries in the following 15 years or so can be seen as contributing to their improved export performance.

19. Analysis of the tariff reforms in Ethiopia in the 1990s finds large positive effects from tariff reductions on intermediate inputs on firm productivity. (Bigsten, A., M. Gebreetsus and M. Soderbom (2013) Tariffs and Firm Performance in Ethiopia, mimeo).

20. The impact of tariffs on intermediates on exports is offset, to an extent, by a duty drawback scheme that reimburses firms for duties on imported inputs that are subsequently exported after further processing. However, such schemes are typically cumbersome and costly to implement. Firms that invest in the industrial parks are typically exempted from duties on imported intermediates and capital goods such as machinery.

21. ITC (2018) Ethiopia: Company Perspectives, An ITC Series on Non-Tariff Measures, ITC, Geneva

22. The survey focused on six sectors: coffee, oilseeds, rest of agriculture, textiles, leather products, and rest of manufacturing

23. Doing Business, 2017.

24. This limits the effectiveness of new finance products or regulations such as the External Loan and Supplier's Credit Directives No. FXD/47/2017 that allow an exporter to access an external loan. An advisory facility to carry out due diligence, business valuation, etc., would assist firms in obtaining funds.

25. This section draws on the recent World Bank note on “Exploring Policy Options for Ethiopia's Telecommunication Sector”, August 2018.

26. Among other options to be fully assessed, Ethio Telecom could potentially be restructured into two main divisions under the existing corporate structure comprising: (i) an infrastructure division which would be responsible for the network and gateways and for selling on a non-discriminatory basis, wholesale services at regulated prices; and (ii) a services division, which would manage customer in competition with new entrants that would purchase capacity from the infrastructure division. Subsequently, the new divisions would develop as two distinct companies with separate governance and management. Such a restructuring would prepare the organization for competition and for privatization.

27. These data come from Gashayie, A. and M. Singh (2016) “Development of Financial Sector in Ethiopia: Literature Review”, *Journal of Economics and Sustainable Development*, Vol 7, p 9-20.

28. Leon, F. (2015) ‘Does bank competition alleviate credit constraints in developing countries?’, *Journal of Banking and Finance*, 57, pp. 130-142.

29. For example, households that have bought insurance have been able to increase use of fertilizer (Berhane, G, D O. Gilligan, J. Hoddinott, N. Kumar, and A. Taffesse. (2014) “Can Social Protection Work in Africa? The Impact of Ethiopia's Productive Safety Net Programme.” *Economic Development and Cultural Change* 63 (1): 1–26). Increased fertilizer use is in turn linked to higher agricultural productivity, higher incomes and welfare.

30. These simulations were undertaken using a computable general equilibrium model for the Ethiopia Systematic Country Diagnostic (World Bank, 2016).

31. World Bank (2016) Ethiopia Public Expenditure Review.

32. The data sources used for the model include recent input output tables, household surveys, employment surveys, macroeconomic variables from the World Bank's WDI, povcalnet and other sources, IMF's World Economic Outlook and Article IV documents, documents and statistics from the Central Statistical Agency of Ethiopia (CSA), Ethiopia's Growth and Transformation Plans among other minor sources.

33. The development of EPIQ Ethiopia has been supported by the Let's Work Global Partnership and a report introducing the model and showcasing its abilities has been released under the partnership's umbrella.

34. We assume an elasticity of substitution between different providers of 1.3. This follows the approach of Jensen, J., Rutherford, T., and D. Tarr, (2005). Telecommunications Reform within

Russia's Accession to the World Trade Organization. World Bank Policy Research Working Paper 3501 to the Russian telecommunications sector. For a derivation of their formula see Markusen, J. R., Rutherford, T., and D. Tarr, (2000). Foreign Direct Investment in Services and the Domestic Market for Expertise," Policy and Research Working Paper 2413, Washington D.C.: World Bank.

35. Ethiopian annual investments into the telecommunications sector have roughly equaled 0.5 percent of GDP between the period of 2008 and 2015 according to the ITU (WTI, 2018). An assumption of additional FDI into the sector of 0.2 percent of GDP is therefore potentially on the lower end.

36. 4.9 equals the long-term growth rate from 2008 to 2014. Historically, other African countries have exhibited similar growth rates during periods of rapid expansion of the telecommunications sector.

37. We compute our exogenous assumptions on the impact on TFP using the elasticity estimated by Deloitte, (2012). What is the impact of mobile telephony on economic growth? A report for the GSM association. Technical report, Deloitte LLP. Deloitte estimate that every increase of mobile telephony penetration rates by 10 percent will lead to an increase in total factor productivity of 4.2 percentage points in the long run.

38. As those effects are difficult to quantify and depend heavily on other policies, we assume identical additional FDI inflows in both the logistics and the telecommunications scenarios, to improve comparability between the scenarios.

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