

Report

The Belt and Road and Chinese enterprises in Ethiopia

Risks and opportunities for development

Linda Calabrese, Zhengli Huang and Rebecca Nadin

August 2021



Readers are encouraged to reproduce material for their own publications, as long as they are not being sold commercially. ODI requests due acknowledgement and a copy of the publication. For online use, we ask readers to link to the original resource on the ODI website. The views presented in this paper are those of the author(s) and do not necessarily represent the views of ODI or our partners.

This work is licensed under CC BY-NC-ND 4.0.

How to cite: Calabrese, L., Huang, Z. and Nadin, R. (2021) *The Belt and Road and Chinese enterprises in Ethiopia: risks and opportunities for development*. ODI report. London: ODI (www.odi.org/en/publications/the-belt-and-road-and-chinese-enterprises-in-ethiopia-risks-and-opportunities-for-development).

Photo: Worker in a garment factory, Ethiopia. © Davide Scalenghe (www.davidscalenghe.com)

Acknowledgements

This report is the outcome of a study by Linda Calabrese and Rebecca Nadin (ODI) and Zhengli Huang (Tongji University). The authors are grateful to Judith Tyson, Dirk Willem te Velde (ODI) and Lauren Johnston (SOAS University of London) for their comments and feedback on an earlier draft. Responsibility for the final content rests with the authors alone. The views expressed should not be attributed to ODI.

About the authors

ORCID numbers are given where available. Please click on the ID icon next to an author's name in order to access their ORCID listing.

Linda Calabrese^{ID}

Research Fellow with the International Economic Development Group, ODI. A development economist by training, she works on trade and investment, industrialisation and economic transformation. Her research interests include Chinese outward investment and the Belt and Road Initiative, and she leads ODI's work on China–Africa. She has extensive experience in East Africa, working as an economist with various government and research institutions.

Zhengli Huang

Post-doctorate researcher at Tongji University, Shanghai. She has worked as Research Associate at the University of Sheffield in the UK and the Chinese University of Hong Kong. She was Luce Visiting Scholar in Trinity College in the US. She has a rich fieldwork experience through working in UN-Habitat's slum upgrading projects, her role as Project Manager in building a school in Nairobi's informal settlements, and various research projects on Chinese infrastructure development in Africa. Her work focuses on African urbanisation and China's impact on urban development, especially on housing, urban governance and development finance, and geographically covering Ethiopia and the East African region.

Rebecca Nadin

Director of ODI's Global Risks and Resilience programme and the Head of ODI's Global China 2049 initiative. She manages a team of policy analysts and experts exploring the risk emerging from intersecting global challenges such as climate change, transnational crime and geopolitical volatility. A China policy expert with a focus on China's emerging geopolitical strategy, national security and climate policy, her current focus is on understanding the potential environmental, social and political risks and/or opportunities that may arise from China's evolving global outreach for host countries and other key stakeholders.

Contents

Acknowledgements / i

Display items / iii

Acronyms / iv

Executive summary / 1

1 Introduction / 3

2 Ethiopia's development trajectory / 5

2.1 Ethiopia's development context / 5

2.2 Challenges arising: Covid-19 in Ethiopia / 10

2.3 Looking forward: Ethiopia's development plans / 11

3 Chinese enterprises in Ethiopia / 18

3.1 Sectoral analysis of Chinese investment / 18

3.2 Typologies of Chinese enterprises / 19

3.3 Emerging trends in Chinese investment in Ethiopia / 20

4 Drivers and risk narratives of Chinese enterprises / 22

4.1 Drivers of Chinese enterprises in Ethiopia / 22

4.2 Risk narratives of Chinese investors / 25

4.3 Risk appetite of Chinese investors / 29

5 Risks and opportunities in Ethiopia–China investment relations / 32

5.1 Reliance on China as a source of foreign investment and infrastructure financing / 32

5.2 Debt sustainability / 33

5.3 Potential crowding out of domestic investors / 35

5.4 Spillovers from foreign investment / 36

5.5 Opportunities to contribute to Africa's economic integration: building the African Continental Free Trade Area / 36

6 Conclusions and recommendations / 39

References / 42

Appendix Chinese loan commitments to Ethiopia, 2000–2018 / 49

Display items

Figures

Figure 1 Gross value-added by sector at constant 2015 prices / 6

Figure 2 Employment by sector / 6

Figure 3 Exports by sector, 2000–2017 / 7

Figure 4 Total exports and imports / 7

Figure 5 Foreign direct investment (FDI) flows by sector, 2014–2018 / 9

Figure 6 Gross value-added by sector (industry only), at constant 2015 prices / 10

Figure 7 Ethiopian exports to and imports from China, 2000–2018 / 13

Figure 8 Ethiopian exports to China (left) and imports from China (right), 2018 / 13

Figure 9 Chinese foreign direct investment flows to Ethiopia / 14

Figure 10 Chinese loan commitments to Ethiopia, 2000–2018 / 15

Tables

Table 1 Chinese investment projects by sector, 1999–2017 / 19

Table A1 Chinese loan commitments to Ethiopia, 2000–2018 / 49

Boxes

Box 1 Ethiopia's industrial park development model / 8

Box 2 Chinese digital infrastructure in Ethiopia / 16

Box 3 The origin of the Eastern Industrial Zone / 21

Box 4 Heightened political risk: the Tigray conflict / 28

Box 5 Risks along the Ethiopia–Djibouti railway / 37

Acronyms

AfCFTA	African Continental Free Trade Area
AGOA	African Growth and Opportunity Act
BRI	Belt and Road Initiative
CAD Fund	China–Africa Development Fund
CCECC	China Civil Engineering Construction Corporation Ltd.
CDB	China Development Bank
CREC	China Railway Engineering Corporation
DAC	Development Assistance Committee
DSSI	Debt Service Suspension Initiative
EIC	Ethiopian Investment Commission
EIZ	Eastern Industrial Zone
EPRDF	Ethiopian People’s Revolutionary Democratic Front
ERC	Ethiopian Railway Corporation
ETB	Ethiopian birr
eWTP	electronic World Trade Platform
Eximbank	Export-Import Bank of China
FDI	foreign direct investment
HLMZ	Huajian Light Manufacturing Zone
ICT	information and communications technology
IMF	International Monetary Fund
IPDC	Industrial Park Development Corporation
LRT	light rail transit
MOFCOM	Ministry of Commerce, People’s Republic of China
MoU	memorandum of understanding
ODA	official development assistance
OEM	original equipment manufacturer
PPP	public–private partnership
SASAC	State-owned Assets Supervision and Administration Commission of the State Council
SME	small and medium-sized enterprises
SOE	state-owned enterprise

TPLF

Tigray People's Liberation Front

ZTE

Zhongxing Telecommunication Equipment Corporation

Executive summary

China's Belt and Road Initiative (BRI) has the potential to open up new development pathways through infrastructure development, stimulating investment and job creation and promoting economic transformation in host countries. Through its five areas of cooperation (infrastructure connectivity, trade, financial cooperation, policy and people-to-people exchanges), the BRI can be an engine for growth and development. However, this is not a given – as a powerful external change agent, the BRI also has the potential to increase a range of economic, environmental and political risks within host countries. These risks are not separate and distinct, but rather dynamically interconnected (Opitz-Stapleton et al., 2019).

Ethiopia has a close economic and political relationship with China, and is the recipient of a large amount of investment by large and small Chinese enterprises, as well as lending by the Chinese government, policy and commercial banks, and state-owned enterprises (SOEs). These investment and lending flows create both risk and opportunities. The risks are two-fold: to the Ethiopian development process, and to Chinese investors themselves. This report seeks to join the two, articulating the risk perceptions and appetite of Chinese investors, and the potential impact these will have on Ethiopia's economic development.

There is a huge diversity of Chinese enterprises operating in Ethiopia. Differences among them include their ownership (public, at the central state or other levels, or private), their size and the sectors where they operate. They are also driven to invest in Ethiopia by different factors,

and perceive different risks in different ways. The report explores underlying vulnerabilities giving rise to Chinese investors' concerns, based on a review of the literature and interviews in Ethiopia in 2019 and additional material collected to understand the impact of Covid-19 and of current political unrest.

The report shows that Chinese investors are concerned about economic and political uncertainty in Ethiopia affecting not only investors' profitability, but also the personal safety of their staff. Economic challenges relate to high production and transport costs and the challenges of accessing foreign exchange, which is a problem for virtually all Chinese businesses in the country. Assessing the situation of other foreign (non-Chinese) investment was beyond the scope of this work, but it is likely that such challenges will similarly affect these investors. These challenges are not only a problem for the firms themselves – they also affect Ethiopia's development path.

More broadly, the report also identifies the opportunities that the relationship with China, and more specifically with a wide variety of Chinese firms, offers to Ethiopia in terms of job creation, increased production and exports and infrastructure development, both nationally and regionally. At the same time, it highlights the potential risks in terms of a potential overreliance on China and debt sustainability. Given Ethiopia's reliance on China as a source of investment and finance, issues affecting Chinese firms may have a deep impact on Ethiopia's future development. In this sense, addressing these issues would be beneficial to the Ethiopian economy more broadly.

This suggests several recommendations for the Ethiopian government, with the support of development partners, and for Chinese financing institutions.

Recommendations for the Ethiopian government:

- Focus on mitigating the economic and financial risks faced by investors, especially companies operating in manufacturing, and in particular on export-oriented sectors.
- Strengthen screening of new lending, including improving screening of the financial impact of infrastructure projects in relation to growth, and the feasibility of their repayment schedule.
- Consider new infrastructure financing modalities, such as public–private partnerships (PPPs), while carefully assessing the potential downsides.
- Strengthen the Ethiopian government’s ability to plan, design and develop infrastructure. Other countries faced with similar challenges have adopted innovative solutions. These could be studied and adapted to the Ethiopian context.

- Support the creation of links between Ethiopian and foreign firms to foster knowledge and technology transfer. This can be done via support and matching programmes, and by providing improved access to capital for Ethiopian firms.

Recommendations for Chinese financing institutions:

- Align financing programmes to the growth model and priorities of the Ethiopian government.
- For infrastructure development projects, engage a wider range of expertise (beyond engineering specialists) to include planning, social and environmental issues. This will ensure that these projects support economic development in the borrowing country.
- Work alongside the Ethiopian government to create a coordination structure for bilateral cooperation in various sectors, including large-scale infrastructure, to ensure that infrastructure programmes are planned and implemented to facilitate the country’s structural transformation strategies.

1 Introduction

China's BRI has the potential to open up new development pathways through infrastructure development, stimulating investment and job creation and promoting economic transformation in host countries. Through its five areas of cooperation (infrastructure connectivity, trade, financial cooperation, policy and people-to-people exchanges), the BRI can be an engine for growth and development.

However, this is not a given – as an external change agent, the BRI also has the potential to increase a range of economic, environmental and political risks within host countries. These risks are not separate and distinct, but rather dynamically interconnected. For instance, economic shocks as a result of natural hazards, conflict or health emergencies can generate political tensions, which in turn become political risks, and economic risks if they drive away investment (Opitz-Stapleton et al., 2019). This is particularly true for infrastructure connectivity, the most 'visible' part of the BRI, but it extends to other areas as well.

Ethiopia has a close economic and political relationship with China, and is the recipient of a large amount of investment by large and small Chinese enterprises, as well as lending by the Chinese government, policy and commercial banks, and SOEs. Chinese investment in Ethiopia has been explored in depth in the literature, particularly in relation to drivers, challenges and developmental impacts (Geda and Meskel, 2010; Adem, 2012; Seyoum and Lin, 2015; Seyoum et al., 2015; Oya, 2019; Oya and Schaefer, 2019).

The risks (actual or perceived) of Chinese investment in Ethiopia have not been so deeply

explored. These are two-fold, entailing risks both to the Ethiopian development process and to Chinese investors. This report seeks to join the two, articulating the risk perceptions and appetite of Chinese investors, and the potential impacts these will have on Ethiopia's economic development.

The report explores underlying vulnerabilities of concern to Chinese investors and enterprises based on a review of the literature and interviews primarily undertaken in Ethiopia in October–November 2019. It also draws on additional material on the impact of Covid-19 and current political unrest.

Rather than generically discussing Chinese investment in Ethiopia, the report looks at Chinese enterprises undertaking and implementing activities ranging from capital investment (such as setting up manufacturing firms) to infrastructure construction, usually through engineering contracts. Investments, in particular foreign direct investment (FDI) and infrastructure construction, while strongly interrelated, in fact respond to different economic logics and therefore have different impacts on the Ethiopian economy. Chinese enterprises and firms in Ethiopia are very diverse, ranging from small and large private firms to large SOEs at the state or provincial level. Different firms operating in different sectors will respond to different drivers and logics. This too will become clear in the report.

The BRI's most prominent manifestation is its infrastructure component, and in Ethiopia the infrastructure project most commonly associated with the BRI is the Ethiopia–Djibouti railway. But the BRI is much broader than infrastructure, with

many other connectivity initiatives falling under the BRI heading, including industrial parks and industrial cooperation between Ethiopia and China. For this reason, this report also discusses industrial parks, and more broadly investment in manufacturing.

The report is structured as follows. Chapter 2 provides an overview of Ethiopia's development trajectory, both in general and specifically in relation to China's economic engagement in the country. Chapter 3 focuses on Chinese investment in the Ethiopian manufacturing sector, Chapter 4 explores the drivers and

risk narratives of Chinese investors in the country, and Chapter 5 analyses the risks and opportunities generated by Chinese investment and infrastructure-building to Ethiopia's development trajectory. As this report highlights, Chinese enterprises and firms in Ethiopia are not homogeneous, instead they are diverse in nature, ranging from small and large private firms to large SOEs at the state or provincial level. Consequently, different types of firms operating in different sectors will also respond to different drivers and logics. Chapter 6 concludes and provides policy recommendations.

2 Ethiopia's development trajectory

Ethiopia is Africa's second most populous state, with over 110 million people, and one of the world's fastest-growing economies over the last decade. This chapter reviews Ethiopia's political and economic context, the country's current development trajectory and relations between China and Ethiopia. This is important to understand, as it is this context that ultimately drives and frames the risk appetite of Chinese investors, and their potential impacts on the Ethiopian economy.

2.1 Ethiopia's development context

2.1.1 Political context

In 2018, Abiy Ahmed assumed the position of Prime Minister, replacing the government that had ruled the country since 1991 in a transition process that began with the death of Meles Zenawi in 2012, and continued under Hailemariam Desalegn.

Abiy's government has introduced a series of changes. Politically, the most notable has been the signing of a joint peace declaration between Ethiopia and Eritrea in 2018, for which Abiy was awarded the Nobel Peace Prize in 2019. However, the peace process seems to have achieved limited results, and is stalling (Hirt, 2019; Marchal, 2020).

Abiy has also introduced economic reforms (termed 'Home Grown Economic Reform') aimed at privatising state assets, in particular SOEs, in an attempt to open up the economy, starting with the telecoms and logistics sectors (Barber and Pilling, 2019; Soliman and Demissie, 2019). Even though

these reforms have progressed slowly, they signal that the current government wants to adjust the course of economic policy followed by the previous administration.

Abiy's tenure has not been without challenges. In 2019 and 2020, motivated by political tensions among ethnic groups, clashes broke out in various regions in the country, leaving many dead (International Crisis Group, 2019; Pilling, 2020). Some 1.8 million people have been displaced by conflict and the effects of climate change (IOM, 2020), and many more require food assistance. The government regularly shuts down the internet as a temporary measure around these conflicts, and to prevent the spread of protests (Anna, 2020; Getachew, 2020). Political unrest is also affecting business. In one World Bank study, around half of businesses interviewed reported suffering disruption and losses caused by the protests in 2020 (Abebe et al., 2020a).

2.1.2 Economic context

Despite being a landlocked country with limited natural resources in a resource-rich continent, Ethiopia has achieved remarkable growth rates in recent years, albeit from a low base.¹ Even so, GDP per capita was \$856 in 2019, making Ethiopia a low-income country (ibid.).

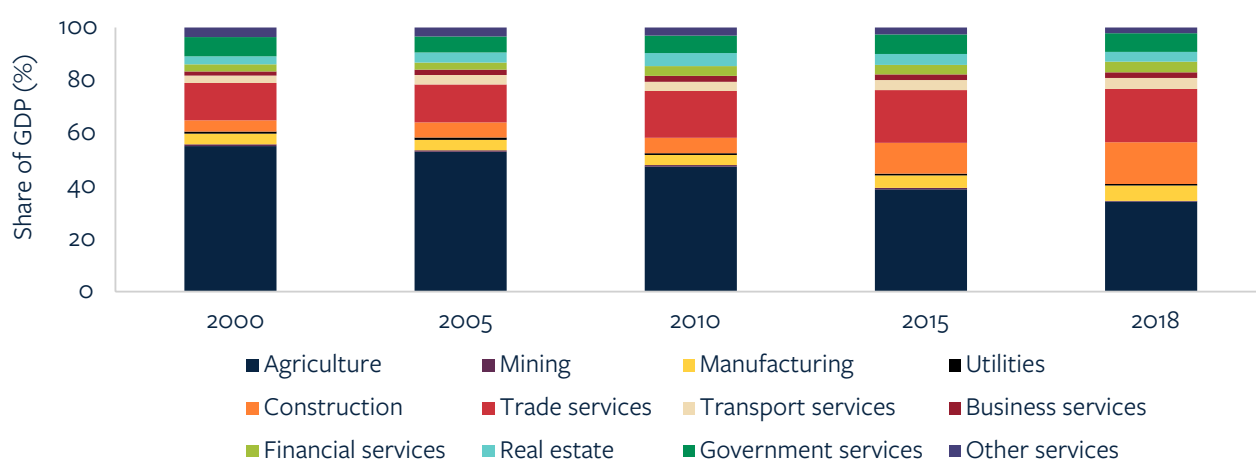
As domestic policies have shifted the focus from agriculture-led to manufacturing-led growth, GDP growth has been accompanied by structural transformation, with non-traditional sectors of

¹ In the period 2010–2019, the country averaged gross domestic product (GDP) growth of 9.8%, peaking at \$95 billion (World Bank, n.d.).

the economy expanding in the past decade. Figure 1 shows that agriculture has shrunk as a share of GDP, while the shares of construction and trade services have increased. However, agriculture remains the dominant source of livelihood for many Ethiopians, employing

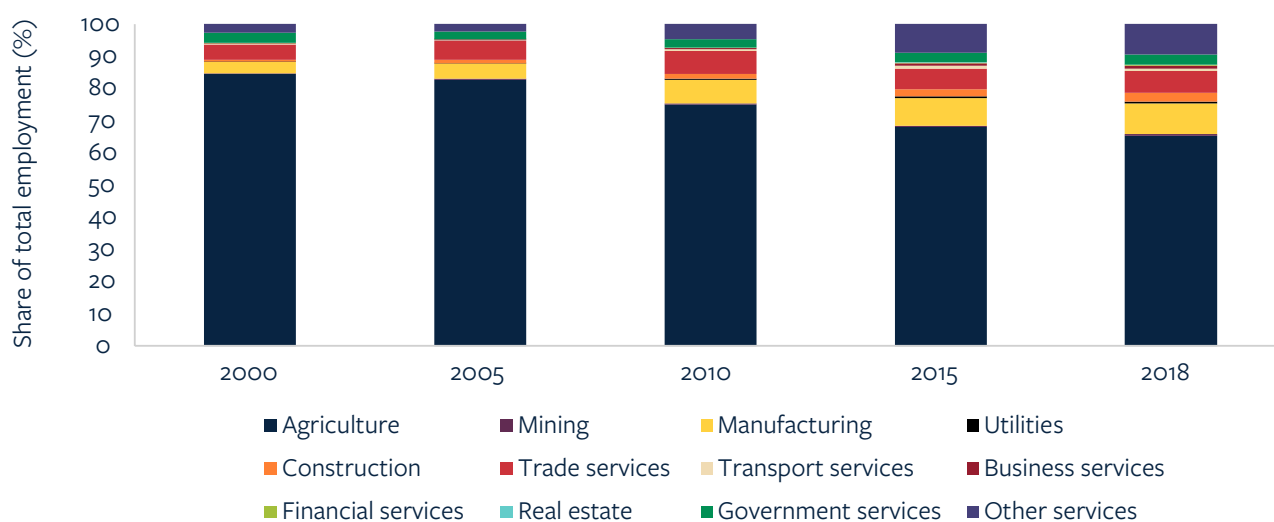
over 60% of the population (Figure 2). Most of the population is employed in relatively low value-added sectors, and the four most productive sectors of the economy (transport, construction, mining and utilities) employ around 5% of the population.

Figure 1 Gross value-added by sector at constant 2015 prices



Source: de Vries et al. (2021)

Figure 2 Employment by sector

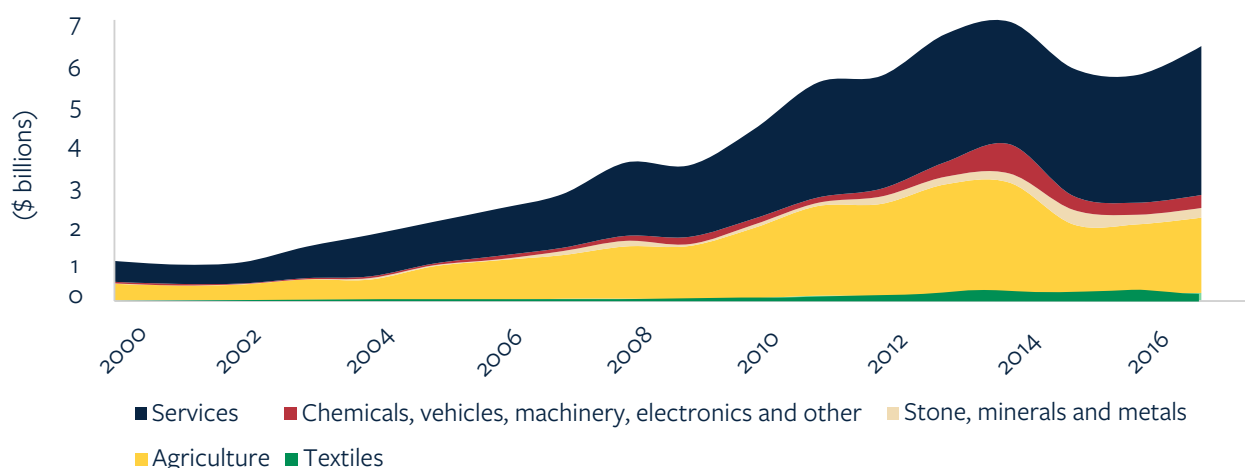


Source: de Vries et al. (2021)

Over the past two decades Ethiopia has sought to increase exports. Growth in exports of transport services and logistics has been driven by Ethiopian Airlines Business Group, which has become a world-

leading enterprise with a diversified business portfolio (Balchin et al., 2019). Figure 3 shows that exports grew six-fold between 2000 and 2017, with services exports making up a large part of the increase.

Figure 3 Exports by sector, 2000–2017

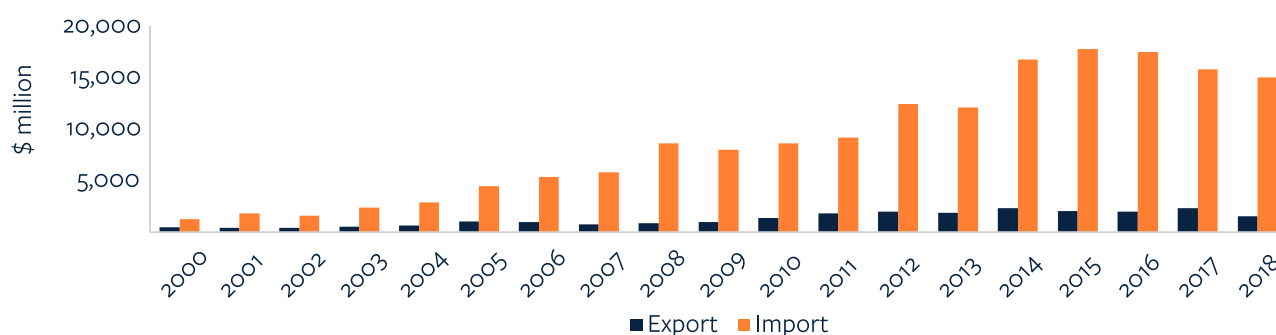


Source: The Growth Lab at Harvard (n.d.)

Goods exports have stagnated in the last decade, and have lagged behind imports, which have grown exponentially, as shown in Figure 4. The main export products are agricultural goods, coffee in particular, but garments are gaining in

importance.² In terms of markets, most Ethiopian exports go to Asia (China in particular), followed by Europe and North America. The biggest single market for Ethiopian goods is the (US).

Figure 4 Total exports and imports



Source: UNSD (n.d.)

² In 2018, Ethiopian data reports exports of garments, textiles and footwear worth \$47 million, \$2 million and \$27 million respectively, compared to \$391 million in exports of tea and coffee.

The growth in inflows of foreign investment into Ethiopia is the result of active efforts to promote investment, especially by the Ethiopian Investment Commission (EIC), which has sought to attract

foreign capital towards manufacturing through an ambitious industrial park programme (see Box 1). Manufacturing investment has comprised more than half of total FDI over recent years (Figure 5).

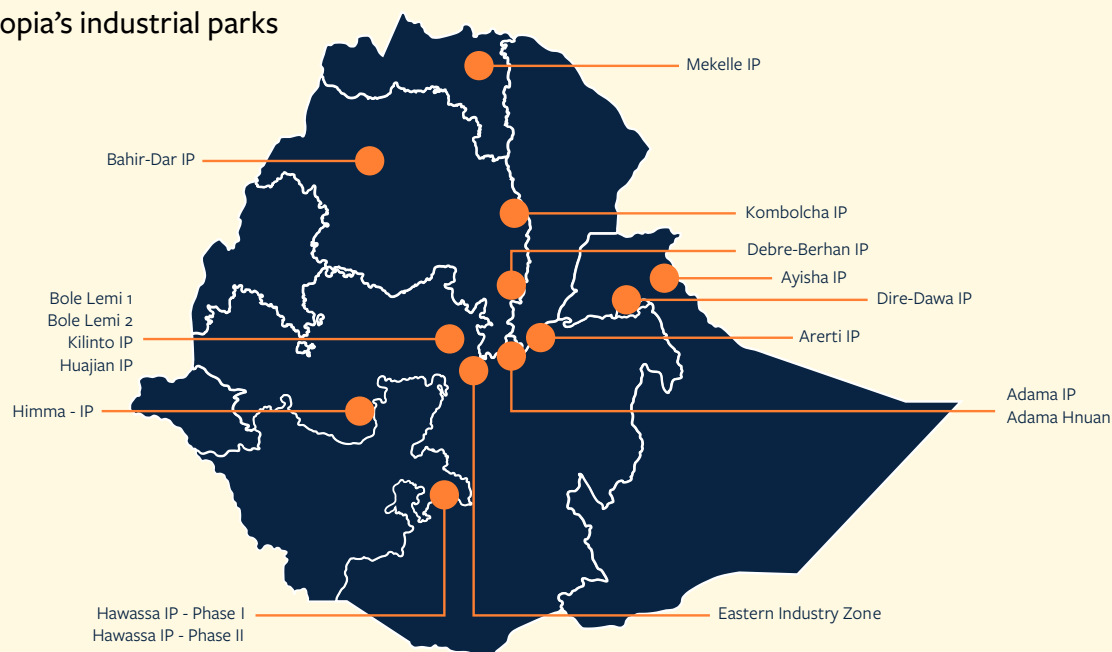
Box 1 Ethiopia's industrial park development model

The Ethiopian model of industrial development relies heavily on industrial parks. Given Ethiopia's large infrastructure gaps, an approach to industrialisation based on industrial parks is sensible, as it allows for the building of infrastructure specifically targeted at production – namely the parks themselves and the transport infrastructure connecting them to the rest of the country – without having to address the whole country's infrastructure deficit at once.

Currently, the country has 14 industrial parks which are at least partly operational, with more under construction (EIC, 2021). Some are government-built through the Industrial Park Development Corporation (IPDC), while others were established by private investors (such as the Eastern Industrial Zone, discussed in more detail in Chapter 3).

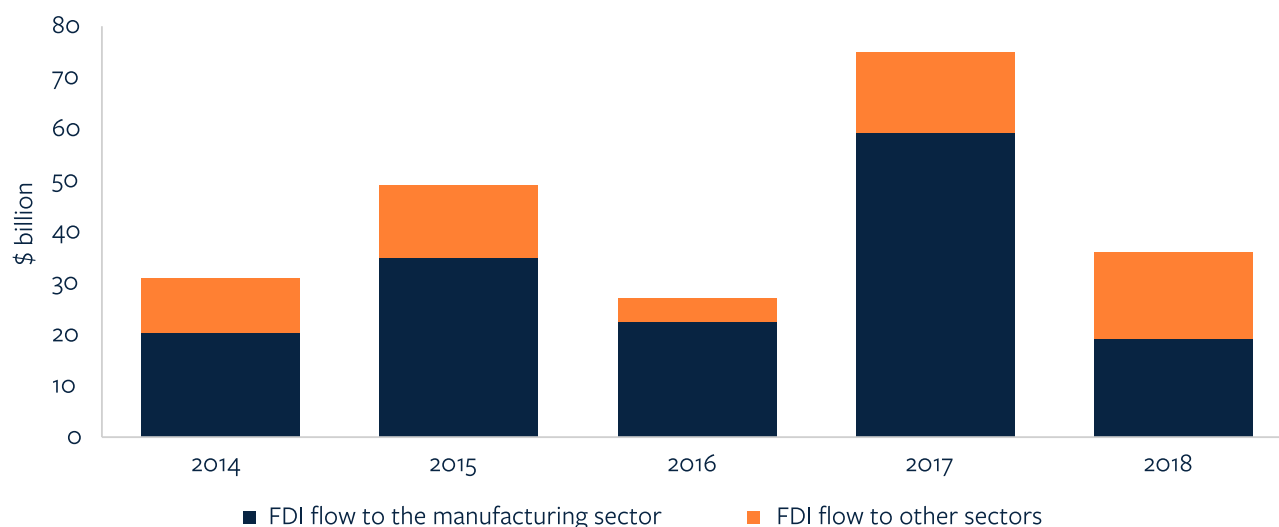
One flagship example is the Hawassa Industrial Park. Located near Lake Hawassa, 275km from the capital, Addis Ababa, this is a 300-hectare eco-park, mostly powered by hydro-electricity and built around energy and water conservation principles. Mainly centred on textile and garment products, the park aims to work in collaboration with the newly built Hawassa University.

Ethiopia's industrial parks



Note: IP = industrial park

Source: EIC (2020)

Figure 5 Foreign direct investment (FDI) flows by sector, 2014–2018

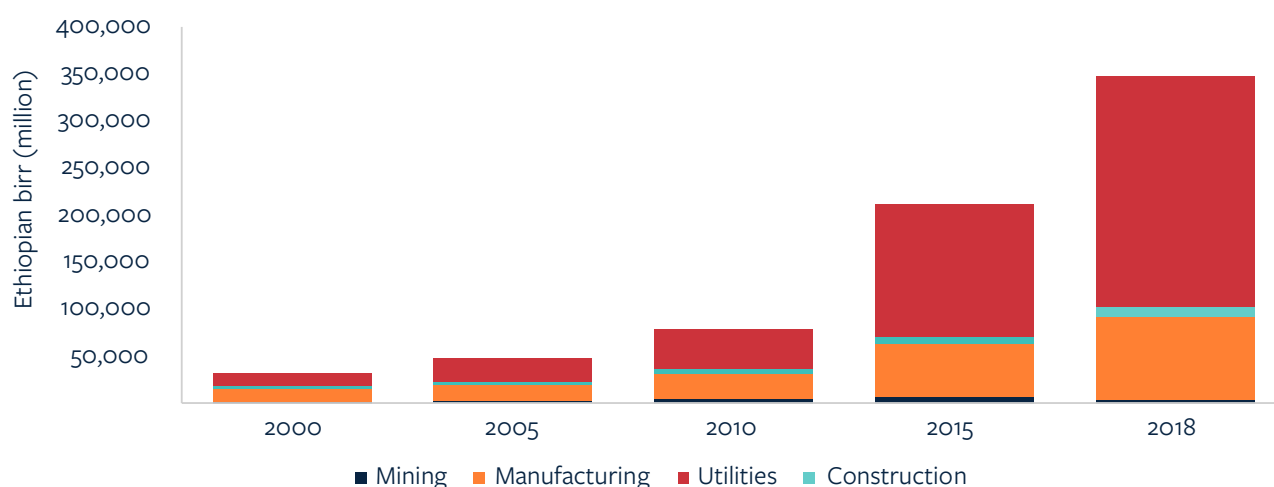
Source: UNSD (n.d.)

Despite strong foreign investment in the manufacturing sector, in recent decades industrial growth has been driven by construction. This, in turn, has promoted growth in construction material manufacturing, in particular cement, a sector dominated by Ethiopian (rather than foreign) firms (Oqubay, 2016).

As an integral part of government developmental programmes, infrastructure development and the construction sector have attracted robust public expenditure, serving as a catalyst for Ethiopia's rapid economic development.³ The National Urban Development Policy, which encouraged

infrastructure development to enhance rural–urban links and housing construction in urban areas, became operational in 2005. Infrastructure development policies have also contributed to stimulating growth in the domestic construction market and a significant increase in employment in the sector. Growth in the construction sector continued to surge as the government began promoting manufacturing. The construction of sugar factories in the Southern region, and the promotion of the nationwide industrial parks programme (see Box 1), opened up opportunities for foreign construction companies, including Chinese entities.

³ One example of infrastructure development at the regional level is the Lamu Port– South Sudan–Ethiopia Transport (LAPSSET) Corridor, which will link Kenya with Ethiopia, Uganda and South Sudan. Plans for the project, estimated at \$25 billion, include a railway, a highway, a crude oil pipeline and a fibre-optic cable connecting the four countries, as well as airports, resort cities, an oil refinery, a port in Lamu and other projects. Another example is the Berbera corridor, a trade corridor that follows a historical trading route connecting Berbera Port in Somaliland with the Ethiopian hinterland.

Figure 6 Gross value-added by sector (industry only), at constant 2015 prices

Source: de Vries et al. (2021)

Ethiopia receives financial support through aid and lending. Net aid received from Development Assistance Committee (DAC) members stood at \$4,810 million in 2019, or 5% of gross national income (GNI). The US, the United Kingdom (UK), Germany and the European Union (EU) are major DAC donors (OECD, n.d.). China is not a DAC member, and therefore this data does not include Chinese aid.

In terms of lending, Ethiopia has a total debt of \$29 billion owed to a wide range of lenders, including China, the World Bank and countries in the Middle East (Eom et al., 2018). Data from the Debt Service Suspension Initiative (DSSI) shows that China is the largest creditor in Ethiopia, with outstanding debt of \$8.7 billion (32% of Ethiopia's total external debt).⁴ The World Bank is close behind, at 31%. Higher interest rates for Chinese loans mean that China made up 42% of debt service due in 2020 (Brautigam et al., 2020).

In summary, the Ethiopian economy pre-Covid-19 has experienced growth and structural transformation since the turn of the century, with a growth of services exports and of investment in the construction sector. However, some areas of fragility remain, as shown by the low growth of goods exports and the limited investment in other sectors. Growth may also be affected by the Covid-19 pandemic, as discussed in Section 2.2.

2.2 Challenges arising: Covid-19 in Ethiopia

Environmental, socio-political and economic risks are not separate and distinct, but rather dynamically interconnected. For example, health emergencies can generate political tensions, which in turn can exacerbate political vulnerabilities, and create economic risks if they drive away investment (Opitz-Stapleton et al., 2019). This interconnection is visible in the case of the Covid-19 outbreak.

⁴ Over the period 2000–2018, Chinese financiers agreed to loan commitments to Ethiopia worth \$13.7 billion (CARI and BU GDPC, 2021).

The first confirmed case of Covid-19 in Ethiopia was reported on 13 March 2020. The government declared a five-month state of emergency from April to September 2020, closing land borders, banning inter-regional public transport and public gatherings, closing schools and entertainment venues and requiring social distancing. As the rate of new infections started falling the authorities gradually eased several of these measures. As of March 2021, most restrictions had been lifted. At the time of writing, elections had been postponed from 29 August 2020 to 21 June 2021 as a result of the pandemic (IMF, 2020a; Africa News, 2021).

The Ethiopian economy has faced challenges as a result of Covid-19. Among the most impacted sectors, especially at the beginning of the pandemic, was air transport. Ethiopian Airlines suspended dozens of flights (though it also partnered with Alibaba's electronic World Trade Platform (eWTP) to deliver emergency personal protective equipment and vaccines across the continent (Johnston, 2020). Flower exports fell due to lower demand from the country's main market, Europe, and because of air travel restrictions (fresh flowers are exported by plane) but the sector has since recovered. Women-owned businesses, mostly present in sectors such as trade, tourism and hospitality, were disproportionately affected (Abebe et al., 2020b).

Not being resource-rich, Ethiopia has at least not suffered from declining commodity prices, and in fact benefited from lower oil prices at the beginning of the pandemic. The International Monetary Fund (IMF) estimated that, in 2019/2020, growth was subdued but did not suffer excessively as two of the main sectors of the economy, agriculture and construction, remained resilient. The 2021 GDP growth forecast for Ethiopia, as of April 2021, was 2.0% y/y (IMF, 2020b).

2.3 Looking forward: Ethiopia's development plans

The Ethiopian government has actively sought to develop its export-oriented manufacturing sector, with a bold industrial policy in three phases (Balchin and Calabrese, 2019). In the first phase, from the early to mid-2000s, the government focused on incentivising local investment aimed at production for export, primarily by providing preferential credit and offering favourable land lease rates through access to land schemes. In the second phase, from 2008, there was a clear shift in emphasis towards attracting foreign investors. The third phase has focused on channelling foreign investment into specialised industrial parks, in particular supporting foreign firms willing to foster links with domestic counterparts (Staritz and Whitfield, 2017).

After two five-year plans, termed 'Growth and Transformation Plans', running from 2010 to 2020, the government unveiled a new 10-year plan, 'Ethiopia 2030: The Pathway to Prosperity'. Aiming to make Ethiopia 'an African beacon of prosperity', the plan's ambition is for the country to achieve middle-income status and reach a per capita income of \$2,220 by 2030. The plan seeks to achieve this via targeted economic growth of 10.2% over the period. Regarding structural transformation, the plan sets target growth rates for each sector, with the industrial and in particular manufacturing sectors having much higher targets than others.

The plan sits within the broader context of government reforms, including the Home Grown Economic Reform mentioned above, which aims to address the economic imbalance created by government-funded large-scale infrastructure development. It includes macroeconomic, sectoral and structural reforms:

- Macroeconomic reforms aim at improving tax administration, public finance and budgeting systems, improving the inflow of foreign currencies and remittances, financial stability and financial inclusion, and debt management (in particular reducing commercial loans and seeking to tilt the balance towards concessional loans).
- Sectoral reforms are targeted towards the agriculture sector, manufacturing, the mineral sector, tourism and information and communications technology (ICT) as sources of growth.
- Structural reforms entail rethinking the role of the government and the private sector in driving growth. Specific interventions entail improving transport and logistics, implementing an import substitution strategy, reforming the investment and job creation landscape, strengthening the role of the private sector and expediting the privatisation of large SOEs and the liberalisation of priority sectors.

In summary, the Ethiopian economy has exhibited strong growth, and further plans for development point in a positive direction. However, the economy remains undiversified and it is therefore vulnerable to shocks such as Covid-19 or political unrest.

2.4 Ethiopia–China relations

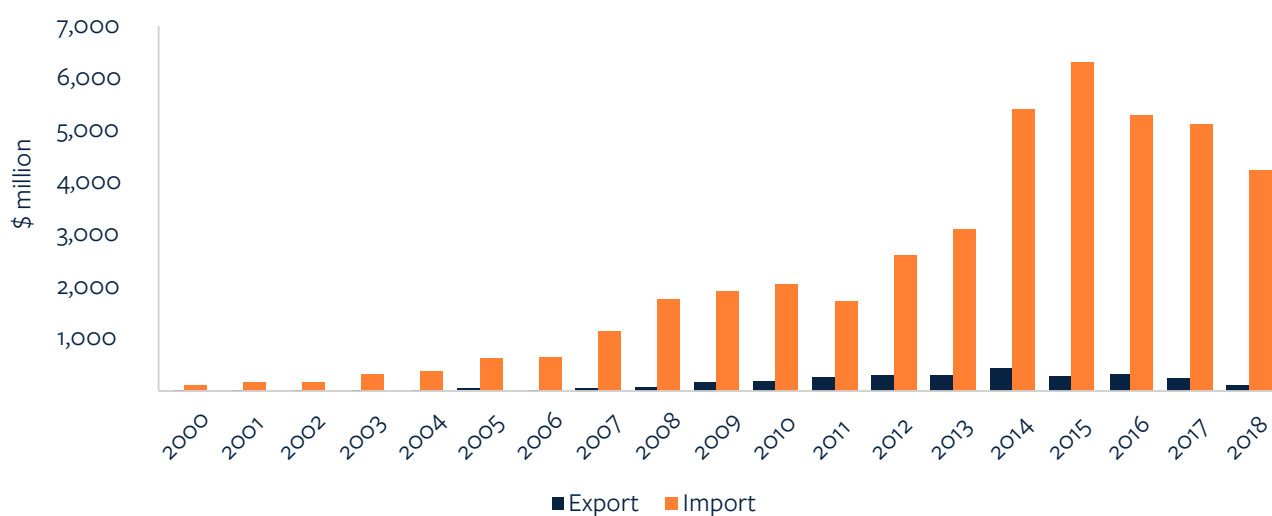
2.4.1 Political and economic relations

Ethiopia and China have a close political relationship. The two countries established diplomatic ties in 1970, and in May 2017 their relationship was elevated to a Comprehensive Strategic Cooperative Partnership.⁵ Since the 1970s the two countries have signed almost 60 agreements and memoranda of understanding (MoUs), including on economic and technological cooperation, trade, investment, taxation, transport and defence. In 2018 the two countries signed an MoU on cooperation within the framework of the Silk Road Economic Belt and the 21st Century Maritime Silk Road Initiative (Ministry of Foreign Affairs, n.d.).

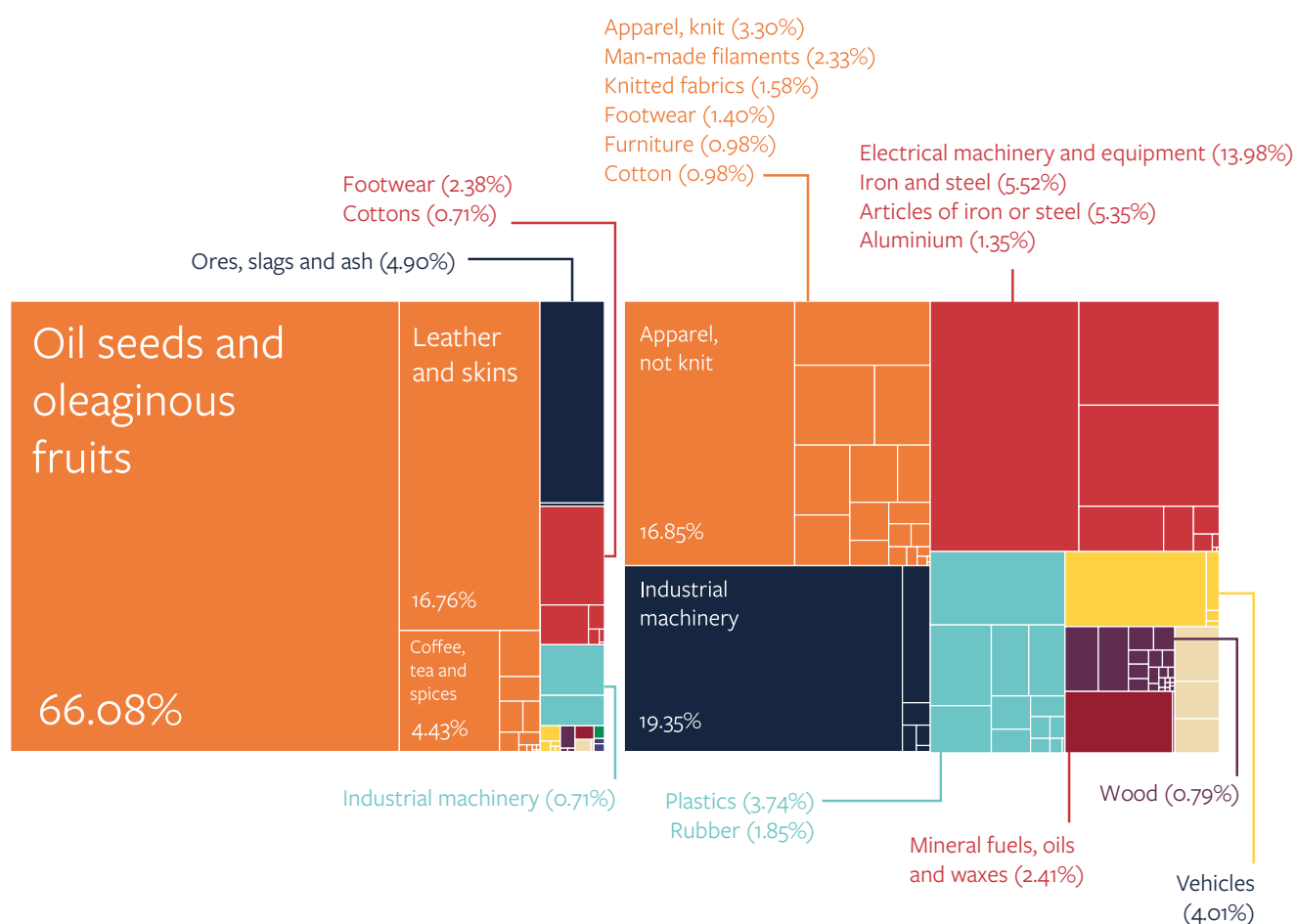
China is an important economic partner for Ethiopia. As shown in Section 2.1, it is the second-largest importer of Ethiopian goods (after the US), and the largest source of Ethiopian imports – over 24% of the goods imported by Ethiopia in 2018 came from China. At least since 2000, Ethiopia has consistently imported more from China than it exported (see Figure 7), leaving the country with a negative trade balance vis-à-vis China.

In terms of the composition of these trade flows, Figure 8 shows that Ethiopian exports to China are dominated by agricultural products (mainly oil seeds) and are largely undiversified.

5 A Comprehensive Strategic Cooperative Partnership is one of the closest types of partnership established by China with other countries or organisations. ‘Comprehensive’ indicates cooperation in the economic, technological, cultural and political domains; ‘strategic’ means that cooperation is not only important, but also stable and long-term; and ‘partnership’ indicates that the two parties cooperate on the basis of respect, trust and equality, for a relationship that is mutually beneficial (Li and Ye, 2019).

Figure 7 Ethiopian exports to and imports from China, 2000–2018

Source: UNSD (n.d.)

Figure 8 Ethiopian exports to China (left) and imports from China (right), 2018

Source: The Growth Lab at Harvard (n.d.)

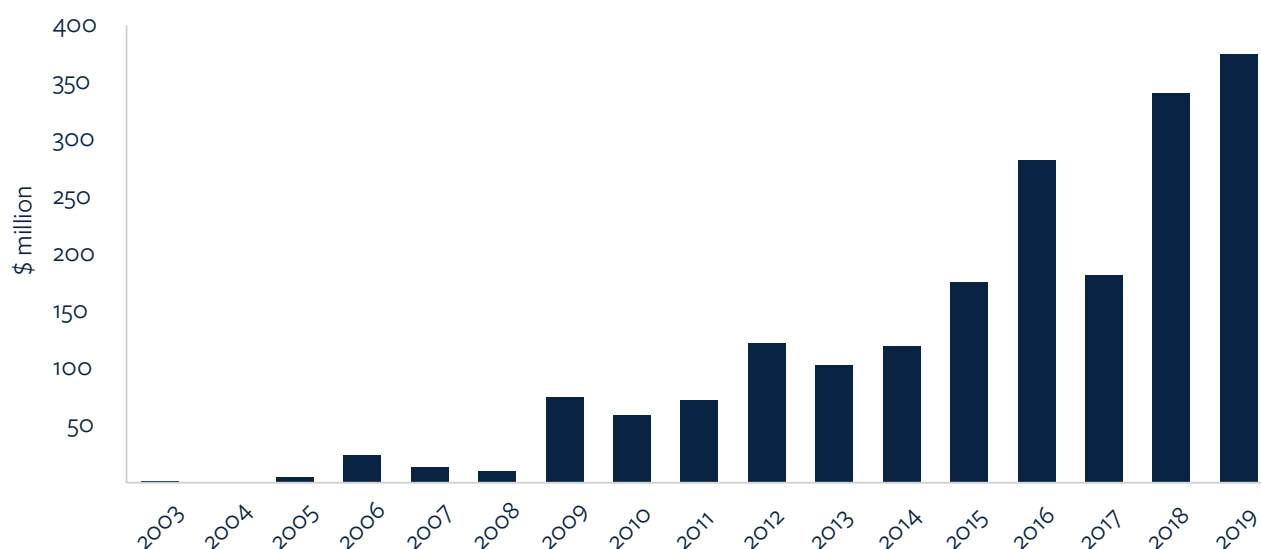
In terms of the composition of these trade flows, Figure 8 shows that Ethiopian exports to China are dominated by agricultural products (mainly oil seeds) and are largely undiversified.

Ethiopian imports from China, on the contrary, are diversified and cover all sectors – mainly garments and textiles (including inputs to the textile industry), but also machinery, plastic products, iron and steel.

In terms of investment, Ethiopia is the fifth largest destination for Chinese FDI stock on the African continent, after South Africa, the Democratic Republic of Congo, Angola and Zambia

(MOFCOM, n.d.). As noted above, a full breakdown of investment in Ethiopia by country is not available. However, Chinese sources provide data on Chinese FDI flows to Ethiopia, shown in Figure 9. Over the period 2003–2019, Chinese FDI stocks in Ethiopia grew more than 500-fold, from less than \$5 million to over \$2.5 billion (ibid.). Almost 70% of China's FDI to Ethiopia in the period 1998–2016 was directed towards manufacturing, followed by construction contracting (13%)⁶ and real estate, machinery rental and consultancy (12%) (Ergano and Rambabu, 2020). A breakdown of Chinese investment by sector is provided in Chapter 3.

Figure 9 Chinese foreign direct investment flows to Ethiopia



Source: Data compiled by the China-Africa Research Initiative based on MOFCOM (n.d.)

2.4.2 The BRI in Ethiopia

Many of the infrastructure projects under construction or recently built in Ethiopia are financed and/or built by Chinese actors. China has been heavily involved in developing Ethiopia's infrastructure at the city, state and federal level.

The signing of a China–Ethiopia MoU on the BRI in 2018 signals both countries' commitment to infrastructure development.

Chinese actors also finance Ethiopia's infrastructure through lending. When looking at loan commitments, Ethiopia was the second largest

⁶ FDI to construction contracting is low because this is rarely financed through FDI, but rather through other sources such as lending, as will be shown later in this chapter.

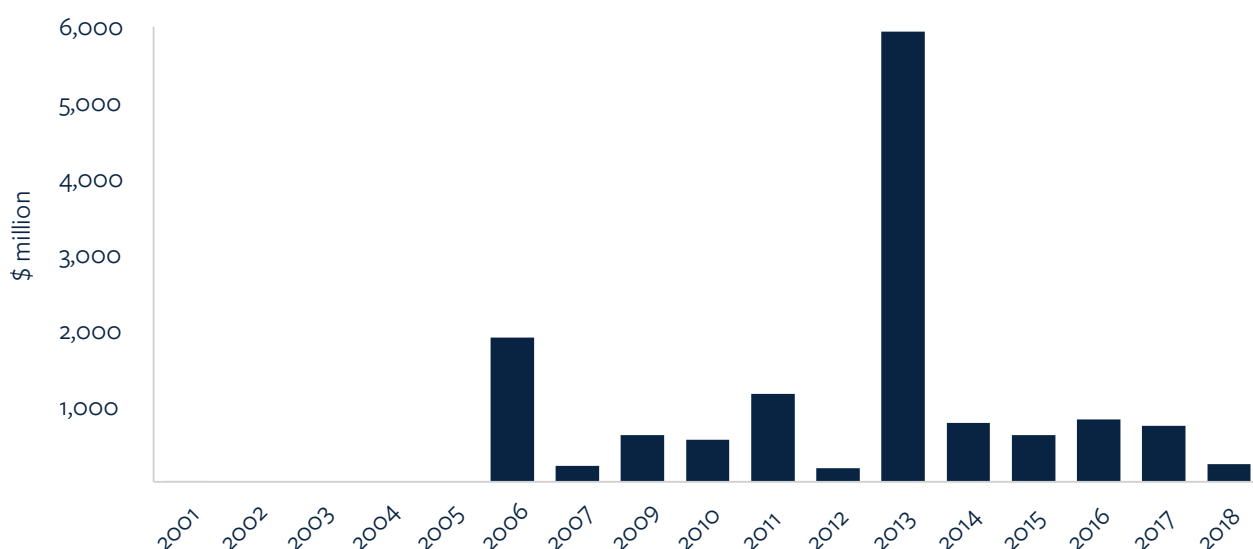
recipient of Chinese loans in the period 2000–2018, after Angola (CARI and BU GDPC, 2021) – however, it should be noted that loans committed may not correspond to loans disbursed. Over the period 2000–2018, China committed to disbursing \$13.7 billion in loan commitments to Ethiopia, as shown in Figure 10 (a full list of commitments and the projects they have financed is provided in the Appendix). Comparing loans with investment, Chinese FDI stock in 2018 amounted to \$2.5 billion, five times smaller than loan commitments up to that year. This is to be expected, given that infrastructure projects are very large and require much more financing than FDI projects.

Figure 10 shows that loan commitments have been volatile, probably because they have

been linked to the signing of large contracts. The peak in 2013 corresponds to a number of large commitments for the Ethiopia–Djibouti railway, a power transmission project and a telecommunications project.⁷

The main lending institutions were China Export-Import Bank (Eximbank), with 56% of loans, followed by Chinese telecommunications companies, both partially state-owned, such as Zhongxing Telecommunication Equipment Corporation (ZTE, 17%), and private, such as Huawei (6%); Chinese SOEs; commercial banks; and China Development Bank (CDB). These loans mainly went to finance infrastructure projects, primarily transport (35%), power (24%), communications (22%; see Box 2) and industry (15%).

Figure 10 Chinese loan commitments to Ethiopia, 2000–2018



Source: CARI and BU GDPC (2021)

In terms of types of loan commitment, the majority of these comprise of commercial loans (38% of the total) and suppliers credits (30%), followed by preferential export buyers'

credit, concessional loans and other forms of finance (CARI and BU GDPC, 2021). Of these loan commitments, only 20% can be classified as official development assistance.

⁷ Commitments are different from disbursements. For commitments agreed in any given year, finance is then disbursed during that year and the following, likely in several instalments. In some cases, only part of the promised sum is disbursed.

Box 2 Chinese digital infrastructure in Ethiopia

Ethiopia's telecommunications industry is a monopoly controlled by the state-owned Ethio Telecom (formerly the Ethiopian Telecommunications Corporation). Liberalisation of the sector, kickstarted in 2019, seems to be stalling (Zelalem, 2020).

In the early 2000s, Ethiopia's telecoms network was deemed inadequate to sustain the country's growth plans. In 2005 the government launched a bid to construct a backbone network for the entire country. The aim of the project, which became known as the 'Millennium Plan', was to rapidly expand telecoms capacity in Addis Ababa and 13 other cities, laying 2,259 km of fibre-optic cable. Several global companies participated (including Huawei and a Chinese SOE), and China's ZTE won the bid. ZTE was favoured because of three factors: the financial support provided by CDB in the form of export credit; low prices; and its willingness to share technology and train a large number of local communications personnel (Zao, 2012). ZTE has set up a communications institute with Ethio Telecom to train 3,000 Ethiopian telecoms engineers (Meester, 2021).

The Millennium Plan was Ethiopia's ICT project in financial terms, with loan commitments of \$1.9 billion (CARI and BU GDPC, 2021). Other projects have since been carried out by both ZTE and Huawei to expand the network. In 2019, the Ethiopian government signed an MoU with Alibaba Group to join the eWTP, allowing Ethiopian small and medium-sized enterprises (SMEs) to sell on the Chinese market. The MoU includes provision for digital capacity-building, and for building a comprehensive digital hub in the country (Yang, 2019). The digital hub is primarily aimed at providing smart logistics and services, conducting cross-border trade, and helping SMEs penetrate markets in China and other parts of the world.

Private sector initiatives include Ethiopia's emerging tech hub, Sheba Valley, operating in partnership with Chinese technology start-ups (Meester, 2021), and manufacturing investments such as those by Transsion/Tecno, a Chinese telephone manufacturer, which set up its first African operation in Ethiopia in 2011 (Mulupi, 2013; Dahir, 2018).

China's presence in the Ethiopian telecoms and digital space has not gone unnoticed. In 2018, newspapers and press agencies announced that the African Union headquarters in Addis Ababa was being hacked by China. The building was fully financed by the Chinese government, and its IT system built by Huawei (Sherman, 2019). According to press sources, African Union servers were sending data back to China each night, and the buildings were bugged with cameras and microphones (Kadiri and Tilouine, 2018; Reuters, 2018). Although accusations were denied by Huawei, and the case was never fully resolved or clarified, it is often cited as a cautionary example of the security risks associated with the use of Chinese digital technology. In 2019, the African Union signed a deal with Huawei to collaborate on a range of technologies, including broadband and cloud computing, 5G and artificial intelligence (Solomon, 2019), signalling that the partnership with Huawei remains strong.

2.4.3 Covid-19 and Ethiopia–China relations

Ethiopia has been one of the recipients of China's support against the Covid-19 pandemic. As emphasised by Chinese and other media sources, China has provided masks and thermometers, as well as vaccines from Sinopharm (Reuters, 2021; Xinhua, 2021a).

Covid-19 has led to some disruption in economic relations between the two countries, and flight connections have been suspended several times (Derrick, 2020). Other economic activities have operated as usual, and Chinese companies have continued to invest and take contracts in the country. BGI Ethiopia, a subsidiary of Chinese biotech company BGI

Genomics Co. Ltd., began producing Covid-19 test kits in 2020 (Xinhua, 2020). In January 2021 the Ethiopian government asked China to provide debt relief to some projects (CARI, 2021). At the time of writing, this was still under discussion. While it is too early to assess the impact that Covid-19 will have on Ethiopia, it seems that Ethiopia–China economic relations are weathering the storm.

In summary, this chapter has provided an overview of the Ethiopian economic and political context, and the importance of China as an economic partner. Chapter 3 dives deeper into the types of Chinese investor in Ethiopia, to enable a better understanding of the impact they are having and the role they are playing in shaping the country's development trajectory.

3 Chinese enterprises in Ethiopia

Chapter 2 illustrated the importance of the secondary sector, in particular infrastructure construction and manufacturing, within Ethiopia's development path. This chapter provides an overview of Chinese enterprises involved in Ethiopia's industrial development. It shows the sectors in which Chinese firms are active, with a focus on manufacturing and infrastructure construction; provides an overview of the types of Chinese enterprises present on the ground in Ethiopia; and briefly outlines emerging trends before and after the Covid-19 outbreak.

3.1 Sectoral analysis of Chinese investment

Chinese investment in Ethiopia is spread across a wide range of projects, but interests are especially strong in the manufacturing sector. According to Ethiopian Investment Commission (EIC) data, more than half of projects implemented between 1999 and 2017 were in manufacturing (see Table 1). In terms of capital value, manufacturing accounts for around two-thirds of investment. Textile and garment manufacturers such as JP Textile and Shanghai Textile have located themselves in or near the national industrial parks owned and managed by the Ethiopian government. Others, such as San Sheng Pharmaceuticals, built their factories in Chinese-constructed private industrial zones. Huajian, a shoe manufacturer from southern China and one of the largest manufacturers in Ethiopia, created its own industrial zone, employing more than 7,000 workers in Ethiopia during its peak in 2018. Mobile telephone producer Tecno's factory employs more than 500 people.⁸

Construction is another sector with a significant Chinese presence. Chinese companies are the largest contractors for infrastructure projects: almost all the industrial parks planned or managed by the government are built by Chinese companies. As discussed above, these contracts are not to be associated with FDIs; rather, they are categorised as trade in services, because the Chinese companies are providing engineering and construction services and are not acquiring equity or assets.

Chinese institutions are financing some of the largest transport infrastructure projects in Ethiopia. Much of this finance, especially for large-scale projects, is in the form of government loans and export credits from policy banks in China directly to Chinese companies. In practice, the finance goes straight from the lender to the contractor, without passing through the coffers of the borrowing country.⁹ Signature infrastructure projects include the \$4 billion, 750 km Ethiopia–Djibouti Standard Gauge Railway and the \$345 million Bole International Airport Expansion Project.

Although Ethiopia is not a resource-rich country, its reserves of minerals and natural gas are attracting the increasing attention of foreign investors in the extractive sector. In 2018, the Chinese company Poly-GCL Petroleum Investment Limited began the extraction of crude oil and natural gas in the Ogaden region in eastern Ethiopia. The company also signed an agreement to build a pipeline connecting Ogaden to an export terminal in Djibouti to transport natural gas.

⁸ Interviews, Chinese industrial parks in Ethiopia, November 2019.

⁹ For details of this practice, see Brautigam (2009).

Table 1 Chinese investment projects by sector, 1999–2017

Sector	Number of projects	Capital in Ethiopian Birr (thousands)	Total number of projects (including registered but not yet operational)
Agriculture	3	13,771	11
Manufacturing	388	12,293,243	666
Mining	2	26,500	2
Education	1	530	1
Health	10	15,417	12
Hotels (including resort hotels, motels and lodges) and restaurants	29	84,076	42
Tour operation, transport and communications	7	19,721	8
Real estate, machinery and equipment rental and consultancy services	86	693,213	124
Construction contracting including water well drilling	75	5,269,786	138
Others	3	56,000	4
Total	604	18,472,258	1,008

Source: Data provided to the authors by the EIC in 2018

3.2 Typologies of Chinese enterprises

Chinese firms in Ethiopia can generally be divided into two categories: SOEs and private. The Chinese government manages the strategic planning and human resources of SOEs through the State-owned Assets Supervision and Administration Commission of the State Council (SASAC) at the central or provincial government level. Private enterprises are usually smaller, but the number of active private investors significantly outnumbers SOEs. While SOEs are subject to direct state intervention, private investors are much more flexible in their business activities.

Being fully or partially owned by the government, SOEs can access the financial resources of

the Chinese state, especially the policy banks. Although CDB and Eximbank also offer funds to the private sector, SOEs generally have much higher accessibility to their finance. The majority of Chinese SOEs in Ethiopia work in construction, and their capacity to mobilise finance has made them powerful competitors in the construction market, in Ethiopia and in Africa more widely. Some have been present in the African market for over a decade, carrying out projects with various financing sources, including the African Development Bank and the World Bank.

Chinese private investors vary greatly in size and in the sectors they invest in. In 2017, the Chinese Ministry of Commerce (MOFCOM) recorded 161 Chinese companies in Ethiopia; the EIC reported

567 Chinese companies and a McKinsey survey identified 689 (Sun et al., 2017).¹⁰ As shown in Table 1, many recent private investors are manufacturers. Others provide services to SOEs.

There is also a growing number of Chinese investors in the recreational sector, ICT services, agricultural development and real estate development. Flexibility is a distinct feature of these private investors, especially smaller ones. One investor may venture into different sectors at the same time. For example, an individual business owner may run a small-scale construction business alongside a restaurant. Private investors can also shift from one sector to another relatively swiftly, as opportunities present themselves.

3.3 Emerging trends in Chinese investment in Ethiopia

Chinese investment in Ethiopia has been expanding in scale and variety as the Ethiopian government gradually opens up new sectors for foreign investment. Chinese investors were pioneers in the real estate market. The Poli Lotus Real Estate Development in the CMC area of Addis Ababa, for example, was developed by Tsehay Real Estate, a Chinese investor. This was the first high-rise apartment block in the country, and most apartment units were sold by the end of 2019.¹¹ The development is regularly cited as an indicator of the potential of Addis Ababa's real estate market.¹²

As more Chinese investors enter different sectors of the Ethiopian market, competition inevitably increases. For example, Italian company Salini

Impregilo, once the dominant foreign contractor in Ethiopia, now faces competition from a dozen different Chinese SOEs. The Eastern Industrial Zone (EIZ), a private Chinese industrial park and the first such park in Ethiopia (see Box 3), faces competition from other parks, including government parks and those built by other foreign investors, and has to constantly adopt new strategies to attract and retain manufacturing companies.

Amid increasing competition, there is also growing potential for collaboration and cooperation between Chinese enterprises and others. EIC recorded 189 joint-ventures with Chinese finance in 2017. The majority are Chinese–Ethiopian, but there is also co-investment with companies and investors from the US, Canada, Europe and South Africa. Cooperation between China and non–Ethiopian investors is particularly active in the manufacturing sector. By 2017, EIC had recorded a Chinese–South African steel factory, a Chinese–Saudi construction material factory and several Chinese–Indian and Chinese–Italian manufacturers. As investment opportunities expand, the scope for co-investment between Chinese and other investors is likely to increase.

In summary, a variety of Chinese investors and companies are present in Ethiopia, and are contributing to the development of a range of new and emerging sectors such as ICT services, agriculture and real estate development. These investors and companies are driven to invest by a variety of push and pull factors, both political and economic, and have different risk tolerances and appetites, which is explored in the next chapter.

¹⁰ The discrepancy in the figures may be because not all Chinese-owned companies register at the Embassy, which forms the basis of the MOFCOM data.

¹¹ Interview with manager, Poli Lotus apartment, Addis Ababa, November 2019.

¹² See, for example, www.skyscrapercity.com/threads/addis-ababa-la-gare-eagle-hills-project-u-c.2136346/page-3.

Box 3 The origin of the Eastern Industrial Zone

The Eastern Industrial Zone (EIZ) Dukem was founded by the Lu brothers of Jiangsu, China, in 2007. They had arrived in Ethiopia the previous year to explore opportunities in the construction sector, before deciding to build a cement factory. They founded the EIZ during the process of setting up the factory, with the encouragement of MOFCOM. Ethiopia's first industrial park, today the EIZ is home to more than 90 factories, and at its peak it employed 14,700 people.ⁱ

EIZ managers are aware of the competition presented by other industrial parks, especially government-owned ones, and seek to offer more attractive terms for potential investors, including rental concessions, better electricity provision and additional maintenance services. The EIZ also seeks to collaborate with the Ethiopian government, for example offering services to the local government to facilitate the merging of Debre Zeyit and Dukam into a new industrial town.ⁱⁱ

Huajian is one of the largest shoe exporters in China and the largest shoe manufacturer in Ethiopia, both in terms of production and employment. The company began to invest in Ethiopia in 2011, establishing its first shed in the EIZ. In 2013, it signed an agreement with the Ethiopian government to build its own industrial park in Addis Ababa. In 2015 the Huajian Light Manufacturing Zone (HLMZ) broke ground, and by the end of 2017 3,600 Ethiopians were working in shoe production there. At its peak, Huajian employed more than 7,600 workers in the HLMZ and EIZ. The plan was to move production entirely to the HLMZ, and in the long run transform the Zone into a multi-use industrial-based estate with accommodation and recreational facilities.

The vision of a multi-functional industrial estate housing a cluster of manufacturers never really took off. The EIC has enforced strict export policies on HLMZ tenants, setting export goals that very few manufacturers could reach within the set period. Huajian has struggled to find suitable investors for the HLMZ.

Labour relations are another serious challenge for Huajian. High turn-over and increasingly frequent strikes are damaging productivity for manufacturers in Ethiopia. These strikes are mainly about wages and grievances concerning work conditions, but are increasingly fuelled by the ethnic conflicts in the country (Oya and Schaefer, 2020). The fact that Huajian's facilities are located on the Federal land of Addis Ababa, while primarily employing people from the Oromo region, home of the most significant political opposition, is directly fuelling conflict.ⁱⁱⁱ

ⁱ Interview with EIZ manager, August 2018.

ⁱⁱ *ibid.*

ⁱⁱⁱ Interview with Huajian manager, November 2019.

4 Drivers and risk narratives of Chinese enterprises

The previous chapter has illustrated the variety of Chinese firms present in Ethiopia. This chapter looks at what motivates Chinese enterprises to enter the Ethiopian market, as well as the risks they perceive or face in the country. The drivers align with the opportunities Chinese investors see in Ethiopia, be it accessing a new market, making use of preferential market access or avoiding the higher production costs and declining profits they face at home.

4.1 Drivers of Chinese enterprises in Ethiopia

The choices Chinese SOEs and private enterprises make are shaped by a range of push and pull factors. The increase in outbound FDI from China has been driven by economic development in China, and policies encouraging investment overseas (chiefly the ‘Going Out’ strategy, discussed in more detail later in this section). The consistent commitment to structural transformation by the Ethiopian government and the country’s centralised governance structure resembles the business environment in China, and functions as a major pull factor for Chinese enterprises.

4.1.1 Push factors

Overcapacity and the search for new markets

A major motivation for Chinese firms to seek overseas investment opportunities is the need

to export domestic overcapacity, generated by three decades of economic boom and a series of domestic stimulus packages designed to enhance productivity (Kenderdine and Ling, 2018). In 2008, exports from China slumped as the financial crisis hit the economies of the West. The Chinese government responded to the crisis with a massive fiscal stimulus package, with an unprecedented lending programme targeting infrastructure investment, which indirectly poured subsidies into the manufacturing sector as well. Intensified by the stimulus package, domestic overcapacity has provided a strong economic impetus driving Chinese companies to explore new markets in the developing world, and for Chinese finance to seek new investment destinations.

Simultaneously African countries, given their infrastructure gap,¹³ presented a huge opportunity for construction companies in search of profit. In 2008, Africa, with its vast but under-explored construction potential, replaced Asia to become the main market for Chinese companies, primarily SOEs, engaged in construction overseas. These firms gained valuable experience domestically, and then sought to expand abroad, becoming some of the most competitive transnational engineering enterprises in the world (Huang and Chen, 2016). Thus, the combination of overcapacity in the Chinese market and the opening up of the African market was a determining factor in contributing to the expansion of Chinese construction companies in Ethiopia.

13 The African Development Bank (2018) estimates that African countries face an infrastructure financing gap of \$68–108 billion per year.

Covid-19 had an overall negative impact on the global economy in 2020, and China's domestic development also stagnated in the middle of the year. However, there has been a significant rebound in the Chinese economy since the last quarter of 2020 following strict containment measures and the recovery of domestic businesses (BBC, 2021). Profit-seeking Chinese companies are expected to continue their expansion in emerging markets, including Ethiopia.

Rising labour costs and firms' relocation strategies

The significant rise in labour costs in China has been a major push factor for the 'going out' of Chinese investors over the past decade, although Africa has not been the destination of choice. Most Chinese manufacturers chose to upgrade their technology or relocate their factories to Southeast Asia, with a few planning to move further afield to Africa (Xu et al., 2017).

Economic theory suggests that companies may seek to reduce their labour costs by moving production to locations with lower wages. Lin's New Structural Economics offers strong theoretical support for the relocation of China's manufacturing sector to African nations (Lin, 2013). The 'flying geese' pattern adapted by Lin from Akamatsu (1962) suggests that the development gap between China and African countries, and the shift in the Chinese

economy from labour-intensive industries to technology-/service-intensive ones, can offer significant opportunities for developing nations in Africa. Subsequent studies have identified that some of the key policy frameworks adopted in Africa, especially in Ethiopia, were in line with the relocation needs of Chinese manufacturers, making these African countries an ideal destination for Chinese investors in the manufacturing sector (Oqubay and Lin, 2019).

Labour costs are not the only factor affecting firms' location decisions. Many private investors from China, especially in the manufacturing sector, are attracted to African countries by the reshaping of global production networks.¹⁴ The majority of Chinese manufacturers in Ethiopia are original equipment manufacturers (OEMs),¹⁵ whose site decisions are often dictated by buyers' ordering contracts, which are dependent on bilateral trade and tariff agreements. For example, the African Growth and Opportunity Act (AGOA), initiated by the US government, boosted the Ethiopian garment industry by lowering trade barriers with Ethiopia.¹⁶ Encouraged by AGOA, PVH, one of the largest clothing companies in the US, supported the construction of Hawassa Industrial Park, the largest industrial park in Ethiopia, and brought many of its suppliers from Asia to set up shop there.¹⁷

However, the issue remains that many Chinese manufacturers, faced with higher domestic costs

14 The reshaping of global production networks is, in turn, affected by other issues, such as technology and market access, which allow or prompt companies to move their production to the most suitable location at any point in time.

15 Firms undertaking OEM (also called full-package manufacturing or free on board production) are responsible for financing and sourcing inputs, organising the production process, finishing and packaging the goods and arranging for the final products to be shipped to a designated location (Gereffi, 1999).

16 The AGOA was enacted in 2000. It aims to promote exports of a wide range of goods (including apparel) from African countries to the US market. The AGOA offers duty-free and quota-free access to these products into the US market. The agreement is set to expire in 2025.

17 In reality, in many African countries Chinese manufacturers largely seek to invest to sell in the local market, rather than for export (Calabrese and Tang, 2020). With its push to increase exports, Ethiopia may be an exception.

of production, may choose to upgrade their technology to save on labour costs, rather than to relocate to Africa (Xu et al., 2017).

Policy drivers

The economic impetus for outbound investment from China was accompanied by a series of policies encouraging the relocation of Chinese investment. The ‘Going Out’ strategy initiated by the central government in 1999 was the first of these efforts. The policy stimulated a steep growth in outbound FDI from China. The 2006 Forum on China–Africa Cooperation Summit in Beijing marked the beginning of a series of policies promoting economic cooperation between China and Africa. The summit saw the commitment of \$5 billion in loans to African countries, and the founding of China Africa Development Fund (CAD Fund), a leading financial institution facilitating Chinese FDI in Africa. Annual FDI flows from China to Africa surged from \$75 million in 2003 to \$2.7 billion in 2019.¹⁸ Other financial institutions to support Chinese investment in Africa have been established over the past decade, including the Silk Road Fund and the China-Africa Production Capacity Cooperation Fund. These initiatives and institutions created by the government not only promote China–Africa cooperation, but also regulate expanding Chinese investment in Africa.

In a way, the BRI can be seen as a continuation and rebranding of the ‘Going Out’ strategy, albeit with a clearer policy impetus to create a platform for ‘mutual benefit’ and economic cooperation. The BRI includes a much stronger component of cultural and social exchange with other countries. For example, scholarships offered to young people from African countries have been increasing steadily since the initiation of the BRI, pointing to more active social exchange and a

more marked soft power approach by China. It is, however, worth noting that some of the largest infrastructure investments by China in Africa were initiated years before the BRI, including the Ethiopia–Djibouti railway, construction of which started in 2011. Therefore, the BRI should not be regarded as the ‘driving force’ for infrastructure construction by China in African countries (or elsewhere), but as a facilitator for Chinese SOEs to explore emerging markets.

Chinese government policy initiatives have smaller effects on investment from the private sector. Most private Chinese investors in Ethiopia, especially medium-sized and small ones, feel that they receive very little direct support from government programmes, including the BRI. The Chinese government has various tools with which to intervene in the management of SOEs, but has limited ways to influence the activities of private Chinese investors abroad. Financial support from government institutions is usually inaccessible for SMEs. At the same time, however, SOEs and their business activities in Africa are important benchmarks for the investment decisions of private enterprises. Many Chinese private investors entered the African market by serving Chinese SOEs, or used the presence and success of SOEs to gauge the potential profitability of new markets they were interested in.¹⁹

4.1.2 Pull factors

Politics and policies in Ethiopia

Ethiopia is a favoured investment destination for Chinese enterprises not only because of the supply of cheap labour and its geopolitical importance in the Horn of Africa, but also for the stability and policy consistency of its previous government (though the country is currently

¹⁸ Data compiled by the China Africa Research Initiative based on MOFCOM (n.d.).

¹⁹ Interviews with Chinese investors, Addis Ababa, November 2019.

experiencing a period of instability). Over the past two decades, the Ethiopian government has adopted a five-year planning system targeting poverty reduction and economic growth. These plans are based on research on the development model of East Asian countries by Ethiopian political leadership. Since the 1990s, the Ethiopian government has facilitated study trips to East Asia, including mainland China and Hong Kong. As such, there are affinities between Chinese investors and Ethiopia's politics and policies, deeply influenced by the learning and research process and dramatically distinct from other sub-Saharan African countries.

From 2011 onwards, Ethiopian policies started to focus more on structural transformation. The Growth and Transformation Plan I (2010–2015) and II (2016–2020) aimed to build an export-driven, labour-intensive manufacturing sector. The construction of over a dozen national industrial parks is part of this effort to create a favourable environment for FDI in manufacturing, as discussed above.

In summary, Chinese companies and individuals are driven out of China and into Ethiopia by a variety of factors, both political and economic. Different firms are influenced by different factors based on their ownership structure and the sectors they operate in. Similarly, their risk narratives and appetite vary based on these factors, as discussed in the following sections.

4.2 Risk narratives of Chinese investors

4.2.1 Monetary risks: forex shortage and inflation

One of the main constraints facing foreign investors in Ethiopia is the country's narrow

economic base, which creates macro-level challenges including forex shortages and inflation risks. A shortage of forex reserves has been an enduring issue in Ethiopia, undermining efforts to attract FDI in the manufacturing sector because most raw materials for production have to be imported with forex payment.

The Ethiopian government has introduced strict restrictions on the use of forex in offshore procurement. Manufacturers have to queue up for their allowance of US dollars for importation to be issued from the National Bank, sometimes waiting for months and even a year, slowing production. The adverse effects of forex shortages are exacerbated by persistent and volatile inflation, which leads to considerable price differences between contracts and the actual procurement of supplies for production and construction. As such there is a vicious circle whereby insufficient forex leads to delayed importation, which in turn increases production costs, slowing down productivity and exports, and generating less forex income.

This has become the leading risk narrative for Chinese investors as local incomes in Ethiopian Birr (ETB) do not flow out of the country easily and any foreign capital invested in Ethiopia is virtually locked inside the domestic market. Recent policy changes in Ethiopia, described in Chapter 2, suggest that Ethiopian government authorities are aware of the economic challenges linked to monetary risks, and are aiming to address them (see Section 2.3).

4.2.2 Economic risks

Besides monetary risks at a macro level, economic risks for Chinese investors stem from cost-control challenges related to relocation of production. These challenges include the rising cost of relocating human resources and company assets,

high logistics costs and the lack of skilled labour, resulting in low productivity and high turnover. These affect the manufacturing sector in particular.

Many private Chinese investors relocated their businesses from Chinese or Asian markets in response to rising labour costs. The relocation of managerial-level staff, the importation of manufacturing equipment and the maintenance of company assets, including imported equipment and property acquired in Ethiopia, are some of the largest cost components for investors, and are often unexpectedly high.²⁰ Investors in manufacturing also face high transport costs. The infrastructure gap and the low capacity of public services may have contributed to logistics costs. Freight costs between Ethiopia and the port in Djibouti City, for example, have been cited as ‘even higher than the freight cost between Djibouti and China’.²¹ Planned national rail and highway networks are expected to reduce logistics costs, but political instability and the effects of the pandemic mean that the benefits of these investments have yet to be seen.

Low labour costs are one of the main attractions for foreign investors in Ethiopia’s manufacturing sector. However, Chinese investors have found that low labour productivity offsets this advantage. High turnover of workers and high training expenditure have also hindered business expansion. Pay strikes and ethnic tensions have affected productivity in factories, and posed threats to the safety of employees. For example, Huajian’s industrial zone housed more than 3,000 local workers in 2018, but after a series of violent clashes in early 2019, this number

nearly halved. Many workers were not able to return to work due to safety concerns, and stable productivity was hard to maintain.²² Some Chinese investors have also been involved in legal disputes with their employees, a situation they were not prepared to face.²³

4.2.3 Social and political instability

The investment appetite of Chinese investors in Ethiopia has been dampened by rising social and political instability in the country. The resignation of Desalegn as Prime Minister and chair of the previous ruling party, the Ethiopian People’s Revolutionary Democratic Front (EPRDF), created a wave of panic among Chinese investors in 2018. Desalegn’s resignation was seen as a sign of the collapse of the EPRDF. Given the close relationship between the Communist Party of China and the EPRDF, especially the core political power, the Tigray People’s Liberation Front (TPLF), Chinese investors feared that they would be caught up in the political battle between the ruling party and its opponents.

Although the liberal policies promoted by Abiy have had positive effects, Chinese investors generally feel that the investment environment is not as encouraging as before. Changes in the structure and leadership of some major government agencies, including EIC and the Industrial Park Development Corporation (IPDC), raised concerns that the new regime would stop promoting the development of industrial parks and infrastructure projects, two areas where Chinese companies have invested heavily.²⁴ Besides rising concerns regarding inconsistency

20 Interviews with Chinese investors, Addis Ababa, November 2019.

21 Ibid.

22 Interview with a Huajian manager, Addis Ababa, November 2019.

23 Interviews with Chinese investors, Addis Ababa, November 2019.

24 Ibid.

in development policies, Chinese investors also found themselves facing competition from firms from other countries, including the United Arab Emirates (UAE) and the US, as a result of Abiy's economic reforms.²⁵

Another growing concern is that political stability has led to inter-regional conflict, or conflicts between the federal and local governments, making it difficult to invest in some parts of the country. Insecurity in oil-producing districts in Somali Region is one example. Production in Chinese industrial parks has suffered frequent interruptions caused by regional and ethnic conflicts.

4.2.4 Governance capacity

The Ethiopian government has put in place a series of policy reforms to promote economic activity. However, Chinese investors widely believe that the government has limited capacity to implement these changes. First, the government's ambitious plan to build over a dozen industrial parks in just a few years was criticised as unrealistic, and disregarded the real needs of manufacturing investors in the country. The government has regulated the location and size of industrial parks, but has yet to find more effective economic strategies, such as sectoral tax incentives and upstream–downstream links to promote investment for groups of firms connected along industrial clusters or value chains in the parks.

Second, the government has been unable to coordinate different sectoral plans and strategies. For example, the industrial parks are not planned in line with the transport network in the country. The largest park, Hawassa Industrial Park in

Southern Province, is 300 km from the nearest railway station, and the planned national rail network will currently not connect to Hawassa. This means that the two largest government expenditures in the past decade, the Hawassa park and the Ethiopia–Djibouti Railway, are not planned in an integrated manner.

Third, there is a lack of coordination between federal and local government. All of the industrial parks are currently planned and implemented by the federal government; local government has no incentive or financial capacity to participate in industrial development, while having to contribute heavily towards land compensation and housing provision. In Hawassa, for example, the local government regularly complains about rising housing costs in the city, growing migration and increasing pollution and solid waste from the industrial park.

4.2.5 Security risks

Crime has been rising steeply in Ethiopia since the collapse of the previous regime. This is very disturbing for Chinese investors, not least because Ethiopia was previously considered one of the safest countries in sub-Saharan Africa in which to work and live as a foreigner. At least one Chinese manager was killed and several others were injured during a robbery in Oromo region in 2019. Other investors are experiencing difficulties in managing their businesses as containers are hijacked on roads in the north of the country. In November 2020, the Chinese Embassy in Ethiopia facilitated the evacuation of more than 600 Chinese investors and employees from the Tigray region following the outbreak of conflict between the federal government and local armed forces

²⁵ Part of the new Prime Minister's economic reforms was to open new sectors and SOEs to FDI, including the logistics sector, real estate and the national telecommunication company. As interviews and official announcements from the Prime Minister's office have shown, there is increasing competition between companies from China, the US and other countries in these areas.

(see Box 4). The continued stand-off in Tigray is discouraging further investment. Testimony to the nervousness of Chinese investors is an MoU

signed by the Chinese and Ethiopian governments in March 2021 to safeguard ‘the safety and security’ of major BRI development projects (Xinhua, 2021b).

Box 4 Heightened political risk: the Tigray conflict

In November 2020 conflict broke out in Tigray region in north-east Ethiopia between the Federal National Defence Forces led by the government and the regional government led by the Tigray People’s Liberation Front (TPLF). Armed clashes were still being reported at the time of writing, leading to loss of life, displacement and disruption to basic services.

The clashes are a symptom of ongoing conflict within Ethiopia’s federal system. The TPLF was the leading party in the Ethiopian People’s Revolutionary Democratic Front (EPRDF), which governed the country for 27 years. The EPRDF began to dissolve after Abiy took office in 2018. Abiy’s political reforms included the founding of a new political coalition, the Prosperity Party, ousting the TPLF.

According to a United Nations Office for the Coordination of Humanitarian Affairs (OCHA) situation report for March 2021, more than 60,000 people have sought refuge since the conflict began (OCHA, 2021). Communications and travel links are temporarily blocked and foreign investors have withdrawn from the region. Crowding in refugee camps could lead to a recurrence of Covid-19 and to the spread of other diseases.

4.2.6 Environmental risks

Domestic development experience in China and experience of legal disputes in other investment destinations have contributed to a growing awareness of environmental risks among Chinese investors and the Chinese government. The latter has made efforts towards ‘Greening the BRI’ in recent years.²⁶

As a negative impact of the booming construction and manufacturing sectors in

Ethiopia, air quality has declined and industrial pollution has become an increasing concern among Chinese investors.²⁷ Chinese interviewees mentioned that, in addition to being a threat to the Ethiopian population and affecting quality of life in Ethiopia, environmental issues could hold back industrial development and damage the reputation of Chinese investment in Ethiopia in the long run. Among Chinese investors, there is growing consensus that more practical environmental regulations should be put in place in order to sustain FDI-led industrial development in the country.

²⁶ See: <https://eng.yidaiyilu.gov.cn/zchj/qwfb/12479.htm>.

²⁷ Interviews with Chinese investors, Addis Ababa, November 2019.

For most infrastructure projects, an Environmental Impact Assessment report is required during the feasibility study phase. However, this assessment document remains a formal requirement with little practical implications. Enforcement of environmental restoration after projects are implemented is also weak.²⁸ With regard to the manufacturing sector, the Ethiopian government has not identified a clear environmental evaluation strategy for increased industrial investment. Although there are some environmental impact controls in Hawassa Industrial Park, there are concerns that the scale of construction of industrial parks will cause serious pollution and over-consumption of underground water, in the absence of timely legislative reform on environment conservation.

4.2.7 Covid-19

The Covid-19 pandemic has had a significant impact on Ethiopia's economy, pushing up food prices and leading to job losses and stagnating productivity. A number of Chinese business owners have reportedly suspended their activities in Ethiopia, but a significant number of projects are still running, albeit some at lower capacity.²⁹ As the Chinese economy started to recover at the end of 2020 (Tanjungco et al., 2020; 2021) and vaccination programmes became available in China, expatriates working for SOEs started to return to Ethiopia. The weak outlook for global trade means that there is not going to be a rapid rebound in the manufacturing sector, though productivity in some Chinese factories has shown signs of recovery since the beginning of 2021.³⁰ The possible production of a billion

Chinese vaccine doses (Ma, 2021), as well as accessibility to such vaccines in Ethiopia, is a positive sign for Chinese investors.

There may also be new opportunities. For example, during the Covid-19 outbreak and recovery phase, Alibaba's eWTP partnership with Ethiopian Airways is intended to last well beyond the pandemic, but the pandemic may have pushed it forward more quickly and intensively (Johnston, 2020). The pandemic also coincided with the launch of the African Continental Free Trade Agreement, which is intended to deepen trade integration between African economies.

4.3 Risk appetite of Chinese investors

4.3.1 Risk appetite of Chinese SOEs

By virtue of their ownership structure, Chinese SOEs adopt a different risk management system to private enterprises. For SOEs in the construction sector, contracts are largely signed on Engineering, Procurement and Construction terms, and risk evaluation is usually based on a cost-benefit analysis. In comparison to construction projects in China and in developed markets, projects in Ethiopia are not considered 'investment-intensive'. This does not mean that Chinese companies make effortless profits in the Ethiopian market, however. Nor does state ownership mean that there will be bailouts when investments fail. Most Chinese SOEs in Ethiopia are operating as subsidiaries and rely on head offices back in China for fiscal management. In this way, their risk appetite largely depends on the financial capacity of the parent company.

²⁸ Ibid.

²⁹ Interviews with Chinese investors, February 2021.

³⁰ Interview with EIZ manager, February 2021.

When competing for large-scale infrastructure projects, Chinese SOEs' risk appetite also depends on their capacity to mobilise finance from state institutions, especially Eximbank. As described in the previous chapter, Eximbank provides the largest loan programmes to infrastructure projects in Africa. The administrative procedures involved in issuing loans for infrastructure development in African countries are complex and highly regulated (Brautigam, 2009).

In reality, Chinese contractors play a major role in driving projects forward and engaging with Eximbank. Contractors identify potential projects and participate in the bidding process, while functioning as the intermediary between the borrowing government and the Chinese bank. Loans from Eximbank to recipient countries are issued with back-up from the state insurance entity Sinosure. Once the loan commitment is secured, financial risks are removed from the contracting SOEs because Eximbank makes direct payments according to the deliverables set out in the contract, while the borrowing government is in charge of repaying the loans.

In such a financial model, investment risks are not evenly distributed among different stakeholders. The terms work in favour of the contracting SOEs, which undertake the project and are paid but carry very little financial risk. This is because, in case of challenges with repayment, the burden falls on the financier or on the borrowing government, but not on the contracting SOE, which is merely the service provider.

However, SOEs also face some risks. Because the financiers rely on information provided by contractors to validate feasibility studies, they encourage SOEs to share the burden of timely loan repayment with the borrowing country. However, in many cases, the financial and

economic returns of infrastructure projects fall short of expectations and the promises of initial plans and feasibility studies. In these situations, the SOEs are left with no option but to manage the infrastructure projects themselves after construction.

This has been the case in the two largest infrastructure projects financed with Eximbank loans, the Ethiopia–Djibouti Railway and the Addis Ababa Light Railway Transit (LRT) project. On completion of the railway in 2017, the contracting SOEs from China, the China Railway Engineering Corporation (CREC) and China Civil Engineering Construction Corporation Ltd (CCECC), formed a joint venture to manage the railway while training Ethiopian Railway Corporation staff, with a six-year exit plan. As the contractor for the project, CREC made similar plans for the LRT in Addis after its completion in 2015. Shenzhen Metro, a Chinese company with extensive experience in managing urban railway projects, was introduced to the Addis LRT project by CREC, and the two formed a joint venture to operate the LRT between 2015 and 2019.

4.3.2 Risk appetite of Chinese private enterprises

Chinese private enterprises usually have limited access to finance from the Chinese state. Their risk appetite depends on financial capacity, and the sector they are engaged in. Investors in catering services, for example, are smaller in scale, and face considerable competition. Investors in manufacturing are generally larger, and their risk appetite often depends on market conditions. Investment in the apparel industry in Ethiopia is driven by both local and external markets, while steel producers largely depend on growth in the domestic construction sector.

As discussed above, smaller business owners are more flexible in changing investment direction.

When facing hazardous losses, they can switch from one sector to another, or relocate their business from one place to another. Larger investors prefer to manage risks by diversifying their investment into new sectors and markets. For example, investors in the construction sector try to increase their risk tolerance level by expanding into the real estate sector. Some real estate developers who invested in Addis Ababa are trying to find new investment opportunities in other regions in Ethiopia, with some eventually venturing into other sectors,

such as construction and manufacturing. As the largest private manufacturing investor from China in Ethiopia, Huajian has been actively seeking to expand into other African countries to manage risks.

In summary, this chapter has highlighted the huge variety of Chinese enterprises present in Ethiopia. These Chinese firms have different risk narratives and risk appetites depending on a number of factors, including their ownership and the sector they operate in. This affects the way in which they influence and shape the Ethiopian development process, as discussed in the next chapter.

5 Risks and opportunities in Ethiopia–China investment relations

The previous chapter analysed some of the risks to Chinese enterprises operating in Ethiopia. In this chapter, we highlight how the dynamics discussed above also present risks for the Ethiopian development process. We highlight the economic, political and social challenges deriving from Chinese economic engagement with Ethiopia, and show how these challenges are interconnected.

5.1 Reliance on China as a source of foreign investment and infrastructure financing

China is one of Ethiopia's most important economic partners, and its investment and lending provide large sources of finance to the Ethiopian economy. Given the scarcity of data, it is difficult to give a precise overview of how China compares with other countries in its economic engagement, but it is clear that it is very important.

As noted above, this is especially the case for Ethiopia's construction and infrastructure sector, one of the main drivers of growth (World Bank, 2019a; see also Chapter 2). It also holds true for the manufacturing sector, which was at the core of the previous government's development strategy and remains a considerable source of employment and, when export-oriented, of foreign exchange. As discussed earlier, Chinese actors play a dual role as constructors (and sometimes financiers) of industrial parks, and as investors and manufacturers in these zones.

Chapter 4 showed how Chinese enterprises in Ethiopia are concerned with a wide range of issues: high production costs and inflation, difficult access to foreign exchange and political instability and insecurity. Each of these issues could drive Chinese enterprises out of Ethiopia. This would, in turn, have major implications for job creation. As shown in Table 1, Chinese FDI in Ethiopia has created over 80,000 direct permanent and temporary jobs.³¹ This figure does not include indirect employment, or jobs in infrastructure construction not recorded as FDI. Research conducted in the manufacturing and construction sectors shows that the overwhelming majority of these jobs (around 90%) go to Ethiopian workers, with the remaining 10% or less allocated to Chinese citizens or other foreigners (Oya and Schaefer, 2019). Challenges to steady job creation could generate larger issues for a country like Ethiopia, with a substantial and young population that needs to find employment.

Reliance (or over-reliance) on a single source of investment and infrastructure financing and construction can have negative impacts on development in Ethiopia. If Chinese investment and financing decrease or stop for any reason outside the control of Ethiopian actors, this may endanger economic growth, and with that job creation, political stability and poverty reduction. Moreover, as Chinese firms invest heavily in export-oriented manufacturing, a decrease in investment may mean a decline in foreign

³¹ Some studies put this higher; see for example Nicolas (2017).

currency entering the country. While Ethiopia has other sources of foreign investment and infrastructure financing, China is one of the most important, if not the main, source.

Ethiopia's development strategy accounts for this, and the country does not exclusively rely on China as a source of capital. For instance, the US and the EU remain the largest markets for Ethiopia's exports. The US, the UK, Germany and the EU are large donors involved in several flagship projects, including industrial parks, and market access to the US is crucial to the country's nascent manufacturing sector. In the infrastructure sector, and specifically for the development of its rail network, Ethiopia relies on Chinese finance and contractors for the Ethiopia–Djibouti Railway, and on Turkish contractors and a mixed group of European and Turkish financiers for other routes (Chen, 2021). Therefore, while Chinese presence in Ethiopia is crucial, its role in the country's development should not be overstated.

5.2 Debt sustainability

Ethiopia's low savings rates cause a savings-investment gap, which means the country struggles to finance its infrastructure. The World Bank estimates Ethiopia's infrastructure financing deficit at \$3.5 billion per year across various sectors, particularly power and energy (Foster and Morella, 2010). Like many other countries, Ethiopia finances its infrastructure through lending, but in some cases the debt thus incurred can become a problem. If excessive debt does not allow the government to provide the infrastructure and services the economy needs, investors may decide to leave the country (and new companies may not invest in the first place). However, if the country defaults on its debt, this may trigger even more dramatic economic consequences, which may also drive investors away.

One of the most widely cited challenges relating to relations between China and Ethiopia is that of debt sustainability. Concerns with public debt linked to Chinese infrastructure are often debated using the concept of 'debt-trap diplomacy', suggesting that China seeks to entrap countries by lending at unsustainable levels and then gaining their assets by way of repayment (Chellaney, 2017). While this narrative has been debunked in the literature (Jones and Hameiri, 2020; Singh, 2020), there are many negative consequences to accumulating excessive amounts of debt. When borrowing externally, countries expose themselves to several financial risks (Bandiera and Tsiropoulos, 2019):

- Risks from repayment of investments: for example, if an external event reduces the expected revenue from a project and triggers additional expenses for the government – if, for example, as a consequence of Covid-19 revenues from toll roads fall.
- Risks from financing terms, such as refinancing, liquidity and currency risks, which could result in a higher debt burden and higher debt service for the government.
- Risk from collateralised debt financing, which could lead the government to lose some of its assets if it cannot repay its debts.
- Default risk, a concern for both the lender and the borrower.

Countries also face operational risks, such as those linked to default or breach of contract clauses (Bandiera and Tsiropoulos, 2019).

There are also broader consequences for a country's development pathway. Large debt service repayments may prompt the government to reduce other development or social spending. The country's creditworthiness is also at stake. If investors doubt a country's ability to service its debt, they can demand higher returns to

compensate for that increased risk. Finally, defaulting on debt obligations may discourage future investment and lending, including access to capital markets. If the country has no choice but to borrow from a lender of last resort (such as the IMF), that lender may impose reforms, thus constraining the country's policy independence.

The debt sustainability issue is often associated with the BRI given its focus on infrastructure construction, which is often financed through lending. However, many developing countries are already in a vulnerable situation with regard to their debt burden. One study looking at several BRI countries finds that more than half are likely to experience increased financial distress as a result of the BRI. However, many of these countries already have high levels of debt vulnerability (Bandiera and Tsiropoulos, 2019).

The impact of large debt-financed investments on debt sustainability depends on how these investments affect economic growth. Here, recent macro research paints a more positive picture, finding that the BRI and Chinese-financed infrastructure projects in general contribute to growth. A recent World Bank study estimates that BRI transport projects could increase global trade by between 1.7 and 6.2 percentage points, increasing global real income by 0.7% to 2.9% (World Bank, 2019b). A study on East Africa shows potentially important gains for Ethiopia from BRI projects: an increase in GDP of up to 0.9%, alongside welfare gains and increased exports and imports (Mukwaya and Mold, 2018). However, the BRI is also likely to have distributional impacts, with some countries benefiting more than others, or some countries being worse off, for instance because of trade diversion. Another World Bank study reports that Azerbaijan, Mongolia and Tajikistan may face a net welfare loss as a result of the BRI due to the high cost of infrastructure

(De Soyres et al., 2019). Moreover, macro-level studies can only provide rough estimates; the actual impact of BRI projects on the ground will vary depending on how they are planned, implemented and monitored.

Over time, Ethiopia has accumulated large amounts of debt from China as well as from other countries, as shown in Chapter 2. China is Ethiopia's largest creditor. Hurley et al. (2019) find that Ethiopia could face increased risk of debt distress in the short term due to BRI-related projects, but total public debt should remain low enough to mitigate the likelihood of default. The latest available Debt Sustainability Assessment conducted by the IMF, looking at the country's overall external debt, finds that, in 2018/2019, Ethiopia's public and publicly guaranteed external debt-to-GDP ratio was about 28.5%. While this in itself does not raise major concerns, debt in relation to low exports and low domestic revenue is a concern for the IMF, which concluded that, even if the pace of Ethiopia's external debt accumulation has decelerated in recent years, the country remains at high risk of external and overall debt distress (IMF, 2020c).

Even prior to Covid-19, Ethiopia has had to revise its external debt situation several times. In 2001, Ethiopia was considered eligible for debt relief under the Enhanced Initiative for Highly-Indebted Poor Countries. China rescheduled or cancelled Ethiopia's debt several times: in 2001 (cancellation of \$122.56 million of debt), 2007 (a debt relief agreement for \$18.5 million), and 2018 (restructuring of some loans, including for the Ethiopia–Djibouti Railway) (Hurley et al., 2019; CARI, 2021). These cancelled and restructured loans are quite small compared to the total \$13.7 billion loan commitments agreed over the period 2000–2018, but nonetheless indicate China's willingness to support Ethiopia.

In 2018/2019 the Ethiopian authorities concluded new debt renegotiations with China, extending the repayment period of the loan for the Ethiopia–Djibouti Railway from 10 to 30 years, thus reducing Ethiopia’s medium-term debt service burden (IMF, 2020c; Acker et al., 2020). In addition, the government made efforts to prioritise SOE investment projects and contain SOEs’ borrowing, which led public and publicly guaranteed debt to fall from 59.5% of GDP in 2017/2018 to 57% at end-June 2019. Despite public and publicly guaranteed debt declining, the IMF is still concerned that debt levels are too high, especially relative to low exports and revenue collection (IMF, 2020c).

Covid-19 has exacerbated Ethiopia’s debt challenges. Ethiopia was one of the countries included in the DSSI in 2020. It is also part of the Common Framework, the second phase of the DSSI which seeks to also include private investors. The government has announced its intention to rework its liabilities, in a plan backed by the IMF (Gebre, 2021).

To sum up, while Ethiopia’s recent growth has been powered by infrastructure development, this, coupled with weak export performance and low revenue collection, is now challenging the sustainability of the country’s development model. The long-term effects may be felt by Chinese firms, and by other investors. Unsustainable debt may make it more difficult for the Ethiopian government to expand its infrastructure and provide essential services to its citizens, including health and education. This, in turn, affects many aspects of investment, including the cost and availability of labour, which can slow the economic development process.

5.3 Potential crowding out of domestic investors

One concern related to Chinese investments in Ethiopia is that they may crowd out domestic investment. This is because Chinese investors may be outcompeting their Ethiopian counterparts, driving them out of the market. This concern derives from observations in Latin America, and in African countries including South Africa (Edwards and Jenkins, 2015; Jenkins, 2019), where industrial activity is more widely present, and where the productive structure more closely resembles that of China (Hung, 2016).

Interviews conducted and literature reviewed for this report do not provide clear evidence of crowding-out of domestic investors. In particular, Ethiopia’s industrial sector was starting from a very low base, and the market still presents many gaps to be filled, leaving space for investors of all countries, and domestic ones. Therefore, the deindustrialisation issues faced by countries like South Africa are not a concern for Ethiopia. As discussed in Chapter 3, there is evidence of increased competition among producers, but this does not amount to crowding out; in fact, there are China–Ethiopia joint ventures in several sectors.

The main problem for private investors may not be competition from Chinese firms, but rather access to finance. The increased presence of foreign firms may stimulate demand for financial services (for the firms, their buyers and suppliers), thus increasing competition on the financial market. This may, in turn, lead to a better offer of financial services which would be helpful in attracting domestic investors.

If anything, there is evidence that Chinese economic engagement with Ethiopia is crowding in investors (domestic and foreign). In particular,

the massive growth in infrastructure construction, financed by both the government and China and often built by Chinese firms, has generated a large demand for domestic materials. Coupled with the government's industrial policy, this has led to the development of the (largely indigenous) cement and construction materials industry (Oqubay, 2016; Wolf and Cheng, 2018).

5.4 Spillovers from foreign investment

Foreign investment can create jobs, promote production and economic activities and, depending on the sector, exports. Moreover, foreign investment, in particular FDI, can also generate spillovers, or benefits for local firms. Working in partnership with, or alongside, foreign firms, and supplying them with inputs and materials, can help domestic firms increase their productivity and upgrade. In Ethiopia, Chinese investors and construction companies hiring domestic workers and interacting with domestic firms can generate these beneficial effects.

To date, the most evident impacts of Chinese investment in Africa are in job creation, production and, in some industries, exports; but there are also examples of knowledge transfer. In Ethiopia, Chinese companies have created a large number of jobs for Ethiopian workers (Oya and Schaefer, 2019). Many Chinese firms in Ethiopia transfer knowledge to staff through training (*ibid.*). A few large Chinese firms, such as Huajian, brought with them advanced production technologies and transferred some of their knowledge to host countries (Tang, 2019a). Other Chinese firms advise local suppliers on the inputs they need to purchase, or provide them with machinery to produce inputs to their specifications (Tang, 2019b; 2019c). To comply with local regulations,

Chinese construction companies regularly hire local subcontractors, though they often give them simple tasks (Oya, 2019).

Knowledge transfer has not, however, been widespread. While Chinese firms have sourced substantial supplies from Ethiopian counterparts, this has not always been possible, and the required inputs are not always available (Tang, 2019c). Knowledge transfer can also be hindered by lack of access to capital. Ethiopian firms, even when able to learn from Chinese counterparts, cannot afford to invest in new technologies or secure reliable supplies to put into practice what they have learnt (*ibid.*). The most beneficial channels through which to transfer knowledge and technology would be via joint ventures or long-term partnerships between Ethiopian and Chinese firms, but these remain rare (Calabrese and Tang, 2020).

5.5 Opportunities to contribute to Africa's economic integration: building the African Continental Free Trade Area

Currently, the main pan-African economic initiative is the African Continental Free Trade Area (AfCFTA), led by the African Union. As of 2020, 36 African countries had deposited their instruments of ratification of the AfCFTA Agreement, signalling that they were ready to start trading under the new arrangement. Ethiopia was among these 36 (tralac, 2020).

While African countries are building the 'soft infrastructure' for the AfCFTA (that is, they are signing the agreements necessary to implement free trade regulations), the 'hard infrastructure' needed to trade is still lacking. The African Development Bank (2018) estimates that African countries face an infrastructure financing gap of \$68–108 billion per year.

Given that China is a major source of infrastructure financing in Africa, it could play a key role in building the physical infrastructure to support the AfCFTA. Not only will China continue to support to the development of Africa's infrastructure; the Chinese government is also interested in providing capacity-building and assistance in trade and industrial cooperation to the AfCFTA Secretariat (Ministry of Foreign

Affairs of the People's Republic of China, 2020; Nyabiage, 2020). While the 'traditional' sources of Chinese infrastructure financing in Africa, namely Eximbank and CDB, have reduced their lending since 2018, this is likely to signal a shift in financing sources (from policy banks to commercial lending, non-financial SOEs and project finance), rather than an overall decline in China's overseas lending (Tanjangco et al., 2021).

Box 5 Risks along the Ethiopia–Djibouti railway

The Ethiopia–Djibouti railway connects Addis Ababa with the port in Djibouti City. The connection is crucial for Ethiopia, given that the country is landlocked and needs access to a port. The railway was the central part of the National Railway Network developed by the Ethiopian Railway Corporation (ERC) in 2007. In 2017, ERC and its counterpart in Djibouti formed the Ethio-Djibouti Standard Gauge Railway Share Company (EDR) to manage the railway as a whole.

Financing for the three phases of construction was in the form of loans provided by Eximbank, for a total of almost \$2.5 billion. The 750 km line (of which 100 km are in Djibouti) is double-track between Addis Ababa and Adama, and single-track until its terminus in Djibouti. In Ethiopia, construction was undertaken by two Chinese companies, the China Railway Engineering Corporation (CREC) and China Civil Engineering Construction Corporation Ltd (CCECC), each taking care of one section of the line (Chen, 2021).

The railway is electrified along its entire route, to save on fuel, as this would need to be imported, but also because the government of the time believed that electrification would create a 'modern image of the country'.ⁱ The decision has, however, presented additional challenges. Energy supply is not always stable in Ethiopia, due to the variable level of water in the country's dams, exacerbated by climate change.ⁱⁱ The construction of power transmission lines and lack of energy delayed the start of operations, even after construction was complete (Chen, 2021).

The line has been flooded on several occasions, halting or delaying services. The Ethiopian government claims that the standards used by the Chinese companies to build the railway did not take flooding into account.ⁱⁱⁱ Chinese stakeholders, however, argue that their standards accounted for potential floods, but that, in the flooded sections, tracks were stolen, causing structural damage to the railroad.^{iv} Interviews also revealed a number of accidents involving animals (camels in particular) being hit by trains and killed. As the ERC has paid more than the market price for camels in compensation, there are suspicions that people are pushing their camels in front of trains deliberately. The plan is to build a fence along the railway, which should reduce accidents and enable

trains to travel faster, from the current 50 km/h to 80 km/h.^v However, this may in turn create other problems, including interrupting paths used by people and animals; it is not clear whether this has been properly assessed.

Profitability is another issue. Initially, the price of a passenger ticket was set at 30 Ethiopian birr (ETB). However, this was subsequently deemed too high and reduced to ETB 4, meaning that the project will generate less revenue than originally planned.^{vi} This would not be a problem given that the project was planned to be catalytic, i.e. it was supposed to promote further economic activity, rather than being financially viable on its own. However, the railway does not seem to be playing this catalytic role since its last mile issues (it does not connect directly to the port in Djibouti or to industrial parks in Ethiopia) do not make the train a suitable mode of transport for business purposes. Our interviews revealed that last mile links were not prioritised during the construction of the new line, but are now being built. The last mile sections are managed by Ethiopian Shipping, a large parastatal. Ethiopian Shipping does not seem to be fully cooperating with the ERC.^{vii}

A final issue concerns the debt incurred to finance the project. As noted, the term of the \$2.5 billion loan has been extended from 10 to 30 years (Acker et al., 2020). In this sense, the Ethiopian government has benefited from China's flexibility with respect to debt servicing (Chen, 2021), but the large-scale lending necessary to finance the project has negatively impacted Ethiopia's debt sustainability, as outlined in Chapter 4.

i. Interviews with Chinese investors, Addis Ababa, November 2019. The SGR in Kenya uses diesel engines because the contractor on that project insisted that unstable electricity supplies would lead to much higher operating costs.

ii. Interview with Ministry of Transport official, October 2019.

iii. Ibid.

iv. Interviews with Chinese investors, Addis Ababa, November 2019.

v. Interview with Ministry of Transport official, October 2019.

vi. Ibid.

vii. Interviews with Chinese investors, Addis Ababa, November 2019.

6 Conclusions and recommendations

This report has discussed the risks and opportunities deriving from economic engagement between China and Ethiopia in the context of the BRI. In particular, it has outlined the drivers and challenges for Chinese firms, differentiating between various types of firms.

China and Ethiopia have a strong political affinity and strong economic bonds, and Ethiopia is one of China's top five investment destinations on the African continent. Beyond investment, relations extend to trade, infrastructure finance and other areas. As is often the case with Chinese finance, all of these aspects are closely interrelated, and it is not always possible to disentangle them.

Economic engagement with China has provided Ethiopia with many opportunities. While the BRI brings a new name to China's global engagement, this does not necessarily entail any change in China–Ethiopia relations, either qualitatively or quantitatively. This report shows that, prior to the announcement of the BRI, China was already a major financier of Ethiopia's infrastructure. The financing and construction of infrastructure have helped address the country's infrastructure gap, and contributed to development of the industrial sector through the construction of industrial parks and by fuelling demand for construction materials. Likewise, investment in the manufacturing sector, one of the Ethiopian government's focus areas, has contributed to the country's economic transformation and diversification and to job creation.

This report has highlighted the diversity of Chinese enterprises operating in Ethiopia. The differences among them include in their ownership (public, at the central state or other levels, or private),

their size and the sectors where they operate. Different factors drive their investment in Ethiopia, and they perceive different risks in different ways. The risks outlined here are likely to affect all firms, albeit differently.

Chinese investors are concerned regarding economic and political uncertainty in Ethiopia. Political uncertainty has to do with domestic conflict and political instability, which may affect not only investors' profitability, but also their personal safety and the safety of their assets. The economic challenges relate to high production and transport costs and the difficulties of accessing foreign exchange, which is a problem for virtually all Chinese businesses in the country. The challenges identified by Chinese investors could pose a threat to the sustained development of China–Ethiopia economic cooperation. While assessing the situation of other foreign (non-Chinese) investment was beyond the scope of this work, it is likely that these challenges will similarly affect them.

The challenges facing Chinese (and other foreign) firms are not only a problem for the firms themselves – they also affect Ethiopia's development path. Given the importance of China as a source of investment and finance for Ethiopia, issues affecting Chinese firms may have a deep impact on Ethiopia's future development. However, it is likely that the issues affecting Chinese investment also trouble other investors. In that sense, tackling these issues would be beneficial to the Ethiopian economy more broadly.

The current debt challenge in Ethiopia also indicates an unsustainable finance situation. While Ethiopia's infrastructure financing deficit

needs to be filled, infrastructure projects need to be planned and executed in synergy with other national structural transformation plans, including industrial park development and urban development schemes.

This suggests several recommendations for both the Ethiopian government and Chinese stakeholders, with the support of other development partners.

Recommendations for the Ethiopian government:

- Focus on mitigating the economic and financial risks faced by investors, especially companies operating in manufacturing, and in particular on export-oriented sectors.
 - In the short term, the most urgent task is to ease restrictions on access to foreign exchange, to allow producers (both domestic and foreign) to import the inputs they need.
 - In the longer term, infrastructural issues and other problems causing high production costs need to be addressed. Ethiopia's approach of developing industrial parks is a step in the right direction, as it eases bottlenecks for productive sectors. However, work on industrial parks is not well coordinated with other infrastructure plans; this coordination needs to be strengthened.
 - Particular attention needs to be paid to foreign exchange-earning sectors, such as export-oriented manufacturing and agribusiness. Increasing exports is crucial to improving debt sustainability. Again, this is already part of the government's approach, but the support provided to these sectors needs to be stepped up.
- Strengthen screening of new lending. This includes improving screening of the financial impact of infrastructure projects in relation to growth, and the feasibility of the repayment schedule.
- Consider new infrastructure financing modalities, such as PPPs, with regard to the potential advantages, as well as the downsides. The Ethiopian government has developed a PPP framework (Mengiste, 2020) and has a number of PPP projects in the pipeline. The main idea behind PPPs, which could be helpful in Ethiopia's case, is to reduce the financial burden and the risks that infrastructure projects pose for the government. However, the government should also bear in mind that PPPs require very careful planning if they are to be beneficial. As complex arrangements that are difficult to manage, PPPs may not be suited to countries where the government has limited resources to dedicate to their preparation; they create large risks for public institutions; and historically, they have often ended up being more expensive than public procurement (Hall, 2014; Romero, 2015; Trebilcock and Rosenstock, 2015; Jomo et al., 2016). Therefore, while PPPs may provide an alternative option to current financing models, this option needs to be assessed carefully, on a case-by-case basis.
- The Ethiopian government needs to strengthen its ability to plan, design and develop infrastructure. The fact that some infrastructure projects have faced a number of challenges in planning and implementation, and that they are not well integrated with each other, suggests limited capacity in this area. Other countries

faced with similar challenges have adopted innovative solutions (see, for instance, the Project Bank developed by the Myanmar government).³² These could be studied and adapted to the Ethiopian context.

- Support the creation of links between Ethiopian and foreign firms to foster knowledge and technology transfer. This is already taking place to some extent, under the policy framework set up by the government. Further encouraging the development of joint ventures through incentives and support programmes may enhance the beneficial outcomes of these partnerships.
 - This can be done via support and matching programmes, both on the Ethiopian side (identifying suitable firms, and building their capacity to partner with or supply foreign investors) and on the Chinese side (supporting Chinese firms in understanding the ways in which they can build long-term relations with Ethiopian firms).
 - Access to capital for Ethiopian firms should be improved through facilitating lending for upgrading through dedicated programmes (concessional lending, matching grants, etc.).

Recommendations for Chinese financing institutions:

- Align financing programmes to the growth model and priorities of recipient countries. This requires a thorough understanding of the development priorities of the government, and the creation of diversified financing models for different development programmes. This can be achieved through a better-planned and better-coordinated approach by Chinese financing institutions, with the Ethiopian government.
- For infrastructure development projects, optimise financing programmes by engaging diverse expertise (beyond engineering specialists) to include planning, social and environmental issues during the feasibility study process, and by developing a long-term monitoring system for the projects they finance. They should also engage appropriate expertise to ensure that these projects support economic development in the borrowing country.
- Work alongside the Ethiopian government to create a coordination structure for bilateral cooperation in various sectors, including large-scale infrastructure, to ensure that infrastructure programmes are planned and implemented to facilitate the country's structural transformation strategies.

32 See www.irrawaddy.com/news/burma/myanmar-launches-online-project-bank-development-projects.html.

References

- Abebe, G., Bundervoet, T. and Wieser, C.** (2020a) *The short-run economic impact of summer 2020 protests in Addis Ababa: a brief look at the evidence from a high-frequency phone survey*. Washington DC: World Bank Group (<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/669751608613046664/Monitoring-COVID-19-Impacts-on-Firms-in-Ethiopia-Results-from-a-High-Frequency-Phone-Survey-of-Firms>).
- Abebe, G., Bundervoet, T. and Wieser, C.** (2020b) *Does the Covid-19 pandemic affect women-owned firms differently?* Washington DC: World Bank Group (<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/669751608613046664/Monitoring-COVID-19-Impacts-on-Firms-in-Ethiopia-Results-from-a-High-Frequency-Phone-Survey-of-Firms>).
- Acker, K., Brautigam, D. and Huang, Y.** (2020) *Debt relief with Chinese characteristics*. Working Paper 39. Washington DC: China Africa Research Initiative, School of Advanced International Studies, Johns Hopkins University (www.ssrn.com/abstract=3745021).
- African Development Bank** (2018) *African development outlook 2018*. Abidjan: African Development Bank.
- Akamatsu, K.** (1962) 'A historical pattern of economic growth in developing countries' *The Developing Economies* 1: 3–25 (<https://doi.org/10.1111/j.1746-1049.1962.tb01020.x>).
- Anna, C.** (2020) 'Ethiopia enters 3rd week of internet shutdown after unrest'. The Washington Post, 14 July (www.washingtonpost.com/world/africa/ethiopia-enters-3rd-week-of-internet-shutdown-after-unrest/2020/07/14/4699c400-c5d6-11ea-a825-8722004e4150_story.html).
- Balchin, N. and Calabrese, L.** (2019) *Comparative country study of the development of textile and garment sectors: lessons for Tanzania*. Report. London: ODI (<https://odi.org/en/publications/comparative-country-study-of-the-development-of-textile-and-garment-sectors-lessons-for-tanzania/>).
- Balchin, N., Booth, D. and te Velde, D.W.** (2019) *How economic transformation happens at the sector level: evidence from Africa and Asia*. Report. London: ODI (www.odi.org/publications/11305-how-economic-transformation-happens-sector-level-evidence-africa-and-asia).
- Bandiera, L. and Tsiropoulos, V.** (2019) *A framework to assess debt sustainability and fiscal risks under the Belt and Road Initiative*. Policy Research Working Paper WPS8891. Washington DC: World Bank (<http://documents.worldbank.org/curated/en/723671560782662349/A-Framework-to-Assess-Debt-Sustainability-and-Fiscal-Risks-under-the-Belt-and-Road-Initiative>).
- Barber, L. and Pilling, D.** (2019) 'My model is capitalism': Ethiopia's prime minister plans telecoms privatisation'. Financial Times 24 February (www.ft.com/content/433dfa88-36d0-11e9-bb0c-42459962a812).
- BBC – British Broadcasting Corporation** (2021) 'Covid-19: China's economy picks up, bucking global trend'. BBC News, 18 January (www.bbc.co.uk/news/business-55699971).
- Brautigam, D.** (2009) *The dragon's gift: the real story of China in Africa*. Oxford: Oxford University Press (<https://global.oup.com/academic/product/the-dragons-gift-9780199550227?cc=us&lang=en&>).

- Brautigam, D. and Hwang, J.** (2019) *China-Africa loan database research guidebook*. Washington DC: Johns Hopkins University School of Advanced International Studies (<https://static1.squarespace.com/static/5652847de4b033f56d2bdc29/t/5d1cc758bb4a5800014dfa1/1562167129838/Guidebook+July+2019+Update+.pdf>).
- Brautigam, D., Huang, Y. and Acker, K.** (2020) *Risky business: new data on Chinese loans and Africa's debt problem*. Briefing paper 3. Washington DC: China-Africa Research Initiative, Johns Hopkins School of Advanced International Studies.
- Calabrese, L. and Tang, X.** (2020) *Africa's economic transformation: the role of Chinese investment*. Report. London: ODI (<https://degrp.odi.org/publication/africas-economic-transformation-the-role-of-chinese-investment/>).
- CARI** (2021) *Global Debt Relief Dashboard*. CARI (www.sais-cari.org/debt-relief).
- CARI and BU GDPC – Boston University Global Development Policy Center** (2021) 'Chinese loans to Africa database version 2.0'. Online database (<https://chinaafricaloandata.bu.edu/>).
- Chellaney, B.** (2017) 'China-Pakistan water pincer against India: as part of CPEC, mega-dams are planned in Gilgit-Baltistan'. Times of India, 16 May (<https://timesofindia.indiatimes.com/blogs/toi-edit-page/china-pakistan-water-pincer-against-india-as-part-of-cpec-mega-dams-are-planned-in-gilgit-baltistan/>).
- Chen, Y.** (2021) *Laying the tracks: the political economy of railway development in Ethiopia's railway sector and implications for technology transfer*. Working Paper 43. Washington DC: SAIS CARI.
- Dahir, A.L.** (2018) 'A low-profile, Chinese handset maker has taken over Africa's mobile market'. Quartz Africa, 30 August (<https://qz.com/africa/1374404/chinas-transsion-dominates-africas-phone-market-with-tecno-itel/>).
- De Soyres, F., Mulabdic, A. and Ruta, M.** (2019) *Common transport infrastructure: a quantitative model and estimates from the Belt and Road Initiative*. Policy Research Working Paper 8801. Washington DC: World Bank.
- de Vries, G., Arfelt, L., Drees, D. et al.** (2021) *The Economic Transformation Database (ETD): content, sources, and methods*. WIDER Technical Note 2/2021. Helsinki: United Nations University World Institute for Development Economics Research (<https://doi.org/10.35188/UNU-WIDER/WTN/2021-2>).
- Derrick, E.** (2020) 'Ethiopian Airlines China flight ban extended until end of the year'. Simple Flying, 3 November (<https://simpleflying.com/ethiopian-airlines-china-flight-ban-extended/>).
- Edwards, L. and Jenkins, R.** (2015) 'The impact of Chinese import penetration on the South African manufacturing sector' *Journal of Development Studies* 51(4): 447–463 (<https://doi.org/10.1080/00220388.2014.983912>).
- EIC – Ethiopian Investment Commission** (2020) *Ethiopian investment report 2019*. Addis Ababa: Ethiopian Investment Commission (www.investethiopia.gov.et/images/Covid-19Response/Covid-19Resources/publications_May-20/EIC-Investment-Report-2019.pdf).
- EIC** (2021) *Government and private parks*. Addis Ababa: Ethiopian Investment Commission (www.investethiopia.gov.et/index.php/investment-opportunities/other-sectors-of-opportunity/government-and-private-parks.html).

- Eom, J., Brautigam, D. and Benabdallah, L.** (2018) *The path ahead: the 7th forum on China-Africa cooperation*. Briefing Paper 1. Washington DC: Johns Hopkins University School of Advanced International Studies (<https://static1.squarespace.com/static/5652847de4b033f56d2bdc29/t/5c467754898583fc9a99131f/1548121941093/Briefing+Paper+1+-+August+2018+-+Final.pdf>).
- Ergano, D. and Rambabu, K.** (2020) 'Ethiopia's FDI inflow from India and China: analysis of trends and determinants' *Journal of Economic Structures* 9(1) (<https://doi.org/10.1186/s40008-020-00211-7>).
- Foster, V. and Morella, E.** (2010) *Ethiopia's infrastructure: a continental perspective*. Country Report. Washington DC: World Bank Group (<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.452.1866&rep=rep1&type=pdf>).
- Gebre, S.** (2021) 'IMF backs Ethiopia's plan to rework debt under G-20 framework'. Bloomberg, 23 February (www.bloombergquint.com/business/imf-backs-ethiopia-s-plan-to-rework-debt-under-g-20-framework-kli8bne2).
- Gereffi, G.** (1999) 'International trade and industrial upgrading in the apparel commodity chain' *Journal of International Economics* 48(1): 37–70 ([https://doi.org/10.1016/S0022-1996\(98\)00075-0](https://doi.org/10.1016/S0022-1996(98)00075-0)).
- Getachew, S.** (2020) 'The internet is back on in Ethiopia but there's every chance it'll be off again soon'. Quartz Africa, 24 July (<https://qz.com/africa/1884387/ethiopia-internet-is-back-on-but-oromo-tensions-remain/>).
- Hall, D.** (2014). *Why public-private partnerships don't work: the many advantages of the public alternative*. PSIRU Research Report. London: University of Greenwich.
- Hirt, N.** (2019) 'Stalled peace and blocked reforms in Eritrea'. ISPI, 20 September (www.ispionline.it/en/publication/stalled-peace-and-blocked-reforms-eritrea-23971).
- Huang, Z. and Chen, X.** (2016) 'Is China building Africa?' *European Financial Review*, 22 June (www.europeanfinancialreview.com/is-china-building-africa/).
- Hung, H.** (2016) *The China boom: why China will not rule the world*. New York: Columbia University Press.
- Hurley, J., Morris, S. and Portelance, G.** (2019) *Examining the debt implications of the Belt and Road Initiative from a policy perspective*. Washington DC: Centre for Global Development (<https://systems.enpress-publisher.com/index.php/jipd/article/view/1123>).
- IMF – International Monetary Fund** (2020a) *Policy responses to COVID19 – policy tracker*. Washington DC: IMF (www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19).
- IMF** (2020b) *World economic outlook: a long and difficult ascent*. Washington DC: IMF.
- IMF** (2020c) *Staff report for Article IV consultation and requests for a three-year arrangement under the Extended Credit Facility and an arrangement under the Extended Fund Facility – debt sustainability analysis*. Washington DC: IMF.
- International Crisis Group** (2019) *Keeping Ethiopia's transition on the rails*. Report 283. Brussels: International Crisis Group (www.crisisgroup.org/africa/horn-africa/ethiopia/283-keeping-ethiopias-transition-rails).
- IOM – International Organization for Migration** (2020) *Ethiopia national displacement report 6: site assessment round 23 & village assessment survey round 6: August–September 2020*. Addis Ababa: IOM (<https://dtm.iom.int/reports/ethiopia-%E2%80%94national-displacement-report-6-august-%E2%80%94september-2020>).

- Jenkins, R.** (2019) *How China is reshaping the global economy: development impacts in Africa and Latin America*. Oxford/New York: Oxford University Press.
- Johnston, L.A.** (2020) 'COVID19 pushes forward Jack Ma's plans for a world trade revolution'. SOAS Blog, 2 July (<https://study.soas.ac.uk/covid19-pushes-forward-jack-mas-plans-for-a-world-trade-revolution/>).
- Jomo, K.S., Chowdhury, A., Sharma, K. and Platz, D.** (2016) *Public-private partnerships and the 2030 agenda for sustainable development: fit for purpose?*. DESA Working Paper 148. New York: United Nations Department of Economic and Social Affairs.
- Jones, L. and Hameiri, S.** (2020) 'Debunking the myth of "debt-trap diplomacy": how recipient countries shape China's Belt and Road Initiative'. London: Chatham House (www.chathamhouse.org/publication/debunking-myth-debt-trap-diplomacy-jones-hameiri).
- Kadiri, G. and Tilouine, J.** (2018) 'A Addis-Abeba, le siège de l'Union africaine espionné par Pékin'. Le Monde.fr, 26 January (www.lemonde.fr/afrique/article/2018/01/26/a-addis-abeba-le-siege-de-l-union-africaine-espionne-par-les-chinois_5247521_3212.html).
- Kenderdine, T. and Ling, H.** (2018) 'International capacity cooperation – financing China's export of industrial overcapacity' *Global Policy* 9(1): 41–52 (<https://doi.org/10.1111/1758-5899.12509>).
- Li, Q. and Ye, M.** (2019) 'China's emerging partnership network: what, who, where, when and why' *International Trade, Politics and Development* 3(2): 66–81 (<https://doi.org/10.1108/ITPD-05-2019-0004>).
- Lin, J.Y.** (2013) 'From flying geese to leading dragons: new opportunities and strategies for structural transformation in developing countries' in J.E. Stiglitz, J.Y. Lin and E. Patel (eds) *The industrial policy revolution II: Africa in the 21st century*. London: Palgrave Macmillan UK (International Economic Association Series): 50–70 (https://doi.org/10.1057/9781137335234_3).
- Ma, J.** (2021) 'Coronavirus: China says it can produce 1 billion doses of a Sinopharm vaccine this year'. South China Morning Post, 6 January (www.scmp.com/news/china/science/article/3116562/coronavirus-china-says-it-can-produce-1-billion-doses-sinopharm).
- Marchal, R.** (2020) 'Two years already? Peace between Eritrea and Ethiopia'. SciencesPo, 25 August (<http://sciencespo.fr/ceri/en/content/two-years-already-peace-between-eritrea-and-ethiopia>).
- Meester, J.** (2021) '*Designed in Ethiopia*' and '*Made in China*': Sino-Ethiopian technology collaboration in South-South relations. CRU Policy Brief. Clingendael Institute (www.clingendael.org/sites/default/files/2021-02/Policy_brief_China_Ethiopia_technology_collaboration_February_2021.pdf).
- Mengiste, D.** (2020) 'Ethiopian public private partnership framework'. Abyssinia Law, 16 November (www.abbyssinialaw.com/blog-posts/item/1964-ethiopian-public-private-partnership-framework).
- Ministry of Foreign Affairs** (n.d.) *Ethio-China relation*. The Federal Democratic Republic of Ethiopia Ministry of Foreign Affairs
- MOFCOM - Ministry of Commerce of the People's Republic of China** (n.d.) *Statistical bulletin of China's outward foreign direct investment*. Beijing: China Commerce and Trade Press.

- Mukwaya, R. and Mold, A.** (2018) 'Modelling the economic impact of the China Belt and Road Initiative on countries in Eastern Africa'. Presented at the 21st Annual Conference on Global Economic Analysis, Cartagena, Colombia. Department of Agricultural Economics, Purdue University, West Lafayette, Global Trade Analysis Project (www.gtap.agecon.purdue.edu/resources/res_display.asp?RecordID=5653).
- Mulupi, D.** (2013) 'Chinese mobile phone company Tecno explains why it only does business in Africa'. How we made it in Africa, 21 January (www.howwemadeitinafrica.com/chinese-mobile-phone-company-tecno-explains-why-it-only-does-business-in-africa/23521/).
- Nicolas, F.** (2017) *Chinese investors in Ethiopia: the perfect match?* Paris: French Institute of International Relations and OCP Policy Center (www.ifri.org/en/publications/notes-de-lifri/chinese-investors-ethiopia-perfect-match).
- OCHA – United Nations Office for the Coordination of Humanitarian Affairs** (2021) *Ethiopia - Tigray Region Humanitarian Update*. Situation report. New York: OCHA (<https://reports.unocha.org/en/country/ethiopia/>).
- OECD – Organisation for Economic Co-operation and Development** (n.d.) 'Aid at a glance charts'. Paris: OECD (www.oecd.org/dac/financing-sustainable-development/development-finance-data/aid-at-a-glance.htm).
- Opitz-Stapleton, S., Nadin, R., Kellett, J. et al.** (2019) *Risk-informed development: from crisis to resilience*. London: ODI (<https://odi.org/en/publications/risk-informed-development-from-crisis-to-resilience/>).
- Oqubay, A.** (2016) *Made in Africa: industrial policy in Ethiopia*. Oxford: Oxford University Press.
- Oqubay, A. and Lin, J.Y.** (eds) (2019) *China-Africa and an economic transformation*. Oxford/New York: Oxford University Press.
- Oya, C.** (2019) 'Labour regimes and workplace encounters between China and Africa' in A. Oqubay and J.Y. Lin (eds) *China-Africa and an economic transformation*. Oxford: Oxford University Press.
- Oya, C. and Schaefer, F.** (2019) *Chinese firms and employment dynamics in Africa: a comparative analysis*. London: SOAS University of London.
- Oya, C. and Schaefer, F.** (2020) *The politics of labour relations in global production networks: collective action, industrial parks, and local conflict in the Ethiopian apparel sector*. IDCEA Working Paper 76. London: SOAS, University of London (www.soas.ac.uk/idcea/publications/working-papers/file148327.pdf).
- Pilling, D.** (2020) 'Ethnic clashes in Ethiopia leave at least 80 dead' Financial Times, 2 July (www.ft.com/content/78afe576-ecd7-4958-bdfd-057e31b9fbe6).
- Reuters** (2018) 'China rejects claim it bugged headquarters it built for African Union'. The Guardian, 30 January (www.theguardian.com/world/2018/jan/30/china-african-union-headquarters-bugging-spying).
- Reuters** (2021) 'Ethiopia to get 300,000 doses of Sinopharm COVID-19 shot, health minister says'. Reuters, 29 March. (www.reuters.com/article/uk-healthcare-coronavirus-ethiopia-idUSKBN2BL1TE).
- Romero, M.-J.** (2015) *What lies beneath? A critical assessment of PPPs and their impact on sustainable development*. Brussels: European Network on Debt and Development.

- Sherman, J.** (2019) 'What's the deal with Huawei and this African Union headquarters hack?'. Medium, 31 May (<https://medium.com/dukeuniversity/whats-the-deal-with-huawei-and-a-hack-at-african-union-headquarters-1e454c1f31a2>).
- Singh, A.** (2020) 'The myth of "debt-trap diplomacy" and realities of Chinese development finance' *Third World Quarterly* 1–15 (<https://doi.org/10.1080/01436597.2020.1807318>).
- Soliman, A. and Demissie, A.A.** (2019) 'Can Abiy Ahmed continue to remodel Ethiopia?'. Chatham House, 12 April (www.chathamhouse.org/2019/04/can-abiy-ahmed-continue-remodel-ethiopia).
- Solomon, S.** (2019) 'After allegations of spying, African Union renews Huawei alliance'. Voice of America, 7 June (www.voanews.com/africa/after-allegations-spying-african-union-renews-huawei-alliance).
- Staritz, C. and Whitfield, L.** (2017) *Made in Ethiopia: the emergence and evolution of the Ethiopian apparel export sector*. Working Paper 3. Roskilde: Roskilde Universitet (<https://forskning.ruc.dk/en/publications/made-in-ethiopia-the-emergence-and-evolution-of-the-ethiopian-app>).
- Sun, I.Y., Jayaram, K. and Kassiri, O.** (2017) *Dance of the lions and dragons: how are Africa and China engaging, and how will the partnership evolve?*. London: McKinsey Global Institute.
- Tang, X.** (2019a) *The impact of Chinese investment on skill development and technology transfer in Zambia and Malawi's cotton sector*. CARI Working Paper 23. Washington DC: CARI, School of Advanced International Studies, Johns Hopkins University.
- Tang, X.** (2019b) *Chinese manufacturing investments and knowledge transfer: a report from Ethiopia*. CARI Working Paper 24. Washington DC: CARI, School of Advanced International Studies, Johns Hopkins University.
- Tang, X.** (2019c) *Export, employment, or productivity? Chinese investments in Ethiopia's leather and leather product sectors*. CARI Working Paper 32. Washington DC: CARI, School of Advanced International Studies, Johns Hopkins University.
- Tanjangco, B., Cao, Y., Nadin, R. et al.** (2020) *Pulse 1: Covid-19 and economic crisis – China's recovery and international response*. London: ODI (<https://odi.org/en/publications/economic-pulse-1-covid-19-and-economic-crisis-chinas-recovery-and-international-response/>).
- Tanjangco, B., Cao, Y., Nadin, R. et al.** (2021) *Pulse 2: China navigates its Covid-19 recovery – outward investment appetite and implications for developing countries*. London: ODI (<https://odi.org/en/publications/economic-pulse-2-china-navigates-its-covid-19-recovery-outward-investment-appetite-and-implications-for-developing-countries/>).
- The Growth Lab at Harvard University** (n.d.) *The atlas of economic complexity*. Boston: Harvard University (www.atlas.cid.harvard.edu).
- tralac** (2020) 'Status of AfCFTA ratification'. Infographic. Western Cape, South Africa: tralac (www.tralac.org/resources/infographic/13795-status-of-afcfta-ratification.html).
- Trebilcock, M. and Rosenstock, M.** (2015) 'Infrastructure public-private partnerships in the developing world: lessons from recent experience' *Journal of Development Studies* 51: 335–354 (<https://doi.org/10.1080/00220388.2014.959935>).
- UNSD – United Nations Statistics Division** (n.d.) 'United Nations Comtrade database'. New York: UNSD, United Nations Department for Economic and Social Affairs (<https://comtrade.un.org/>).
- Wolf, C. and Cheng, S.-K.** (2018) *Chinese overseas contracted projects and economic diversification in Angola and Ethiopia 2000–2017*. IDCEA Working Paper 3. London: SOAS University of London.

- World Bank** (n.d.) 'World Development Indicators'. Washington DC: World Bank (<https://databank.worldbank.org/source/world-development-indicators#>).
- World Bank** (2019a) *Seventh Ethiopia economic update. Special topic: poverty and household welfare in Ethiopia, 2011–2016*. Washington DC: World Bank.
- World Bank** (2019b) *Belt and Road economics. Opportunities and risks of transport corridors*. Advance Edition. Washington DC: World Bank.
- Xinhua** (2020) 'Chinese companies powering Ethiopia's investment efforts amid COVID-19'. Xinhua, 24 October (www.xinhuanet.com/english/2020-10/24/c_139462936.htm) (Accessed: 23 April 2021).
- Xinhua** (2021a) 'China Chamber of Commerce in Ethiopia donates COVID-19 supplies to education ministry'. Forum on China-Africa Cooperation (www.fmprc.gov.cn/zfhzlt2018/eng/zfgx_4/jmhzt1848892.htm).
- Xinhua** (2021b) 'China, Ethiopia ink accord on establishing security safeguarding mechanism for major projects under BRI'. China.org.cn, 7 March (www.china.org.cn/world/2021-03/07/content_77280556.htm).
- Xu, J., Gelb, S., Li, J. et al.** (2017) *Adjusting to rising costs in Chinese light manufacturing: What opportunities for developing countries?* London: ODI (<https://set.odi.org/rising-costs-chinese-manufacturing-opportunities-developing-countries/>).
- Yang, S.** (2019) 'China's Alibaba, Ethiopia sign MoU on eWTP to boost Africa's digital economy'. China Money Network, 27 November (www.chinamoneynetwork.com/2019/11/27/chinas-alibaba-ethiopia-sign-mou-on-ewtp-to-boost-africans-digital-economy).
- Zao, H.** (2012) 'The Chinese telecommunications war in Africa'. Caixin New World, 7 March (<https://africachinareporting.co.za/2013/03/the-chinese-telecommunications-war-in-africa-2/>).
- Zelalem, Z.** (2020) 'Ethiopia is walking back plans to open up Africa's last big telecom sector to foreign players'. Quartz Africa, 19 August (<https://qz.com/africa/1893979/ethiopia-backs-off-ethio-telecom-privatization-for-foreign-firms/>).

Appendix Chinese loan commitments to Ethiopia, 2000–2018

Table A1 Chinese loan commitments to Ethiopia, 2000–2018

Project	Sector	Year of loan commitment	Borrower	Finance type	Value (US\$ million)	Interest rate	Libor rate	Grace period (years)	Loan term (years)	Status
Awassa Textile Plant Equipment Upgrade	Industry	2001	MOFCOM	Government	Zero-interest loan	1	0	–	–	Signed
Millennium Plan Telecom Project Phase I; II; III	Communications	2006	ZTE	Government	Suppliers' credit	1,900	–	Libor 6M+1	3	10 Completed
Finchaa-Amerti-Neshe (FAN) Hydropower Project (97MW)	Power	2007	Eximbank	Government	Export buyers' credit	116	–	–	–	Completed
Tatek; Mugher Cement Enterprise Plant Expansion	Industry	2007	Eximbank	Government	Export buyers' credit	91	–	–	–	Completed
Genale-Dawa III Hydropower Project 3x84.7 (254MW)	Power	2009	Eximbank	Government	Export buyers' credit	270	2.43	–	3	12 Completed
Addis-Adama Expressway Phase I (80 km)	Transport	2009	Eximbank	Government	Preferential export buyers' credit	349	2	–	7	20 Completed
Adama Wind Farm I (51MW)	Power	2010	Eximbank	Government	Concessional loan	99	2	–	8	20 Completed
Gibe III Hydropower Project 10x187 (1,870MW)	Power	2010	ICBC	Ethiopian Electric Power Corporation (EEPCo) (SOE)	Loan (type not specified)	425	3.067	–	4	11 Completed
Meskere Sq-Bole Road (4.3 km)	Transport	2011	Eximbank	Government	Concessional loan	70	2	–	7	20 Completed

Project	Sector	Year of loan commitment	Lender	Borrower	Finance type	Value (US\$ million)	Interest rate	Libor rate	Grace period (years)	Loan term (years)	Status
Addis Ababa Deep Well Water Supply Project III	Water	2011	Eximbank	Government	Concessional loan	96	2	-	8	21	Completed
	Transport	2011	Eximbank	Government	Commercial loan	475	-	Libor 6M +2.6	3	10	Completed
Gibe III Hydropower Project 10x187 (1,870MW) - C (total 612mn)	Power	2011	Eximbank	Ethiopian Electric Power Corporation (EEPCo) (SOE)	Loan (type not specified)	89	2	-	8	21	Completed
Addis Ababa; 400 km transmission lines and substations; Gibe III Hydropower Project (total 612mn)	Power	2011	Eximbank	Government	Loan (type not specified)	188	2	-	8	21	Completed
Kessem Sugar Factory	Industry	2012	CDB	Ethiopia Sugar Corporation (ESC) (SOE)	Loan (type not specified)	123	-	Libor 6M+2.6	3	10	Completed
Adama Wind Farm II (153MW)	Power	2013	Eximbank	Government	Concessional loan	293	2	-	8	20	Completed
Bole Airport expansion	Transport	2013	Eximbank	Government	Concessional loan	239	2	-	7	20	Completed
Omo-Kuraz Sugar Factory 2; South Omo zone	Industry	2013	CDB	Ethiopia Sugar Corporation (ESC) (SOE)	Loan (type not specified)	290	-	Libor 6M+2.6	3	13	Completed
Omo-Kuraz Sugar Factory 3; South Omo zone	Industry	2013	CDB	Ethiopia Sugar Corporation (ESC) (SOE)	Loan (type not specified)	290	-	Libor 6M+2.6	3	13	Completed
Addis-Djibouti Railway (Ethiopian share; total 2.49bn) 656 km; Tranche A	Transport	2013	Eximbank	Government	Loan (type not specified)	220	-	Libor 6M+3	6	15	Completed

Project	Sector	Year of loan commitment	Borrower	Finance type	Value (US\$ million)	Interest rate	Grace period (years)	Loan term (years)	Status
Addis-Djibouti Railway (Ethiopian share; total 2.49bn) 656 km; Tranche B	Transport	2013	Eximbank	Government	Loan (type not specified)	981	- Libor 6M+3	6	15 Completed
Addis-Djibouti Railway (Ethiopian share; total 2.49bn) 656 km; Tranche C	Transport	2013	Eximbank	Government	Loan (type not specified)	1,289	- Libor 6M+3	6	15 Completed
Addis-Adama Expressway Phase II (Toll Motorway); 28 km	Transport	2013	Eximbank	Government	Loan (type not specified)	143	2 -	7	20 Completed
Telecom Transformation and Expansion 7 Circles – Huawei	Communications	2013	Huawei	Government	Suppliers' credit	800	Libor 6M+3	3	13 Completed
Renaissance Dam to Addis Ababa Power Transmission Line and Distribution (500KV, 1,400 km)	Power	2013	State Grid Corporation of China (SGCC)	Government	Suppliers' credit	1,003	3.08 -	3	15 Completed
Telecom Transformation and Expansion 6 Circles	Communications	2013	ZTE	Government	Suppliers' credit	300	- Libor 6M+3	3	13 Completed
Pushkin Square– Gottera Square/ Bole Airport Road; 4.3 km	Transport	2013	MOFCOM	Government	Zero-interest loan	59	0 -	-	Completed
Welkait Sugar Mill; Tigray region	Industry	2014	Eximbank	Ethiopia Sugar Corporation (ESC) (SOE)	Loan (type not specified)	500	- Libor 6M+2.6	2	12 Implementation
Dire Dawa–Dewalle Road; 220 km	Transport	2014	Eximbank	Government	Loan (type not specified)	187	2 -	7	20 Completed
Telecoms-Huawei-Electricity	Communications	2014	Huawei	Government	Suppliers' credit	34	- Libor 6M+2.6	2	12 Implementation
Telecoms-ZTE-Electricity	Communications	2014	ZTE	Government	Suppliers' credit	28	- Libor 6M+2.6	2	12 Implementation

Project	Sector	Year of loan commitment	Lender	Borrower	Finance type	Value (US\$ million)	Interest rate	Libor rate	Grace period (years)	Loan term (years)	Status
Ethiopia-Djibouti Railway Transmission Line Power Supply; 750 km	Power	2015	Eximbank	Ethiopian Electric Power Corporation (EEPCo) (SOE)	Export buyers' credit	63	-	-	-	-	Completed
Omo-Kuraz Sugar Factory - 5; South Omo zone	Industry	2015	ICBC	Ethiopia Sugar Corporation (ESC)(SOE)	Loan (type not specified)	550	-	-	-	-	Implementation
355km Genale Dawa III-Yirgalem II-Wolayita Sodo II-Hawassa II transmission lines and substation; 400KV	Power	2016	Eximbank	Government	Loan (type not specified)	249	-	-	-	-	Completed
Addis Ababa power network rehabilitation and upgrading Project	Power	2016	Eximbank	Government	Loan (type not specified)	165	2	-	7	20	Implementation
Bole Airport expansion passenger terminal - additional finance	Transport	2016	Eximbank	Government	Loan (type not specified)	117	-	-	-	-	Completed
Addis-Adama Expressway Phase II: Akaki-IT Park (Goro) Road; 14.5km; Akaki-Lebu Road; 13.6 km	Transport	2016	Eximbank	Government	Loan (type not specified)	190	-	-	-	-	Completed
Kality Ring Road Interchange-Tulu Dimtu Roundabout Project; 20.6 km	Transport	2016	Eximbank	Government	Loan (type not specified)	103	2.6	-	5	20	Implementation
28.4km Transmission Lines to Bole and Kilinto Industrial Zones in Addis Ababa; 230KV; Kilinto and Bole Lemi power plant substations	Power	2017	Eximbank	Government	Loan (type not specified)	83	-	-	-	-	Implementation
Modjo-Hawassa Expressway, Arsi Negele-Hawassa Section; 52 km	Transport	2017	Eximbank	Government	Loan (type not specified)	171	-	-	-	-	Implementation

Project	Sector	Year of loan commitment	Lender	Borrower	Finance type	Value (US\$ million)	Interest rate	Libor rate	Grace period (years)	Loan term (years)	Status
Adama; Ethio-Hunan Equipment Production Cooperation Industrial Park	Industry	2017	Eximbank	Government	Preferential export buyers' credit	262	-	-	-	-	Implementation
Aysa Wind Farm II; 120MW	Power	2017	Eximbank	Government	Preferential export buyers' credit	219	-	-	-	-	Implementation
Mekelle Water Supply Project - PEBC Part	Water	2018	Eximbank	Government	Preferential export buyers' credit	156	-	-	-	-	Implementation
Mekelle Water Supply Project - ZIL Part	Water	2018	MOFCOM	Government	Zero-interest loan	79	0	-	-	-	Implementation

Note: bn = billion; KV = kilovolts; mn = million; MW = megawatt. While the CARI and BU GDPC database lists the China International Development Cooperation Agency among the lenders, this was only established in 2018, therefore in this table we replace it with MOFCOM.

Source: CARI and BU GDPC (2021)

