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Dance of the lions and dragons

How are Africa and China engaging, and how will the partnership evolve?

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JUNE 2017

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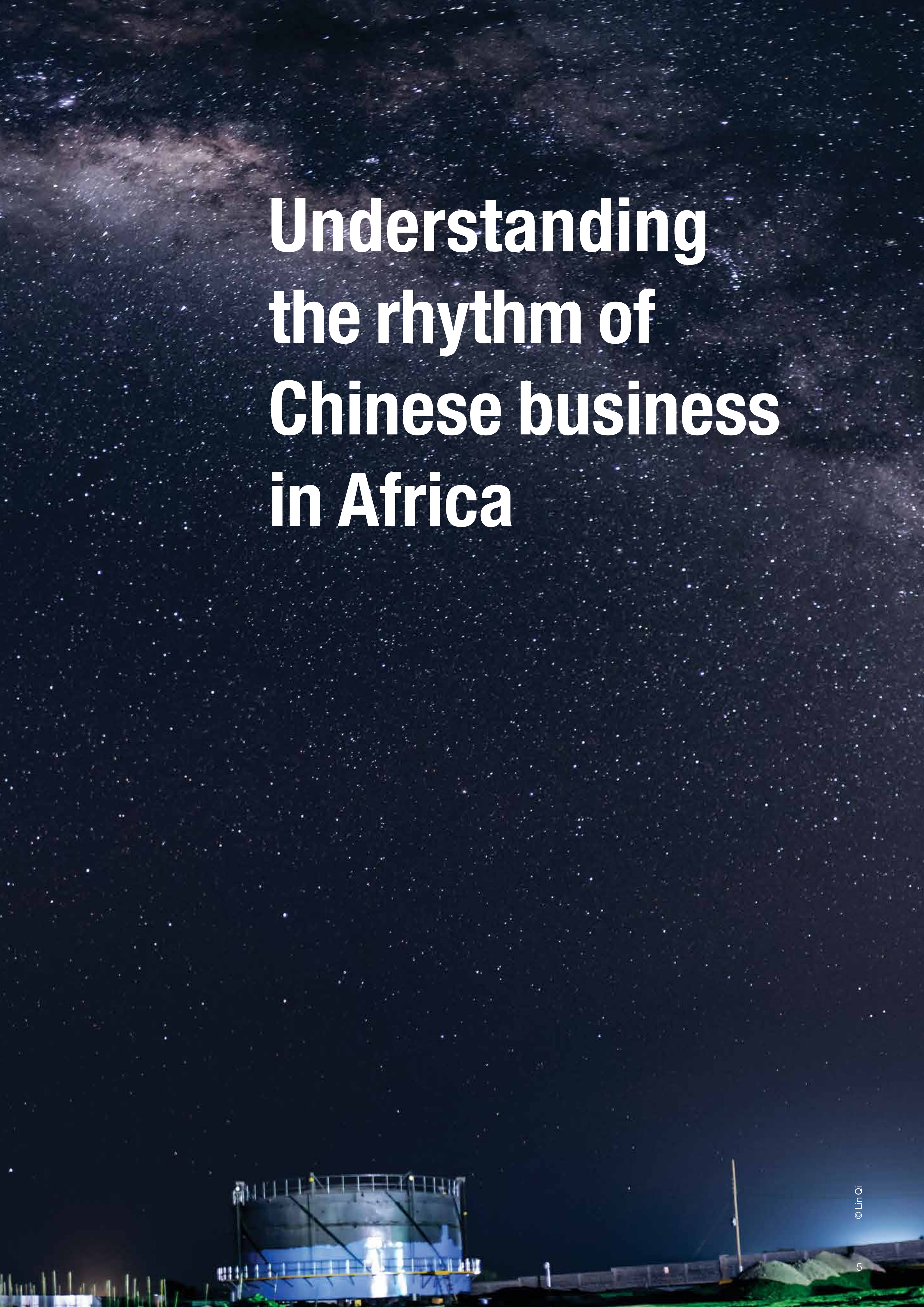
Understanding the rhythm of Chinese business in Africa



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Kajiado County, Kenya, might not be the obvious place to look for evidence of large-scale business. A sleepy, mostly rural area about two hours from Nairobi, the county's greatest claim to fame is its views of snow-capped Mount Kilimanjaro, Africa's highest mountain just over the border in Tanzania.

But when we made the 70-kilometer journey from Nairobi one rainy morning, we were astonished to witness a massive, modern factory—the size of several football fields—rising out of the savannah. We had arrived at the Twyford ceramic tile factory, built in just eight months in 2015–16. One of our teammates commented, "It took me longer to retile my roof and bathroom!"

The factory is a joint venture between two Chinese firms, the SunDa Group and Keda Clean Energy Company. SunDa started as a trading operation in Nigeria, focused on importing tiles from China, but it has since switched to manufacturing in several African countries. Its partner, Shanghai-based Keda, is a major supplier of industrial machinery. The two companies invested $30 million in the first phase of the Kenya factory alone.

Our visit to Kajiado took some time to arrange. The Twyford factory's managers, like many other Chinese business builders in Africa, prefer to keep a low profile. While we were learning more about Chinese industrial firms like Twyford, many business leaders we spoke to in Nairobi were unaware that such a large-scale factory could exist in Kenya. If even such a large industrial facility can remain hidden in plain sight, it's no surprise that the extent of Chinese business activity in Africa is so widely underestimated—and misunderstood.

Our tour of the factory—once we'd trudged through the ankle-deep mud surrounding the construction site of the massive second phase—shed light on several aspects of Chinese business activity in Africa. Inside, the factory is bright, spacious, and modern. It is also enormous: each production line is three-quarters of a kilometer long. Most workers we encountered were Kenyans; the myth that Chinese firms typically avoid employing locals was shown to be just that.

Twyford, like many other Chinese firms in Africa, is not just creating jobs—1,500 at its Kenya factory alone—it is also helping to build skills. Moreover, these employees are not simply engaged in manual labor: many work as technical operators of Keda's advanced machinery. Most of the factory's management and supervisors, including its overall manager, are Kenyan.

The smaller group of Chinese managers and workers, unlike their Kenyan counterparts, live on site—in a housing compound complete with a volleyball court—and rarely leave the factory precinct, even on weekends. With a year or more between their visits back to China, several told us of their homesickness. The camaraderie between Chinese and Kenyan employees was clear for us to see on the factory floor, but the Chinese are far from integrated into the local community.

Since we visited Twyford, we have seen Kenyans also starting to take notice of the factory, which has received coverage by multiple news outlets. We think that shift is emblematic of the increased visibility of Chinese businesses across the continent: the many thousand dragons are emerging into view.

EXECUTIVE SUMMARY

In a mere two decades, China has become Africa's biggest economic partner. Across trade, investment, infrastructure financing, and aid, there is no other country with such depth and breadth of engagement in Africa. The Chinese "dragons"—firms of all sizes and sectors—are bringing capital investment, management know-how, and entrepreneurial energy to every corner of the continent—and in so doing, they are helping to accelerate the progress of Africa's "lions," as its economies are often referred to. Yet to date, it has been challenging to understand the full extent of the Africa-China economic relationship due to a paucity of data.

This report aims to provide a fact-based picture of the Africa-China economic relationship. Its foundation is a large-scale data set about the economic relationship between Africa and China, including on-site interviews with more than 100 senior African business and government leaders, as well as the owners or managers of more than 1,000 Chinese firms and factories spread across eight African countries that together make up approximately two-thirds of Sub-Saharan Africa's gross domestic product (GDP).

1 **THE DRAGON HAS LANDED:** AFRICA'S BIGGEST ECONOMIC PARTNER

Since the turn of the 21st century, China has catapulted from being a relatively small investor in the continent to becoming Africa's largest economic partner. And since the turn of the millennium, Africa-China trade has been growing at approximately 20 percent per year. Foreign direct investment (FDI) has grown even faster over the past decade, with a breakneck annual growth rate of 40 percent.[1] Yet even this number understates the true picture: we found that China's financial flows to Africa are around 15 percent larger than official figures suggest when nontraditional flows are included. China is also a large and fast-growing source of aid and the largest source of construction financing; these contributions have supported many of Africa's most ambitious infrastructure developments in recent years.

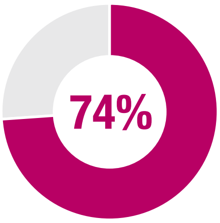
We evaluated Africa's economic partnerships with the rest of the world across five dimensions: trade, investment stock, investment growth, infrastructure financing, and aid. China is in the top four partners for Africa in all these dimensions. No other country matches this depth and breadth of engagement.

1 The trade and investment figures cited in this report are derived from International Trade Centre (ITC) Trade Map; the United Nations Conference on Trade and Development (UNCTAD); *2015 statistical bulletin of China's outward foreign direct investment*, Ministry of Commerce of the People's Republic of China (PRC); National Bureau of Statistics of the PRC; and the State Administration of Foreign Exchange. Unless otherwise stated, the increases cited are in nominal terms.

2 TEN THOUSAND BUSINESS BUILDERS: CHINESE FIRMS' DIVERSITY, SCALE, AND AMBITION

Behind these macro numbers are thousands of previously uncounted Chinese firms operating across Africa. In the eight African countries we focused on, the number of Chinese-owned firms we identified was between double and nine times the number registered by China's Ministry of Commerce (MOFCOM), until now the largest database of Chinese firms in Africa. Extrapolated across the continent, these findings suggest there are more than 10,000 Chinese-owned firms operating in Africa today. Around 90 percent of these firms are privately owned—calling into question the notion of a monolithic, state-coordinated investment drive by "China, Inc." Although state-owned enterprises (SOEs) tend to be bigger, particularly in specific sectors such as energy and infrastructure, the sheer multitude of private Chinese firms working toward their own profit motives make Chinese investment in Africa a more market-driven phenomenon than is commonly understood.

Among surveyed Chinese firms,



are optimistic about their future in Africa.

Chinese firms operate across many sectors of the African economy. Nearly a third are involved in manufacturing, a quarter in services, and around a fifth in trade and in construction and real estate. In manufacturing, we estimate that 12 percent of Africa's industrial production—valued at some $500 billion a year in total—is already handled by Chinese firms. In infrastructure, Chinese firms' dominance is even more pronounced, and they claim nearly 50 percent of Africa's internationally contracted construction market. The firms we talked to are profitable; nearly one-third of them reported 2015 profit margins of more than 20 percent. They are also agile and quick to adapt to new opportunities. Except in a few countries such as Ethiopia, they are primarily focused on serving the needs of Africa's fast-growing markets rather than on exports.

What of the years ahead? An overwhelming 74 percent of Chinese firms said they feel optimistic about the future. Reflecting this, most Chinese firms have made investments that represent a long-term commitment to Africa rather than shallower trading or contracting activities.

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3 BIG BENEFITS, BUT REAL ISSUES: WEIGHING THE IMPACT OF CHINESE INVESTMENT IN AFRICA

Our research points to three main economic benefits to Africa from Chinese investment and business activity: job creation and skills development, transfer of new technology and knowledge, and financing and development of infrastructure:

- At the more than 1,000 companies we talked to, 89 percent of employees were African, adding up to more than 300,000 jobs for African workers. Scaled up across all 10,000 Chinese firms in Africa, these numbers suggest that Chinese-owned business already employ several million Africans.
- Nearly two-thirds of Chinese employers provide some kind of skills training. In companies engaged in construction and manufacturing where skilled labor is a necessity, half offer apprenticeship training.
- Half of Chinese firms have introduced a new product or service to the local market, and one-third have introduced a new technology. In some cases, Chinese firms have lowered prices for existing products and services by as much as 40 percent through improved technology and efficiencies of scale.
- Chinese construction contractors command around 50 percent of Africa's international engineering, procurement, and construction (EPC) market. African government officials overseeing infrastructure development for their countries cited Chinese firms' efficient cost structures and speedy delivery as major value-adds.

Chinese firms contribute to African economies—but they can do more.

89% of employees are African

64% of firms provide training

44% of managers are African

On balance, we believe that China's growing involvement is a strong net positive for Africa's economies, governments, and workers. But there are areas that need significant improvement:

- By value, only 47 percent of the Chinese firms' sourcing was from local African firms, representing a lost opportunity for local firms to benefit from Chinese investment.
- Only 44 percent of local managers at the Chinese-owned companies we surveyed were African, though some Chinese firms have driven their local managerial employment above 80 percent. Other firms could follow suit.
- There have been instances of major labor and environmental violations by Chinese-owned businesses. These range from in inhumane working conditions to illegal extraction of natural resources including timber and fish.

In some cases, Chinese firms have lowered prices for existing products and services by as much as 40 percent through improved technology and efficiencies of scale.


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4 **DIFFERENT DANCES:** FOUR WAYS AFRICAN COUNTRIES ARE ENGAGING WITH CHINA

We focused our research on eight large African economies, and we found four distinct archetypes of the Africa-China partnership:

Robust partners. Ethiopia and South Africa have a clear strategic posture toward China, along with a high degree of economic engagement in the form of investment, trade, loans, and aid. For example, both countries have translated their national economic development strategies into specific initiatives related to China, and they have also developed important relationships with Chinese provinces in addition to with Beijing. As a result, China sees these African countries as true partners: reliably engaged and strategic for China's economic and political interests. These countries have also created a strong platform for continued Chinese engagement through prominent participation in such forums as the Belt and Road initiative (previously known as One Belt, One Road), and they can therefore expect to see ongoing rapid growth in Chinese investment.

Solid partners. Kenya, Nigeria, and Tanzania do not yet have the same level of engagement with China as Ethiopia and South Africa, but government relations and Chinese business and investment activity are meaningful and growing. These three governments recognize China's importance, but they have yet to translate this recognition into an explicit China strategy. Each has several hundred Chinese firms across a diverse set of sectors, but this presence has largely been the result of a passive posture relying on large markets or historical ties; much more is possible with true strategic engagement.

Unbalanced partners. In the case of Angola and Zambia, the engagement with China has been quite narrowly focused. In Angola's case, the government has supplied oil to China in exchange for Chinese financing and construction of major infrastructure projects—but market-driven private investment by Chinese firms has been limited compared with other

African countries; only 70 to 75 percent of the Chinese companies in Angola are private, compared with around 90 percent in other countries. Zambia's case is the opposite: there has been major private-sector investment but not enough oversight from regulatory authorities to avoid labor and corruption scandals.

Nascent partners. Côte d'Ivoire is at the very beginning of developing a partnership with China, and so the partnership model has yet to become clear. The country's relatively small number of Chinese investors are focused on low-commitment sectors such as trade.

5 **THE $440 BILLION OPPORTUNITY:** UNLOCKING THE FULL POTENTIAL OF THE AFRICA-CHINA PARTNERSHIP

One thing is clear to those who are closest to the Africa-China relationship: it will grow. We interviewed more than 100 senior African business and government leaders, and nearly all of them said the Africa-China opportunity is larger than that presented by any other foreign partner—including Brazil, the European Union, India, the United Kingdom, and the United States.

But exactly how quickly will the Africa-China relationship grow in the decade ahead? We see two potential scenarios. In the first, the revenues of Chinese firms in Africa grow at a healthy clip to reach around $250 billion in 2025, from $180 billion today. This scenario would simply entail "business as usual," with Chinese firms growing in line with the market, holding their current market shares steady as African economies expand. Under this scenario, the same three industries that dominate Chinese business in Africa today—manufacturing, resources, and infrastructure—would dominate in 2025 as well.

Chinese firms can expand into **5 new sectors:**

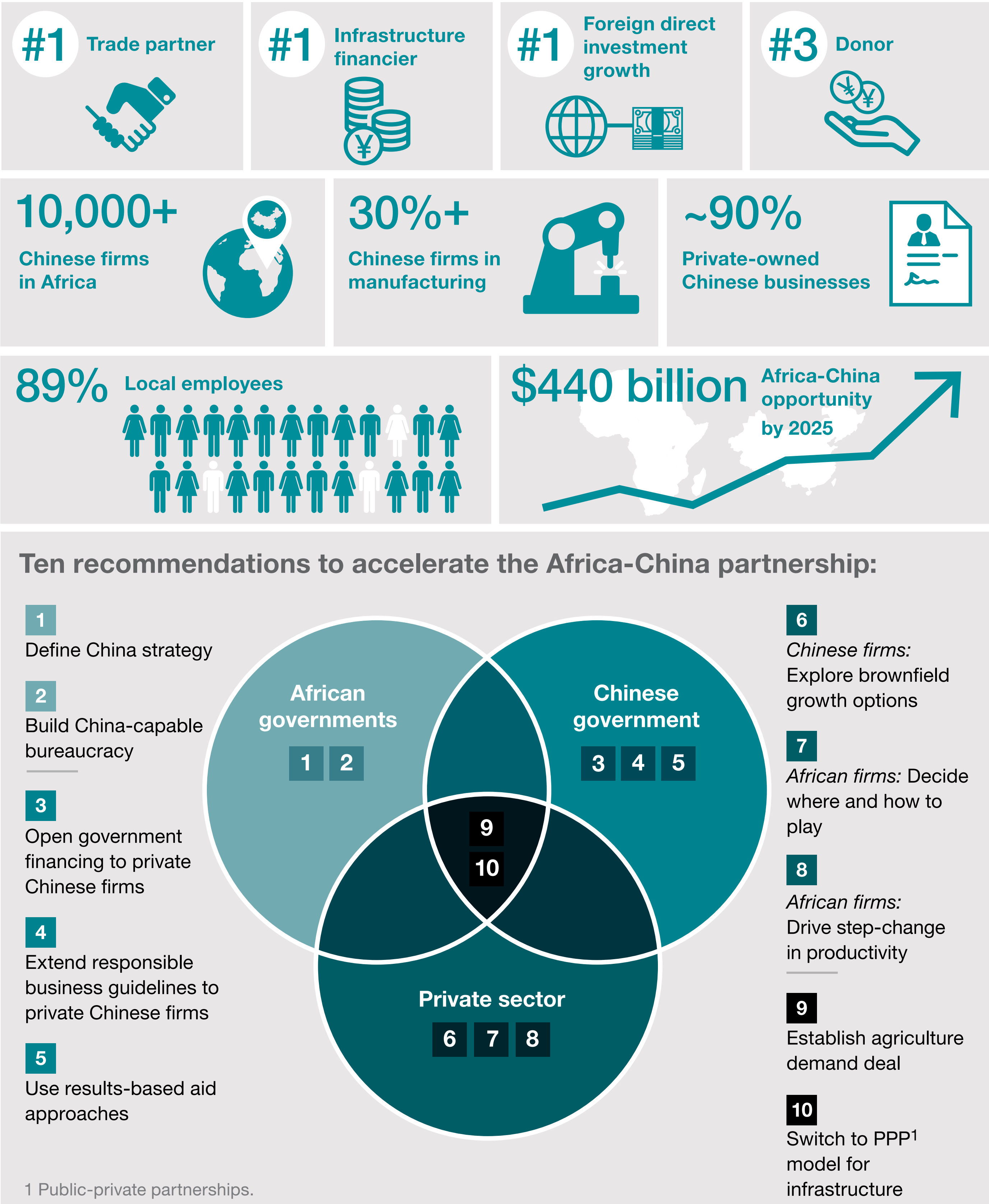
- Agriculture
- Banking and insurance
- Housing
- ICT and tele-communications
- Transport and logistics

We believe much more is possible: in a second scenario, Chinese firms in Africa could dramatically accelerate their growth. By expanding aggressively in both existing and new sectors, these firms could reach revenues of $440 billion in 2025. In this accelerated growth scenario, not only do the three established industries of Chinese investment grow faster than the economy, but Chinese firms also make significant forays into five new sectors: agriculture, banking and insurance, housing, information communications technology (ICT) and telecommunications, and transport and logistics. This expansion could start with Chinese firms moving into sectors related to the ones they currently dominate—for example, from construction into real estate and housing. Another part of this accelerated growth could come from Chinese firms more fully adapting their formulas that have proved successful in China to markets in Africa, including business models in consumer technology, agriculture, and digital finance.

There is considerable upside for Africa if Chinese investment and business activity accelerate. At the macroeconomic level, African economies could gain greater capital investment to boost productivity, competitiveness, and technological readiness, and tens of millions more African workers could gain stable employment. At the microeconomic level, however, there will be winners and losers. Particularly in sectors such as manufacturing, where African firms lag behind global productivity levels, African incumbents will need to dramatically improve their productivity and efficiency to compete—or partner effectively—with the new dragons on their turf.

Exhibit E1

Dance of the lions and dragons:
How are Africa and China engaging, and how will the partnership evolve?



1 Public-private partnerships.

SOURCE: McKinsey analysis

For the foreseeable future, the dragons are here to stay. And with continued and likely growing Chinese involvement, it will become ever more urgent to address the gaps in the partnership, including a greater role for African managers and partners in the growth of Chinese-owned businesses. Moreover, both Chinese and African actors will need to address three major pain points: corruption in some countries, concerns about personal safety, and language and cultural barriers. In five of the eight countries in which we conducted fieldwork, 60 to 87 percent of Chinese firms said they paid a "tip" or bribe to obtain a license. After corruption, the second-largest concern among Chinese firms is personal safety. For their part, our African interviewees described language and cultural barriers that lead to misunderstanding and ignorance of local regulations. If these problems are left unaddressed, the misunderstandings and potentially serious long-term social issues could weaken the overall sustainability of the Africa-China relationship.

Everyone—African or Chinese, government or private sector—has a role to play in realizing the promise of the Africa-China partnership. We suggest ten recommendations, consisting of actions to be taken by African and Chinese businesses and governments, to ensure the Africa-China relationship grows sustainably and delivers strong economic and social outcomes (see Exhibit E1).

■ ■ ■

In the words of one of the many Chinese entrepreneurs we interviewed across Africa, "There is a wise saying in Yoruba: should I wash my left hand or my right hand? The answer is that the right hand should wash the left, and the left hand should wash the right. That is the way to do things. Africa is one hand; China is the other. Working together is the way to do things." ■

Chapter 1

THE DRAGON HAS LANDED: AFRICA'S BIGGEST ECONOMIC PARTNER

Idan kidi ya chanza,
rawan ma zai chanza

When the music changes, so must the dance
—Hausa proverb (West Africa)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A decade ago, one might have been excused for characterizing the Africa-China relationship as little more than a sideshow. Trade and investment between Africa and China lagged behind that of Africa's traditional Western partners. African countries' loan portfolios were owed to the likes of the World Bank and the Paris Club. And the Chinese migrating to Africa, who spoke little English, French, Portuguese, or Swahili, seemed ill-equipped to ever make a real dent on local economies.

But then, as thousands of Chinese traders opened "China shops"—small retail shops run by Chinese traders—across the continent, 35 African heads of state showed up in Beijing in 2006 for the Forum on China-Africa Cooperation (FOCAC). Although FOCAC was founded six years previously, this was the first time the majority of African heads of state attended. Chinese firms invested in the largest steel plant in West Africa, the largest ceramic tile factory in East Africa, and the largest bank in all of Africa. The Chinese telecommunications giants Huawei and ZTE built most of Africa's telecoms infrastructure. Chinese contractors built the $1.2 billion Tanzania Gas Field Development Project in 2015; the $3.4 billion, 750-kilometer Ethiopia-Djibouti Railway in 2016; and the $3.8 billion, 750-kilometer Standard Gauge Railway in Kenya in 2017.[2]

In merely a decade, China has become Africa's most important economic partner. There is no other country with such depth and breadth of engagement in Africa across the dimensions of trade, investment, infrastructure financing, and aid. Chinese "dragons"—firms of every size and sector—are bringing capital investment, management know-how, and entrepreneurial energy to every corner of the continent—and in so doing they are helping to accelerate the progress of Africa's "lions," as its economies are often referred to.

Yet to date, it has been challenging to understand the full extent of the Africa-China economic relationship due to a paucity of data (see Box 1, "Why is the Africa-China economic relationship so poorly understood?"). Into the data vacuum have poured urban legends and sensational stories—everything from charges of neocolonialism to a persistent yet unfounded rumor that Chinese firms use convict labor en masse. Because of this knowledge gap, it is difficult for public- and private-sector leaders—in both Africa and China—to make informed decisions on how best to strengthen collaboration, attract investment, and harness those investments for business success and sustainable economic development.

This report aims to dispel the myths and provide a fact-based picture of the Africa-China economic relationship. Its foundation is a new large-scale data set, including on-site interviews with the owners or managers of more than 1,000 Chinese firms spread over eight of sub-Saharan Africa's largest economies. These interviews, conducted in Chinese, included a detailed survey that uncovered a rich layer of previously unknown information on informal financial flows, local management practices, job-creation numbers, business expansion plans, perceptions of barriers such as crime and corruption, and much more (see Box 2, "Behind the numbers: McKinsey's large-scale data-gathering effort on Chinese

2 *China Investment, Africa version*, Ministry of Commerce of the People's Republic of China (MOFCOM).

business and investment in Africa"). Alongside our own research, we analyzed more than 70 existing data sets and source documents.

THE DEEP ROOTS OF THE AFRICA-CHINA RELATIONSHIP

Chinese firms' 1968–76 construction of the Tan-Zam Railway cost **$3 billion** **in today's money.**

The expansion of Chinese business and investment in Africa is akin to that of a bamboo plant: from modest beginnings, it has shot up at record speed. As with bamboo, that growth springs from long-established roots. Although the Chinese naval explorer Zheng He sailed to the east coast of Africa in the 15th century, China's modern ties with Africa date back to the earliest years of African independence in the 1950s and 1960s, when leaders such as President Julius Nyerere of Tanzania turned to China to build "Third World solidarity." One concrete expression of that early cooperation was China's 1968–76 construction of the Tan-Zam Railway, which linked landlocked Zambia with the Port of Dar es Salaam in Tanzania. Britain, Japan, West Germany, and the United States, as well as the United Nations (UN) and the World Bank, had all declined to fund the project, deeming it financially unviable.[3] Only China—at the time poorer than both Tanzania and Zambia—agreed to fund it, to the tune of $3 billion in today's money. Mao told Nyerere, "To help you build the railway, we are willing to forsake building railways for ourselves."[4]

3 Deborah Brautigam, *The dragon's gift: The real story of China in Africa*, Oxford University Press, 2009; Jamie Monson, "Freedom railway: The unexpected successes of a Cold War development project," *Boston Review*, December 1, 2004.

4 "Revisit the Chinese-aid Tanzania-Zambia Railway: Poorly maintained and operated," Xinhua News Agency, 2010.

Box 1

Why is the Africa-China economic relationship so poorly understood?

Until now, the true extent of the Africa-China economic relationship has been poorly understood because the data in the field is patchy, at best, and often inaccurate. This information deficiency is consistent across every major area of global flows, including:

Companies and investments. Previous data sets have tended to focus disproportionately on state-owned enterprises (SOEs) and on deals with public announcements. Although these investments tend to be some of the bigger ones by size, each is only a subset of the vast range of business activities occurring between China and Africa.

Loans. Despite announcements every few months about major bilateral loans, there is no reliable database about the true level of Chinese lending by African recipient country.

Aid. China's lack of a central aid agency and its unique definition of aid—one that differs from standards set by the Organisation for Economic Co-operation and Development (OECD)—make comparisons with other countries' aid flows difficult.

Migration. Existing information sets on global migration flows include the demonstrably wrong figures of zero Chinese living in Angola, as well as zero migrants from China to Tanzania and Côte d'Ivoire in 2013.[1]

Whether due to language barriers or the sheer speed at which Africa-China relations have evolved over the past decade, statisticians and analysts have simply not been able to keep up. Existing studies tend to be based on small samples and focused on particular industries or countries, meaning there is no comprehensive picture of Chinese investment across the continent.

1 These errors may be because global migration databases are built largely from country-level census data, many of which are incomplete and outdated, particularly with regard to information specifically about foreign migrants. *Trends in international migrant stock: The 2015 revision*, United Nations, December 2015.

Box 2

Behind the numbers: McKinsey's large-scale data-gathering effort on Chinese business and investment in Africa

In 2016 and 2017, a team from McKinsey's Africa and China offices fanned out across eight countries to conduct comprehensive, large-scale research on Chinese business in Africa. We conducted face-to-face interviews and surveys of 1,073 Chinese firms across eight countries—Angola, Côte d'Ivoire, Ethiopia, Kenya, Nigeria, South Africa, Tanzania, and Zambia—that make up approximately two-thirds of sub-Saharan Africa's gross domestic product (GDP) and around 50 percent of Chinese foreign direct investment (FDI) to Africa. The survey covered the companies' primary business activities, funding sources, motivations for investing in Africa, key challenges, and future expansion plans. To supplement that research, we also interviewed 104 senior African government and business leaders across the continent on topics ranging from their China strategies to their perceptions of Chinese investors. Finally, we interviewed around 30 other Chinese leaders and global experts.

The Chinese firms we surveyed spanned a diversity of industries, including manufacturing, services, construction and real estate, and trading. They also included large, midsize, and small businesses; while 28 percent of the firms in our sample employ more than 100 people each, nearly half employ between 10 and 100 people, and 21 percent employ fewer than 10.

As we surveyed Chinese firms across the eight countries, we also collected highly localized data sets such as business-association membership lists, information on regional business groups, country-level investment promotion agency lists, and company registration lists. We merged these data sets—comparing Chinese names against English ones and eliminating double-counting of parent and subsidiary companies—to create a holistic view of Chinese investments in Africa.

We should point out several caveats in our methodology. First, some of our analysis is based on self-reported data, which could be biased. Second, although we believe our sample of more than 1,000 Chinese firms (spread across countries, sectors, and sizes) is statistically robust for the conclusions of this report, some of the pan-African analyses are extrapolations.

But China was also getting something concrete out of its friendships in Africa. For more than two decades after the Communist Party came into power in mainland China in 1949, the People's Republic of China was not recognized by the UN. Instead, Taiwan held the coveted seat on the UN Security Council. When UN member states voted to return that seat to China in 1971, 26 of 76 votes came from African nations. By the 1990s, around 90 percent of African countries recognized the People's Republic of China. Those relations created fertile ground for China's "Going Out" policy, launched in 1999, which encouraged Chinese enterprises to invest abroad.

China's links with Africa were further strengthened in 2000 with the launch of FOCAC. In recent meetings, more than 50 African heads of state and top Chinese leadership have gathered in Beijing or African capitals to discuss ways to deepen trade and cooperation. More recently, China's Belt and Road initiative (previously known as One Belt, One Road), launched in 2013 and showcased on the global stage with a summit in Beijing in May 2017, has created new policies and funding to deepen investment, infrastructure, and trade ties across Eurasia and Africa. Finally, China's growing involvement on the world stage has been accompanied by its leadership creating three new global-development finance institutions: the $100 billion Asian Infrastructure Investment Bank (AIIB), the $100 billion New

Development Bank (NDB, formerly known as the BRICS Bank), and the $40 billion Silk Road Fund.

AFRICA'S BIGGEST ECONOMIC PARTNER

Since the turn of the 21st century, China has catapulted from being a relatively small investor in the continent to becoming Africa's biggest economic partner. Africa-China trade increased from $13 billion in 2001 to $188 billion in 2015—an average annual growth rate of 21 percent. FDI has grown even faster, from $1 billion in 2004 to $35 billion in 2015, according to official figures. This represents a breakneck average annual growth rate of 40 percent.[5]

We evaluated Africa's economic partnerships with the rest of the world across five dimensions: trade, investment stock, investment growth, aid, and infrastructure financing (Exhibit 1). China is in the top five partners for Africa on all five dimensions. This is true for no other country. Neither the Western partners such as France, the United Kingdom, and

5 The trade and investment figures cited in this report are derived from International Trade Centre (ITC) Trade Map, United Nations Conference on Trade and Development (UNCTAD), and the 2015 Statistical bulletin of China's outward foreign direct investment, MOFCOM, National Bureau of Statistics (NBS) of the People's Republic of China, and the State Administration of Foreign Exchange (SAFE). Unless otherwise stated, the increases cited are in nominal terms.

Exhibit 1

China is now Africa's biggest economic partner.

	Goods trade, 2015, $ billion		FDI stock, 2014E,[1] $ billion		FDI growth, 2010–14,[2] %		Aid, 2015,[3] $ billion		Infrastructure financing, 2015 $ billion	
1	**China**	**188**	United States	79	**China**	**25**	United States	10[4]	**China**	**21**
2	India	59	United Kingdom	71	South Africa	13	United Arab Emirates	7	France	3
3	France	57	France	70	United Kingdom	11	**China**	**6**	Japan	2
4	United States	53	**China**	**32**	United States	10	United Kingdom	6	Germany	1
5	Germany	46	South Africa	30	France	6	Germany	4	India	1
China ranks	**#1**		**#4**		**#1**		**#3**		**#1**	

1 Estimated according to compound annual growth rate (CAGR) from 2009 to 2012.
2 For countries other than China, we made projections using historical data.
3 Office of Development Assistance (ODA) and Other Official Flows (OOF), 2015 for Organisation for Economic Co-operation and Development (OECD) countries, 2012 for China.
4 According to United States Agency for International Development data, US foreign aid to Africa was $11.9 billion in fiscal year 2015 and $7.4 billion in fiscal year 2016. The discrepancy with OECD data shown here is likely due to the fact that US fiscal years start in October, whereas OECD data is for calendar years.

SOURCE: Bilateral trade database, International Trade Centre Trade Map, 2015; Bilateral FDI database, United Nations Conference on Trade and Development, 2012; Statistical Bulleting of China's Outward Foreign Direct Investment, Ministry of Commerce of the People's Republic of China, National Bureau of Statistics of the People's Republic of China, State Administration of Foreign Exchange, 2015; "Total official flows by country and region (ODA+OOF)," Organisation for Economic Co-operation and Development statistics, 2015; "Foreign Aid Explorer: The official record of U.S. foreign aid," USAID; "Infrastructure Financing Trends in Africa—2015," The Infrastructure Consortium for Africa, 2015

$188 billion

Total goods trade between Africa and China in 2015—**triple** that of Africa's next-biggest trade partner.

the United States, nor major developing countries such as India and Brazil, match China in the depth and breadth of its involvement in Africa. Make no mistake: China is *already* Africa's biggest economic partner.

A closer look at the numbers within each type of flow—trade, FDI, aid, infrastructure financing, and loans—shows the significant ways that Chinese government and firms are engaging in Africa.[6]

Africa-China trade dwarfs that of Africa's other trade partners

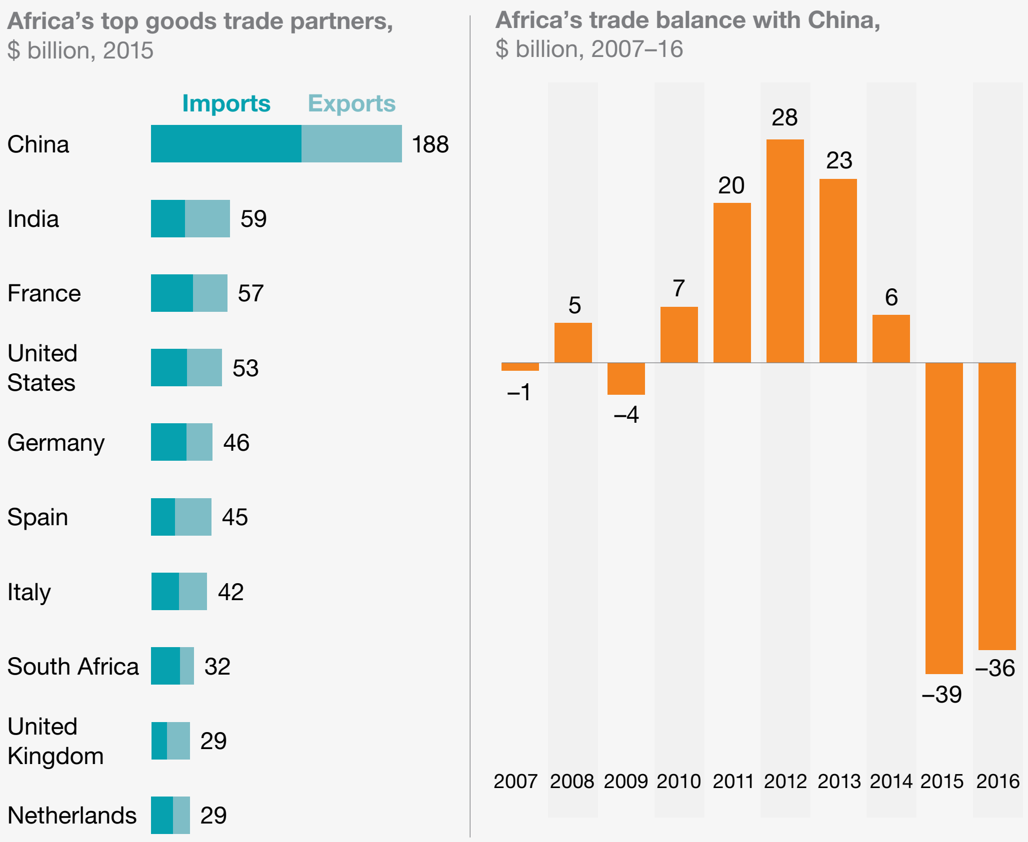
China has far surpassed Africa's longstanding trade partners such as France, Germany, India, and the United States (Exhibit 2). In 2015, total goods trade between China and Africa amounted to $188 billion—more than triple that of India, Africa's next-biggest trade partner. China made up 20 percent or more of 16 African countries' exports in 2014; for Angola, China is the destination for half of exports.[7] And while Africa imports largely manufactured goods from China, its exports to China consist of resources such as oil and minerals, as well as semiprocessed raw materials. Thus the trade balance fluctuates

6 Comparable loan information was not available across countries, hence the exclusion of loans from Exhibit 2.

7 Valentina Romei, "China and Africa: Trade relationship evolves," *Financial Times*, December 3, 2015.

Exhibit 2

China is Africa's largest trade partner.



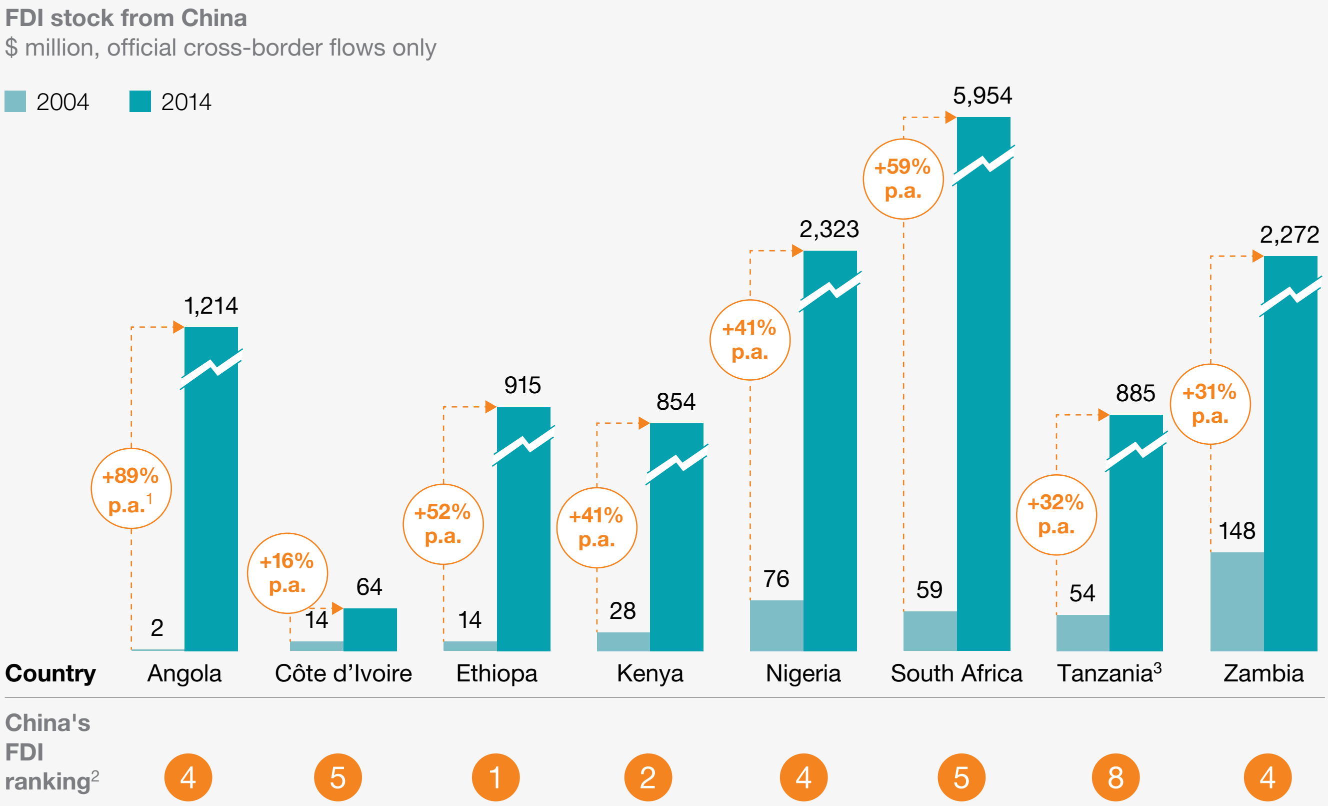
SOURCE: Bilateral trade database, International Trade Centre Trade Map, 2015 according to commodity prices: when commodity prices are high, Africa runs an even balance or even a surplus, but when commodity prices dip, as they did in 2015, Africa runs a trade deficit.

China is poised to become Africa's largest source of FDI

At current growth rates, China will be Africa's largest source of FDI stock within the next decade. A country-level view shows that the growth in Chinese investment has been uniformly high, at an average growth rate of more than 52 percent a year in Ethiopia, 59 percent a year in South Africa, and 89 percent a year in Angola from 2004 to 2014 (Exhibit 3). In fact, our research finds that China's financial flows to Africa are around 15 percent larger than previous estimates. This discrepancy is found because official figures, which rely on banking-system data, do not cover informal money-transfer methods often used by smaller businesses. These methods include "mirror transfers," in which a local payment is made into the Chinese account of an associate or family member, who in turn makes a local equivalent payment in Africa to the beneficiary's bank account. Our interviews of more than 1,000

Exhibit 3

Across eight selected countries, FDI growth from China is consistently high, ranging from 16 to 89 percent per year.

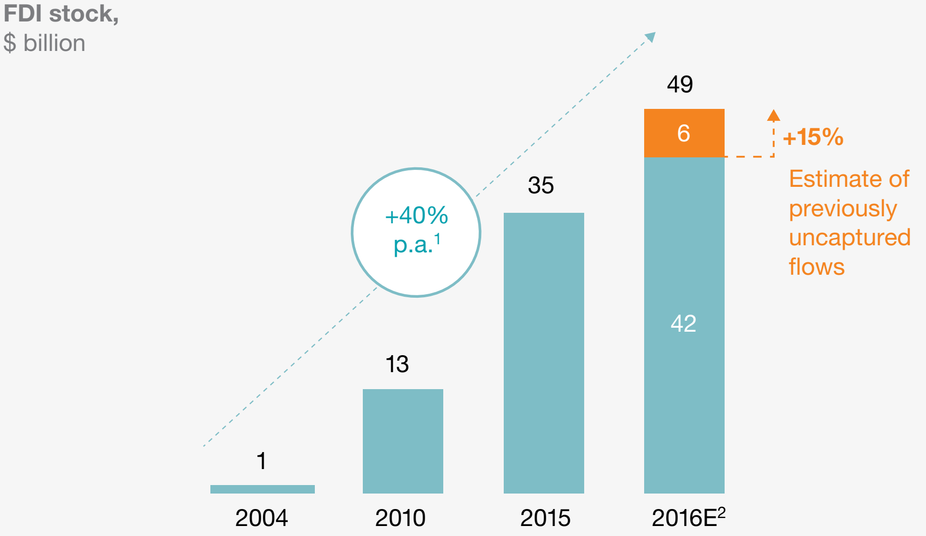


1 Per annum.
2 Based on 2012 foreign domestic investment (FDI) figures.
3 Tanzania ranking is based off 2011 figures due to unavailability of 2012 data.

SOURCE: Bilateral FDI database, United Nations Conference on Trade and Development, 2012; Statistical Bulletin of China's Outward Foreign Direct Investment, Ministry of Commerce of the People's Republic of China, National Bureau of Statistics of the People's Republic of China, State Administration of Foreign Exchange, 2015; "Total official flows by country and region (Official Development Assistance and Other Official Flows)," Organisation for Economic Co-operation and Development statistics, 2015

Exhibit 4

Chinese FDI stock in Africa has grown from nearly zero to ~$50 billion in a decade.



1 Per annum.
2 Estimated using a five-year compound annual growth rate, which is 21% per annum for five years (2011–15).

SOURCE: Bilateral FDI database, United Nations Conference on Trade and Development, 2012; McKinsey field survey of Chinese firms in eight African countries, November 2016–March 2017

$21 billion
Chinese commitments to **African infrastructure** in 2015.

Chinese firms find that this money-transfer process is ubiquitous as a way for smaller firms to avoid China's currency controls. Although the average transaction size is small, the total is sizeable, pushing Chinese FDI stock into Africa to an estimated $49 billion in 2016 (Exhibit 4).

China is the second- or third-largest country donor to Africa

Chinese official development assistance (ODA) and other official flows (OOF) to Africa together amounted to $6 billion in 2012 (Exhibit 1). China does not report aid figures according to the definitions of the Organisation for Economic Co-operation and Development (OECD), so we estimate China's aid based on an analysis that parsed China's aid disbursements in 2012 according to OECD definitions, hence making them comparable with other countries' aid activities.[8] In contrast to Western donors such as the European Union and the United States, which provide aid primarily in the form of grants, Chinese aid centers heavily on concessional loans for infrastructure and export credits.

China is the single-largest bilateral infrastructure financier in Africa

In 2015, Chinese commitments to infrastructure in Africa amounted to $21 billion (Exhibit 1)—more than the combined total of the Infrastructure Consortium for Africa, whose members include the African Development Bank, the European Commission, the European Investment Bank, the International Finance Corporation, the World Bank, and the Group of Eight (G8) countries. Chinese infrastructure commitments grew at

8 *An age of choice for development finance*, Overseas Development Institute (ODI), 2016.

an average annual rate of 16 percent from 2012 to 2015 and supported many of Africa's most ambitious infrastructure developments.[9] For example, China EXIM Bank financed more than 90 percent of the $3.8 billion Mombasa-Nairobi Standard Gauge Railway in Kenya, while Chinese institutions also financed most of the $1.7 billion Karuma Hydroelectric Power Station in Uganda.[10] Chinese contractors today account for nearly half of Africa's international engineering, procurement, and construction (EPC) market.[11] Six of the ten largest international EPC contractors operating in Africa are Chinese: China Communications Construction, China Railway Group, Sinohydro Group, China State Construction Engineering Corporation, China Railway Construction Corporation, and Citic Construction Company.[12] A recent large-scale public opinion survey found that infrastructure development is African citizens' most appreciated aspect of Chinese involvement in Africa.[13]

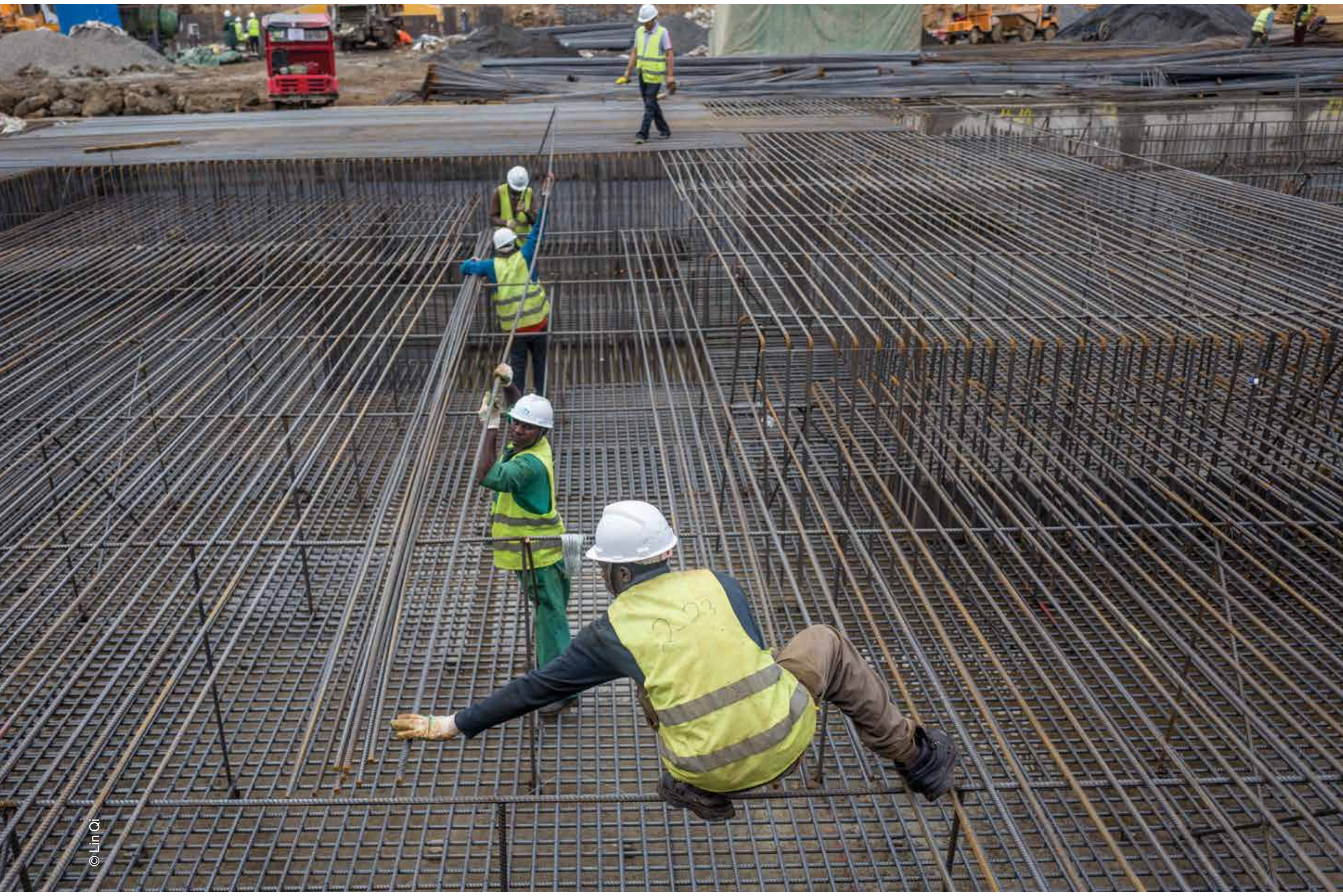
9 Comparable data is not available for earlier years.

10 "Top ten African projects with concession loan from China," Chinese investment Africa version.

11 ENR 225 data on Chinese Contractors' Global Market, *Engineering News-Record*, 2016.

12 Based on contracting revenue of top players obtained outside of home country as reported by *Engineering News Record*, ENR Global Sourcebook 2014, IPAT version 3.0.

13 Mogopodi Lekorwe et al., *China's growing presence in Africa wins largely positive popular reviews*, Afrobarometer, 2016.



China's loan issuance to Africa has tripled since 2012

New debt issuance by Chinese institutions to African governments increased dramatically in the past five years, rising to some $5 billion to $6 billion of new loan issuances each year in the 2013–15 period.[14] We estimate that in 2015, these loans accounted for approximately one-third of new sub-Saharan African government debt. Most of these loans are linked to infrastructure projects, such as China EXIM Bank's $3.6 billion loan to finance the Mombasa-Nairobi Standard Gauge Railway in Kenya.[15]

These macroeconomic numbers tell a dramatic story of the rapid rise of Chinese business and investment in Africa. But there's a microeconomic story as well about the entrepreneurs behind those numbers. As we show in the next chapter, thousands of Chinese businesses have set up shop and invested across Africa over the past decade. Their scale, diversity, growth rates, and ambitions for the future are much greater than most observers have assumed.

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14 *Chinese loans to Africa, 2000–2014*, Johns Hopkins School of Advanced International Studies (SASI), China-Africa Research Initiative (CARI).

15 China EXIM Bank website.

Chapter 2

TEN THOUSAND BUSINESS BUILDERS: CHINESE FIRMS' DIVERSITY, SCALE, AND AMBITION

Mchumia juani, hulia kivulini

He who toils in the sun, feasts under the shade
—Swahili proverb (East Africa)

China's economic engagement with Africa has grown to impressive scale at rapid speed, as is clear from the overall trade and investment numbers set out in the previous chapter. But it would be a mistake to characterize this burgeoning relationship as a coordinated push by a monolithic "China, Inc."—or even as a concerted, coordinated push dominated by a handful of state-owned enterprises (SOEs). Certainly, the SOEs have played a critical role in a few sectors such as natural resources, but in most sectors the rapid rise of China's business presence in Africa has been driven by a remarkably diverse group of mostly privately owned firms, each agile and aggressive in finding profitable market niches in Africa.

The fact that Chinese firms have flocked in such large numbers to Africa is indicative that we are in an era of complementarity between the Chinese entrepreneurial class and Africa's market conditions. Market returns in Africa are high, but in many cases they're also risky, requiring a certain comfort level with unpredictable developing-market conditions. And China's entrepreneurial class, fresh from a three-decade run of building China in a similarly fast-paced and uncertain market environment with evolving institutions, has the risk tolerance, practical experience, and skill set to undertake such investments. With this structural similarity between the China of a generation ago and Africa today, it is no wonder that so many dragons are now finding their next home in Africa.

TEN THOUSAND DRAGONS

Our research shows that there are many more Chinese enterprises operating in Africa than previously estimated. In the eight African countries we focused on, the number of Chinese-owned firms was between double and nine times the number registered by China's Ministry of Commerce (MOFCOM), until now the largest database of Chinese firms in Africa. Our tally of Chinese firms outstripped those of the African countries' investment authorities by similar multiples (Exhibit 5). Extrapolated across the continent, these findings suggest there are more than 10,000 Chinese-owned firms operating in Africa today.

NO SINGLE "CHINA, INC."—THE REALITY IS A HUGE DIVERSITY OF ENTERPRISES

Much has been written about what essentially can be summed up as "China, Inc."—a supposedly coordinated effort by Chinese companies, primarily SOEs supported or coordinated by the government, to buy up resources around the globe.[16] But the China, Inc. stereotype was never accurate. China's companies, government agencies, and financial institutions are a complex set that often reflects multiple interests and uncoordinated agendas.[17]

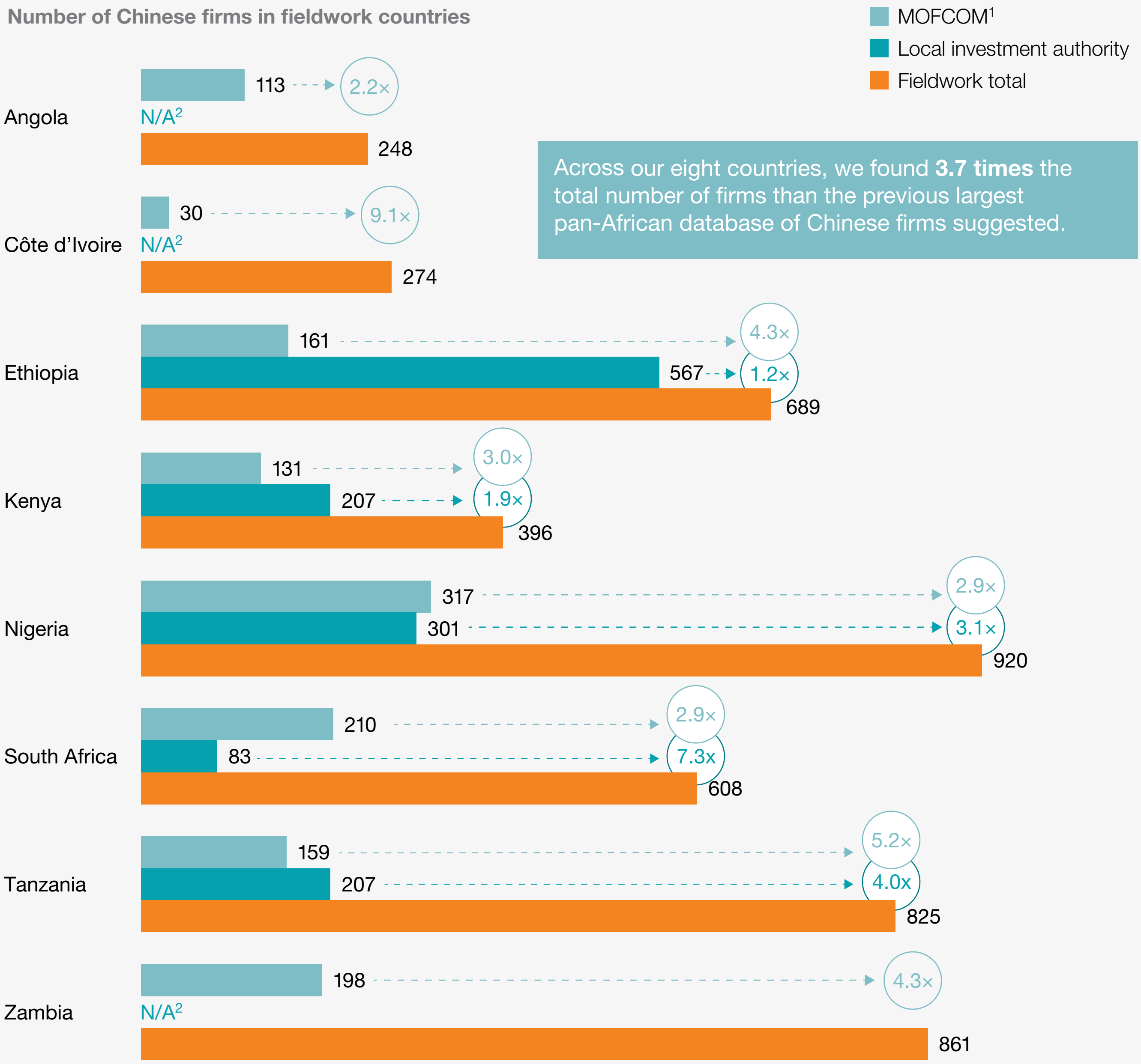
16 The term "China, Inc." seems to have been coined by US author Ted Fishman in his bestselling book *China, Inc.: How the rise of the next superpower challenges America and the world*, Simon & Shuster, 2006.

17 Erica Downs, "Whatever became of China, Inc.?" *China Economic Quarterly*, June 2014.

Our research debunks the idea of a monolithic China, Inc. in Africa, as we found that there are far too many enterprises for any suggestion of homogeneity to be plausible. While major infrastructure projects by Chinese SOEs might grab the headlines, the reality is that around 90 percent of the 10,000 or so Chinese businesses in Africa are privately owned (Exhibit 6). Although SOEs tend to make high-value investments, the sheer number of private firms

Exhibit 5

We estimate that there are more than 10,000 Chinese firms operating in Africa.

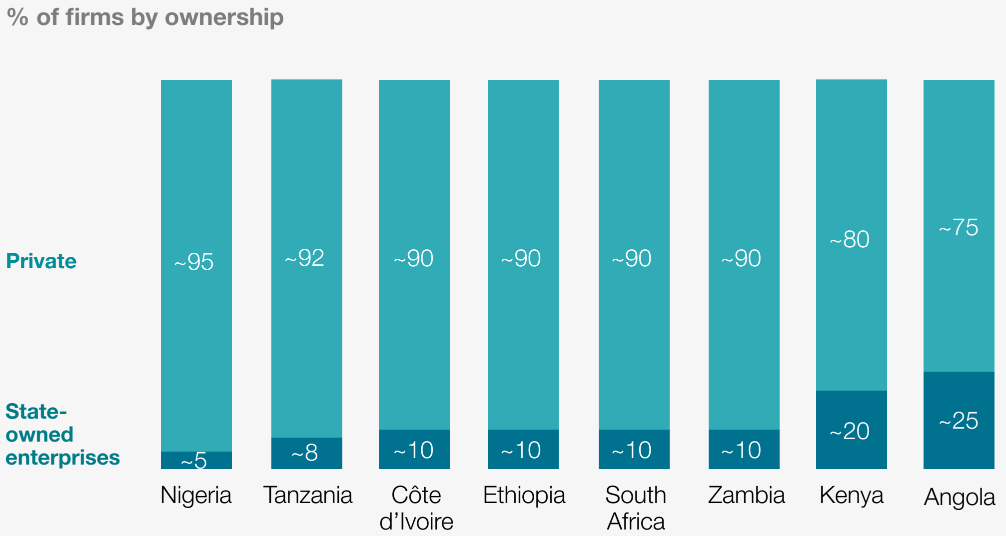


1 Ministry of Commerce, People's Republic of China.
2 Data on the number of Chinese firms from Angolan, Ivorian, and Zambian investment authorities were not available.

SOURCE: MOFCOM database; McKinsey field survey of Chinese firms in eight African countries, November 2016–March 2017

Exhibit 6

Most Chinese firms in Africa are private, not state-owned enterprises.



NOTE: Numbers may not sum due to rounding.

SOURCE: McKinsey field survey of Chinese firms in eight African countries, November 2016–March 2017

mean that their investment total equals that of SOEs. Even in Angola, where Chinese SOEs play a particularly prominent role in the local economy, our research shows that three-quarters of Chinese firms operating in the country are privately owned.

Of surveyed Chinese firms in Africa,

31% are in manufacturing

25% are in services

15% are in construction and real estate

Moreover, Chinese firms operate across many sectors of the African economy. Our research finds that 31 percent of Chinese firms in Africa are involved in manufacturing, 25 percent in services, 22 percent in trade, and 15 percent in construction and real estate (Exhibit 7). Many are active in more than one sector. These enterprises' focus areas, business models, and customer value propositions are as diverse as the entrepreneurs who founded them (see Box 3, "All shapes and sizes: The diversity of Chinese business in Africa").

DRAGONS GROWING AND FLYING

Despite the many diverse African sectors in which Chinese firms are investing, two deserve special mention here: manufacturing, and construction and real estate. In these sectors, Chinese-owned firms have rapidly achieved a sizeable market share (Exhibit 7). In many cases, Chinese firms were more aggressive than incumbent and other foreign firms in pursuing market opportunities. Indeed, while some slumbered, the dragons flew.

In manufacturing, we estimate that Chinese firms already handle 12 percent of Africa's industrial production—valued at some $500 billion a year in total. This significant share reveals a relocation of some of China's manufacturing might to Africa, with Chinese manufacturing executives increasingly drawn to Africa's relatively high margins for a range of manufactured goods. However, unlike in China, Chinese factories in Africa are largely serving domestic markets; 93 percent of the revenues of manufacturers we spoke to came

Exhibit 7

One-third of these firms are manufacturers, and most are private.

Chinese firms by sector		Market share in Africa[1]	Annual revenues in Africa
Manufacturing	31	~12	~$60 billion
Services[1]	25	~5	~$15 billion
Trade[2]	22	~3	~$15 billion
Construction and real estate	15	~50	~$40 billion
Other[3]	13	~1	~$50 billion

1 Market share based on average revenues for service firms from our survey compared against revenues from service firms in Africa.
2 Market share based on imports and exports between Africa and China in 2015 as reported on the ITC Trade Map.
3 Includes agriculture, utilities, oil and gas, and mining. Market share based on average revenues from our survey against Africa revenues from such firms.

SOURCE: McKinsey field survey of Chinese firms in eight African countries, November 2016–March 2017; Bilateral trade database, International Trade Centre Trade Map, 2015; *Lions on the move II: Realizing the potential of Africa's economies*, McKinsey Global Institute, 2016

from local or regional sales in Africa. Although there are notable exceptions such as the Huajian shoe factory in Ethiopia and garment factories in Lesotho, Chinese factories in Africa are primarily focused on domestic markets.

In construction and real estate, Chinese firms' dominance is even more pronounced, with nearly 50 percent market share of Africa's international EPC market.[18] China's own breakneck pace of infrastructure construction over the past three decades has produced contractors with some of the most efficient cost structures in the world. The Chinese government's financing of African infrastructure has helped Chinese contractors win some bids, but even in open-tender projects sponsored by the World Bank, Chinese firms are the biggest winners, winning 42 percent of contracts by value.[19] African government officials we interviewed said that the contest in such projects is not even close; one official described Chinese firms as routinely being 40 percent cheaper than the next lowest bid for similar levels of quality.

In addition to cost structure, Chinese construction firms have rapidly gained such market share in part because they seem to be more committed. One CEO of a major US equipment supply firm that has sold hundreds of millions of dollars worth of equipment to Chinese EPC contractors in Africa told us, "I can't get US companies to come to Africa and really

18 *Engineering News-Record*.

19 Jeffrey Gutman et al., *Who wins World Bank-financed government contracts? Four things we learned from the data (+ 1 lingering question)*, Brookings Institution, 2015.

> "I can't get US companies to come to Africa and really treat these EPC tenders as top of mind. It's not that I don't want to sell to American companies in Africa; it's just that by and large, they're not here."
>
> —CEO of a major US equipment supply firm

treat these EPC tenders as top of mind. It's not that I don't want to sell to American companies in Africa; it's just that by and large, they're not here."

In both these sectors—and others—the firms we surveyed reported that their revenues were growing rapidly. In the manufacturing, trade, and services sectors, firms reported that on average their revenues grew by 8 to 9 percent annually from 2012 to 2015, with construction and real-estate firms growing at around 4 percent annually. While construction and real-estate companies remain the largest by annual revenues, at an average of $27 million per firm in 2015, the rapid growth of firms in other sectors is creating many sizeable businesses. The average annual revenues of the manufacturing firms in our sample, for example, stood at $21 million in 2015.

CHINESE FIRMS ARE MAKING HEALTHY PROFITS

Among the firms we looked at, nearly a quarter said they had covered their initial investment in one year or less, and more than half reported that they had taken three years or less to make back their initial investment. In interviews, Chinese firms, particularly in manufacturing, identify ample pricing headroom in Africa as a key factor in their profitability. For example, a manufacturer in Kenya said, "I expect to make back my investment in less than a year because the prevailing market price is so high for my product." Indeed, factory bosses like him who are used to squeezing a quarter of a percentage point of margin to survive in the ultracompetitive manufacturing sector in China breathe much easier in Africa. But we found similar stories in other industries as well: the manager of a construction and real-estate firm said, "We started out with a small investment that we made back quickly, so we keep reinvesting more and more money each year."

One-third of surveyed Chinese firms reported profit margins of **>20% in 2015.**

Nearly one-third of the Chinese firms we surveyed reported 2015 profit margins of more than 20 percent. For several sectors for which data is available, Chinese firms' profit levels are significantly higher than those of other African firms.[20] But the picture differs significantly between state-owned and privately owned companies (Exhibit 8). Fewer SOEs reported profit margins of more than 20 percent, and a quarter of them reported losses. The lower profit margins of SOEs are likely driven by recent commodity price drops in the energy and mining sectors, in which their presence is significant, as well as fierce competition in the infrastructure construction sector. In addition, several of the businesspeople we interviewed pointed out that private firms answer only to their own profit motives, whereas SOEs also account for geopolitical considerations guided by the Chinese government.

20 *Lions on the move II: Realizing the potential of Africa's economies*, McKinsey Global Institute (MGI), September 2016.

Box 3

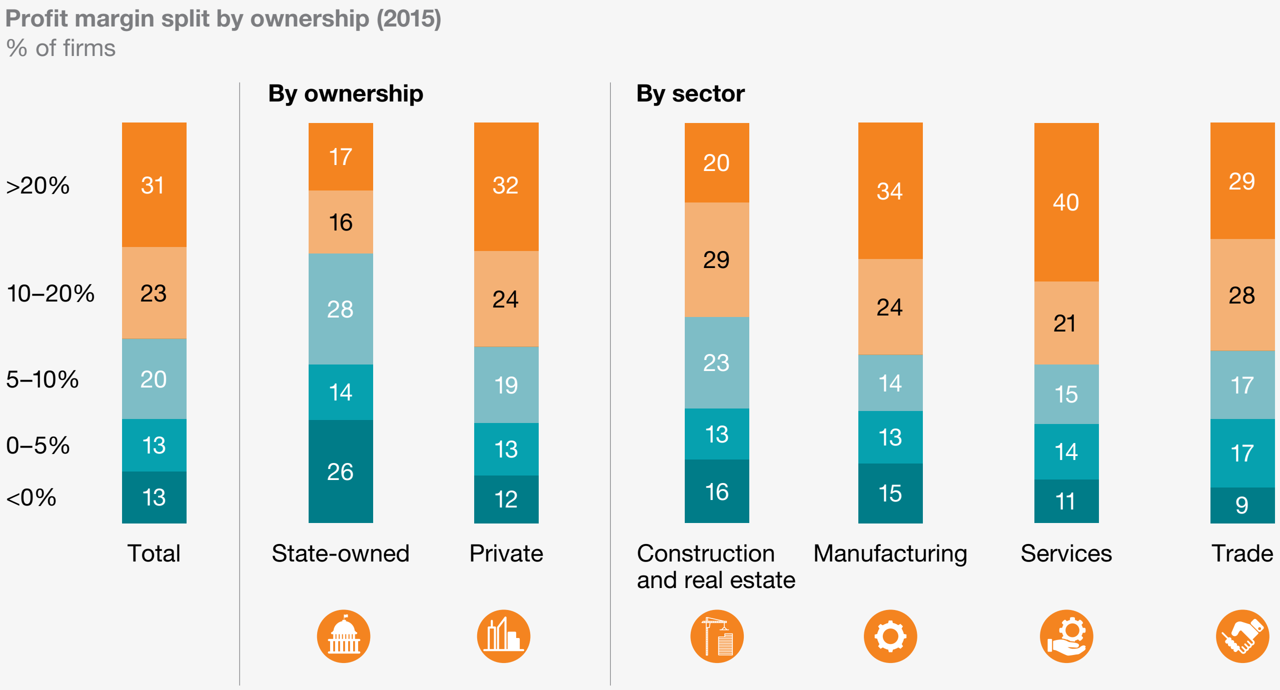
All shapes and sizes: The diversity of Chinese business in Africa

Among the approximately 10,000 Chinese firms operating across Africa, there is wide diversity of sectors and sizes. Here are just a few examples of the range of Chinese firms operating across the African continent.

	Large businesses		Small businesses	
Manufacturing	**First Automotive Works (FAW)**—South Africa and Nigeria	The plant invested $50 million in a truck assembly factory in South Africa and produces 5,000 trucks annually—many of which are exported to other African countries. It also partnered with Perfection Motors to set up a $100 million truck assembly factory in Nigeria to cover the West African market.	**Small-scale clothing factories**—South Africa	A cluster of several hundred small-scale clothing factories in Newcastle, a small city in KwaZulu-Natal province, South Africa, produces low-cost apparel targeting the domestic market.
Services	**Bank of China**—multiple African countries	One of the world's largest banks, the Bank of China established a presence in Africa in 1997, when it opened a branch in Zambia. An aggressive expansion drive has seen it open branches across the continent, from Mauritius to Morocco to South Africa.	**Bobu Africa**—Kenya	This travel agency was launched by a young Chinese couple to create a platform that would introduce authentic African culture to Chinese tourists. The founders developed a series of innovative travel routes, including visits to craft workshops, enabling local craftspeople to earn significant additional income.
Trade	**Sany Group**—Kenya	This leading Chinese machinery company first entered Kenya to support public-sector projects sponsored by the Chinese government. It set up a Kenya subsidiary to provide machinery parts and after-sales service to the construction sector and established local distribution channels for heavy machinery for construction.	**Small traders**—Kariakoo, Tanzania	Kariakoo is a low-income neighborhood where there are more than 100 small Chinese traders operating and selling everything from clothes to slippers to cheap electronic devices. Its store owners are often poorly educated and speak minimal English or Swahili, yet they operate successful businesses by building relationships with local wholesalers and retailers.
Construction and real estate	**China International Trust Investment Corporation (CITIC)**—Angola	Having entered Angola in 2008, CITIC is now one of the biggest construction companies in the world. It has developed major projects such as Kilamba Kiaxi, a $10 billion new-build satellite town. But this contractor has moved well beyond construction, investing in an aluminum frame factory as well as two major farms, each more than 10,000 hectares.	**China Town Trust**—South Africa	Trustees established a "China Town" retail precinct in Cape Town, made up of around 50 retail units, all occupied by Chinese traders selling goods including food, clothing and fabrics, household goods, furniture, and electrical appliances. This trust subsequently opened two more precincts in other parts of the city.
Other	**China Nonferrous Metals Mining Group**—Zambia	Purchased through an international bid in 1998, this is the largest and oldest Chinese-owned mine in Zambia. It involves a total investment of $160 million in order to exploit 5 million tons of copper and 120,000 tons of cobalt.	**Mr. Wang, farmer and grocer**—Kenya	As owner of a farm and a grocery store, Wang serves the Chinese market by selling vegetables such as Chinese flowering cabbage. He supplies Chinese supermarkets as well as some large Chinese SOEs.

Exhibit 8

Chinese firms in Africa are generally profitable, though private-sector players outperform their state-owned counterparts.



NOTE: Numbers may not sum due to rounding.

SOURCE: McKinsey field survey of Chinese firms in eight African countries, November 2016–March 2017

DRAGONS ARE AGILE AND DECISIVE

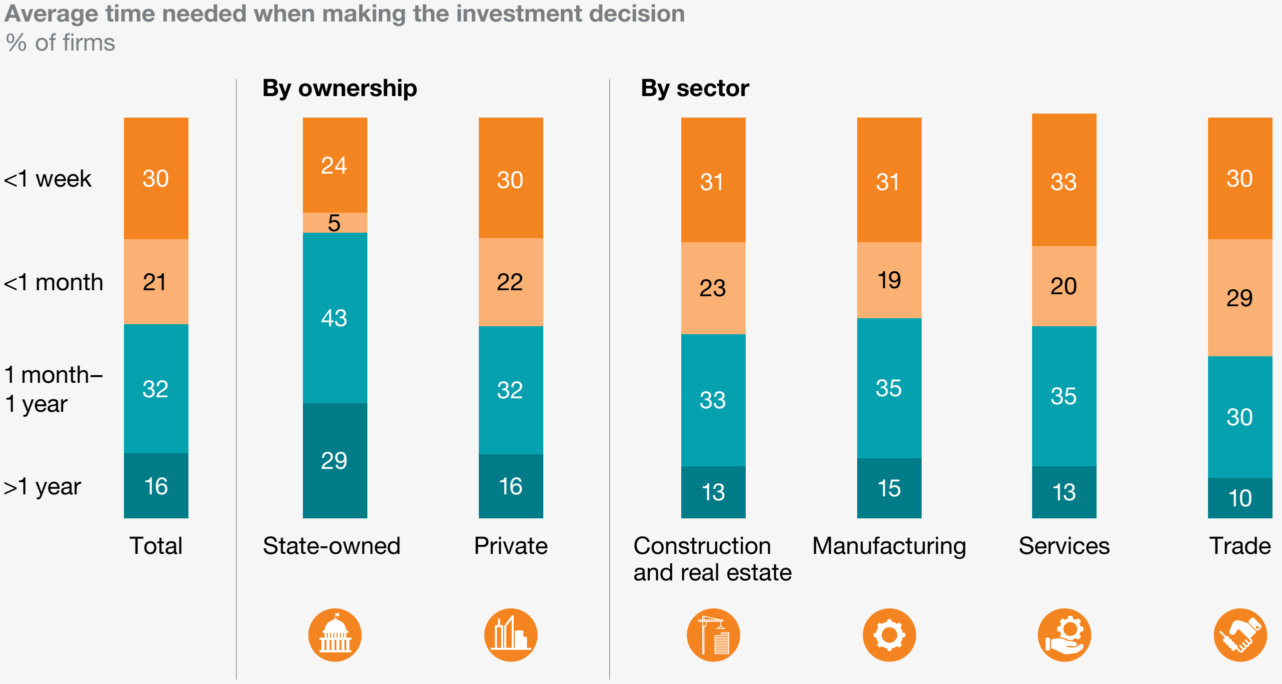
In our discussions with members of the Chinese business community across Africa, we heard many stories of entrepreneurs who had acted boldly and quickly—often at significant personal risk—to invest in building businesses. For example, the head of the Chinese business association in Côte d'Ivoire recounted the story of a newly arrived investor who set up a polyvinyl chloride (PVC) pipe factory in a matter of weeks: "The guy just came once to Côte d'Ivoire and doesn't even speak French, but he decided immediately to go for it and invest!"

Such stories are the norm rather than the exception. More than half of respondents said they needed, on average, less than a month to make an investment decision—and strikingly, 30 percent said they needed less than a week (Exhibit 9). This rapid decision making holds true across all the sectors we studied—although SOEs reported slower turnaround times, likely driven by the larger average size of their investments and the sectors they tend to invest in. But another factor is who makes decisions: in the words of one executive, "Chinese SOEs in Africa usually cannot make decisions directly—they need to report back to their headquarters in China for approval."

Chinese firms' decisiveness is indicative of the relationship between the comparative advantages of Chinese entrepreneurs and the opportunities in African markets. To some, the high returns earned by Chinese firms are symptomatic of a market failure: too little

Exhibit 9

Chinese investors are decisive: Half make significant investment decisions within a month.



NOTE: Numbers may not sum due to rounding.

SOURCE: McKinsey field survey of Chinese firms in eight African countries, November 2016–March 2017

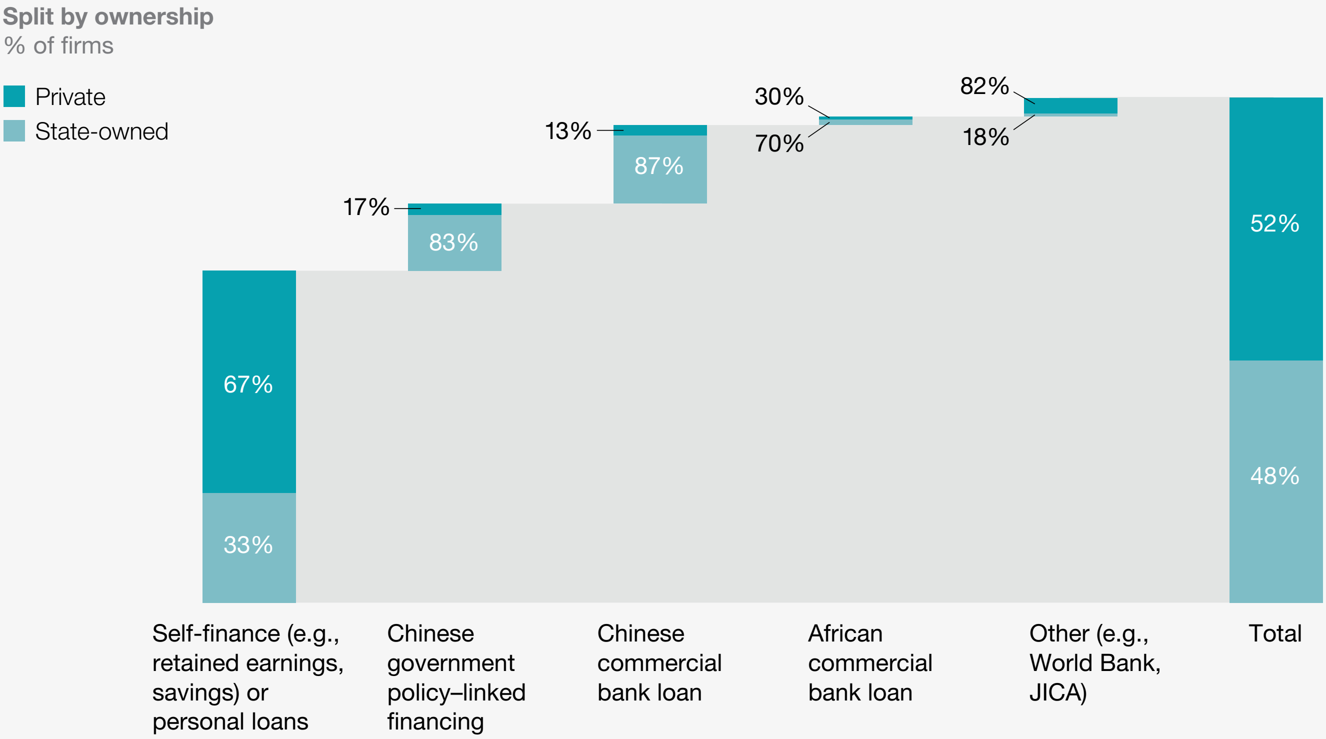
competition in African markets. But in sectors such as manufacturing, there are too few African firms with the capital, technology, and skills to invest successfully and too few Western firms with the risk appetite to do so in Africa. Thus the opportunities are reaped by Chinese entrepreneurs who have the skills, capital, and willingness to live in and put their money in unpredictable developing-country settings.

What makes the decisiveness of Chinese investors all the more impressive is that they are mostly using their own money. Two-thirds of the private firms we surveyed, and over half of all firms in our sample, reported that their investments were self-financed through retained earnings or savings, or funded through personal loans. Only 13 percent of investment funds came from financing schemes linked to the Chinese government, and less than 20 percent came from Chinese or African commercial bank loans (Exhibit 10).

Many of the Chinese firms operating in Africa are also remarkably agile. Consider the story of Jian Gao. Before moving to Africa, he was a student at the Kung Fu school at the Shaolin Temple in Henan province in central China. He spoke very little English and no French at all; nonetheless, he uprooted himself and moved to Senegal to work for a Chinese businessman. In his first three years in Senegal he attended night school after work to learn French. Then he quit his job and put all his savings—around $20,000—into his own trading business in Côte d'Ivoire. Success in that business enabled him to open

Exhibit 10

Chinese companies in Africa are investing mainly with their own money, with only about 15 percent linked to the Chinese government.



% of total	66%	13%	16%	2%	4%

NOTES: The figures are unweighted due to our belief that we typically include the biggest firms in a country in our sample. Numbers may not sum due to rounding.

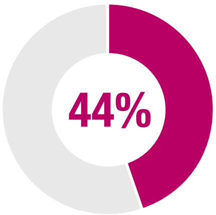
SOURCE: McKinsey field survey of Chinese firms in eight African countries, November 2016–March 2017

additional warehousing and customs-clearance businesses. He later began to invest in land, and then he opened a variety of other establishments including a gym and a massage studio. Five years later, his investment has grown and is now worth many multiples of his initial investment.

CHINESE FIRMS FEEL OPTIMISTIC AND ARE HERE TO STAY

Most Chinese firms in Africa have achieved healthy profits and rapid revenue growth over the past decade. But what of the years ahead? We asked firms whether they felt optimistic about the future—and 74 percent said "yes." Confidence about the future of the African market was uniformly high across all sectors and countries. Many of the firms said they had plans for expansion, particularly into new products and industries.

Among surveyed Chinese firms,



have made **capital-intensive investments** in Africa.

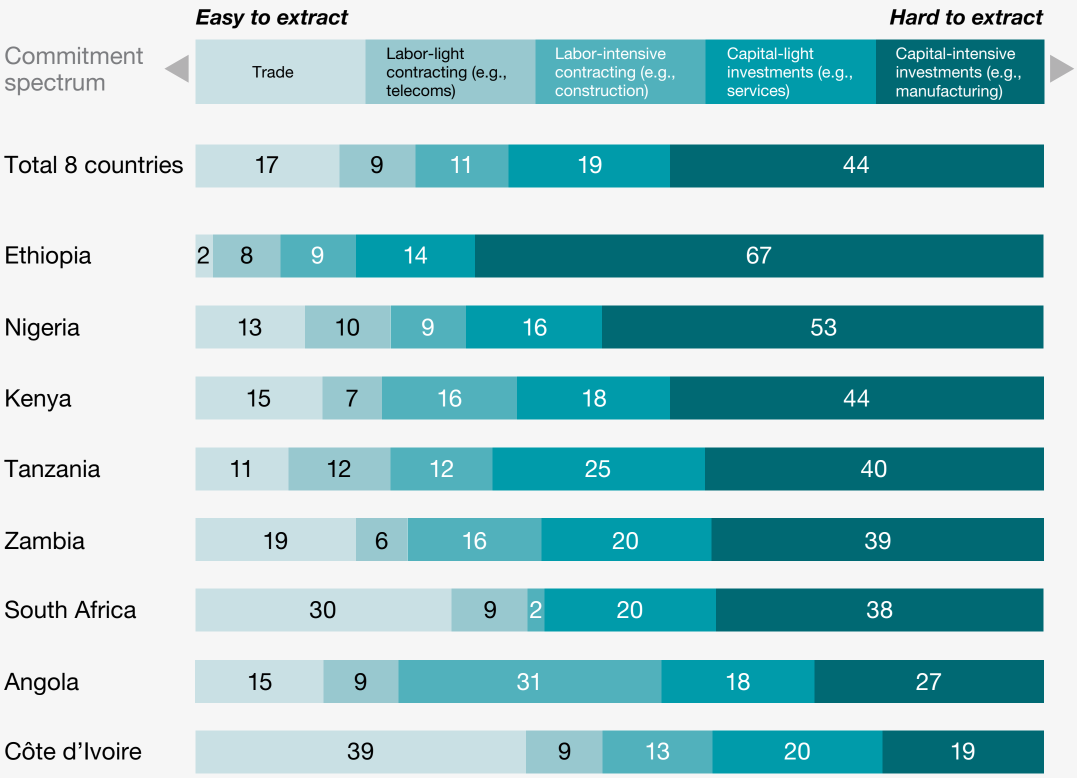
Reflecting this confidence, our research shows that the majority of Chinese firms have made investments that represent a long-term commitment to Africa. Among the companies we surveyed, 44 percent reported that they had made capital-intensive investments—for example, in building factories or purchasing manufacturing equipment. A further 19 percent had made capital-light investments, for example, in shop fittings and technology in retail and service businesses. On average, less than one-third of the companies surveyed were focused on contracting or trade, which require lower levels of investment and therefore lower levels of commitment to staying in Africa (Exhibit 11).

The past decade has been a time of entrepreneurial drive and rapid business growth for Chinese business in Africa. Over the next decade, we expect many businesses to mature into large companies characterized by extensive capital investments, diversification into different sectors, expansion across geographies—or all three. China will play an increasingly integral role in growing and modernizing many African economies. In many ways, though, the future is already here. Across the continent are many examples of

Exhibit 11

More than 40 percent of Chinese firms are in industries with a high number of long-term commitments in sub-Saharan Africa.

Commitment level, % of firms



NOTE: Figures may not sum due to rounding.

SOURCE: McKinsey field survey of Chinese firms in eight African countries; Registration lists of Chinese firms with overseas investments, Ministry of Commerce of the People's Republic of China, 2015

Box 4

Three fast-growing companies, three different pathways to expansion

The expansion stories of some of Africa's pioneering Chinese businesses are instructive—both for other firms seeking to become major players and for observers who want to understand the likely evolution of Chinese firms across the continent.

CGCOC Group: From single-country focus to regional play. This state-owned construction firm started its business in Africa drilling boreholes in Nigeria, and it subsequently expanded both up and down the value chain and geographically across the continent. As one of its senior managers told us, "At first we were just an EPC contractor, but we knew we needed to change from a contractor to an investor, designer, and operator." Today the firm is active across the continent in multiple sectors including real estate, manufacturing, green energy, agriculture, and mining. At the time of this writing, it had more than 250 active projects—ranging from a water supply project near Douala, Cameroon, to a wind power project near Addis Ababa, Ethiopia.

Sunshine Group: From one sector to many. Founded in Tanzania in 2012, Sunshine Group initially focused on mining but has since expanded at a rapid rate to build businesses in agriculture, transportation and logistics, and manufacturing. To date, it has invested around $100 million in Tanzania and neighboring countries, including building a gold-smelting factory, processing plants for agricultural commodities ranging from peanuts to cotton to rice, and a card-printing facility producing bank, credit, and phone cards. Its transportation subsidiary operates more than 200 vehicles. Sunshine Group exports processed agricultural products to both China and Southeast Asia.

Aviation Industry Corporation of China: From trader to investor. AVIC is a Chinese SOE and one of the largest companies in the world—ranked 143rd in the Global Fortune 500 in 2016—having grown from its roots in aviation to a diversified conglomerate that also includes manufacturing, services, and construction units. But its history in Africa is much humbler. In the 1990s, it sent one employee to Kenya to start selling a variety of goods: wheelbarrows, uniforms, and port-inspection equipment. AVIC's Africa business later expanded into construction contracting, including the construction of Jomo Kenyatta International Airport in Nairobi. AVIC has subsequently shifted to a capital-intensive expansion model. It recently invested $430 million in developing a major Nairobi real-estate complex, which will include the tallest building in East Africa.

Chinese firms that have grown from humble beginnings into serious regional players. Along the way, they deepened and broadened their investments in Africa (see Box 4, "Three fast-growing companies, three different pathways to expansion"). Their experience points the way for others.

■ ■ ■

Chinese firms in Africa are far more numerous and diverse than official numbers suggest. They are confident about the future, and they are making long-term capital investments across the continent. As we show in the next chapter, Chinese investment is generating considerable benefits for African economies. Downsides exist too, but on balance, the dance of the dragons and lions is finding a productive rhythm. ■

Chapter 3

BIG BENEFITS, BUT REAL ISSUES: WEIGHING THE IMPACT OF CHINESE INVESTMENT IN AFRICA

百尺竿头，更进一步

Even at the highest level of enlightenment, one can still make further progress

—Chinese proverb

© Lin Qi

As with any long and complex relationship, the Africa-China engagement includes both benefits and challenges. Overall, however, we believe that China's growing involvement has been highly positive for economies, governments, and workers in Africa. China's fast-growing investments in Africa have built factories and railroads and introduced new technologies, from low-cost smartphones to state-of-the-art data-storage facilities. The more than 10,000 Chinese firms employ millions of African citizens. And increased trade with China has opened new markets for Africa's minerals and commodities as well as factory-made goods. Through all of this, China has helped to modernize Africa's markets and improve its productivity.

Despite these very real gains, there are areas where the relationship could and should be improved. Local businesses have not yet won a large share of Chinese firms' purchase orders. Many of these firms have so far failed to promote African workers to management positions in sufficient numbers. As Chinese companies usher in new technology and more efficient management, they are putting some longstanding African enterprises—and the jobs they provide—at risk. Perhaps most troubling are instances of unfair or unsafe business practices, particularly in areas related to resources and extraction, that threaten worker safety as well as the environment.

This chapter provides a picture of the dragons' impact, as seen from the lions' eyes.

BUILDING—AND FINANCING—A BETTER AFRICA

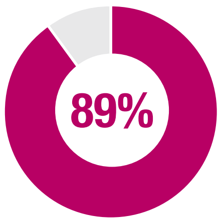
When we asked nearly 50 African public-sector leaders what they value most from their Chinese partners, low-cost financing and improved infrastructure topped the list. The outsized role that China plays in infrastructure is clear: as noted in Chapter 1, China is now the largest bilateral-infrastructure financier in Africa, seven times the next-largest bilateral financier. In international EPC contracting, Chinese construction firms have nearly 50 percent market share and also win 42 percent of World Bank tenders in sub-Saharan Africa by value.[21] These efforts are appreciated by Africans: in a large-scale public survey of citizens in 36 African countries, China's investment in infrastructure was the top reason cited for having a positive image of China.[22]

According to those African government officials, China's contribution to infrastructure in Africa comes with several benefits: cost effectiveness, administrative efficiency, and speedy delivery without compromising quality. In many cases, Chinese firms are significantly more affordable than other options. As one government official responsible for road tendering told us, "In a typical bid, there will be several Chinese firms with the best price, then the next

21 Ibid. Jeffrey Gutman and Christine Zhang, "Who wins World Bank-financed government contracts?" June 24, 2015.

22 Ibid. Mogopodi Lekorwe, *China's growing presence in Africa*, October 2016.

At surveyed Chinese firms,



of **employees are African.**

lowest bid from a non-Chinese contractor is routinely one-third higher or more." In addition to cost effectiveness, African leaders we spoke to also appreciated the timely administrative process to set up infrastructure projects. One interviewee noted that Chinese projects can be agreed to in a matter of months, whereas multilateral donor-funded projects take years.

These advantages do not seem to compromise the quality of infrastructure. For example, scholars have found that for World Bank infrastructure projects, there is no difference between the quality of work performed by Chinese and non-Chinese contractors.[23]

CHINESE FIRMS PROVIDE LOCALS WITH JOBS AND SKILLS—BUT NOT MANY MANAGER POSITIONS

A walk through a Chinese factory or construction site almost anywhere in Africa will confirm what our research finds: Chinese enterprises overwhelmingly employ local workers. At the more than 1,000 companies we surveyed, 89 percent of employees were African, adding up to more than 300,000 jobs for African workers. Scaled up across the more than 10,000 Chinese firms in Africa, these numbers suggest that Chinese-owned businesses employ several million Africans. Private companies and SOEs across all industries in the eight countries we studied had majority-local workforces. In trade, for example, the workforce is 82 percent African; in manufacturing, it's 95 percent African. Comparing public and private enterprises, SOEs employ an 81 percent African workforce, and private companies employ a 92 percent African workforce (Exhibit 12).

The reason for the bias toward local labor is not hard to understand: employing Africans leads to lower overall cost. Although China rose to global manufacturing prominence on a large, low-cost labor pool, its payroll costs have been rising and its labor is becoming less price competitive with Africa. As one Chinese manufacturer told us, "Chinese labor is so expensive these days. Even when we bring some technicians to help set up operations, we try to send them back as soon as possible." One construction-company supervisor told us that even though Chinese workers tend to be more productive, it is now five times more expensive to bring a Chinese worker to Africa than it is to hire locally.

Just as Chinese firms tend to take a long-term view with their investments in brick-and-mortar establishments, they also display a willingness to invest in training programs for the local workers they hire in Africa. Nearly two-thirds of Chinese employers say that they provide some kind of skills training. In companies engaged in construction or manufacturing where skilled labor is a necessity, 53 percent and 50 percent of firms, respectively, offer apprenticeship training. Even in trade, which is less dependent on skills, 33 percent of firms offer apprenticeships (Exhibit 13).

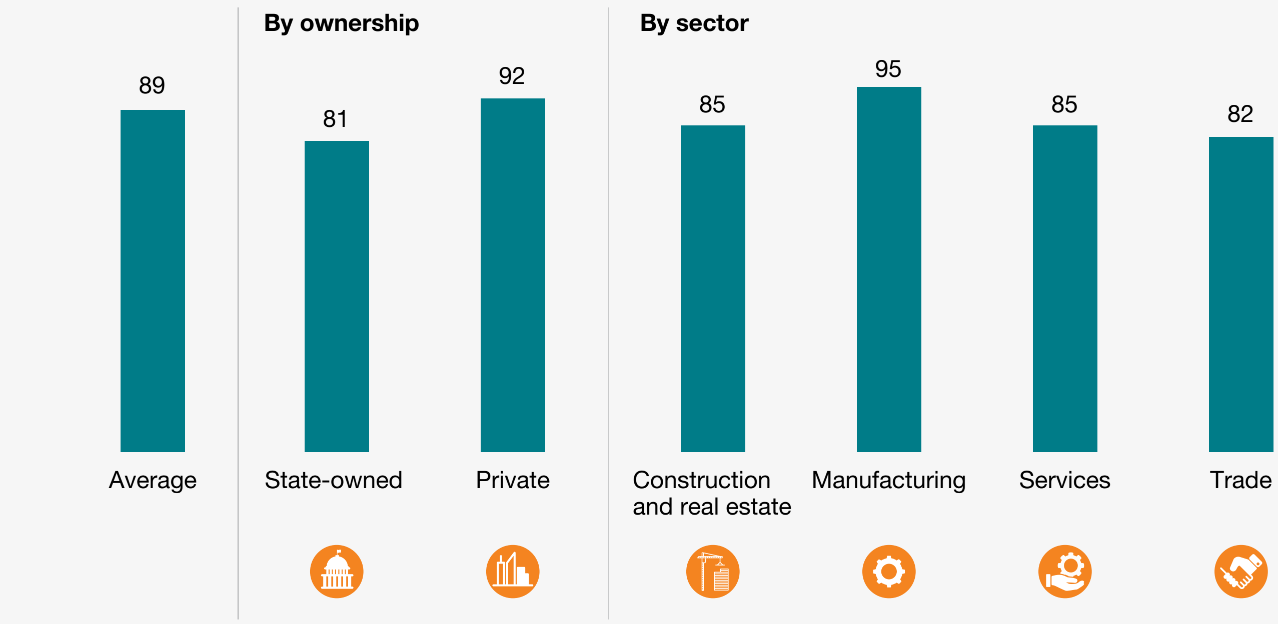
Why this emphasis on workforce training? Much of it stems from economic self-interest. Chinese companies consistently report that substandard vocational training in Africa means that workers report to jobs without the necessary basic skills. That view is especially widespread in the industrial and technical sectors. One Chinese construction firm told us, "It's actually *worse* to hire someone who has been to vocational school because then they

23 Jamie Farrell, *How do Chinese contractors perform in Africa? Evidence from World Bank Projects*, Johns Hopkins SAIS-CARI working paper 3, February 2016.

Exhibit 12

Chinese firms overwhelmingly employ locals.

% of employees who are local

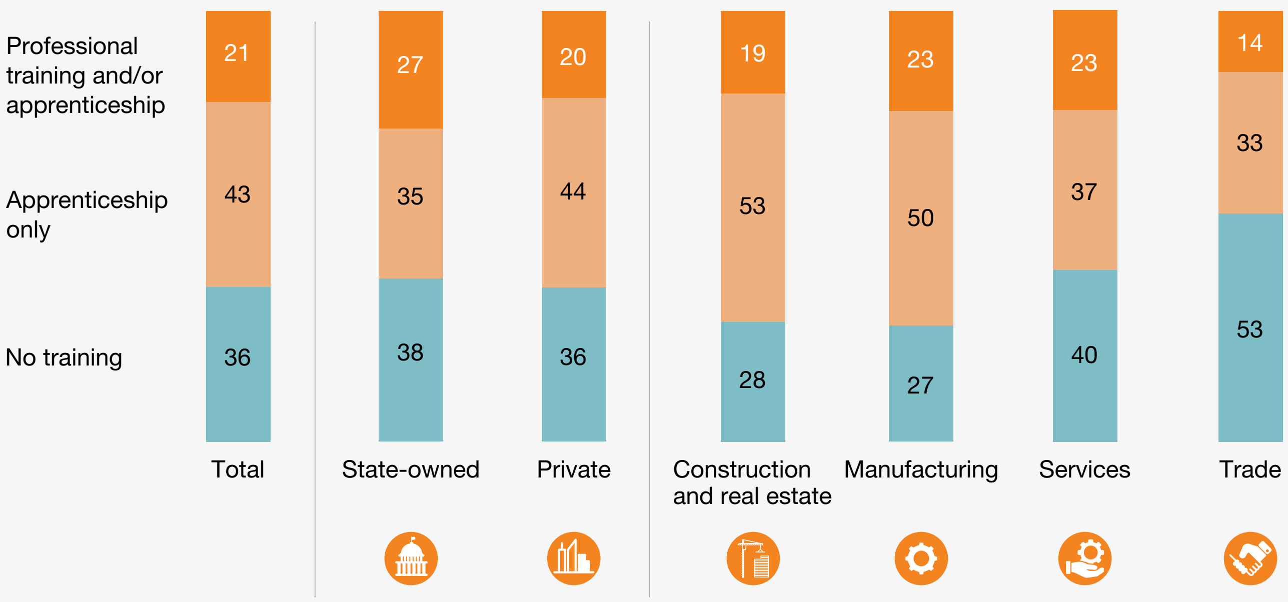


SOURCE: McKinsey field survey of Chinese firms in eight African countries, November 2016–March 2017

Exhibit 13

Nearly two-thirds of Chinese firms provide skills training to their employees.

Training programs offered by Chinese firms
% of firms

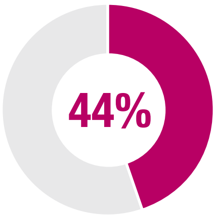


NOTE: Numbers may not sum due to rounding.

SOURCE: McKinsey field survey of Chinese firms in eight African countries, November 2016–March 2017

have all these ideas about buildings from a generation ago. I'd rather just hire someone off the street who's a blank slate that I can train the right way."

At surveyed Chinese firms,



of **managers are African.**

One example is AVIC, the diversified Chinese SOE mentioned in Box 4. It has set up technical and vocational training programs in six African countries to develop the skills needed not only for its own subsidiaries but also for other Chinese companies. In Gabon, for example, AVIC has set up training programs focused on machinery, electronics, aeronautical maintenance, and other skills for the country's petroleum and timber industries. The company also helped launch the Africa Tech Challenge, a competition aimed at building technical skills such as machining and mobile app development. Initially focused on Kenya, the contest now also covers Ghana, Uganda, and Zambia. The winners receive cash rewards and offers for full-time employment with AVIC.[24]

Some companies include training and study in China as part of their workforce skills-development. An example is Sino-Ethiop Associate Africa, a joint Ethiopian- and Chinese-owned gel-capsule manufacturer in Ethiopia that exports its products widely across Africa and the Middle East. The company's managers and technicians are almost entirely local. At the time of writing, around 10 percent of its Ethiopian workforce has attended company-sponsored training programs in China.

China's massive investment in Africa should include training a generation of African managers and business leaders. So far, too few companies are making this investment. Only 44 percent of managers at the Chinese-owned companies we surveyed were African. In manufacturing, that share reached 54 percent; in construction, it is only 33 percent (Exhibit 14). While these proportions may be higher than some observers would expect, we believe they could be much higher—because we have seen it. Some Chinese firms have driven their local managerial employment to around 80 percent, and many of their practices are transferrable to other firms (see Box 5, "Empowering a new generation of African business managers").

TRANSFERRING NEW PRODUCTS, TECHNOLOGY, AND KNOWLEDGE TO AFRICA

Our research shows that Chinese firms engage in substantive technology transfer in Africa. Nearly half of Chinese firms in Africa have introduced a new product or service to the local market, and more than one-third have introduced a new technology (Exhibit 15). In some cases, Chinese firms have lowered prices for products and services by as much as 40 percent through improved technology and efficiencies of scale (see Box 6, "How a Chinese firm developed a smartphone tailored to Africa"). And others have introduced technologies that significantly improve service levels, such as Huawei's 4G telecommunications technology.

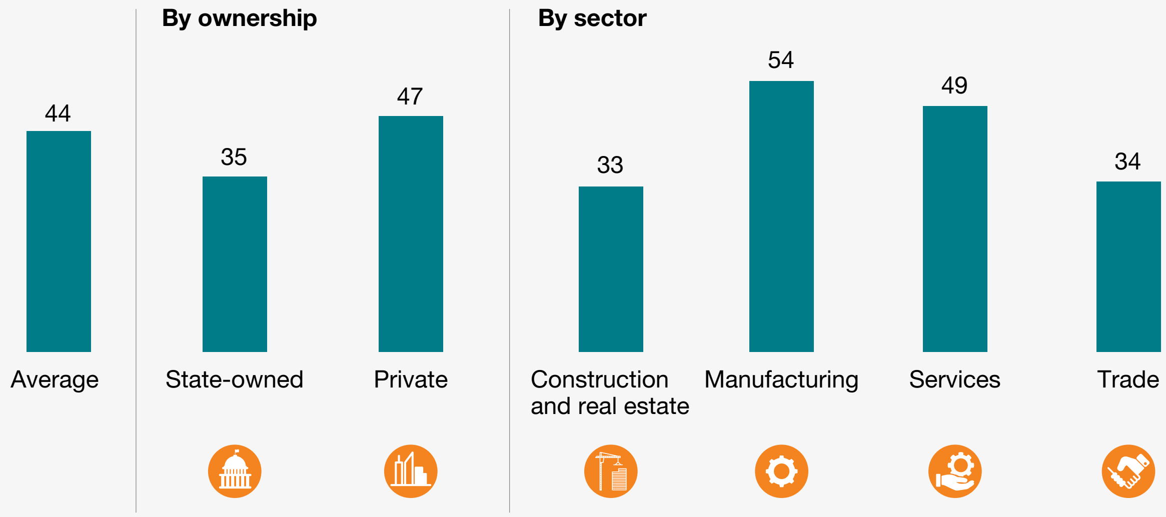
Consider Kenya-based mobile telecommunications operator Safaricom, which launched the mobile payment initiative M-Pesa in 2007. Today M-Pesa provides cellphone-based banking services to tens of millions of people in East Africa and beyond. It is recognized as a world-leading African innovation that has used technology to leapfrog traditional financial services models. As Safaricom (and parent company Vodafone) expands M-Pesa's

24 Hou Liqiang, "AVIC works to make Africa soar," *China Daily*, October 12, 2015; Ikwap Amos, "Africa Tech Challenge kicks off its third season with 'made in Kenya' theme," *iAfrikan*, July 15, 2016.

Exhibit 14

Only 44 percent of managers are locals.

% of managers who are local



SOURCE: McKinsey field survey of Chinese firms in eight African countries, November 2016–March 2017

Box 5

Empowering a new generation of African business managers

As Chinese firms build scale and investments in Africa, they are providing not just jobs but also opportunities for local people to shape meaningful careers. In many cases these firms are introducing technologies, management techniques, and performance cultures that are helping to nurture a new generation of African business managers.

One such manager is Mary Karuthai. She works at the Kenyan subsidiary of the Chinese broadcasting company StarTimes, which has risen rapidly to become one of the largest and most impactful pay-television providers in Africa.[1] She joined the company as a customer service representative in 2010, having graduated from the University of Nairobi with a commerce degree two years previously. Since then, she has risen through the ranks to become the assistant director of operations, overseeing some 400 employees across several departments, including after-sales service, maintenance, and the company's call center.

"StarTimes is giving many people opportunities to grow fast in their careers," Karuthai said. "If you look at the managers here, you'll see that most of them are young people. In other companies, you would have to wait many years before getting the advancement opportunities available here." She herself received her first promotion to a managerial role after only one year with the company.

Karuthai said she has experienced strong support from the company's leadership to develop her management skills; it is even backing her pursuit of a master's degree. Just as important, though, is the company's performance-management system and culture: it holds monthly performance reviews that are tied to promotions to identify and nurture high-potential employees.

Said Karuthai, "StarTimes sets clear goals, and you're expected to deliver on them. You are rewarded for meeting those goals, but you have to work hard to get there. There's a very strong work ethic in this company, and that's been part of my growth."

1 "Let's share the benefit of digital television," *Beijing Review*, 2015.

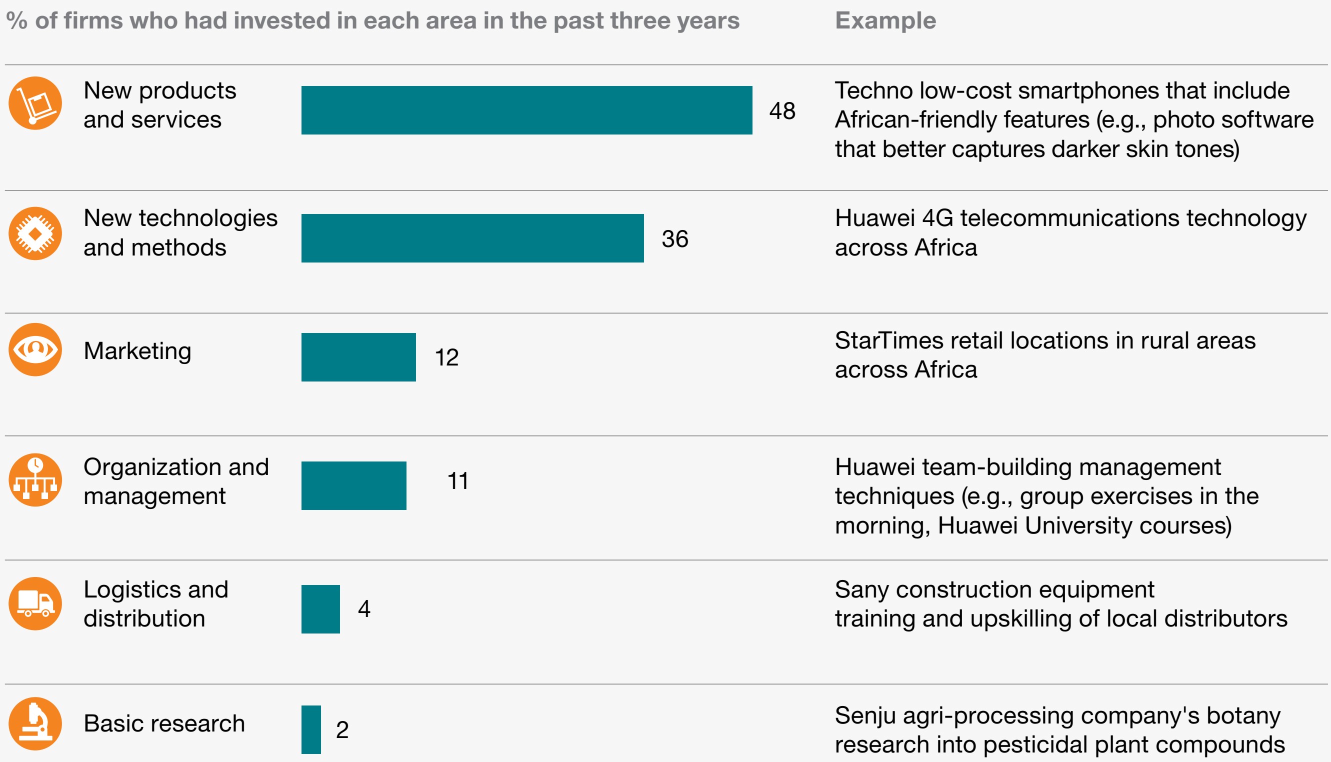
reach and increases its sophistication, it is relying on Chinese technology—specifically the Mobile Money platform developed by China-based Huawei, the world's largest telecommunications-equipment manufacturer. In 2015 M-Pesa migrated all 12.8 million of its Kenyan subscribers to Huawei's platform—in a single day.[25] This move greatly improved the service's functionality, doubling the number of transactions possible per second and speeding up transfers between M-Pesa accounts and bank accounts. Huawei's Mobile Money platform is purpose-built for developing countries and works on both smartphones and the more basic feature phones that are used widely in Africa.

For China's StarTimes broadcasting company, Africa represented a wide-open market—free from the more constraining regulation common in its home country. But in Africa, StarTimes faced a market with little infrastructure and unformed viewing habits. Taking the long view, the company has invested in low-cost, digital satellite television for its African markets—and according to our expert interviews, in ten years it has grown from nothing to the number-one pay television provider in Africa by subscriber volume. In Tanzania, for example, we found it has invested $120 million over the past six years—and reduced the local price of pay-television by 80 to 90 percent.

25 "Huawei and Vodaphone achieve a major M-Pesa milestone in Kenya," Huawei, May 6, 2015.

Exhibit 15

Chinese firms contribute sustainably to market modernization.



SOURCE: McKinsey field survey of Chinese firms in eight African countries, November 2016–March 2017

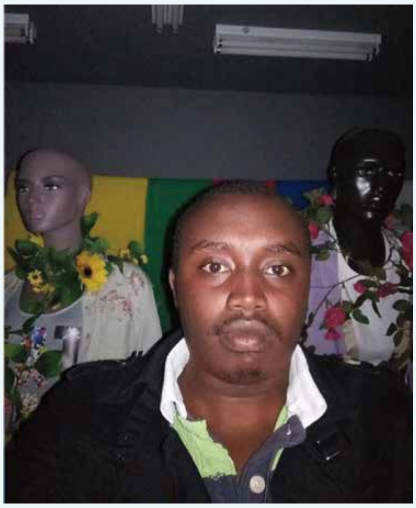
Box 6

How a Chinese firm developed a smartphone tailored to Africa

Mobile phone maker Tecno has taken the adage "Think global, act local" to new heights. The Chinese company packs advanced technology into smartphones that retail for less than $50 and have been carefully tailored for African customers. The phones include photo software designed to better capture darker skin tones (as shown in these comparison photos). In Ethiopia, it was the first major cell phone brand to introduce a keyboard in Amharic, Ethiopia's official language. Thanks to its deep understanding of local markets, Tecno is prospering in Africa, winning a market share of between 25 and 40 percent in several East-African markets, despite competition from global technology leaders.[1] As it does so, Tecno is hastening the spread of smartphone technology.

1 "Tecno mobile acquires 25% of Africa's smartphone market share," CNBCAFRICA, 2017.

SOURCE: Tecno training manual



Tecno

Other leading mobile manufacturer

Just as other Chinese companies have done, StarTimes pursues a localization strategy. As it builds its customer base, the company employs locals as technicians and provides them with the necessary training. On the product side, it invests in both international and local programming. This focus on the local market has taken television viewing from an occasional luxury to a daily routine for many Tanzanians. Next door in Kenya, StarTimes brought digital satellite television to rural parts of the country that previously had no or only limited access to a television signal, helping to bridge the rural-urban information gap.

In addition to such examples of Chinese companies bringing new technologies to Africa, there are many instances of African firms replacing existing imports of equipment and other inputs with lower-cost Chinese alternatives. More than half the African business leaders we interviewed said that cheaper and more easily available inputs were a major source of value from the Africa-China economic relationship. For example, a pan-African packaging company reported that it had previously imported packaging machinery from Germany and Italy, but it decided to switch to a Chinese equipment provider. As its CEO told us, "The quality of Chinese equipment has been improving rapidly in the past few years and now is 95 percent as good as German or Italian equipment—yet the price remains very competitive." The chosen Chinese supplier, he said, was ready to address any issue and was aggressively taking market share from European companies.

These views were echoed by the CEO of a large manufacturer and distributor of electro-mechanical equipment based in South Africa. He said Chinese suppliers took a longer-term view than their Western counterparts: "Our Chinese supplier is willing to take the risk and do the research and development for the specific parts that we need, then transfer the technology to us in order to build a long-term partnership. Suppliers in Europe are unlikely to do so, and they tend to be far more concerned about their patents."

FEELING THE DRAGON'S FIRE: LOCAL COMPANIES ARE COMING UNDER PRESSURE

As economic flows between Africa and China increase, some homegrown companies have come under threat. These cases present a challenge to African governments, which must balance the broader benefits of Chinese engagement with preserving locally owned companies.

One example of such a struggle is the South African steel industry, which is under threat of collapse as local producers struggle to compete with imports from China. Steel production in China rose in 2016, despite the central government's stated intention to shut down 150 million tons of capacity.[26] There are accusations that Chinese steel producers are engaging in "dumping"—selling in export markets at prices below those charged to domestic customers and below the cost of production.[27] South Africa's government, however, has

26 Steel Business Briefing (SBB, Platts).

27 Biman Mukherji, John W. Miller, and Chuin-Wei Yap, "Why Chinese steel exports are stirring protests," *The Wall Street Journal*, March 15, 2015.

© Lin Qi

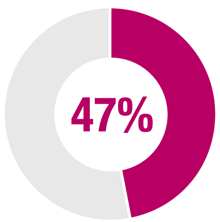
> “The quality of Chinese equipment has been improving rapidly in the past few years and now is 95 percent as good as German or Italian equipment—yet the price remains very competitive.”
>
> —CEO of a major pan-African packaging company

The South African steel industry lost

11,000

jobs in 2015.

Chinese firms report that only



of procurement by value is **locally sourced.**

taken relatively modest action, raising tariffs on Chinese steel imports to just 10 percent (at the time of writing, it was investigating further tariffs).[28] These measures have been insufficient to prevent large-scale job losses. In early 2016, Evraz Highveld Steel and Vanadium Limited shut down, retrenching more than 2,000 employees—on top of some 11,000 jobs lost across the South African steel and engineering industries in 2015.

Further adding pressure to local African industry is the fact that Chinese firms currently source less than half of their supply from local suppliers. The more than 1,000 firms we spoke with reported that, on average, only 47 percent of procurement by value was locally sourced (Exhibit 16). Of course, there are many reasons, some sector-specific, for why this is the case. But one common response we heard from both Chinese and African interviewees is that African firms need to invest in growing their scale and capabilities. Many of the Chinese companies told us that they would prefer to use local suppliers but have trouble finding ones that meet their price and quality specifications. As one African government official put it, “If Chinese firms could source locally at the right price and quality, they would. This issue is not with them but with our local suppliers.”

INSTANCES OF MAJOR LABOR AND ENVIRONMENTAL VIOLATIONS

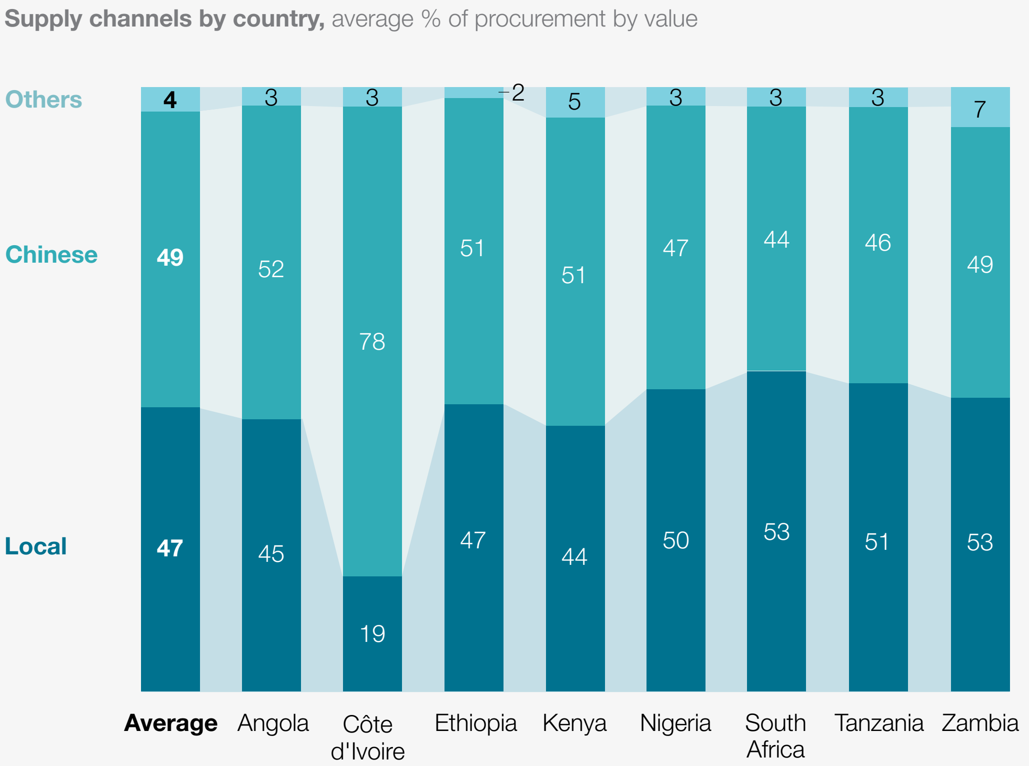
As the Africa-China economic partnership evolves, both sides will need to take decisive action to prevent labor and environmental violations. While such violations are committed by firms of all nationalities, some studies suggest that breaches of labor regulations, in particular, are currently more common among Chinese firms than among other foreign-owned firms in Africa. For example, a study published by the Johns Hopkins China-Africa Research Initiative comparing Chinese- and American-owned firms in Kenya found that less than half of the Chinese firms had employment contracts for all their employees, compared with 100 percent of American firms.[29] According to Human Rights Watch, there have been substantial employee safety violations in Chinese SOE-run copper mines in Zambia. Inhumane working conditions included poor ventilation that could lead to

28 Department of Trade and Industry, South Africa.

29 Zander Rounds and Hongxiang Huang, *We are not so different: A comparative study of employment relations at Chinese and American firms in Kenya*, CARI, February 2017.

Exhibit 16

Chinese firms procure 47 percent of their supply from local firms.



NOTE: Numbers may not sum due to rounding.

SOURCE: McKinsey field survey of Chinese firms in eight countries, November 2016–March 2017

serious lung disease, exceeding the legal limits on work hours, failure to replace protective equipment, and threatening to fire workers who refuse to work in unsafe conditions.[30]

Cases of serious environmental violations among Chinese enterprises have also been uncovered. For example, according to the Environmental Investigation Agency, nearly half of the logs that Mozambique supplies to China are reported to be smuggled—and Mozambique exported more than half a million cubic meters of timber to China in 2013. The high level of illegal procurement involves connections with high-level Mozambican officials to circumvent restrictions and blatant fraudulent practices, such as hiding illegal logs behind legal ones in containers to avoid detection by customs authorities.[31]

In some cases, environmental violations by Chinese companies are exacerbated by Chinese government policies. Fishing by Chinese vessels off West Africa is a case in point. A recent study points out that most Chinese ships, which are heavily subsidized by the government, are so large that they catch as many fish in a week as local boats catch in a

30 *You'll be fired if you refuse: Labor abuses in Zambia's Chinese state-owned enterprise copper mines*, Human Rights Watch, 2011.

31 *China's illegal timber imports ransack Mozambique's forests*, Environmental Investigation Agency (EIA), July 2014; "First class connections: Log smuggling, illegal logging, and corruption in Mozambique," EIA, July 2013.

Illegal Chinese fishing costs West African economies an estimated **$2 billion** a year.

year.[32] In 2015, Greenpeace found numerous cases of illegal Chinese fishing in West African waters, including ships that misreported their coordinates or underreported their tonnage. Researchers have estimated the cost to West African economies at some $2 billion a year. Fish stocks in countries such as Senegal, for example, have fallen sharply, threatening the livelihoods of local fishermen and resulting in higher food prices for citizens—many of whom depend on fish as their primary source of protein.

For the Africa-China relationship to be sustainable, it must also be mutually beneficial. Hence, it is in the Chinese government's and Chinese firms' own interests to address these issues and work together with African partners to channel broad-based benefit to African workers, firms, and nations. In Chapter 5, we discuss recommendations to benefit the future of the Africa-China economic relationship, including steps the Chinese government should take to encourage responsible business practices.

As the dance of the lions and the dragon evolves, both partners will need to take action to address these serious issues. Despite these downsides, African leaders believe the relationship has been beneficial overall and have expressed commitment to continuing and strengthening it into the future.

As we discuss in the next chapter, however, the depth of that commitment—or at least the willingness to translate it into concrete and concerted action—differs markedly across African countries. Some have shaped robust, long-term partnerships with China and are benefiting from large-scale investment and accelerated industrialization. Other countries have a more fragile partnership, and both sides will need to take steps to unlock the partnership's full economic value.

32 "China's appetite pushes fisheries to the brink," *The New York Times*, April 30, 2017.

Chapter 4

DIFFERENT DANCES: FOUR WAYS AFRICAN COUNTRIES ARE PARTNERING WITH CHINA

Bwoba tomanyi gyolaga, buli lugudo lukutuusa yo

If you don't know where you're going, any road will take you there

—Luganda proverb (Uganda)

Thus far, we have largely covered the commonalities across African countries of Chinese entrepreneurial activity and how that activity has an impact on local economies. Yet on some dimensions, there is significant country-level variation. For example, nearly 40 percent of the Chinese firms in Côte d'Ivoire are traders, compared with 2 percent in Ethiopia. Local impact varies as well: local employment ranges from 60 percent in Angola to 96 percent in Nigeria. Much of this variation is due to the fact that several types of relationships have evolved between African nations and China. Far from a single monolithic model, we found four main archetypes of Africa-China relationships, by and large driven by how proactive the African country is in managing the relationship.

FOUR ARCHETYPES OF AFRICA-CHINA ENGAGEMENT

We analyzed the African countries in our study along two dimensions. The first is the strength of their bilateral government relationship with China, including the strategic priority accorded to the relationship by both sides, the level of leadership interaction, the extent of intergovernment lending, and the volume of bilateral trade.[33] (Chinese policies toward Africa have been articulated in the "China's Africa Policy" document published by the Chinese government and in Chinese Ministry of Foreign Affairs announcements.) The second is the depth of their economic engagement with Chinese investors and businesses, including the size, diversity, and intensity of private-sector activity in each African country, as well as whether the economic engagement has been relatively free of corruption and yielded social benefits such as local employment and technology transfer.[34] This analysis revealed four distinct archetypes of the Africa-China partnership (Exhibit 17):

Robust partners

Ethiopia and South Africa have a clear strategic posture toward China, along with a high degree of economic engagement in the form of investment, trade, loans, and aid. For example, both countries have translated their national economic development strategies into specific initiatives related to China, and they have also developed important relationships with Chinese provinces in addition to with Beijing. As a result, China sees robust partner countries as true partners in Africa: reliably engaged and strategic for

33 We examined five indicators related to the strength of government-to-government relationships: the level of strategic priority of each African country from China's perspective as identified by Chinese Ministry of Foreign Affairs announcements; the level of strategic priority of China from each African country's perspective as measured by survey responses to our local perspective interviews with African government officials and based on policy document review; the number of high-level leadership visits over the past five years; the loan amount from China scaled by GDP; and the value of bilateral trade scaled by GDP. The first two indicators were each given a weight worth twice as much as each of the other three indicators.

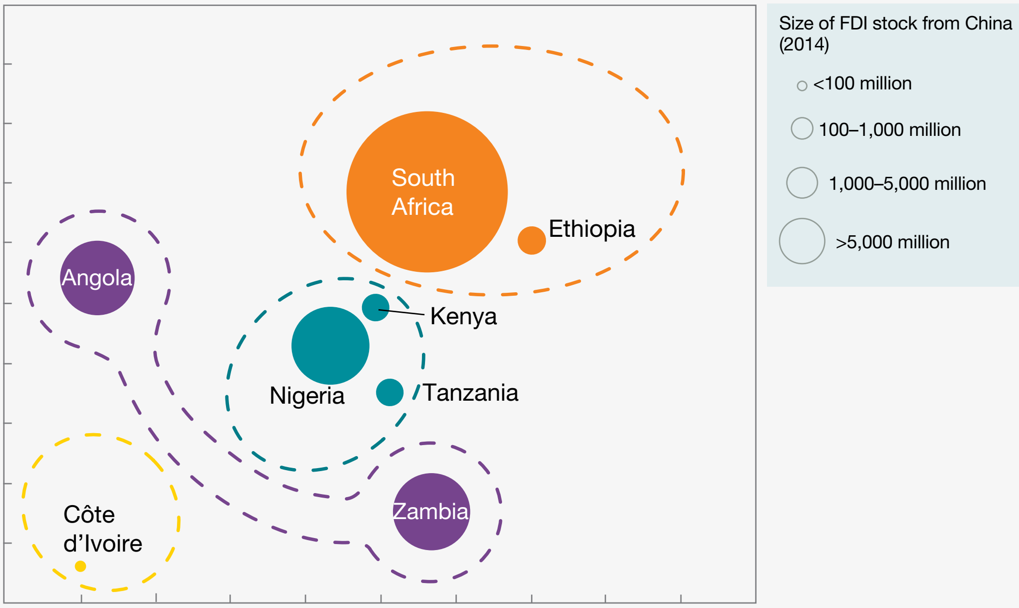
34 We examined seven indicators related to the depth of economic engagement: investment size as measured by FDI stock from China scaled by the African country's GDP; capital intensity as measured by the percent of Chinese investments that are in capital-intensive industries; social impact as measured by percent of local employment, percent of local sourcing, percent introducing a new product or service, and percent introducing a new technology or method as answered by Chinese firms in our field survey; sector distribution similarity to Brazil, China, and India's historical sector distribution a decade after the starts of their industrialization; industry diversity as measured by the standard deviation of the proportion of firms by industry; concentration as measured by the number of Chinese firms scaled by GDP; and corruption as measured by whether Chinese firms identified corruption as a major barrier in our survey. The first three indicators were each given a weight worth twice as much as each of the other four indicators.

China's economic and political interests. These countries have also created a strong platform for continued Chinese engagement through prominent participation in such forums as the Belt and Road initiative, and they can therefore expect to see ongoing rapid growth in Chinese investment.

Exhibit 17

Four distinct archetypes of Africa-China engagement

Strength of government-to-government relationship
Diplomatic and strategic priority on both sides, government loan level, leadership interaction, and trade



Depth of economic engagement
Size, diversity, and intensity of private sector activity, corruption, and social benefits

Nascent partners
- Partnership model has yet to become clear
- Traders often dominate

Unbalanced partners
- Mixed results for locals
- Macro shifts could destabilize relationship

Solid partners
- Good but not great outcomes for locals
- Likely to grow at healthy rates

Robust partners
- Result in best outcomes for locals
- Likely to grow quickly

SOURCE: McKinsey field survey of Chinese firms in eight African countries, November 2016–March 2017; Bilateral FDI database, United Nations Conference on Trade and Development, 2012; Bilateral trade database, International Trade Centre Trade Map, 2015; Announcements on strategic partnership by Ministry of Foreign Affairs of the People's Republic of China, 2017; Registration lists of Chinese firms with overseas investments, Ministry of Commerce of the People's Republic of China, 2015; GDP database, World Bank, 2015; McKinsey local stakeholders survey on Chinese investment in eight African countries, November 2016–March 2017; Investment policy review—Brazil, the United Nations, 2005; Investment country profiles—India, UNCTAD, 2013; Chinese foreign trade and development yearbook, Ministry of Commerce of the People's of Republic of China, 1993–2003

>50%

Average annual **growth rate of Chinese FDI** in Ethiopia and South Africa.

Solid partners

Kenya, Nigeria, and Tanzania do not yet have the same level of engagement with China as Ethiopia and South Africa, but government relations and Chinese business and investment activity are meaningful and growing. These three governments recognize China's importance, but they have yet to translate this recognition into an explicit China strategy. Each has several hundred Chinese firms across a diverse set of sectors, but this presence has largely been the result of a passive posture relying on large markets or historical ties; much more is possible with true strategic engagement.

Unbalanced partners

Angola and Zambia have each built their engagement with China on one dimension but to date have neglected the other dimension, at least in relative terms. In Angola's case, the government has supplied oil to China in exchange for Chinese financing and construction of major infrastructure projects—but true market-driven private investment by Chinese firms has been limited, calling into question the sustainability of the partnership. Zambia's case is the opposite: there has been considerable private-sector investment, often by smaller private firms with limited experience operating internationally. But a lack of oversight from regulatory authorities has led to regular labor and corruption scandals over the past ten years. In both countries growth has been quick, but the tilted nature of the relationships mean that macroeconomic shifts such as commodity price fluctuations and elections could jeopardize the sustainability of the relationship.

Nascent partners

Côte d'Ivoire is at the very early stages of developing a partnership with China, and so the partnership model has yet to develop and be shaped. The country's relatively small number of Chinese investors are focused on low-investment industries such as trade.

AFRICAN COUNTRIES SHOULD STRATEGICALLY SHAPE THEIR RELATIONSHIPS WITH CHINA

No matter a country's size or its current relationship with China, there is room to strengthen that relationship and advocate for its national interests. What's more, progress can be achieved in a short amount of time: after the announcement of China's Belt and Road initiative, both Ethiopia and Kenya expressed strong interest, with the heads of state of both nations traveling to Beijing for the May 2017 Belt and Road Summit. The following week, China's Ministry of Foreign Affairs upgraded its strategic rating of both countries—implying that targeted engagement by African countries can produce results quickly.

China has expressed interest in cultivating more balanced partnerships with African countries, with the view that more strategic direction from African countries, backed by stronger African governance, is in the interests of the long-term sustainability of the Africa-China relationship. As one Chinese diplomat told us, "We have been clear on how we'd like to see our relationships in Africa evolve. What would be tremendously helpful for us is if we could get that same level of clarity from our African counterparts."

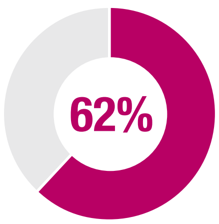
The two robust partner countries—Ethiopia and South Africa—have harnessed their engagement with China to drive distinct industrial development strategies. They have managed to attract sustained attention and investment from China, with average annual

FDI growth rates of more than 50 percent, despite conditions that understandably spooked foreign investors such as the state of emergency in Ethiopia in 2016 and the generally anemic economic growth and political instability in South Africa. In so doing, they offer lessons for other countries as to what measures enable effective engagement with China.

Ethiopia: Guiding Chinese investment to support industrialization

With a population of more than 100 million, Ethiopia is Africa's second-most populous country, but its GDP per capita has historically been among Africa's lowest. To accelerate broad-based growth and transform a mostly agrarian economy, the government has followed a deliberate policy of industrialization since 2010. This strategy has been underpinned by close cooperation with China and has drawn lessons from China's own success at driving manufacturing-led growth. As a result, Ethiopia has increased its manufacturing value added by an average of more than 10 percent a year since 2004 and become one of Africa's fastest-growing economies. For example, the value of its footwear exports increased at an average annual rate of 38 percent from 2004 to 2014, and the value of apparel exports increased at an average of 22 percent a year over that period.[35]

Of the nearly 700 Chinese firms in Ethiopia,



are manufacturers.

Ethiopia has drawn on Chinese investment and expertise in several major aspects of its industrialization and broader economic development. It has engaged the Chinese government to finance key infrastructure, helping to add 66,000 kilometers of new roads since 2000 and increase power supply by 15 percent between 2010 and 2014.[36] Chinese firms built, and now comanage, the 750-kilometer Ethiopia-Djibouti Railway, a $3.4 billion project opened in late 2016. And Ethiopia's government has taken steps to improve its business environment and actively attract Chinese and other international investment. For example, it has waived customs duties for the import of capital goods, and it set up a one-stop shop to handle commercial registration and business licenses. It has also appointed Chinese-speaking liaison officers to facilitate investments from China, and the official Ethiopian Investment Commission regularly arranges trips to China—not just to the megacities of Beijing and Shanghai but also to provinces, such as Guangdong and Shandong, that are teeming with Chinese entrepreneurs. In May 2017, Ethiopian Prime Minister Hailemariam Desalegn visited seven Chinese provinces during an investment-promotion trip. The Ethiopian government has tried to attract specific types of investment, including labor-intensive manufacturers such as shoe factories, as well as technology-heavy firms such as pharmaceutical manufacturers for its upcoming pharmaceutical manufacturing hub.[37]

Perhaps most striking about Ethiopia's relationship with China is that it does not allow Chinese firms to set up trading business and most services businesses. (Ethiopia does not allow any foreign firms into the trading business.) As a result, 62 percent of the nearly 700 Chinese firms in Ethiopia are manufacturers—double the percentage of manufacturing firms in our eight countries as a whole. One can debate whether this result is desirable for all African countries, but nevertheless Ethiopia is a dramatic example of how a

35 Ibid. *Lions on the move II*, MGI, September 2016.

36 Ibid. *Lions on the move II*, MGI, September 2016.

37 *Launch of Ethiopian national strategy and plan of action for pharmaceutical manufacturing development and improving access*, Federal Democratic Republic of Ethiopia and the World Health Organization, July 14, 2015.

> “We have been clear on how we’d like to see our relationships in Africa evolve. What would be tremendously helpful for us is if we could get that same level of clarity from our African counterparts.”
>
> —Chinese diplomat

determined national government with a clear strategy in directing Chinese investment and a willingness to enforce regulations can achieve striking results.

South Africa: Coming from behind to attract big-ticket innovation from China

As recently as the late 1990s, South Africa did not have a relationship with China at all. Today, it is China’s most strategic partner in Africa.

Historically, South Africa had dismal relations with China. The apartheid government sent troops to fight against China in the Korean War, and South Africa had long and close ties with Taiwan. It was not until 1998 that South Africa formally recognized mainland China and recalled its ambassador from Taiwan.

After that, relations took off. From a mere $14 million of trade in 1992, bilateral trade topped $20 billion in 2016.[38] In recent years, frequent high-level government leadership visits between the two countries have deepened the bilateral relationship and cemented a strategic economic partnership. In December 2015, for example, the heads of state of China and South Africa signed 26 agreements worth $6.5 billion.[39] They also agreed to cooperate on several priority areas including accelerating South Africa’s industrialization and strengthening its special economic zones (SEZs). South Africa is also unique among African countries in that its firms make significant investments in China; one example is South African-based insurer Discovery’s stake in Pingan’s health insurance business. The two countries also worked together on the global stage, cofounding (along with Brazil, India, and Russia) the $100 billion New Development Bank.[40]

Given its position as the most industrially advanced economy in Africa, South Africa has been deliberate in attracting big-ticket investments from China that are capital- and technology-intensive. For example, provincial-level investment promotion agencies from South Africa have been actively reaching out to their provincial counterparts in China, promoting specific business opportunities within their province and luring investors with incentives such as cheap electricity. Leading Chinese companies have made large

38 According to ITC Trade Map, South African imports from China in 2016 were $13.5 billion, and South African exports to China were $6.8 billion. China country data from the same source are larger: $22.6 billion in imports from South Africa to China and $12.9 billion in exports from China to South Africa.

39 “The FOCAC opened, Jinping XI committed $60 billion investment,” *BBC China*, 2015.

40 Patrick Bond, “BRICS establishes a development bank,” *The Real News Network*, July 12, 2015.

investments in the advanced manufacturing sector, including automobiles and household electric appliances, as well as in financial services, such as the Industrial and Commercial Bank of China's 20 percent stake in South Africa's Standard Bank[41].

Other notable investments include Hisense's $30 million investment in an industrial park in Cape Town that produces 400,000 fridges and a similar number of televisions each year.[42] BAIC Group plans to invest more than $226 million in Port Elizabeth to establish a vehicle assembly factory with an expected production of 50,000 cars annually, creating 2,500 direct jobs.[43]

However, South Africa also provides a reminder that Chinese investment, even on a large scale, is not enough to make up for gaps in other drivers of economic development. South Africa's GDP growth has lagged behind the rest of sub-Saharan Africa in recent years—and it fell to below 1 percent in 2016.[44] Unemployment levels remain around 25 percent, and Chinese investment to date has not moved the needle on this figure. In fact, local employment by Chinese firms in South Africa is only 78 percent, below the 89 percent average we see across all eight countries. Local managerial employment is also low; 23 percent of managers of Chinese firms in South Africa are locals, compared with an average of 44 percent across all eight countries. To reignite growth, South Africa will first and foremost need to address a broader range of structural issues while continuing to work with China on areas of national interest.[45]

THE DANCERS CAN ALSO LOSE THEIR RHYTHM

The generally quick growth of Africa-China ties might obscure an important point: it is possible for relations to go backward as well as forward. Nigeria in the 1990s provides a historical case example, and Tanzania today may be in danger of following in those unenviable footsteps.

Nigeria: Going up, down, then up again

Chinese investment by way of Hong Kong to Nigeria dates back more than half a century, when some Chinese industrialists who moved from mainland China to Hong Kong moved yet again to Africa in search of more market headroom. These manufacturing enterprises were sizeable: at one point, the largest textile factory in Africa was located in Nigeria and was Chinese-owned.[46] But by the 1990s, a combination of macroeconomic crises, political instability, and rising competitiveness of Asian manufacturing caused these old-guard industrialist giants to die, and a new class of Chinese traders—and smugglers—flooded the market with cheap Asian goods. Investment stock actually shrank, as capital-intensive manufacturing was replaced by asset-light traders and smugglers. It took Nigerians more than a decade to reclaim the trading business, with Nigerian traders flying to Guangdong

41 "ICBC buys up 20pc of Standard Bank (South Africa)," ICBC, press release, updated October 29, 2007.

42 "Hisense will invest $30 million in South Africa with an annual production of 400,000 televisions and fridges," Hexun, 2013.

43 "BAIC South Africa: how to implement the initiatives raised in the Johannesburg FOCAC," SCETA, 2017.

44 Ibid. *Lions on the move II*, MGI, September 2016.

45 *South Africa's big five: Bold priorities for inclusive growth*, McKinsey Global Institute, August 2015.

46 Sola Akinrinade and Olukoya Ogen, "Globalization and deindustrialization: South-south neo-liberalism and the collapse of the Nigerian textile industry," *The Global South*, volume 2 (2), 159–170.

themselves to pick out products while accepting lower margins, thus edging Chinese firms out of trading and forcing them to diversify back into other sectors.

Inasmuch as Nigeria is an example of decline, it shows that recovery is possible as well. In 2015, Nigeria took in $2.4 billion in Chinese FDI, mostly in industrial sectors. The government has worked with the Chinese government and Chinese firms to develop two major SEZs and negotiate multiple large-scale infrastructure deals such as the $7.5 billion Lagos-Kano Railway.[47]

Tanzania: Demonstrating that past success does not guarantee future success

In Tanzania today, we observe early warning signs of a similar investment shrinkage. Tanzania, despite historical ties to China dating back to the 1960s, has been less proactive in building its relationship with China in recent years. And many investors from countries including China have been concerned about a deterioration in the country's business

47 Aminu Adamu, "Update: Nigeria secures $7.5 billion loan from China for rail project—Amaechi," *Premium Times*, February 6, 2017.

environment, including the unreasonably stringent tax imposition, barriers to obtaining work permits, and the denial of some previously promised investment incentives. In our research, we identified several Chinese entrepreneurs who planned to withdraw from Tanzania, citing an unfavorable investment environment. It bears repeating that the vast majority of Chinese firms are privately owned and seek market opportunities; whether they stay in Africa is not dictated by the Chinese government. So despite the long history of friendship between the two countries, if current trends continue, Chinese investment could slow or even shrink unless Tanzania develops a clear strategy to attract Chinese investment, improves its business environment, or both.

THE NEXT FRONTIER FOR EACH ARCHETYPE

All countries, no matter where they are in shaping their relationship with China and regardless of whether their recent trajectory along the two dimensions has been up or down, have an opportunity to improve their engagement model with China to drive better alignment with their national goals and derive better outcomes for their citizens. Although every country should take its unique circumstances into account, we offer each country archetype a set of considerations as a starting point to get to the next level in their relationships with China.

Robust partners: Ensure local benefit

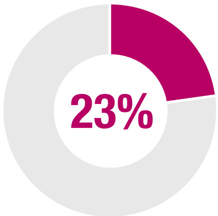
These countries have a strategically defined relationship with China, with success on both the government-to-government and private-sector fronts. Yet there are areas where the impact has not fully landed: for example, in Ethiopia only 47 percent of Chinese firms' sourcing is from local firms, and in South Africa only 23 percent of managerial employment is local. The next horizon for these countries is to go a layer deeper on their overall China strategy to build out more specific strategies by sector or value chain. These countries would also benefit from a focus on local benefits beyond infrastructure—setting clear targets about social outcomes such as local employment, opportunities for local firms, and technology transfer—then measuring and tracking progress on these indicators over time to ensure that Chinese investment is not only large and growing but also socially impactful.

Solid partners: Get strategic

These countries have done well with China—but not necessarily as a result of a purposeful, strategic approach. Most have simply benefited from other factors: Nigeria from the fact that it is a big market bound to attract a fair share of Chinese investors anyway, Tanzania from strong historical ties with China, and Kenya as an economic hub for the region. The name of the game for these countries will be to get strategic about China, not only during

No matter a country's size or its current relationship with China, there is room to strengthen that relationship and advocate for its national interests.

In South Africa, only



of Chinese firms' managers are African.

the lead-up to major state visits and in negotiating infrastructure deals but also by defining clear and holistic engagement strategies that guide and direct Chinese activity toward areas that most support national economic development goals. These countries also have some of the highest levels of corruption involving Chinese firms; these governments should work with the Chinese economic consuls in their countries to encourage better behavior on both the African and Chinese sides. Some bureaucratic reorganization is also likely in order; these countries would do well to start following Ethiopia's example in posting strong diplomatic personnel in China and creating China desks to manage cross-government initiatives related to China.

Unbalanced partners: Rebalance toward sustainability

Countries such as Angola that are tilted toward government engagement need to proactively court Chinese private-sector investors. A key channel is the many business associations in China, organized by sector and by region. Countries such as Zambia with the opposite tilt—essentially private-sector overheating—should strengthen regulatory capacity and oversight of Chinese firms already active in the country. A key partner could be the Chinese economic consul's office in the country, some of which already work on such initiatives as translating local laws into Chinese and assisting first-time Chinese investors in understanding local regulations.

Nascent partners: Define the dance floor

These countries likely need to recognize the full opportunity that engagement with China presents: alongside the former colonial European power and the traditional Western influences, China offers a new source of trade, investment, loans, and aid. Chinese investors are already testing the waters in these countries, but they may be little noticed because they rarely mix in local business associations and social settings. On the government front, the most critical step is to set high-level direction and determine the key areas of engagement with China—for example, infrastructure, investment, and technology—and to identify a cadence for interaction at multiple levels, including Beijing, the provinces, and the Chinese private sector. Governments should pick a few sectors to attract Chinese investment and plan targeted trips to China, as engaging provincial-level governments and business associations can turn into a snowball effect as word about new investment destinations reverberate through fast-acting Chinese kinship and regional networks.

While some lions are charging ahead, others are slumbering. The African countries that have built the most thoughtful and robust partnerships with China have many best practices to share with their neighbors. But in all countries, the full potential of the Africa-China partnership has yet to be reached. In the next chapter, we explore just how large that potential is and what it will take for businesses and governments to unlock it.

Chapter 5

THE $440 BILLION OPPORTUNITY: UNLOCKING THE FULL POTENTIAL OF THE AFRICA-CHINA PARTNERSHIP

众人拾柴火焰高

The fire burns high when everyone brings wood to it
—Chinese proverb


© Lin Qi

The Africa-China partnership, which has accomplished so much over the past two decades, is poised to accomplish much more. Our analysis suggests that accelerated Chinese investment could bring Chinese firms in Africa annual revenues of $440 billion by 2025—and that this business growth will enable greater productivity, millions of new jobs, and accelerated development for Africa's economies. But several obstacles—particularly language and cultural barriers, safety issues, and corruption—could put the sustainability of the relationship at risk if both sides do not actively work to mitigate them. To tackle these challenges and unlock the full economic potential of the Africa-China partnership, businesses and governments will need to take decisive action to strengthen ties, explore new models for business growth and collaboration, and translate Africa's demographic and resource advantages into sustained, accelerated development.

THE $440 BILLION PRIZE

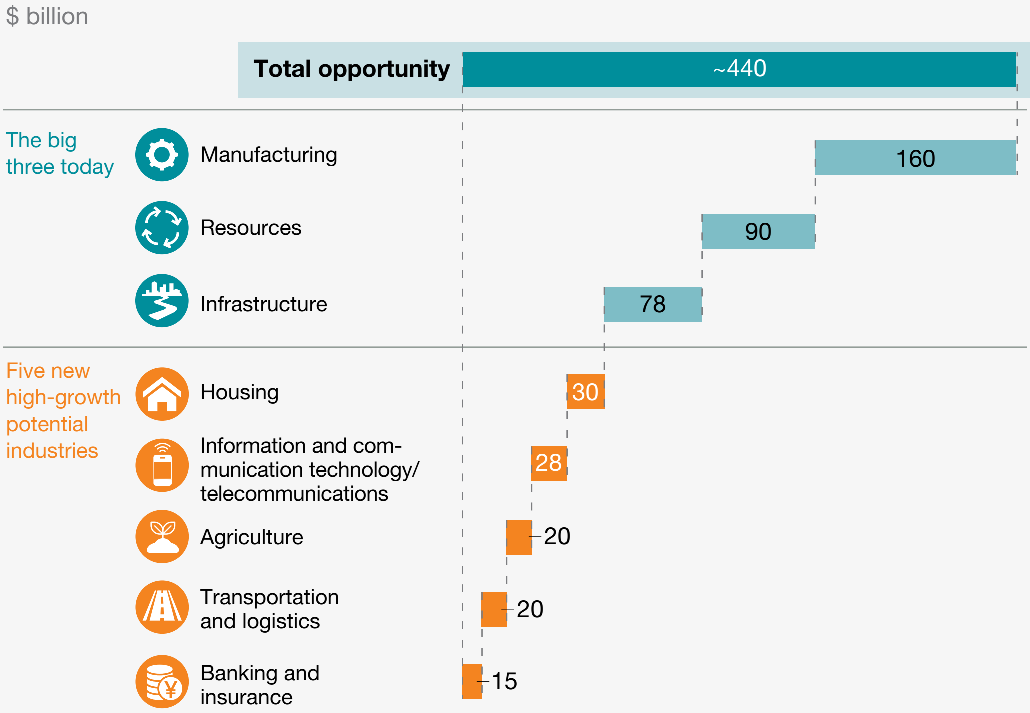
How will the Africa-China economic partnership evolve over the decade ahead? One proxy for the overall health of that partnership is the revenues of Chinese-owned firms across Africa, which amounts to approximately $180 billion today. We see two scenarios for how those revenues might grow. In the first, relatively conservative scenario, which we might label "business as usual," the revenues of Chinese firms in Africa grow in line with the market to reach annual revenues of $250 billion in 2025. In this scenario, Chinese firms would need to simply hold their current market shares steady as the African economy expands, and the same three industries that dominate Chinese business in Africa today—manufacturing, resources, and infrastructure—would dominate in 2025 as well.

While that scenario would bring a healthy contribution to Africa's economy, we believe much more is possible. Specifically, we see a second scenario—call it the "accelerated growth" scenario—in which governments on both sides and private-sector firms seize new market opportunities. By expanding aggressively in both existing and new sectors, we believe these firms could reach revenues of $440 billion in 2025. In this scenario, not only do the three established industries of Chinese investment grow faster than the economy but Chinese firms also make significant forays into five new sectors: agriculture, banking and insurance, housing, information communications technology (ICT) and telecommunications, and transport and logistics (Exhibit 18). With a handful of exceptions, Chinese firms have so far invested little in these five high-growth-potential industries.

This expansion could start with Chinese firms moving more strongly into sectors related to the ones they currently dominate. Already, Chinese construction firms are moving into real estate and housing, and given Africa's rapid urbanization, we foresee this trend continuing. EPC contractors are expressing interest in creating logistics services that complement the infrastructure they are building. Another part of this accelerated growth could come from

Exhibit 18

In the "accelerated growth" scenario, Chinese firms could realize $440 billion in revenue growth by 2025.



NOTE: Numbers may not sum due to rounding.

SOURCE: *Lions on the move II: Realizing the potential of Africa's economies*, McKinsey Global Institute, 2016; "Infrastructure financing trends in Africa—2015," The Infrastructure Consortium for Africa, 2015; Bilateral trade database, International Trade Centre Trade Map, 2015

Chinese firms more fully applying formulas that have proved successful in China to markets in Africa. For example, the models that digital giants such as Alibaba, Didi Chuxing, and Tencent have innovated for the Chinese market—including seamless payment systems and business-to-business platforms designed for small businesses—could be adapted to serve the needs of the African market as well. Likewise, Chinese dairy, livestock, and other agricultural companies have grown over the past 20 years by sourcing from small farmers and local cooperatives, an agricultural ecosystem similar to that found in many African countries. Chinese agricultural technologies, such as smaller machinery suitable for smallholder farmers, are a good fit for the African market. Exporting these and other suitable business models and products to Africa could accelerate business growth significantly.

Notably missing from our scenario is a downside scenario in which Chinese investment shrinks at an aggregate level across Africa. Even in the very unlikely situation that the Chinese government's interest in Africa cools, our research shows that Chinese investment in Africa is market-driven, undertaken in large part by private firms that find promising market niches and invest their own capital. It is difficult to imagine any single shift (other than a major epidemic or global war) that would drive these firms from the continent as a whole. We discussed in the previous chapter how Chinese interest could diminish in particular countries, as has historically been the case in Nigeria and, more recently, Tanzania. To retain investment and growth, the countries in question should improve governance and the business environment for all investors, not just Chinese ones.

Annual investment in African infrastructure will need to double to **$150 billion.**

For the continent as a whole, however, Chinese investment appears to be relatively resilient. Recent economic headwinds in countries such as Nigeria, South Africa, and Zambia have not caused large numbers of Chinese firms to pull out. Government contracting has declined with the global drop in commodity prices, but private Chinese investors are generally unaffected, thanks to technological or scale advantages over their competition. It is also just plain hard for many investors to leave: as discussed in Chapter 2, a substantial portion of Chinese firms in Africa are making long-term commitments in the form of capital-intensive investments in factories, workshops, and real-estate projects. Presumably, local conditions would have to deteriorate dramatically before they would be willing to walk away from these investments.

What is the upside for Africa if Chinese investment and business activity on the continent accelerates? We see three main areas of benefit for African economies:

Employment. Chinese firms already primarily hire locals—89 percent of their employees are African—and underlying labor-cost trends in Africa and China suggest this figure will continue to increase. In some markets, Chinese firms employ a notable share of the workforce already: for example, we estimate that Chinese firms account for approximately 5 percent of total formal employment in Kenya. In manufacturing, Chinese companies will soon be offshoring tens of millions of jobs, and even a fraction of these landing in Africa could help with Africa's growing working-age population.[48] Particularly if African governments revamp technical and vocational training, Chinese investment could become a major source of jobs that create a pathway to the middle class in Africa.

Infrastructure. The Chinese government and Chinese firms will need to continue to invest and engage in infrastructure to fill Africa's financing gap. Africa's spending on infrastructure is estimated to be $80 billion in 2015 in nominal terms but, as a share of GDP, infrastructure investment has remained at around 3.5 percent, less than the 4.5 percent that MGI research has found is necessary each and every year until 2025.[49] In absolute terms, this means doubling annual investment in African infrastructure to $150 billion. In addition to funding, Chinese firms' involvement in contracting and execution helps African nations get a better bang for the buck due to their efficient cost structures.

Taking a step back, African nations today are in some ways where China was a generation ago. In the past three decades, inbound FDI combined with China's own economic management helped the country transform itself, resulting in the fastest sustained rise in living standards in human history.[50] Now, Chinese investment could play a role in helping

48 According to Justin Yifu Lin, a former chief economist at the World Bank, "China is on the verge of graduating from low-skilled manufacturing jobs. . . . That will free up nearly 100 million labor-intensive manufacturing jobs, enough to more than quadruple manufacturing employment in low-income countries." See J. Esteban, J. Stiglitz, Justin Lin Yifu (eds.), *The Industrial Policy Revolution II: Africa in the Twenty-first Century*, Springer, 2013.

49 Ibid. *Lions on the move II*, MGI, September 2016.

50 "China has the world's fastest growth in living standards," China.org.cn, 2013.

Africa do the same. If Africa could lift just half as many people out of poverty as China has in the past three decades, it could eliminate extreme poverty within its borders.[51]

TO REALIZE THE FULL OPPORTUNITY, THREE PAIN POINTS NEED TO BE OVERCOME

The experiences of most countries show that foreign investment is nearly always accompanied by some negative externalities, and Chinese investment in Africa is no exception. So far, the Africa-China relationship has been characterized by three growing pains in particular: corruption in some countries, language and cultural barriers, and personal safety concerns.

Corruption in some countries

In five of the eight countries we studied, corruption is Chinese businesspeople's top concern (Exhibit 19). In each of these countries, between 60 and 87 percent of Chinese firms said they paid "tips" or bribes to obtain a business license. Our interviews suggest that corruption is perceived to be a vicious cycle in these countries—one fed by perceptions on both the African and the Chinese sides.

On the African side, there is a perception among some that the Chinese are easier targets for tips and bribes than other foreigners. As one African official in charge of major government tenders told us, "It's not that the Chinese pay bribes and others don't. It's just that it's a lot easier to get them to pay." On the other hand, some members of Chinese communities in Africa have formed a strong perception that in these countries, "tips" if not bribes are necessary to get anything done. As one experienced Chinese businessman told us, "There are so many random government authorities that come to my business for 'inspections,' and I have to give them 'penalties' or 'tips' almost every time, just to get on with my work."

Our data suggests that most such bribes are small amounts, with at least 71 percent of firms in six of eight countries saying that they paid either no tips or bribes or paid tips amounting to less than 1 percent of annual revenues. But their prevalence still causes friction: in interviews with Chinese business people in Africa, we heard dozens of examples of Chinese people being targeted for bribes at African airports in order to be let across the border. One interviewee told us, "Literally the first thing that happened after I got off the airplane in Africa was that I was asked for a 'tip' to be let across the border, even though I had all my papers in order."

In addition, in two countries, corruption involves much more sizeable amounts, with 4 to 9 percent of firms responding they pay more than 10 percent of annual revenues in bribes. These bribes exact a real cost on African economies, as bribes ultimately lead to higher prices for local consumers as well as lost opportunity as some investors will inevitably take their capital to better-governed markets. Yet corruption is near the bottom of the list of barriers cited by African leaders (Exhibit 20). This mismatch of perception makes it an even more difficult barrier to overcome; unless they take this issue seriously, it will be difficult to change Chinese—or African—behavior in this regard.

51 Justin Yifu Lin, "Africa's path from poverty," *Project Syndicate*, February 19, 2015.

Language and cultural barriers

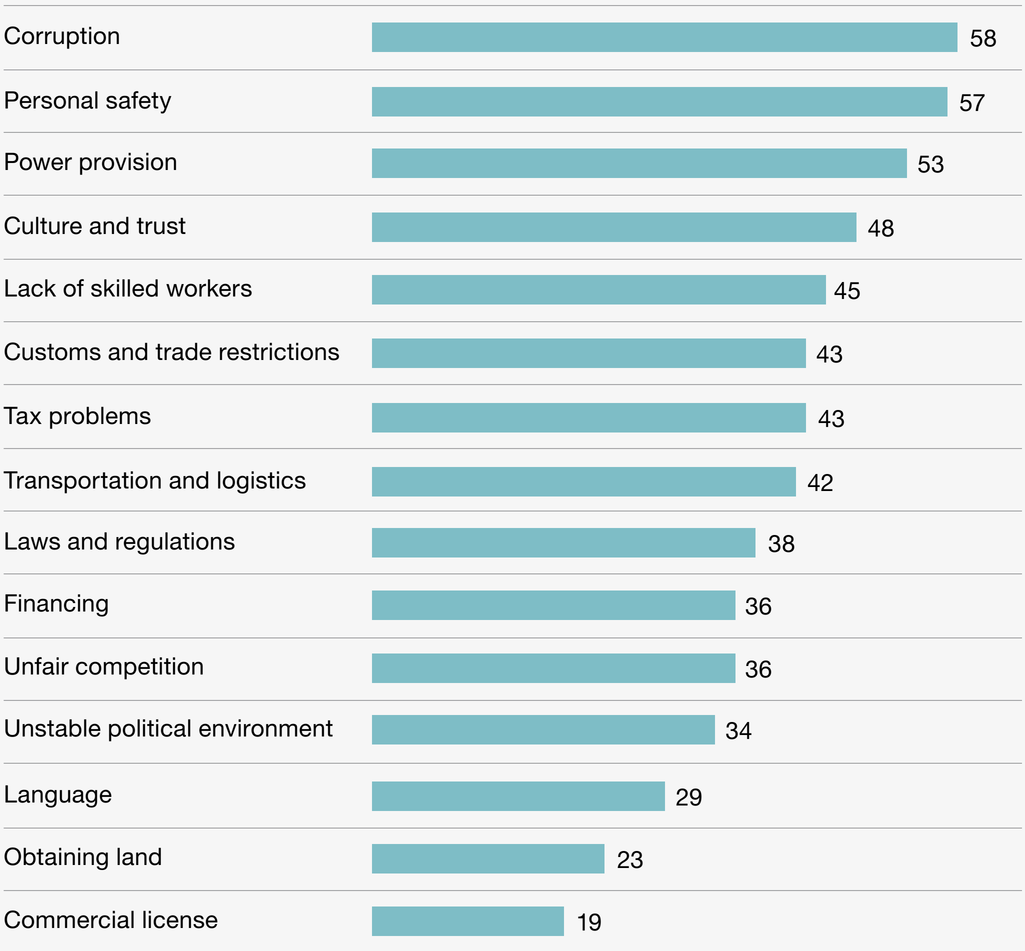
The African leaders who participated in our study identify language and cultural barriers as their top two concerns in working with Chinese firms (Exhibit 20). African leaders who routinely deal with Chinese in both business and government worry about details—or even major ideas—being lost in translation. Leaders also worry that Chinese firms have a tendency to be transactional in their approach to dealing with Africans instead of building strong relationships.

African government officials also identify language barriers as the root cause in cases where there has been widespread ignorance of local regulations (their third-cited concern). Zambian officials described how a recent wave of labor law violations by Chinese firms turned out to involve mostly small entrepreneurs who simply did not realize that regulations in Zambia were different than what they were used to in China. In other countries, Chinese economic

Exhibit 19

Corruption and personal safety are the top concerns of Chinese firms in Africa.

% of Chinese firms that rated element as "medium" or "severe" barrier



SOURCE: McKinsey field survey of Chinese firms in eight African countries, November 2016–March 2017

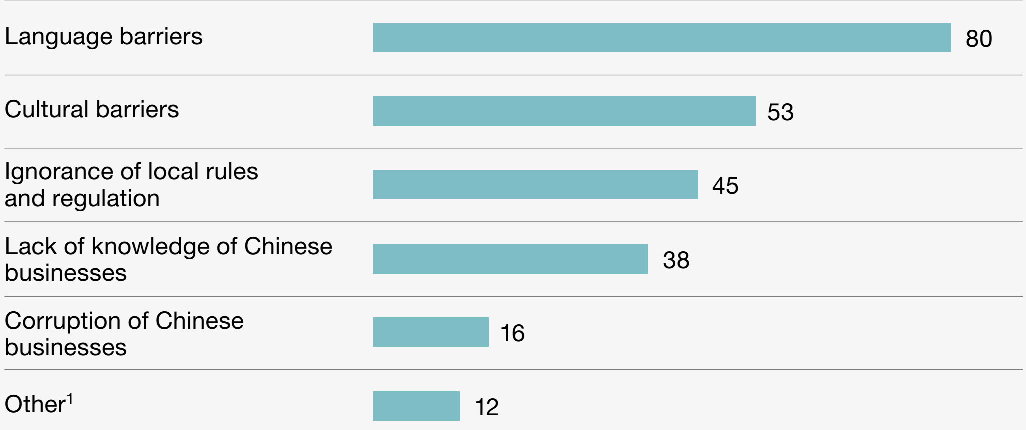
consular offices have proactively made Chinese translations of relevant immigration, customs, taxation, and labor laws available in order to head off similar issues.

By contrast, Chinese firms rate language as third-to-last on their list of barriers, although "culture and trust" is fourth—another example of a mismatch in perspectives between African leaders and Chinese firms (Exhibit 20).

Exhibit 20

African leaders overwhelmingly identify language and culture as the top barriers to overcome.

% of leaders who named element as a barrier



1 Includes lack of local content and support from major institutions, as well as poor personal relations.

SOURCE: McKinsey local stakeholders survey on Chinese investment in eight African countries, November 2016–March 2017; ENR 225 data on Chinese contractors' global market, *Engineering News-Record*, 2016

Concerns about personal safety

The second-biggest concern of the more than 1,000 Chinese firms we surveyed is personal safety (Exhibit 19). One Chinese interviewee described how he felt that some locals see Chinese as "walking ATMs." Of course, African and non-Chinese foreigners also experience crime, perhaps at even higher levels. And perceptions about crime have clearly not dampened the resolve of current Chinese entrepreneurs to stay in Africa and continue to grow their businesses. As highlighted earlier, three-quarters of survey respondents say that they are optimistic about their future in Africa. What the survey results do not show, however, are the number of Chinese investors who elect to stay away because of concern for their safety.

ACTIONS FOR ACHIEVING ACCELERATED, SUSTAINABLE GROWTH

Given these challenges and opportunities discussed thus far, how can the Africa-China relationship realize accelerated, sustainable growth? The multifaceted nature of the relationship means that everyone—African or Chinese, government or private sector—has a role to play. We suggest ten specific actions to be taken by African and Chinese businesses and governments (Exhibit 21).

Exhibit 21

We offer ten recommendations to accelerate the Africa-China partnership.

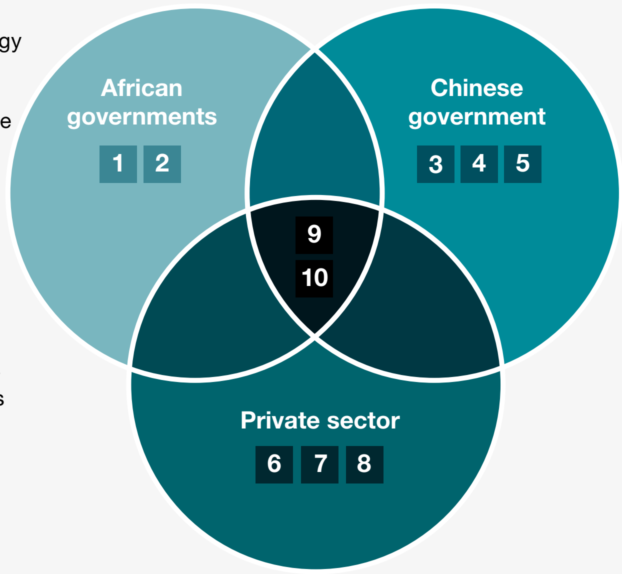
1 Define China strategy

2 Build China-capable bureaucracy

3 Open government financing to private Chinese firms

4 Extend responsible business guidelines to private Chinese firms

5 Use results-based aid approaches



6 *Chinese firms:* Explore brownfield growth options

7 *African firms:* Decide where and how to play

8 *African firms:* Drive step-change in productivity

9 Establish agriculture demand deal

10 Switch to PPP[1] model for infrastructure

1 Public-private partnerships.

SOURCE: McKinsey analysis

Governments: Enabling accelerated business growth and economic development

While the acceleration of the Africa-China partnership will in large part be business-driven, governments both in Africa and China can do much to enable increased investment, growth, and development through better governance. We recommend five specific actions.

1. African governments can define a clear China strategy.

The most important step African governments could take is to simply define what they want from the Africa-China relationship and to draw up some simple steps for getting there. Eighty percent of the African leaders we surveyed said that their organizations currently lack a China strategy. And as we mentioned in Chapter 4, the Chinese government also believes that building the Africa-China relationship would be helped by African governments being clearer on what they want from it.

Every country needs to think through what a good China strategy means for its unique context. In the previous chapter, we profiled two of the few countries that shaped relatively advanced China strategies: Ethiopia and South Africa. Given their radically different contexts, these two countries have rightly followed different strategies. Other countries should also customize their strategies according to their contexts, but we have identified five common elements to a good China strategy:

- Clearly and explicitly link the China strategy to national industrial policy, including incentives for foreign investment that incorporate key technologies, talent and skills initiatives, and revamped strategies for SEZs (see Box 7, "Fixing the special economic zone model in Africa").

Box 7

Fixing the special economic zone model in Africa

A special economic zone (SEZ) offers a differentiated competitive environment compared with the base economy. It often includes simplified access to land and currency, infrastructure, and favorable labor and trade regulations. Successful SEZs have created business environments that attract substantial volumes of foreign investment. The benefit for the host country is increased investment, trade, job creation, and industrialization.

Achieving widespread industrialization in Africa will involve fixing the SEZ model, as Africa's track record has been less than stellar; the World Bank has described them as "underperforming" compared with their Asian and Latin American counterparts.[1] Engagement with China could be a part of the solution: given China's current dominance in global manufacturing, many of the firms that African SEZs need to attract to be successful are likely Chinese. Chinese entities are already playing a number of roles in African SEZs: developing zones in Ethiopia, codeveloping a zone in Egypt, constructing several zones in Ethiopia, managing and operating a zone in Nigeria, and of course setting up investments inside zones across the continent.

Our interviews with African government officials, Chinese industrial firms, and zone developers illuminated a few lessons for African countries to consider in the quest to improve their success rate with SEZs:

Set a clear legal framework and then give the zone operator autonomy. In the African context, firms often note that one of the major advantages of SEZs is that they are removed from normal bureaucratic processes. African governments can thus consider defining clear legal frameworks and then allowing the zone operator—whether a parastatal or a private zone developer—strong autonomy in day-to-day execution within those boundaries.

Software, not just hardware. Quality infrastructure is critical to the success of SEZs, but too often governments reflexively focus on putting up new buildings or other "hardware" showpieces that look good on brochures and official visits but are only somewhat aligned with what firms need to run well. Instead, governments should find the right balance between the hardware and critical "software"—such as administrative efficiency, economic incentives, and land rights—that will make a difference for firm-level economics.

Design around specific value chains and subvalue chains. African nations have too often followed the "build it and see what comes" approach to SEZ development. Instead of building a zone open to a general set of industrial firms, countries should consider specifying the cluster of industries that should be collocated into each SEZ, then designing sector-specific incentives, competitive matching with policies offered by other countries, targeted investment attraction activities, and connections with local supplier firms. This approach will also naturally help prioritize which relationships need to be built with Chinese provinces rich with firms who focus on that subsector or value chain.

1 Thomas Farole, *Special economic zones in Africa*, The World Bank, 2011.

- Define national financing policies that outline clear guidelines for when to use Chinese versus multilateral financing, especially for infrastructure projects.

- Carefully consider local content and protectionism, particularly for contracting and for government tendering, including transition periods to encourage localization of industrial value chains.

- Establish immigration policies that balance the imperative for local talent development with the opportunity for skills transfer from Chinese workers.

- Link the China strategy to national trade policy that not only considers tariff levels but also emphasizes trade facilitation to help African firms sell more value-added products and services to China.

Beyond the country level, African leaders should consider regional strategies: on select issues such as trade, regional associations such as the East African Community (EAC), the Economic Community of West African States (ECOWAS), and the South African Development Community (SADC) may be more effective vehicles to advance collaboration on a more level playing field with China. In addition, regional bodies such as the African Development Bank and the African Union may play a role in encouraging cross-country initiatives, such as those on industrialization and infrastructure development.

2. African governments can build a China-capable bureaucracy.

Most African governments we encountered are woefully understaffed when it comes to all things China-related. As noted in the previous chapter, Ethiopia is an exception. It has appointed Chinese-speaking liaison officers to facilitate investments from China, and it regularly arranges investment promotion trips to various Chinese provinces.

To increase their China-related capacity and capabilities, other African governments can take five key steps:

- Create a China desk to coordinate all China-related initiatives across government.

- Establish a talent pipeline that tracks each country's share of the 50,000 African students studying in China, and conduct outreach to attract them to national service.

- Define career ladders in government for talent with Chinese language skills and experience, making sure they receive mentorship, meaningful roles early in their career, and exposure to multiple parts of government.

- Set up provincial-level offices in China to help with investment promotion and linkages with provincial and local governments.

- Cocreate an Africa-China management university, much like how Chinese officials in the past generation received managerial capacity-building training sponsored by the government of Singapore. The China Europe International Business School (CEIBS) Africa is a start in this direction, providing its African participants management training through modules in Accra, Ghana; Shanghai, China; and Zurich, Switzerland.

3. The Chinese government can extend government financing to private Chinese firms.

As discussed in Chapter 2, private firms make up 90 percent of all Chinese enterprises in Africa. To date, however, the vast amount of funding that the Chinese government has pledged for economic development in Africa—$60 billion through FOCAC in 2015, and a share of the even larger Belt and Road initiative—has been inaccessible to Chinese private-sector firms.[52] Yet we have seen the enormous impact that Chinese private-sector firms have had in Africa: aggressively investing and reinvesting their capital, filling critical market niches, and employing locals and conducting skills training at a higher rate than SOEs. This impact has been achieved largely without the help and backing of the Chinese government. With government support, private firms could be an even more powerful force in Africa's development.

4. The Chinese government can extend responsible business guidelines to private Chinese firms.

If the Chinese government extends the availability of financing to private firms, it can also expect those firms to follow higher standards for responsible business. Private Chinese firms are typically nimble, decisive, and quick to localize, yet they can also be prone to insufficient due diligence, an ignorance of local regulations, and a tendency to cut corners. Even as it unleashes the energy of the private sector in Africa, the Chinese government should work to encourage better business practices in its private-sector companies operating there. As discussed in this chapter, corruption is common in the interactions between Chinese firms and African officials in several African countries, and on this issue, China could do more to lead the fight against corruption.

The Chinese government has a blueprint it could follow: it has already issued multiple guidelines for SOEs, including the *2007 Guidelines to the state-owned enterprises directly under the central government on fulfilling corporate social responsibilities*.[53] In addition, President Xi Jinping has led a highly publicized push within China to root out corruption domestically—an effort that has involved outlining limits for appropriate business dinners, gifts, and other business expenses for SOEs. The government should now consider extending these guidelines to the Chinese private sector as well. In addition, the Chinese consular offices should work with Chinese business associations in each African country to disseminate these guidelines and train firms on their application.

5. The Chinese government can make a step-change in its aid approach.

As discussed in Chapter 1, the Chinese government and the Chinese people give a lot of aid to Africa—some $6 billion in 2015 alone—and have been doing so for a long time. Yet some of China's aid efforts are siloed and could be made more effective. The Chinese medical teams that have been providing services for decades are sequestered in far-off regions of

52 "The FOCAC opened, Jinping XI committed $60 billion investment," *BBC China*, 2015.

53 "Guidelines to the state-owned enterprises directly under the central government on fulfilling corporate social responsibilities," State-Owned Asset Supervision and Administration Commission of the PRC.

The Chinese government gave

$6 billion

in aid to Africa in 2015.

their host countries, with few linkages to the overall African health system. The agricultural demonstration centers typically fall into disrepair as soon as the Chinese technical staff leave. It's time for a new, results-oriented model for Chinese aid to Africa. This will entail three major shifts:

- Shift from inputs to outcomes. In medicine, for example, the emphasis should shift from "we provide medical teams" to "we provide disease reduction."

- Shift from lone actor to engaging the private sector. A corollary to the previous point is that the execution of aid projects could be opened up to whatever sort of organization is best positioned to deliver results, including the private sector. Results-based contracting approaches and market-shaping incentives that involve engaging with private-sector firms could help make rapid progress, especially in areas such as smallholder agriculture, where farmer livelihoods are closely linked to market development.

- Shift from grantor to partner. Traditionally, the Chinese define the parameters of the aid they provide. This shift would be to a partnership in which China works with African governments to jointly identify goals and approaches.

The private sector: Taking the Africa-China partnership to new heights

As Chinese firms become a more prominent and permanent presence in African economies, there are exciting growth opportunities for both Chinese- and African-owned businesses. As discussed earlier in this chapter, Chinese firms can accelerate the growth of their own revenues—and of the broader economy—by developing new businesses in new sectors. Very often, the way to unlock these opportunities is to deepen collaboration between Chinese firms and their African suppliers, customers, and partners. We recommend three actions in particular.

6. Chinese firms can explore new market entry strategies.

To date, the vast majority of Chinese investments in Africa have been greenfield investments, and only 12 percent of those investments are set up as joint ventures. This current state is in part due to the sectors Chinese firms have invested in to date: Chinese manufacturers and construction contractors find little use for local partners that may be less efficient and more expensive. As Chinese investment expands into new sectors of investment, there will be a need to consider greenfield investment approaches. These new sectors of opportunity are characterized by incumbent firms in Africa with local market knowledge, substantial market share, and strong connections. In this regard, we believe the Industrial and Commercial Bank of China's 20 percent stake in South Africa-based Standard Bank could be the herald of much more to come. Chinese banks seeking higher returns internationally can look to the slate of well-run African banks as acquisition targets. Another opportunity is in tech-enabled microsavings, microfinance, and microinsurance to reach the masses of unbanked and underbanked consumers and small businesses in Africa. Here, a mash-up of Chinese and African digital consumer finance models—for example, matching Alibaba's small business services with the risk assessment intellectual property of Discovery, a pioneering South Africa-based health insurer—have the potential to create startlingly innovative models for financial inclusion.

Chinese firms could consider joint ventures, mergers and acquisitions (M&A), and other partnership options to accelerate rapid entry and scaling, especially in consumer-facing sectors. One way to explore these options would be for Chinese firms to join local business associations to get to know the landscape of existing businesses and potential partners. For example, there are currently zero Chinese members in the Kenya Association of Manufacturers. This action will also no doubt help to increase local sourcing.

7. African firms can decide where and how to play.

The contents of this report likely come as a surprise to many African incumbent firms who did not realize that 10,000 nimble, confident, and profitable Chinese firms are already on their turf. This realization also illuminates a core strategic question for African firms: are you in the right businesses, and do you have the right partners and business models to succeed in an increasingly competitive world? Some firms should move to white spaces in their markets that are better protected from Chinese competition. Others are well positioned to defend their market position. Still others may find it in their interest to court Chinese partners—whether for capital, technology, or simply avoiding competition—and become the counterparties to the M&A, joint ventures, and partnerships that we recommend Chinese firms consider in the next wave of investment.

8. African firms can raise their game.

In addition to reconsidering their overall business strategy, African firms have an additional "no regret" move: drive a step-change in productivity to match Chinese efficiency and speed. We encountered many examples of African firms rising to the challenge: in Zambia, local traders told us that they now open several hours earlier to match the hours of their Chinese competitors.

As more Chinese (and other) firms enter Africa, competition will intensify, price points will drop, and margins will erode unless African firms become more efficient. Whether by implementing lean operations improvements, adopting a performance-based incentive system, or rationalizing costs, African firms must now meet a higher, world-class bar if they are to compete.

Cross-sectoral partnerships: It takes two to tango

Perhaps the most exciting frontier in the Africa-China partnership is innovation in development models where the public and private sectors overlap. We see two big opportunities.

9. Boost trade and production through a government-to-government agricultural agreement.

Africa has 60 percent of the world's remaining arable cropland and a suitable climate for growing products in high demand in the Chinese market—yet only 4 percent of its exports to China are agricultural products. At the same time, two generations of Western-backed "push" models of agricultural development, which attempt to convince African farmers to use better seeds, fertilizer, and methods, have largely failed to improve yields. What's needed is a complementary "pull" approach: a big new market that guarantees sales if production increases. That pull could very easily come from China.

African governments and the Chinese government should enter into a long-term demand agreement for China to purchase agricultural commodities from Africa. Such an agreement would give African farmers the confidence to invest in improving yields and also spur investors to create the agricultural value chains linking farmers to storage, processing, and logistics facilities.

10. Switch from debt-fueled contracting to a public-private partnership model for infrastructure.

The past decade's infrastructure building boom in Africa has been fueled by government debt, often by African governments taking concessional debt from the China EXIM Bank or China Development Bank and hiring Chinese contractors to do the work. Many African governments are reaching their debt ceilings; one example is Zambia, which has increased its debt ceiling three times in the past three years, from $2 billion to $3.5 billion.[54] The government of Zambia has even stopped paying contractors for work already performed, with some local contractors telling us they have waited up to eight months for payment. MGI estimates Africa's spending on infrastructure was $80 billion in 2015 in nominal terms—but, as a share of GDP, infrastructure investment has remained at around 3.5 percent a year, less than the 4.5 percent that MGI research has found is necessary each and every year until 2025. In absolute terms, this means doubling annual investment in African infrastructure to $150 billion. Clearly, a new model of financing infrastructure development is necessary.

We believe an answer is to shift to public-private partnership (PPP) and blended finance models, in which national governments take on less debt and share financing responsibility with external partners such as private-sector firms and multilateral institutions. Better enabling the private sector to take on the projects that have greater market viability would free up government budgets to finance projects that are less likely to generate market returns—projects such as water, sanitation, and rural infrastructure.

This shift will require new capabilities because PPPs and blended finance models are more complicated than EPC contracting. African governments will need to structure projects to entice private-sector participation. To make these new models possible, African governments must create PPP legal frameworks with enough detail and substance that investors can trust their provisions. They must also manage consortia of partners playing different roles rather than single sponsor-contractor relationships. Several African governments are already piloting these models: the Kenya Electricity Transmission Company Limited (KETRACO), for instance, is now in the process of trying to create the first PPP in power transmission in Africa.

On the private-sector side, sophisticated risk and contingency assessment skills will be required. It is in Chinese private-sector firms' interest to build these capabilities or risk being cut out of the next decade's biggest building projects in Africa. In addition, there is an important role for intermediating institutions. Sinosure, the Chinese government–backed insurer, can develop PPP-friendly risk products by asset class. Multilateral development institutions such as the African Development Bank, the New Development Bank, and the

54 "Debt ceiling increased," *Zambia Weekly*, issue 266, week 10, 2016.

World Bank can provide concessional financing for key deals and independent technical advisory services for PPP consortia.

READING THE TEA LEAVES: FIVE PREDICTIONS FOR THE FUTURE

So far, we have covered the facts we discovered about the Africa-China economic relationship, the potential opportunity, and recommendations that we hope will be realized. In doing this work, we have also come to a few predictions—informed but still judgment-based views on what *might* happen.

- Some African countries will **default on Chinese debt,** further straining the current EPC contracting model. As already discussed, several countries such as Zambia are already bumping up against their debt ceilings. As a result, China may be forced into additional rounds of debt forgiveness—and rethinking its debt-fueled infrastructure provision model in Africa (and beyond).

- There will be **winners and losers** as approximately five manufacturing clusters emerge in Africa. The relatively scattered African manufacturing sector will consolidate into a few megaclusters, on the order of China's Guangdong or Jiangsu, and they will be globally competitive, serving export markets as well as domestic and regional ones. There will be a race between countries to win with such clusters, for those that emerge will likely preclude their neighbors from doing the same.

- Half of incumbent family-owned businesses (for example, in East Africa) **will die.** Despite our hopes that African firms will take seriously the recommendation to drive a step-change in productivity, many incumbent firms, particularly in manufacturing, are so far behind the global efficiency frontier that their chances of independent survival are slim. They will collapse or get absorbed by others in some form. But the half that survive will be stronger than ever, producing a new class of globally competitive African firms.

- Africa will experience a **China-led digital revolution.** The models from China developed by such pioneers as Alibaba and Tencent are obvious for all to see. If the originators are too busy in the Chinese market to turn their attention to Africa, then Africa-focused Chinese hardware firms such as Tecno and Huawei may very well find an attractive opening.

- As Chinese economic growth slows, **investment flows to Africa will accelerate.** China's decelerating economic growth represents a force pushing increased Chinese investment toward Africa, as Chinese investors seek higher returns abroad. Despite fairly stringent capital controls by the Chinese government, recent rules making it easier for the Chinese middle class to invest abroad via Hong Kong–based funds will help enable this shift.[55]

55 Gordon Orr, "It's now easier for China's middle class to invest overseas," McKinsey China blog, January 18, 2016.

Predicting the future is always a fraught business, and we don't pretend to know exactly what will happen. What we do know for certain, however, is that Chinese firms are already in Africa in a big way, impacting the lives of millions of workers and hundreds of millions of consumers in almost every corner of the continent. In short, Africa's economic relationship with China is here to stay. The dance of the lions and dragons will continue, and we expect it to take many forms. This dance will be a riveting—and important—one to watch, as a better and brighter future for the continent will need to involve Chinese partnership and participation.

Over dinner one night in Lagos, at the end of a long day of interviews with Chinese firms in Nigeria, we chatted with a businessman originally from China who had been in Nigeria for so long that he had acquired Nigerian citizenship. He recalled how when he first came to Nigeria in the 1970s, he was amazed by the highways around Lagos and the fancy cars on the road—neither of which existed in China at the time. Soon after he arrived, he met a Nigerian who became the manager of one of his businesses, and they are still working together today. Over the course of more than 40 years in the country, he had witnessed many ups and downs in Nigeria, but he was proud in his own way to have contributed to his adopted homeland becoming the largest economy in Africa.

Over stewed pork, stir-fried tofu, and chow mein, he raised his glass: "There is a wise saying in Yoruba: should I wash my left hand or my right hand? The answer is that the right hand should wash the left, and the left hand should wash the right. That is the way to do things. Africa is one hand; China is the other. Working together is the way to do things." Cheers to that. *Ganbei! Ma gbadun!*

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NOTE: In addition, we used eight country-level data sources (two in Côte d'Ivoire, two in Ethiopia, two in Nigeria, one in South Africa, and one in Zambia), the owning organizations of which we promised confidentiality.

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