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A Rebalancing Act for China and Africa

The Effects of China's Rebalancing on
Sub-Saharan Africa's Trade and Growth

Wenjie Chen and Roger Nord



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I N T E R N A T I O N A L M O N E T A R Y F U N D

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Overview

China and Africa have developed close economic ties over the past 20 years. China's rapid growth has boosted its demand for raw materials, many of which come from Africa, and trade has risen more than 40-fold over the period. More recently, the growing strength of Chinese enterprises has also led to rapid expansion of Chinese direct investment in Africa. At the same time, China's competitive manufacturing has provided consumer goods that were previously out of reach to low-income households across the continent.

But now China's growth is slowing and the drivers of its growth are shifting from investment and exports to domestic consumption. This shift is affecting the global economy (see the IMF's October 2016 *World Economic Outlook*) but is having a particularly large impact on commodity exporters, many of which are in Africa. Overall, Africa's commodities exports have fallen as a result of the decline in Chinese demand and the precipitous fall in world commodity prices, putting pressure on the fiscal and external accounts of many African countries. After expanding by 5–6 percent over the past two decades, economic growth in sub-Saharan Africa is expected to reach barely 1.5 percent in 2016.

How does China's new growth model affect sub-Saharan Africa? To address this question, this paper is structured as follows: It first looks at the growing ties between China and Africa; it then attempts to estimate more precisely the impact on growth through the trade channel, since trade dominates the economic ties between China and Africa. Finally, it draws some policy implications and the discussion reflects on whether this means an end of the Africa Rising narrative or merely the beginning of a new chapter.

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Growing Integration between China and Africa

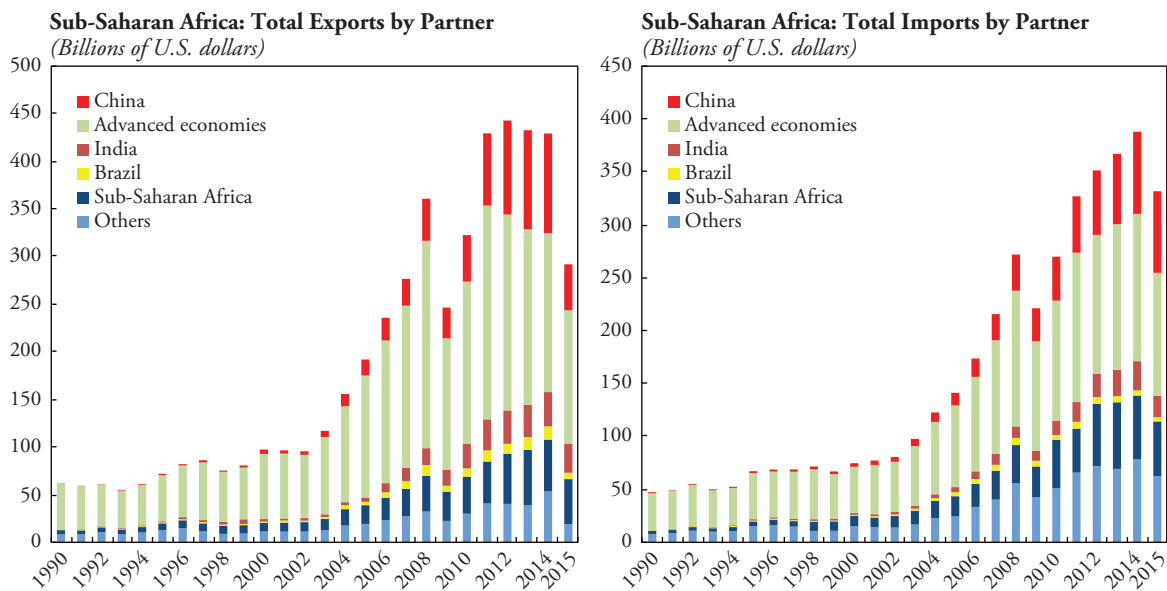
China Has Become Sub-Saharan Africa's Single Largest Trading Partner

China's rapid growth over the past 40 years has turned it into a major trading hub for most countries in the world, whether directly or indirectly through other trading partners.

Sub-Saharan Africa, where a remarkable shift in trade patterns has taken place in the past 20 years, is no exception. Advanced economies accounted for close to 90 percent of sub-Saharan Africa's exports in 1995, but 20 years later new partners, including Brazil, China, and India, account for more than 50 percent, with China accounting for about half of that (Figure 1). The story is similar on the import side. Total exports and imports have declined significantly in 2015, though the proportion of trade by destination and origin countries have remained fairly similar. By 2014, China was the single largest source of sub-Saharan Africa's imports. Fuel and metal and mineral products account for 70 percent of sub-Saharan African exports to China whereas the majority of sub-Saharan Africa's imports from China are manufactured goods, followed by machinery (Figure 2).

What has been the economic impact of sub-Saharan Africa's growing engagement with China? Access to new markets for its raw materials has spurred Africa's exports, which quintupled in real value over the past 20 years (1995-2015). But maybe even more important, by diversifying its trading partners, sub-Saharan Africa has reduced the volatility of its exports. This combination of trading partners helped cushion the impact of the global financial crisis in 2008–09, when advanced economies experienced a deep economic contraction that curbed their demand for imports. At the same time, China actually increased its contribution to the growth of sub-Saharan African exports, allowing most of sub-Saharan Africa to sustain robust economic growth during the Great Recession. Trade has also boosted living standards in Africa

Figure 1. Sub-Saharan Africa’s Exports and Imports by Partner



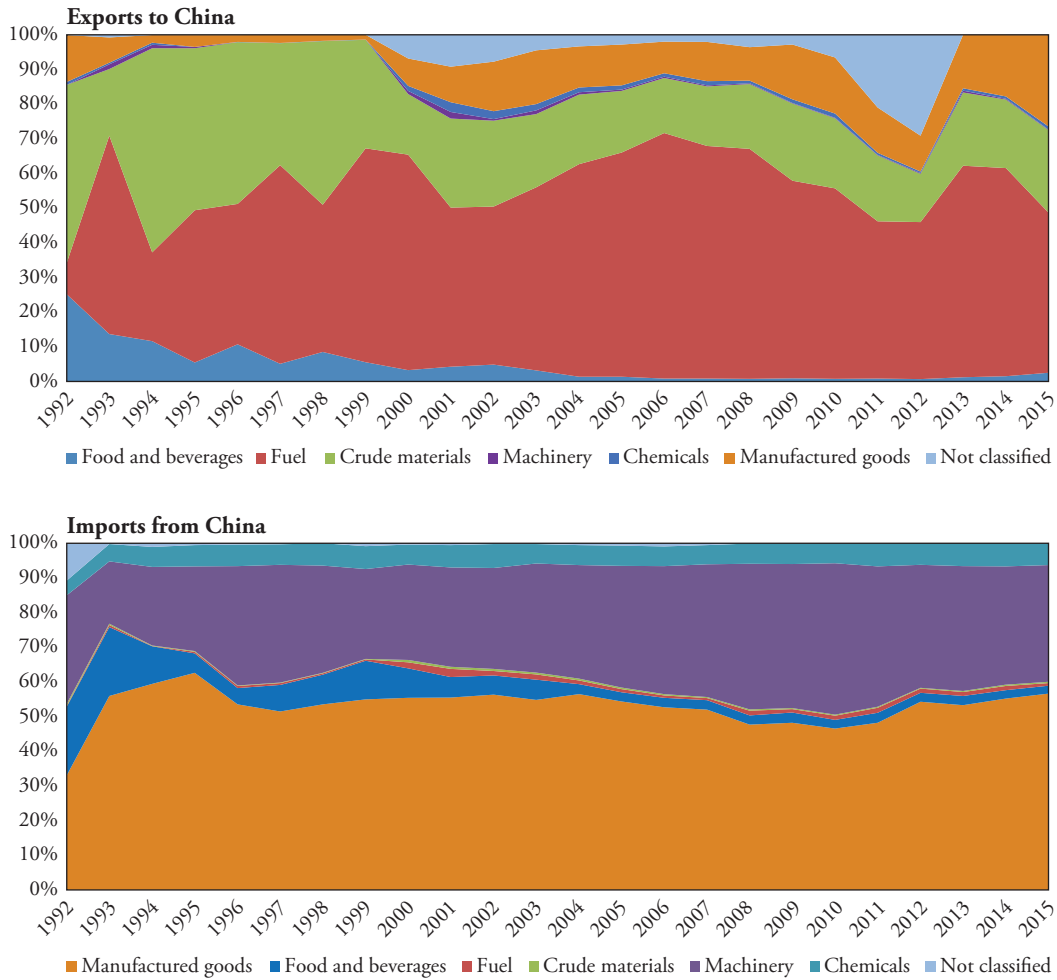
Source: IMF, Direction of Trade Statistics.
DAC: Development Assistance Committee (DAC), part of the Organisation for Economic Co-operation and Development (OECD).

through access to cheap Chinese consumer goods, from clothing to mopeds, and has contributed to lower levels of inflation in many countries.

China Is a Growing Investor and Lender in Africa

Sub-Saharan Africa has also diversified its sources of capital. China’s outward foreign direct investment (FDI) to sub-Saharan Africa has increased significantly since 2006. Official statistics indicate that it remains small as measured by its share of total FDI to sub-Saharan Africa—less than 5 percent in 2012 (Figure 3). But anecdotal evidence suggests that in reality the figure may be much higher, with a large number of small Chinese entrepreneurs establishing themselves in Africa (for example, French 2014; Chen, Dollar, and Tang 2015). In addition, Chinese loans to sub-Saharan Africa—many of them financing public infrastructure projects—have risen rapidly, and China’s share of total external debt in sub-Saharan Africa has risen from less than 2 percent before 2005 to about 15 percent in 2012. These loans have provided many African countries with a welcome new source of project financing, particularly attractive for countries with low levels of external debt following comprehensive debt relief under the Heavily Indebted Poor Countries Initiative. And Africa is becoming increasingly important for China as well. By some accounts, by 2013 about a quarter of all Chinese engineering contracts worldwide were in sub-Saharan Africa (Heritage Foundation 2016). Most of

Figure 2. Sub-Saharan Africa: Exports to and Imports from China by Product Composition
(a) (Percent)

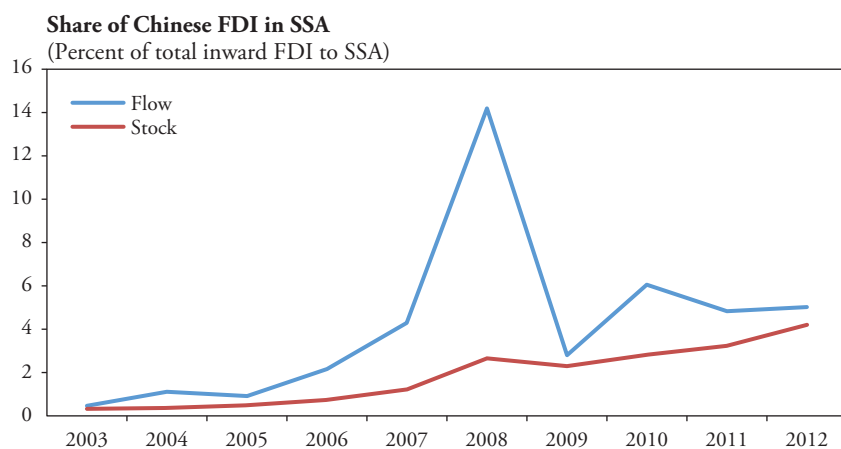
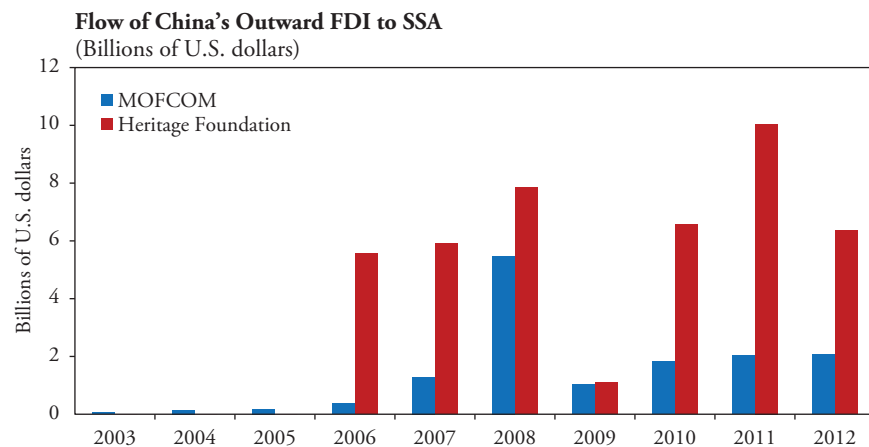


these contracts (Figure 4) were awarded in energy (hydropower) and transport (roads, autos, ports, aviation).

China and Africa – The New Balance

China’s investment-heavy, export-oriented growth model made it a growing importer of commodities. Between 2010 and 2014, China accounted for more than 40 percent of the world’s metal consumption, more than 10 percent of demand for crude oil, more than 20 percent of agricultural crops consumption, and more than 20 percent of primary energy demand (World Bank 2016). In the first decade of the century, base metal and energy prices

Figure 3. China’s Outward FDI to Sub-Saharan Africa

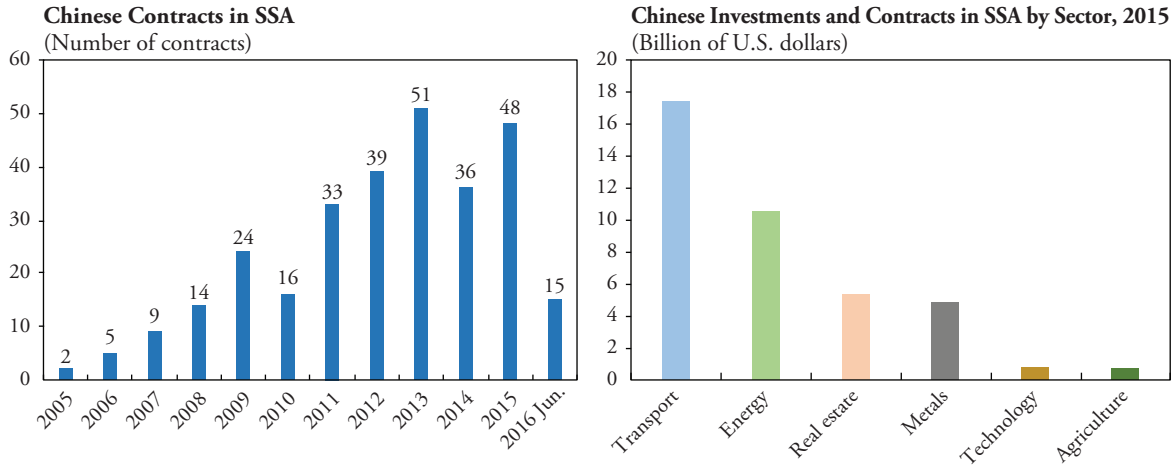


Sources: UNCTAD; Ministry of Finance, China (MOFCOM); Heritage Foundation 2016; and IMF staff calculations.
Note: FDI = foreign direct investment; SSA = sub-Saharan Africa.

rose by more than 160 percent, precious metals rose more than 300 percent, and agricultural commodities more than 100 percent. Sub-Saharan Africa’s many commodity exporters benefited enormously from this boom. But now, oil prices and many mineral prices have fallen by more than half from their peaks of the past few years, and many other commodities have suffered sharp declines (Figure 5). Futures markets suggest little recovery in prices by 2020. Moreover, lower investment in China has curbed the country’s appetite for raw materials, resulting in a sharp swing in its trade balance with sub-Saharan Africa (Figures 6 and 7).

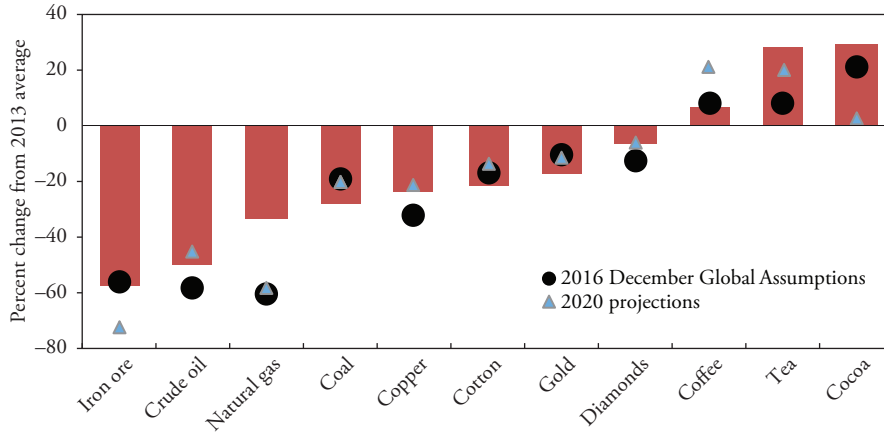
FDI is less cyclical and driven more by medium-term considerations. But a string of recent Chinese mining closures in sub-Saharan Africa (copper

Figure 4. Chinese Investments and Contracts in Sub-Saharan Africa



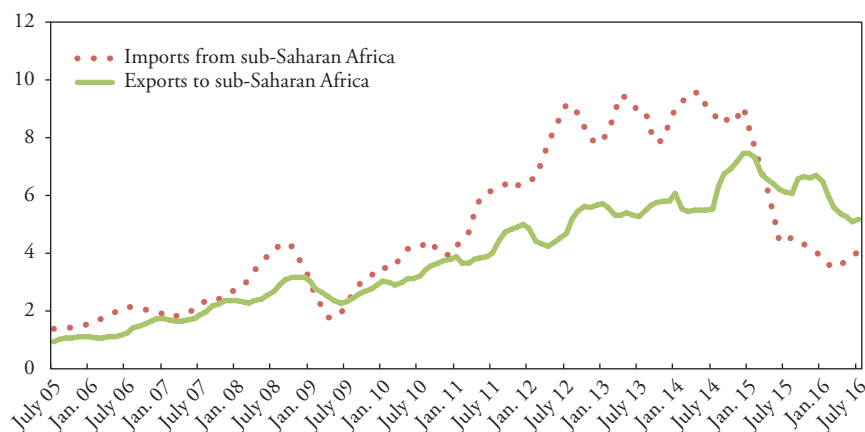
Source: American Enterprise Institute and the Heritage Foundation's China Global Investment Tracker.

Figure 5. Selected Commodity Prices, Average, 2015



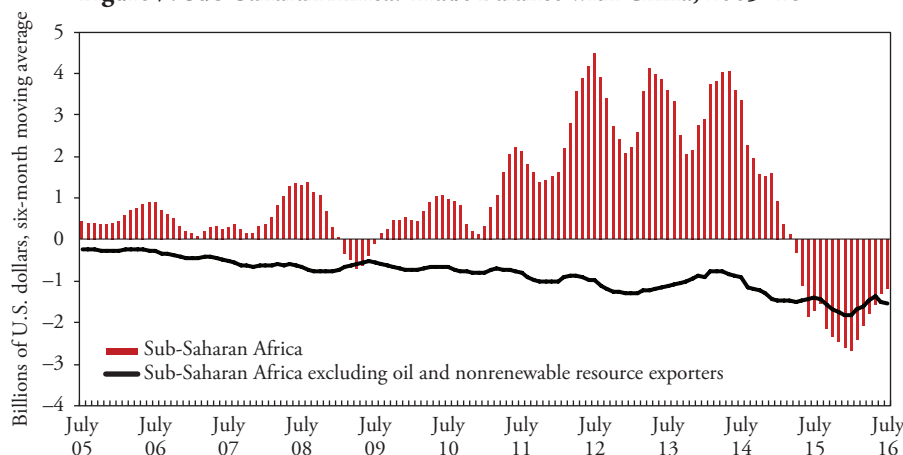
Source: IMF Commodity Price System; IMF Global Assumptions.
 Note: Besides oil, some of the main export commodities in the region are copper (Democratic Republic of Congo and Zambia), iron ore (Liberia and Sierra Leone), coal (Mozambique and South Africa), gold (Burkina Faso, Ghana, Mali, South Africa, and Tanzania), and platinum (South Africa).

Figure 6. China’s Trade with Sub-Saharan Africa
(July 2005–July 2016, billion U.S. dollars)



Source: IMF Direction of Trade Statistics.

Figure 7. Sub-Saharan Africa: Trade Balance with China, 2005–16



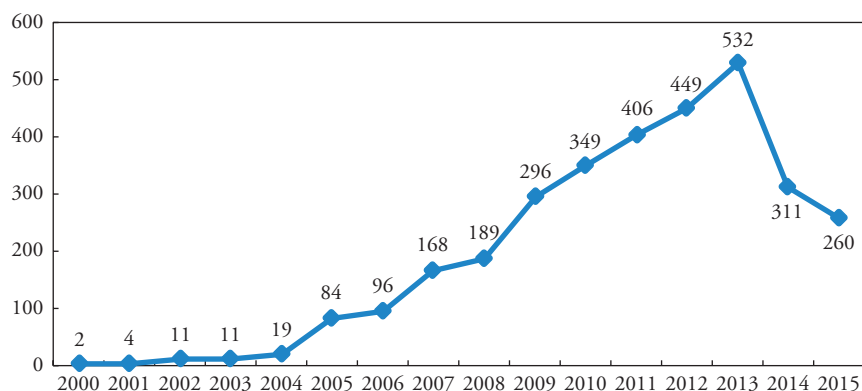
Source: IMF Direction of Trade Statistics and Regional Economic Outlook.

mines in Zambia,¹ iron ore mines in South Africa,² and the cancellation of an iron ore project in Cameroon³) suggests that returns on investment in the traditional commodity sectors are falling. Data from China’s Ministry of

¹Norimitsu Onishi, “China’s Slowdown Tarnishes Economic Boom in Copper-Rich Zambia,” *New York Times*, December 2, 2015, http://www.nytimes.com/2015/12/03/world/africa/zambia-china-economic-slowdown.html?_r=0.

²Benjamin Robertson, “More High-Cost Chinese Iron Ore Mines to be Shut This Year as Prices Tipped to Sink Further,” *South China Morning Post*, April 8, 2015, <http://www.scmp.com/business/commodities/article/1760097/more-high-cost-chinese-iron-ore-mines-be-shut-year-prices>.

³“Sundance Resources Postpones Mbalam-Nabeba Iron Ore Project in Cameroon,” *Mining-technology.com*, <http://www.mining-technology.com/news/newssundance-resources-postpones-mbalam-nabeba-iron-ore-project-cameroon-4783728>.

Figure 8. Number of Chinese FDI Projects in Sub-Saharan Africa

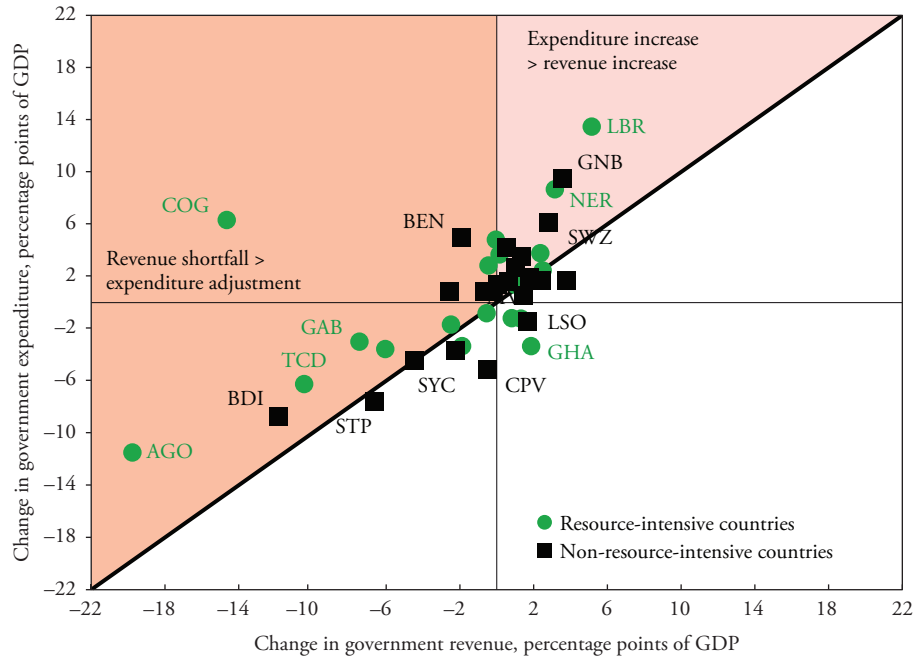
Source: Ministry of Commerce, China.
 Note: FDI = foreign direct investment.

Commerce corroborate this: the number of approved projects has been falling since 2014 (Figure 8). In May 2015, the Ministry estimated a 45.9 percent drop in China's FDI flows to Africa in the first quarter of 2015 compared with the same period in 2014. The impact extends beyond China, of course. Major planned investments in natural resources, such as the gas fields off Tanzania and Mozambique, may now need to be reevaluated.

Painful Adjustment Ahead

The immediate impact on commodity exporters has been severe. Oil-exporting countries, in particular, are experiencing sharp declines in exports, putting pressure on reserves and exchange rates. Many commodity exporters also rely on significant government revenue from natural resources and are now facing growing budget deficits and pressures to reduce spending. In Angola, for example, the fall in oil prices wiped out about half of the country's revenue base, with a loss of more than 20 percent of GDP. Lower spending levels (Figure 9), in both the public and private sectors, have led to sharply lower growth rates for oil-exporting countries, now expected to average less than 1 percent in 2015–16, compared with an average of greater than 7 percent in the preceding decade (Figure 10).

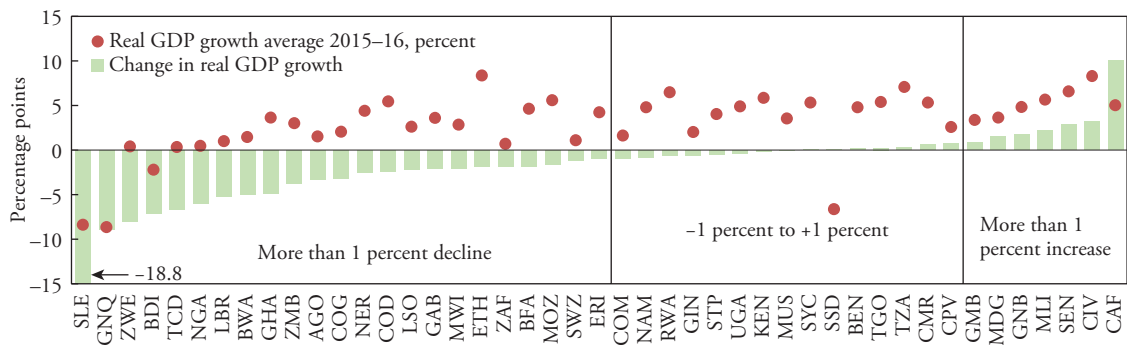
Figure 9. Sub-Saharan Africa: Change in Expenditure and Revenue, Average 2010–13 to 2015



Source: IMF 2016a.

Note: Country abbreviations are International Organization for Standardization country codes.

Figure 10. Sub-Saharan Africa: Change in Real GDP Growth, Average 2010–14 vs. Average 2015–16



Source: IMF, World Economic Outlook database.

A More Detailed Look at the Trade Channel

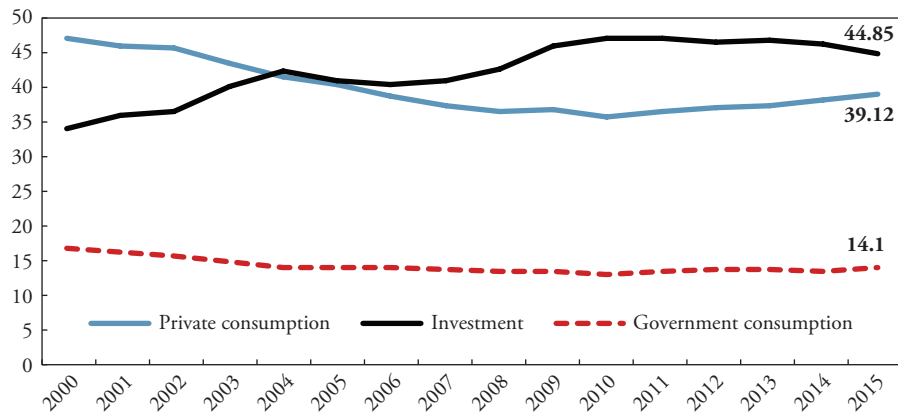
Headline economic data clearly suggest that the slowdown in China and its rebalanced growth model have had a severe impact on sub-Saharan Africa. For instance, the October 2016 IMF *World Economic Outlook* found that spillovers from China are transmitted primarily via trade links. In particular, a deceleration in China's domestic demand affects imports from trading partners, but this impact differs among countries, creating winners and losers from China's rebalancing. China's trade ties with low-income and developing economies have risen markedly in recent years, dominated by fuel, minerals, and metals. This section explores the trade channel—the dominant economic link between China and Africa—in more detail.

For most of the past 15 years, China has seen a sharp increase in domestic investment and a commensurate decline in the share of domestic private consumption as a share of GDP (Figure 11).

But this trend recently began to change. Growth in construction and real estate investment, for example, has fallen sharply. China's demand for many commodities has fallen (Figure 12), especially those commodities, such as ores and metals, related to capital- and investment-type expenditures, whereas demand for commodities associated more with consumption expenditures, such as agricultural raw materials and foods, have increased.

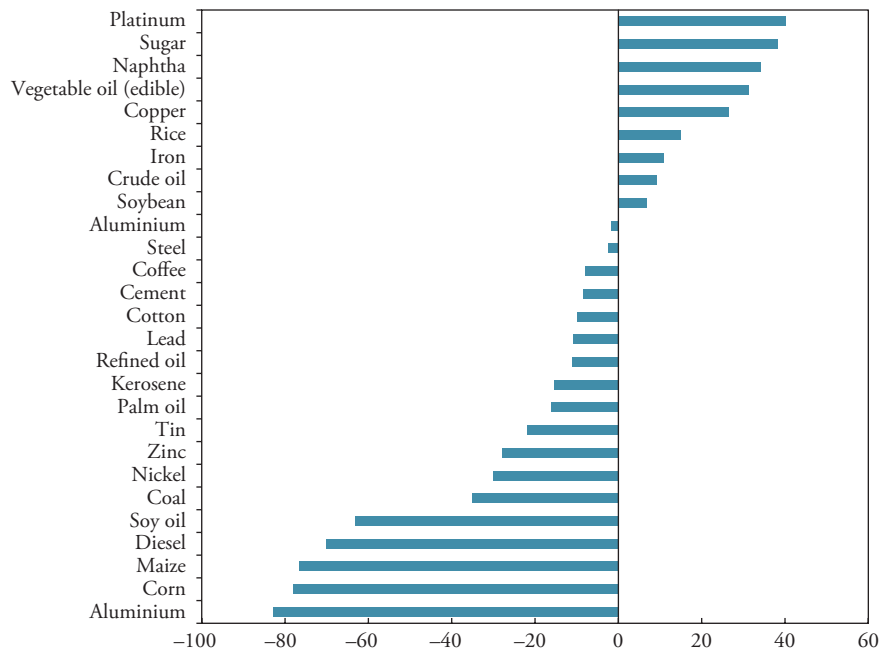
This rebalancing has affected countries in sub-Saharan Africa in very different ways. For analytical purposes, commodity-exporting countries in sub-Saharan Africa are divided into two groups: those whose exports are mainly driven by investment in China (for example, ores and metals exporters), and those whose exports are driven primarily by consumption (for example, agricultural and foods exports). Figure 13 illustrates the breakdown of commodity exporters in sub-Saharan Africa. To be included, the share of a country's commodity exports in its total exports has to be 50 percent or greater. For it

Figure 11. Chinese National Accounts
(Percent of GDP)



Source: CEIC.

Figure 12. China's Consumption Growth, Year End 2015
(Year over year, percentage)

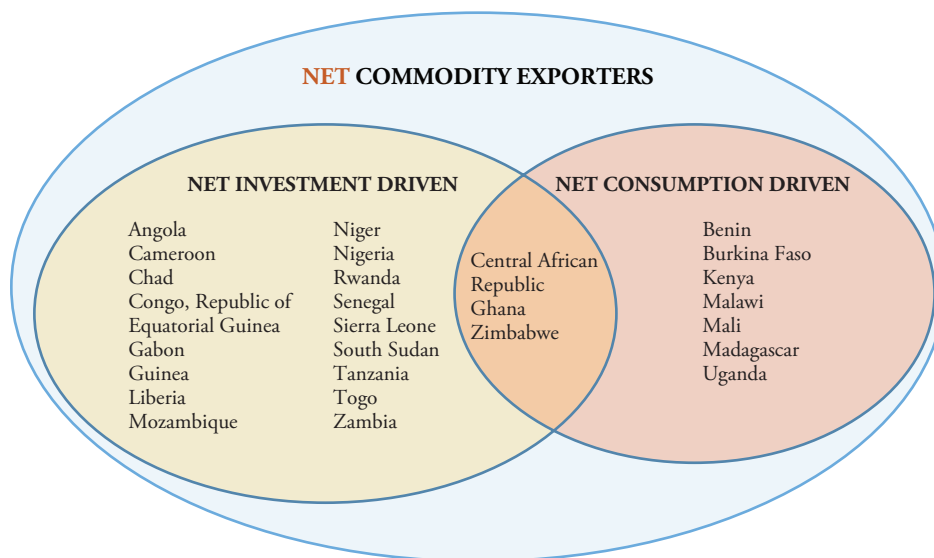


Source: Bloomberg L.P. China Customs dataset.

to be a net exporter of investment- or consumption-driven commodities, its net exports of the respective commodity has to exceed zero.

Depending on the type of commodity a country exports, China's rebalancing from investment-led to consumption-led growth is expected to affect the country differently. Because of the large role that China plays in driving the

Figure 13. Classification of Commodity Exporters



world market for investment-type commodities, its slowdown in investment is likely to have an adverse effect on investment-driven commodities exporters in sub-Saharan Africa, both because of decreases in the world price and directly through lower import demand in China. On the other hand, the boom in consumption-driven commodities is likely to have a positive impact on exporters of those commodities in sub-Saharan Africa, through a surge in world prices of those commodities and increased import demand by China. Thus, we propose the following two hypotheses:

H1: Exporters of investment-driven commodities are negatively affected by China's shift from investment-led to consumption-led growth.

H2: Exporters of consumption-driven commodities are positively affected by China's shift from investment-led to consumption-led growth.

Empirical Strategy

The hypotheses are tested by building on the literature that connects trade and growth. In particular, using a model similar to that employed in Arora and Vamvakidis (2004) and Papageorgiou and Xie (2016), growth regressions are used to assess the impact of China as a trading partner on the growth of sub-Saharan African countries after controlling for a host of other explanatory variables. The sample of sub-Saharan African countries is then divided into different types of commodities exporters, that is, investment and con-

sumption driven, to examine the impact of China on the respective groups' growth.

The following growth regression is estimated:

$$\text{Growth}_{i,t} = \alpha_i + \beta_1 \times \text{Trade Partners' Growth}_{i,t-1} + \beta_2 \times X_{i,t} + \beta_3 \times Z_i + \varepsilon_{i,t}$$

where:

Dependent variable: Real GDP per capita growth of country i in year t

Variable of interest: Trade partners' growth of country i at time t , weighted by country i 's exports, more specifically,

$$\text{Trade Partners' Growth}_{i,t} = \sum_j \left[\left(\frac{GDP_{j,t}}{GDP_{j,t-1}} - 1 \right) \times \left(\frac{\text{Exports}_{ij}}{\text{Exports}_i} \right) \right]$$

where each j represents a trading partner country to country i .

Trading partners are further divided into specific groups:

Advanced economies (AE), emerging markets (EM), and sub-Saharan African countries (SSA) (see appendix for detailed country classifications)

The group of countries in EM are divided into China and non-China

Controls ($X_{i,t-1}$) (expected signs): Initial real GDP/capita (-), domestic investment (+), FDI (+), inflation (-), trade openness (+), conflict (-), commodities terms of trade (+), country fixed effect (Z_i)¹

Sample period: Annual data from 1980 to 2014.

Because initial real GDP per capita that precedes the dependent variable by five years is included, this is in essence a dynamic panel regression model, and thus suffers from the Nickell (1981) downward bias on the estimate of the coefficient of the lagged dependent variable.² The coefficient of interest, however, is on the explanatory variable, that is, trading partners' growth, which is not affected by the Nickell bias.

¹In an alternative specification, year fixed effects are also included. While the magnitudes of the coefficients remain similar, some coefficients lose statistical significance because of the loss in variation in the explanatory variables. Moreover, the coefficients on the year fixed effects are not statistically significant.

²The authors thank the AFR advisory group for pointing out this issue.

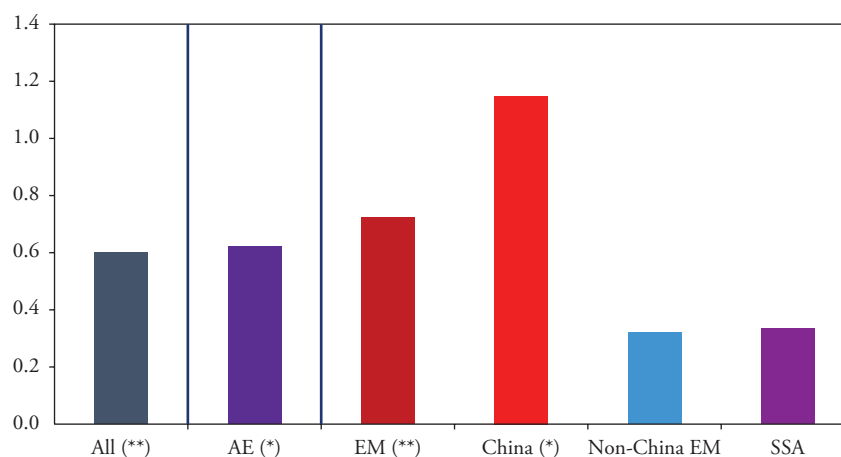
Results

The results are broadly in line with findings in existing literature on the role of trading partners on growth. In Table 1, column (1) shows a positive and statistically significant coefficient on trading partners' growth, while all other control variables exhibit the expected signs. When the trading partners are divided further, results in column (2) show that growth in imports from advanced and emerging markets matter more to a country's growth than the growth rates of its African trading partners. Furthermore, within the group of EM trading partners, column (3) indicates that it is primarily China's growth that plays a significant role in exporters' own growth.

Columns (4)–(9) display the results yielded by dividing the sample of sub-Saharan African countries into their respective types of commodities exports. While columns (4) and (6) confirm that commodities exporters rely heavily on China's growth, non-commodities exporters do not exhibit a statistically significant correlation with China's growth rate (columns (5) and (7)). The main results are presented in columns (8) and (9). For the sample of investment-driven commodities exporters, the coefficient on China's growth is positive and statistically significant, whereas for the group of consumption-driven exporters, the coefficient on China's growth is actually negative and not statistically significant.

Overall, the results suggest two broad conclusions:

Figure 14. Impact of Trading Partners' Growth, Percent



Sources: IMF Direction of Trade Statistics; IMF World Economic Outlook; and World Bank World Development Indicators.

Note: AE = advanced economies; EM = emerging markets; SSA = sub-Saharan Africa.

* $p < .1$; ** $p < .05$.

Table 1. Dependent Variable: Real GDP per Capita Growth Rate (Percent)

	Whole Sample (1)	Whole Sample (2)	Whole Sample (3)	Commodity Exporter (4)	Non- Commodity Exporter (5)	Net Commodity Exporter (6)	Non-Net Commodity Exporter (7)	Investment- Driven Net Commodities Exporters (8)	Consumption- Driven Net Commodities Exporters (9)
Initial Real GDP per Capita (5 Years Before)	-2.218 (1.468)	-2.277 (1.458)	-2.664* (1.517)	-2.001 (1.651)	-6.875** (3.452)	-2.362 (1.639)	-5.213* (3.078)	-2.673 (1.870)	-0.194 (2.363)
Gross Fixed Capital Formation (% of GDP)	0.113 (0.093)	0.114 (0.094)	0.110 (0.094)	0.158 (0.121)	-0.067 (0.069)	0.125 (0.119)	0.096 (0.072)	0.131 (0.126)	0.113 (0.090)
Inflation	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.000 (0.001)	-0.042* (0.024)	-0.001 (0.001)	-0.073 (0.060)	-0.000 (0.001)	0.002 (0.012)
Change in Real Effective Exchange Rate (%)	-0.022 (0.017)	-0.022 (0.017)	-0.023 (0.017)	-0.045** (0.018)	0.007 (0.026)	-0.023 (0.018)	-0.038 (0.043)	-0.023 (0.021)	-0.032* (0.017)
FDI (% of GDP)	0.436** (0.185)	0.437** (0.187)	0.440** (0.187)	0.423** (0.205)	0.193 (0.178)	0.435** (0.192)	-0.150 (0.280)	0.435** (0.196)	0.279* (0.167)
Trade Openness	0.020 (0.032)	0.020 (0.032)	0.019 (0.032)	0.006 (0.033)	0.035 (0.044)	0.027 (0.034)	-0.034 (0.035)	0.021 (0.038)	0.046 (0.033)
Conflict Dummy	-1.566* (0.893)	-1.531* (0.887)	-1.481* (0.892)	-1.433* (0.832)	-2.111 (1.749)	-1.886 (1.177)	-1.036 (1.238)	-1.728 (1.361)	-1.040 (0.771)
Growth in Commodities Terms of Trade (%)	0.171 (0.191)	0.175 (0.192)	0.203 (0.194)	0.314 (0.268)	0.067 (0.313)	0.229 (0.217)	-0.006 (0.376)	0.364 (0.268)	0.034 (0.299)

Trading Partners' Growth (%)	0.600** (0.248)								
AE Partners Growth (%)	0.622* (0.325)	0.603* (0.326)	0.577 (0.373)	0.945 (0.644)	0.790* (0.411)	0.490 (0.361)	0.901* (0.509)	0.530 (0.389)	
EM Partners Growth (%)	0.722** (0.319)								
China's Growth (%)		1.149* (0.647)	1.620* (0.853)	0.154 (0.569)	1.246* (0.721)	0.341 (0.710)	1.957* (1.154)	-0.146 (0.307)	
Non China EM Partners Growth (%)		0.320 (0.408)	0.096 (0.529)	-0.309 (0.597)	0.629 (0.507)	0.110 (0.640)	1.276* (0.712)	-0.004 (0.505)	
SSA Partners Growth (%)	0.237 (0.460)	0.335 (0.453)	-0.179 (0.664)	1.061* (0.633)	0.219 (0.457)	1.004 (1.131)	0.125 (0.592)	-0.288 (0.627)	
Country Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y
R Squared	0.49	0.49	0.49	0.56	0.17	0.52	0.20	0.54	0.23
Observations	718	718	718	496	222	556	162	393	190

Sources: IMF Direction of Trade Statistics; World Bank World Development Indicators; IMF *Regional Economic Outlook* African Department; and author's calculations.

Note: AE = advanced economies; EM = emerging markets; FDI = foreign direct investment; SSA = sub-Saharan Africa. Robust standard errors in parentheses.

* $p < .1$; ** $p < .05$; *** $p < .01$.

First, trading partners, especially China, matter for Africa’s growth. A 1 percent increase in trading partners’ growth will raise sub-Saharan Africa’s growth by 0.6 percent; however, a 1 percent increase in China’s growth increases sub-Saharan Africa’s growth by more than 1 percent (Figure 14).

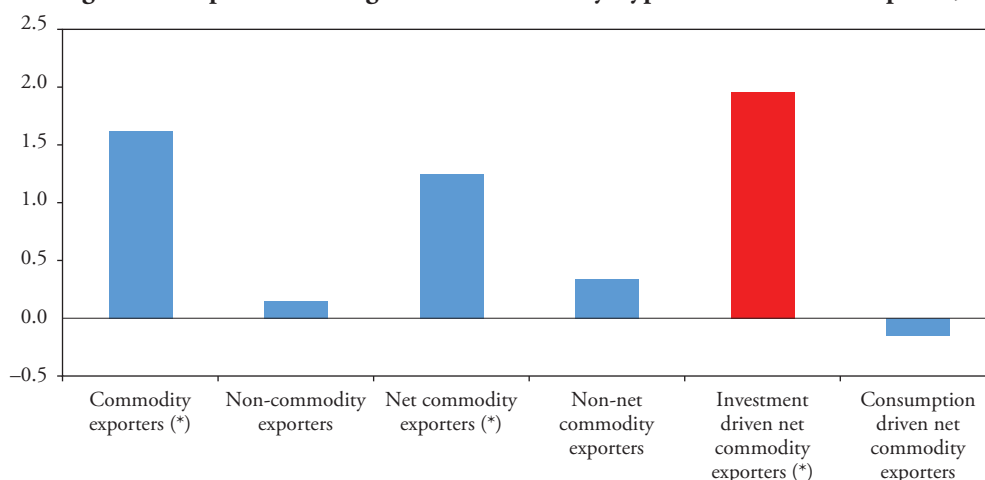
Second, China’s impact on investment-driven net commodities exporters is especially large. For them, a 1 percent increase in China’s growth is associated with about a 2 percent increase in their own growth (Figure 15).

These results support the hypothesis that investment-driven commodities exporters are highly dependent upon China’s growth. Thus, if China’s growth were to slow down because of falling investment, the investment-driven commodities exporters would likely experience negative impacts on their growth, while consumption-driven exporters would not face the same adverse effects.

The spillovers from China are not limited to direct channels such as exports and government revenue. They extend further to subsequent spillovers from the export sectors to other sectors in the economy resulting from sectoral links (Box 1).

There are also intra-African effects. Slowdowns in large economies in sub-Saharan Africa, such as South Africa and Nigeria, affect their smaller neighbors with whom they trade. Uganda, which is not a commodity exporter, is affected by the economic contraction in South Sudan, which had become an important destination for Uganda’s regional exports (Box 2). There are

Figure 15. Impact of Trading Partner’s Growth by Type of Commodities Exporter, Percent



Sources: IMF Direction of Trade Statistics; IMF World Economic Outlook; and World Bank World Development Indicators.
* $p < .1$.

also trade links between sub-Saharan African countries. Countries such as the Democratic Republic of the Congo, South Africa, and Zambia, which are main exporters to China, are themselves important destinations for other African countries' exports.

Of course, countries other than commodity exporters have trade ties with China. Some non-commodity exporters like Uganda also have close links. And, as noted, intra-African links can amplify the impact. For example, the indirect impact (via a decline in exports to countries in the region) of China's spillover on South Africa is many times bigger than the direct effect (Nose, Saxegaard, and Torres 2016). In turn, the negative impact from China on South Africa has further implications for neighboring countries such as those in the Southern African Currency Union because of sharing of tariff revenues (Canales-Kriljenko et al. 2013).

Overall, the analysis confirms that the close trade ties between China and sub-Saharan Africa result in a significant dependence of sub-Saharan Africa on growth in China. This finding is particularly true for sub-Saharan African commodity exporters and among that group, for countries that export commodities that are driven by investment rather than consumption. While the direct impact is strongest for the investment-driven commodity exporters, it is clear that indirect effects on intra-African trade are also significant.

These findings complement existing analyses on the effects of China's spillovers on other economies and regions through various transmission channels. Furceri, Jalles, and Zdzienicka (2016), for instance, examine how growth shocks in China are transmitted to other regions and find that the effects of China's idiosyncratic shocks can vary substantially across regions, and are especially large in Asian and sub-Saharan African countries. Moreover, work on China's impact on export growth in advanced and emerging market economies shows that a 1 percentage point shock to China's final demand growth would reduce export growth by about 0.1–0.2 percentage point for the average country. This effect is particularly large for emerging Asia as well as for other countries linked to China's manufacturing sector (Blagrove and Vesperoni 2016). Last, literature on the external impact of China's financial spillover on global financial markets shows that the effects tend to be more pronounced for bad news than for good news, and they work largely through risk aversion and global commodity prices (Mwase and others 2016). Thus, consistent with the findings in this paper, countries most affected are those with deeper trade ties with China.

Box 1. South Africa: Spillovers from China and Lower Commodity Prices

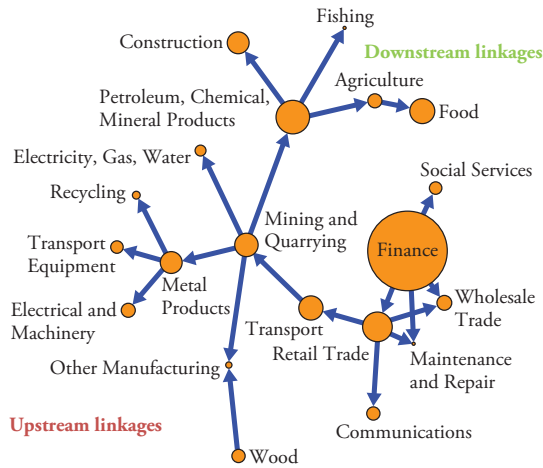
In South Africa, rising trade links and a reliance on commodities has increased spillovers from China. China absorbs 10 percent of South African exports, the most absorbed by any individual country. It also plays a key role in determining global demand for South Africa’s commodity exports. IMF staff analysis suggests China’s growth now matters more for South Africa than does growth in the United States and the European Union.

The impact of lower commodity prices is amplified by links between sectors (Figure 1.1). An analysis of input-output tables in South Africa suggests that links between the commodity sector and the rest of the economy are significant. A sectoral structural vector autoregression identified using multipliers from the input-output table suggests a 10 percent decline in export commodity prices would reduce real GDP growth by nearly 0.2 percentage points (quarter over quarter, seasonally adjusted, annualized) per year after two quarters, with most of the impact coming from downstream (for example, construction) and upstream (for example, transport) sectors, including manufactured commodities.

Commodities: Linkages and Price Shocks

Figure 1.1 Commodities: Linkages and Price Shocks

Intersectoral Linkages with the Commodity Sector

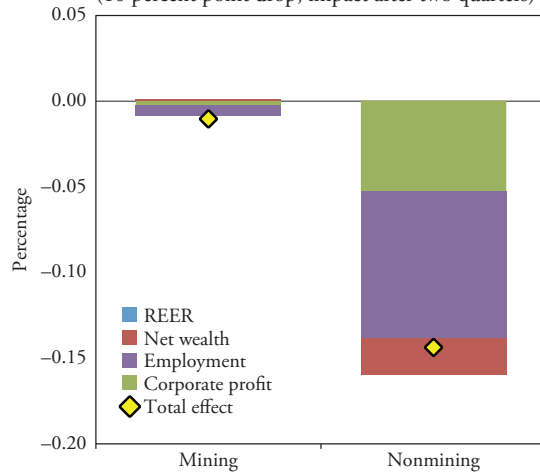


Source: IMF 2016b.

Note: In panel 1, the size of the bubbles represents the share in GDP; the thickness of the arrows represents the strength of sectoral links.” In panel 2, REER = real effective exchange rate.

Figure 1.2 Impact of Shocks to Export Commodity Prices: Spillover Channels

(10 percent point drop; impact after two quarters)

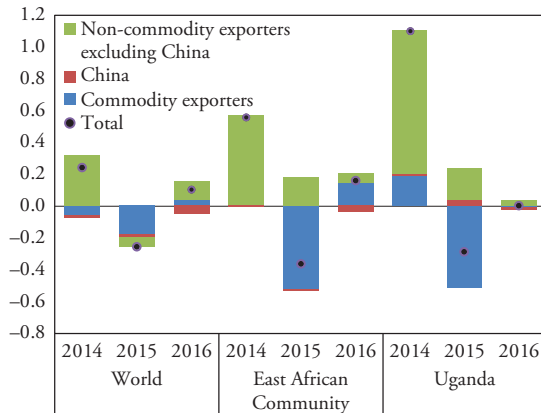


Box 2. Uganda: Spillovers from China through Trade and Investment

China’s rebalancing does not directly affect Uganda through trade, but other countries that rely on China as a major importer do, in turn, affect Uganda. Ugandan exports to China are small at only 2.5 percent of total exports. However, more than 40 percent of Ugandan exports (including informal exports) go to commodity-exporting countries, particularly South Sudan, an economy largely dependent on oil. Slow growth in commodity-exporting countries in 2015 significantly dampened growth in Uganda’s main trading partners, and the weak performance is estimated to have continued in 2016 (Figure 2.1).

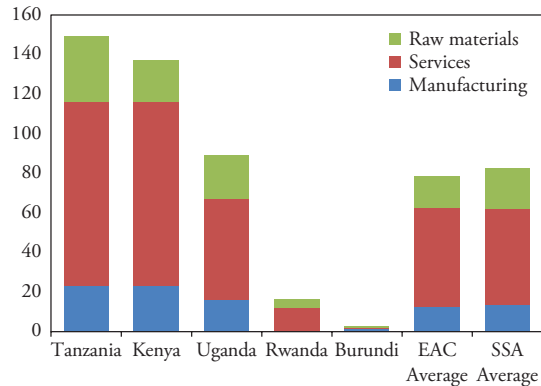
Financial links are important because China has become a major source of investment in Uganda (Figure 2.2). China has ranked consistently in the top three foreign investors by value in recent years, with large investments in the mining sector. China also ranks second by number of projects, with 53 projects in FY2013/14, only behind India. Between 1993 and 2012, 310 Chinese enterprises were registered in Uganda, with planned investments of \$683 million, creating 33,000 job opportunities for locals in the process (Uganda Investment Authority). Chinese companies are present in nearly every sector of the economy, including farming, retail, and telecommunications and

Figure 2.1. Trading Partners’ Growth Changes
(Percent difference in GDP growth)



Sources: Bank of Uganda; IMF Direction of Trade Statistics; IMF World Economic Outlook; and IMF staff estimates.
Note: Export weights are three-year averages of exports of goods in the previous year. Purchasing-power-parity GDP weighted averages are used for country groups. Commodity exporters are defined as fuel and primary commodity exporters under the World Economic Outlook classification.

Figure 2.2. Chinese Investments in Africa, 2014
(Number of projects)



Source: Data from Chen, Dollar, and Tang 2015.
Note: EAC = East African Community, SSA = sub-Saharan Africa.

Box 2. Uganda: Spillovers from China through Trade and Investment (*continued*)

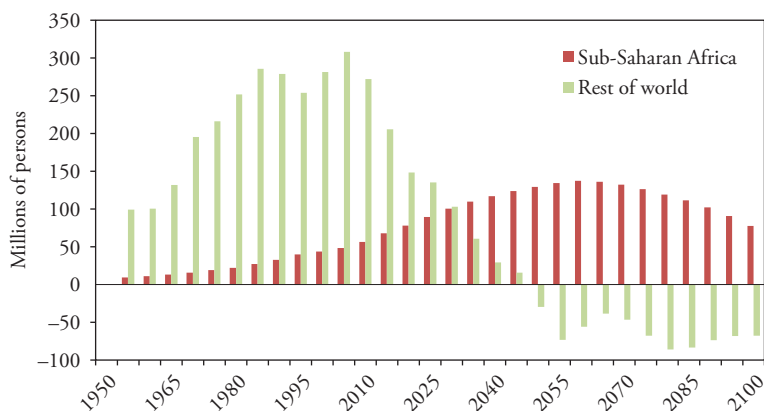
mobile telephone networks. Furthermore, China, mostly through ExImbank, is an important source of financing for key infrastructure projects in the pipeline, including the two large hydroelectric power plants, Karuma and Isimba, and the toll highway between Entebbe International Airport and Kampala.

The End of Africa Rising?

Does China's slowdown and its rebalanced growth model spell the end of the Africa Rising narrative? The answer to this question depends on whether the strong economic performance in Africa over the past 20 years was mainly the result of exceptionally high commodity prices resulting from China's buoyant demand. Most analysis suggests that while commodity prices played a role, they were not the determining factor. In 2008, the IMF's *Regional Economic Outlook* for sub-Saharan Africa comprehensively reviewed sub-Saharan Africa's growth experience and concluded that sound economic policies and strong institutions, rather than high commodity prices, had been the hallmark of the growth take-off in the mid-1990s. Radelet (2010) came to broadly the same conclusion in his analysis of Africa's leading emerging economies. A review by the IMF in 2013 that focused on sub-Saharan Africa's non-resource-rich economies confirmed the key role of sound macroeconomic policies and good governance. The sharp drop in commodity prices since 2015, however, has severely affected resource-rich countries—many of which have close ties to China. For these countries, adjustment to the permanent terms of trade shock is inevitable in the short term (IMF 2016). In the longer term, economic diversification and reducing dependence on natural resources revenues should be a top priority. At the same time, for the non-resource exporters in sub-Saharan Africa, economic growth has remained robust. In these countries, the challenge is to sustain the strong performance over the medium term.

At least two more factors having to do with China may support sub-Saharan Africa's medium-term prospects. China's pledge at the 2015 Forum on China-Africa Cooperation to more than double the financing envelope for Africa to \$60 billion over 2016-18 reflects both a strong commitment to the continent and the continued availability of ample financing for Chinese investors. Of course, this level of investment will require the identification of new commercial opportunities, likely outside of the traditional natural resources

Figure 16. Change in Working-Age Population
(Ages 15–64)



Source: United Nations, World Population Prospects, 2012 Revision.

sectors. But the recent surge in Chinese outward capital flow, especially by Chinese corporations, signals investors' continued appetite for investments and high returns outside China. The non-commodity-dependent frontier economies in East Africa, for example, could be very attractive new growth markets.

Looking even further ahead, shifts in production patterns and global demographic trends provide opportunities for sub-Saharan Africa to benefit from China's new growth model (Drummond, Thakoor, and Yu 2014). Vietnam and Bangladesh have already stepped into the global garment and textile trade as China continues to move up to higher-value-added supply chains. By 2035, the number of sub-Saharan Africans reaching working age (ages 15–64) will exceed that of the rest of the world combined (Figure 16). Provided that sub-Saharan Africa can foster structural transformation and increase its integration into global value chains (IMF 2015) over the coming decades, these factors represent a historic opportunity to decisively boost growth and poverty reduction on the continent. It will be up to the continent's policymakers to ensure that this opportunity is seized, not squandered.

Appendix

Country Classifications

Advanced Economies (AE)	Emerging Markets (EM)		Sub-Saharan African Countries (SSA)	
Australia	Albania	Kuwait	Angola	Sierra Leone
Austria	Algeria	Lebanon	Benin	South Africa
Belgium	Antigua and Barbuda	Libya	Botswana	South Sudan
Canada	Argentina	Lithuania	Burkina Faso	Swaziland
Cyprus	Armenia	Macedonia, FYR	Burundi	Tanzania
Czech Republic	Azerbaijan	Malaysia	Cameroon	Togo
Denmark	Bahamas, The	Maldives	Cape Verde	Uganda
Estonia	Bahrain	Mexico	Central African Republic	Zambia
Finland	Barbados	Morocco	Chad	Zimbabwe
France	Belarus	Oman	Comoros	
Germany	Belize	Pakistan	Congo, Democratic Republic of	
Greece	Bosnia and Herzegovina	Panama	Congo, Republic of	
Hong Kong SAR	Brazil	Paraguay	Côte d'Ivoire	
Iceland	Bulgaria	Peru	Equatorial Guinea	
Ireland	Chile	Philippines	Eritrea	
Israel	China	Poland	Ethiopia	
Italy	Colombia	Qatar	Gabon	
Japan	Costa Rica	Romania	Gambia, The	
Korea	Croatia	Russia	Ghana	
Luxembourg	Dominica	Saudi Arabia	Guinea	

A REBALANCING ACT FOR CHINA AND AFRICA

Advanced Economies (AE)	Emerging Markets (EM)		Sub-Saharan African Countries (SSA)
Netherlands	Dominican Republic	Sri Lanka	Guinea-Bissau
New Zealand	Ecuador	St. Kitts and Nevis	Kenya
Norway	Egypt	St. Lucia	Lesotho
Portugal	El Salvador	St. Vincent and the Grenadines	Liberia
Singapore	Fiji	Suriname	Madagascar
Slovak Republic	Georgia	Syrian Arab Republic	Malawi
Spain	Grenada	Thailand	Mali
Sweden	Guatemala	Trinidad and Tobago	Mauritius
Switzerland	Hungary	Tunisia	Mozambique
United Kingdom	India	Turkey	Namibia
United States	Indonesia	Turkmenistan	Niger
	Iran, Islamic Republic of	Ukraine	Nigeria
	Iraq	United Arab Emirates	Rwanda
	Jamaica	Uruguay	São Tomé and Príncipe
	Jordan	Venezuela	Senegal
	Kazakhstan		Seychelles

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