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# AID PROCUREMENT AND THE DEVELOPMENT OF LOCAL INDUSTRY
## A QUESTION FOR AFRICA

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Global Economy and Development
at BROOKINGS

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*Abstract:*

The emergence of markets is in many ways a formative aspect of global development. A key part of the world economy, public procurement—the purchase of goods, works, and services by governments—can play an important role in enabling this emergence. In developing countries, procurement for large projects financed by multilateral institutions is subject to international bidding procedures. The emphasis on open international competition has become a key instrument through which local industry has advanced in some countries and regions and a main indicator of where it has lagged in others. This paper uses data on World Bank-financed projects from 1995 to 2013 to follow the evolution of industry competitiveness in the developing world, with a focus on civil works.

Our findings illustrate the increasing dominance of domestic and regional firms across the developing world over the past two decades. The main exception to this trend is in sub-Saharan Africa, where the local construction industry has actually lost ground. Uncovering the reasons behind the lagging participation of African construction firms requires more detailed analysis, but the strong competition of Chinese and Indian firms, coupled with local industry weaknesses, are important factors to consider.

We make the following recommendations for future study: 1) increasing the usage (and ease of usage) of public procurement data from the multilaterals; 2) directing more research toward the local construction industry in Africa; and 3) looking at multilateral procurement reform from the perspective of local industry development.

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## INTRODUCTION

Economic development is often tied to the evolution of local industry. One way to assess a country's emergence as a major player in the global economy is by examining the ability of its domestic firms to compete on the global market. Public procurement—the purchase of goods, works, and services by governments—represents a significant portion of this market, making up an estimated average of 15 to 30 percent of a country's GDP.[1,2] Procurement in the developing world is especially noteworthy, since large projects are often partially or wholly financed by external donors such as the World Bank and other international financial institutions (IFIs), which encourage developing country governments to internationally advertise the goods, works, or services they require and to select the most competitive bid they receive. Yet the role of IFI-funded procurement in the emergence of global markets, particularly for and among developing countries, is seldom a topic of empirical study, despite its linkages to global growth.

This paper takes a first step toward evaluating the connection between a country's or a region's economic development trajectory and its domestic firms' competitiveness by examining IFI-funded procurement contracts. Using data from 1995 to 2013 for World Bank-financed civil works and goods contracts, we consider the theory that international competition in developing-world procurement has become a key instrument through which local industry has advanced in some countries and regions and a main indicator of where it has lagged in others. Notably, we find evidence of a "civil works lag" in sub-Saharan Africa, whereby local competitiveness in the construction industry has developed more slowly there than in other regions. It is our hope that this preliminary study will direct attention to the critical issues raised by international procurement trends and encourage increased analysis of IFI-funded contracts data.

We proceed in four sections: Section I presents the history of IFI-funded international procurement and a theoretical framework to guide the rest of the paper. Section II presents the data and macro and regional trends. Section III poses the question of civil works in Africa. Section IV summarizes key findings and recommendations.

## SECTION I. BACKGROUND

### History

Understanding the historical context and evolution of international competition in IFI-funded procurement is crucial for appreciating its contributions to and implications for development outcomes. The history of IFI-funded procurement is rooted in the history of development assistance. The World Bank was set up in 1944 to make loans for the rebuilding of Europe post-World War II. After a few years, its loan portfolio had significantly expanded, along with its development agenda. As a primary supplier of capital to developing nations, the Bank had a fiduciary responsibility to ensure the optimal use of its funds, prompting a formal set of rules governing borrower country procurement. In 1951, Raymond A. Wheeler, the Bank's newly-appointed engineer advisor, began a policy on international competitive bidding (ICB) for Bank-financed projects.[3] Wheeler's aim was to ensure optimal outcomes by establishing competitive bidding procedures for World Bank-financed contracts. His implementation of ICB is considered "one of the Bank's proudest procedural achievements."[4] ICB remains the default method for procurement under World Bank financing, an indication of the Bank's continuing belief in open competition as the best way to ensure its primary objective of "allow[ing] borrowing countries to buy high-quality goods and services as economically as possible."[5]

Wheeler's vision for ICB was truly international in that it allowed firms from all countries to bid on Bank-financed contracts; in 1956, the policy was revised to include only member countries and Switzerland.[6,7] Thus, an initial consequence of ICB was that firms from Western Europe, North America, and later Japan won the majority of Bank-financed contracts, as they were the only member states with sufficiently competitive firms; by the 1960s, their share of total goods and works contracts stood at over 60 percent.[8] This prompted the Bank in 1966 to formally include a "domestic preference" clause, allowing a small margin of preference for local suppliers in low-income borrower countries.[9]

During the 1980s, the Bank's rules for procurement were codified into standardized policies and procedures, and alternatives to ICB were outlined.[10] The most notable of these was national competitive bidding (NCB), whereby contracts were typically advertised only inside and in the language of the borrower country, rather than internationally.[11] In practice, NCB was often more efficient for smaller-value or labor-intensive contracts, which were unlikely to attract international attention. Thresholds governing the size and nature of contracts appropriate for ICB were set accordingly. Additionally, rules were established to determine when Bank staff would review contracts to make sure the bidding process had adhered to the appropriate guidelines. The review of contracts prior to being awarded to the supplier, also known as "prior review," was limited to large, complex contracts via the establishment of prior review thresholds. For smaller and more straightforward contracts, a random number would be selected for "post review," or reviewing after the awarding of the contract.

Prior-reviewed contracts are a relatively small portion of total World Bank contracts; in the universe of ICB and NCB contracts, which number about 20,000 to 30,000 a year, only about 7,000 are prior-reviewed.[12] And in fiscal year 2013, fewer than 2,000 prior-reviewed contracts were bid through ICB.[13] However, these made up 71 percent of the total annual value of prior-reviewed contracts, indicating that ICB is still dominant in terms of value, if not in terms of volume.[14]

To a certain extent, the primacy of developed country suppliers was an expected initial result—if not an outright "secondary" objective—of international procurement under ICB. As contributing members to the Bank, developed countries often expected a "return on investment" in the form of World Bank contracts for their domestic firms. The narrative of Western firms as the main suppliers for Bank-financed contracts continued into the 1990s, culminating in an advertising campaign in the U.S. ("The World Bank: A Good Investment") claiming that World Bank contributions would help the U.S. economy because American companies could win procurement contracts, though by then the trend had already slowed.[15] In the 2000s, an average of over 75 percent of the total value for civil works and goods was supplied by developing country firms, marking a change in direction for ICB and a reversal of narrative for Bank-financed procurement.

The shift in the status quo of "*developed country* supplier-developing country borrower" toward "*developing country* supplier-developing country borrower" was neither an intended consequence nor an anticipated result of the importance placed on ICB by the World Bank (and later by regional development banks who followed its example). But it is undoubtedly a salient contribution of IFI-funded procurement to the world economy. Recognizing this aspect of ICB procurement is critical, particularly in the midst of procurement reform among the IFIs.

## Theory

What does the shift toward developing country supplier firms tell us about the "emergence" of markets? By "emergence" we mean two things: first, the opening up of developing country markets to the international community, and second, the evolution of local private sector capacity in these countries.

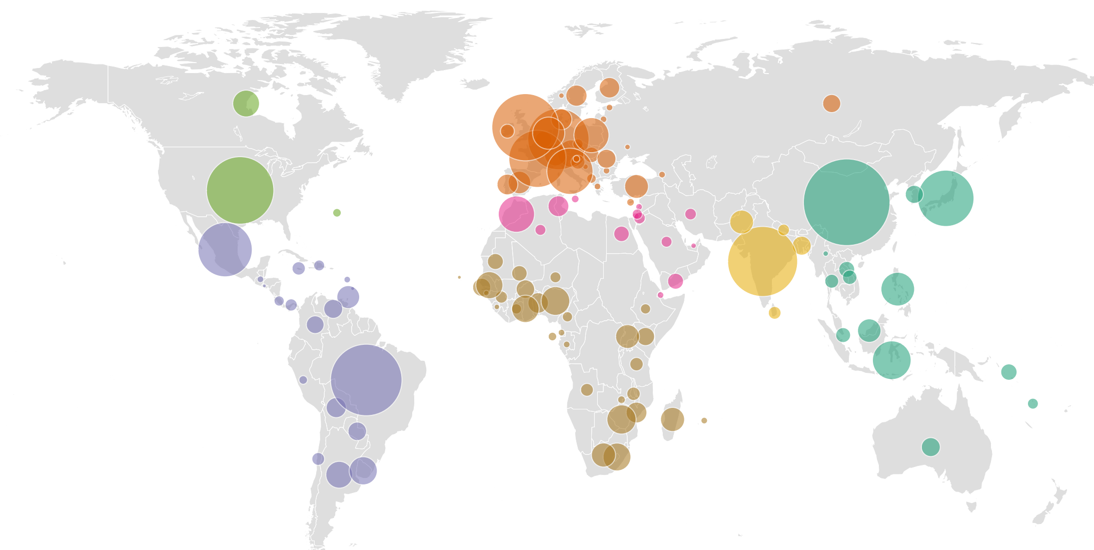
The first type of emergence is from the supplier perspective. That is, potential supplier firms benefit from the enhanced openness that ICB procurement provides in the form of increased access to borrower country markets. We have made this point in previous work.[16] Map 1 illustrates the fact that more supplier firms are now from developing countries rather than high-income OECD countries. This evolution in the composition of supplier firms is indicative of the effectiveness of IFI-financed procurement in stimulating competition and opening global markets.

The second aspect of emergence is from the borrower country perspective and is the main focus of our paper. How have firms from borrower countries fared under international competition? IFI-funded procurement contracts provide one way to address this question. As a country's firms become more competitive, this should be manifested in the contracts they are awarded. Assume that a borrower country's firms are either non-existent or of very low capacity. In this case, we would expect foreign firms to be the main suppliers in this country. Interacting with foreign firms through sub-contracting or joint-venture agreements may help local firms to gain experience and resources to become suppliers in their own right.[17] Thus, as the borrower country's firms develop capacity and competitiveness, they will begin to win more contracts, first domestically, then regionally, and even globally.

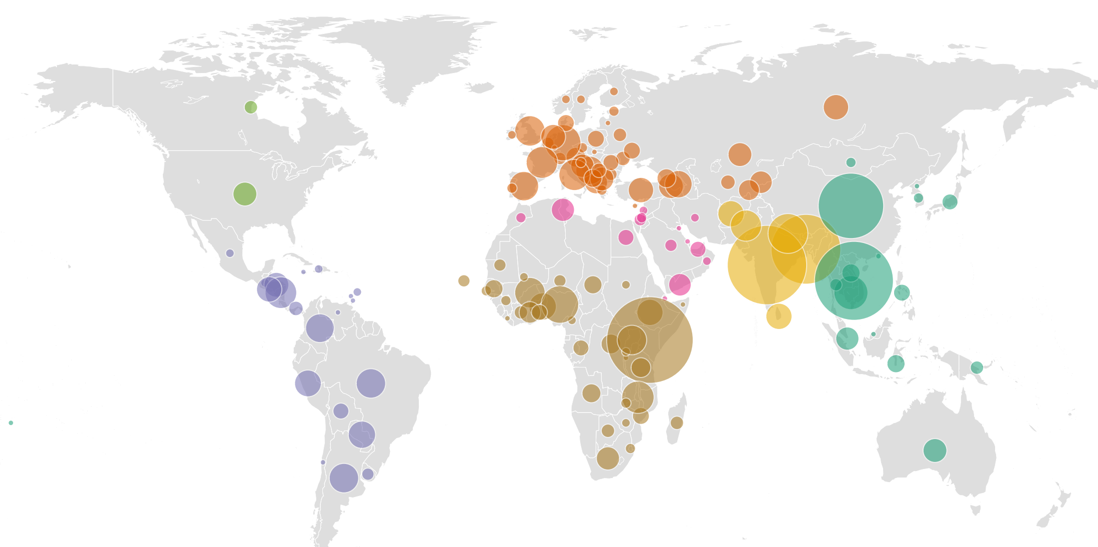
China provides a good example of the emergence of borrower country firms. In 1995, Chinese firms were already winning domestically. Over half of ICB contracts for World Bank projects within China were awarded to Chinese firms. By 2013, nearly all ICB projects in China were won domestically (85 percent by value and 94 percent by number of contracts).

**Map 1. Supplier countries, sized by number of ICB contracts for goods and works and shaded by region, FY 1995 vs. FY 2013**

1995



2013



Source: Gutman (2014).

However, China's ability to compete in other markets was more limited in 1995; only 20 percent of the contracts won by Chinese firms under World Bank ICB were for projects outside of China. By 2013, this figure had increased to over 70 percent (see Figure 1), showing that Chinese firms were now winning globally. Thus, Chinese contractors were able to succeed outside as well as inside of China over time.

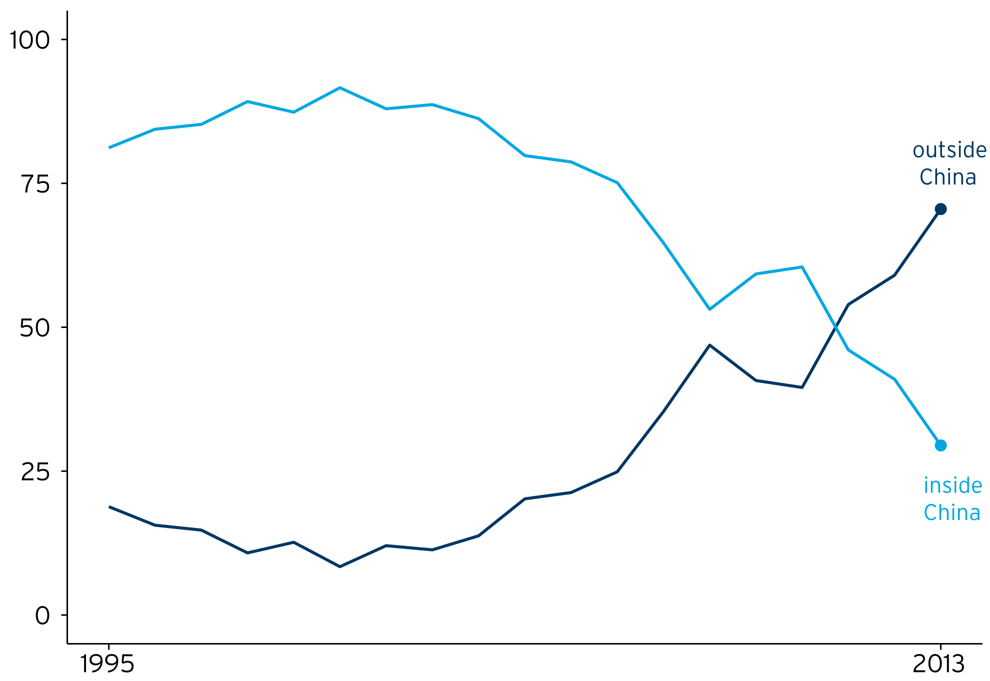
China is not unique in this regard, as will be shown later in this paper.[18]

Civil works is often among the first sectors to "emerge." The development and expansion of a country's construction industry is a key component of its early industrialization experience.

Under this theoretical framework, as a country or region develops over time, we would expect an increase in the contracts awarded to within-country or within-region firms. And we would typically expect this increase to first occur in civil works.

**Figure 1. Percent of goods and civil works contracts won by China under World Bank ICB, FY 1995-2013**

*Chinese contractors are now succeeding outside of China.*




Source: Authors' calculations based on World Bank (2014).

## SECTION II: ANALYSIS

### Data

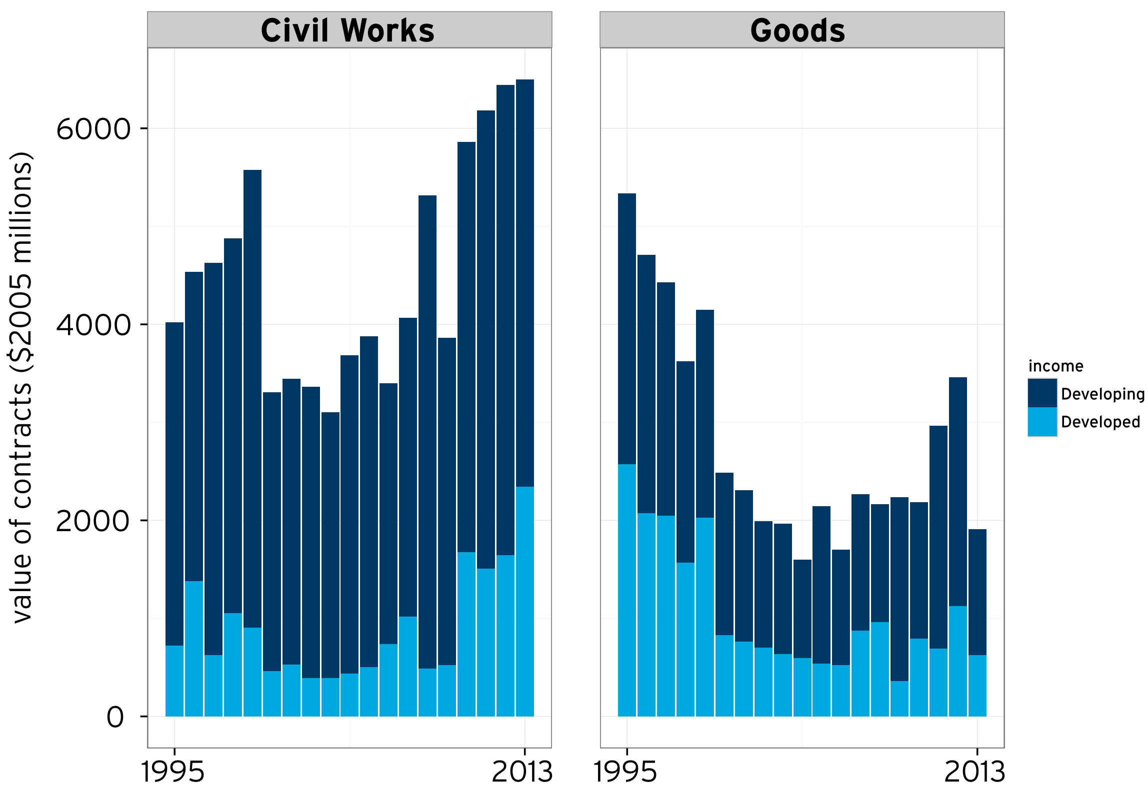
The dataset is constructed from the World Bank's Summary and Detailed Borrower Procurement Reports[19] and contains information on all prior-reviewed contracts, by fiscal year, borrower country, supplier firm, and country, category, and procurement method. We analyze civil works and goods contracts procured under ICB for fiscal years 1995 through 2013.

A "contract" refers to an activity in a project that is tendered and won separately by a supplier firm. Note that this definition is different from the Bank's, which is less granular in its classification of contracts.

In the context of "winning" ICB contracts, the emergence of local capacity in developing countries can be examined from two main angles. First, we can examine the dollar value that has been supplied by firms in a given developing country or region in a given year, as a percentage of the total dollar amount of contracts supplied to that country in that year. Second, we can examine the number of contracts that have been supplied by firms in a given developing country or region in a given year, as a percentage of the total number of contracts in that year.

The rest of this section presents macro-level and regional trends from both angles (i.e., "by value" or "by contracts") before turning to the question of civil works in Africa.

**Figure 2. Total value of contracts by supplier income status, FY 1995-2013 ($2005 millions)**




Source: Authors' calculations based on World Bank (2014).

## Trends

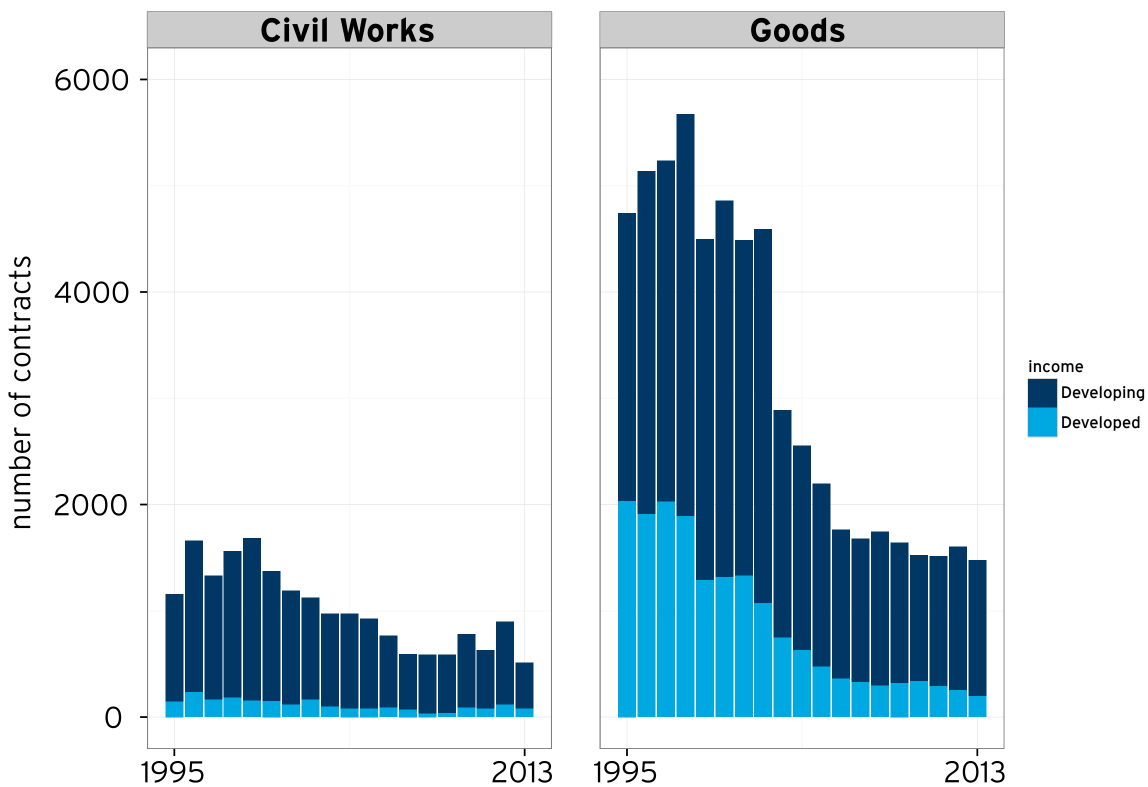
### *Macro patterns*

Firms from both developed and developing countries can bid on—and win—ICB contracts. Note that we do not have information on the firms that have unsuccessfully bid on ICB contracts; our data show only the winning firms. Figures 2 and 3 illustrate the income status of supplier firms that have won civil works and goods contracts over time, by value and by number of contracts.

On a by-value basis (Figure 2), developing country firms have fluctuated over the years in the proportion of ICB contracts they have won. Still, in most years, they have captured the lion's share of contracts. Interestingly, though, the share of contracts by value going to developed country firms has seen a slight uptick in recent years, especially for civil works projects. This could be the result of several factors. Developed country firms could be more likely to compete than before, spurred perhaps by domestic economic challenges. Another contributor could be the raising of value thresholds determining whether or not procurement must occur under ICB.[20] Raising thresholds implies that lower-value contracts are of less interest to international firms and would now be procured via NCB rather than ICB.

On a by-contracts basis (Figure 3), the dominance of developing country firms is subject to much less variation from year to year. This supports the notion that developing countries are more competitive in volume

**Figure 3. Total number of contracts by supplier income status, FY 1995-2013**

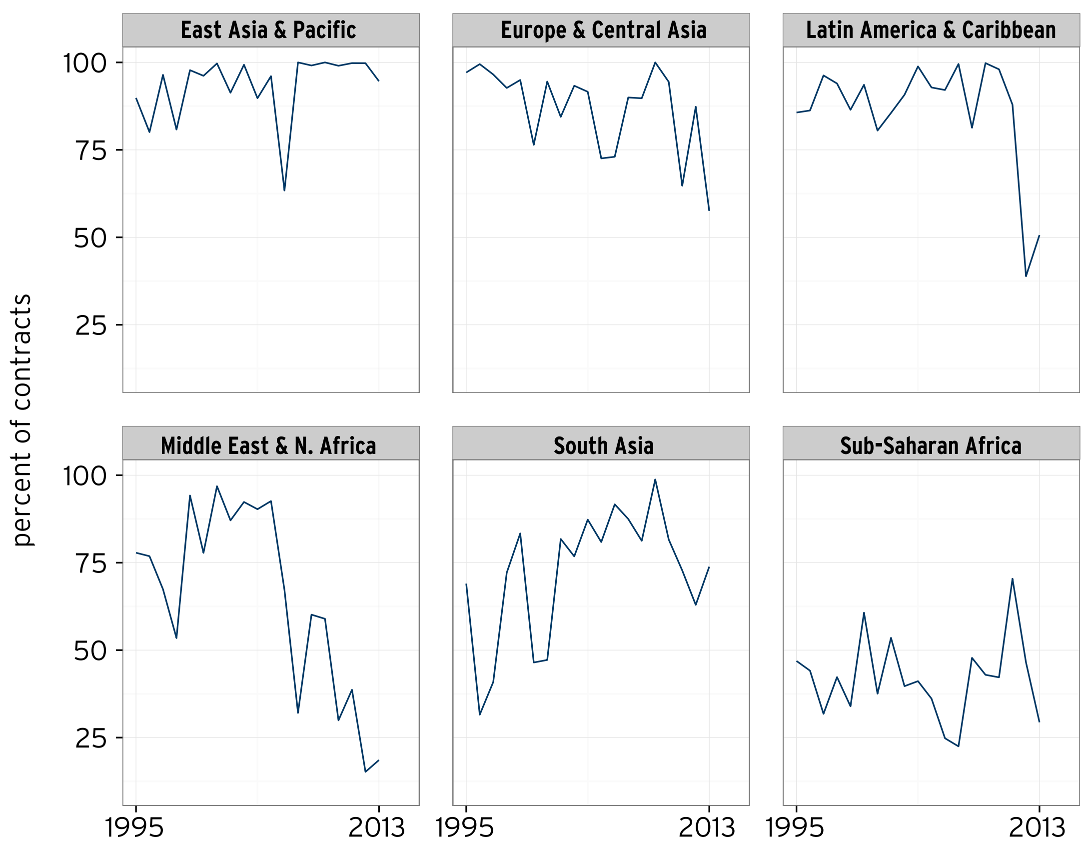



Source: Authors' calculations based on World Bank (2014).

than in value; that is, their firms are better-equipped to win higher numbers of smaller-value contracts. Notably, the total number of ICB contracts has declined over time; this is the case across regions for the period as well.[21] Again, the decline could be the result of contracts increasingly being procured through NCB rather than ICB. The growth of non-investment lending at the Bank could be another reason; Development Policy Loans (DPLs), for instance, take the form of budget support rather than project-based investments.[22]

The evolution of developing country suppliers is more striking in goods than in civil works. In goods, developing country firms were only winning about half of the contracts in 1995 (Figure 3), whereas by 2013 they were winning around 86 percent. These figures, however, may be misleading. In the World Bank's dataset, firms are listed by their country of *domicile*, which is not necessarily the same as their country of *origin*. As a result, disentangling what is "local" and what is "foreign" is a thorny topic, especially for firms that have branches or subsidiaries in several markets. For example, the Tata Group is an Indian multinational that has a significant presence in Africa.[23] In fiscal year 2013, Tata as a supplier firm is assigned a country of either Kenya, Mozambique, Tanzania, or Uganda, corresponding to the country in which Tata houses its operations in the form of subsidiaries, joint ventures,

**Figure 4. Percent of regionally supplied civil works contracts, by value, FY 1995-2013**




Source: Authors' calculations based on World Bank (2014).

or partnerships, even though Tata's "actual" country of origin is India. This and other instances make it difficult to parse out the true nature of regional procurement trends, and this is something to keep in mind for the remainder of the paper, though it does not impact our overall conclusions (see note 25).

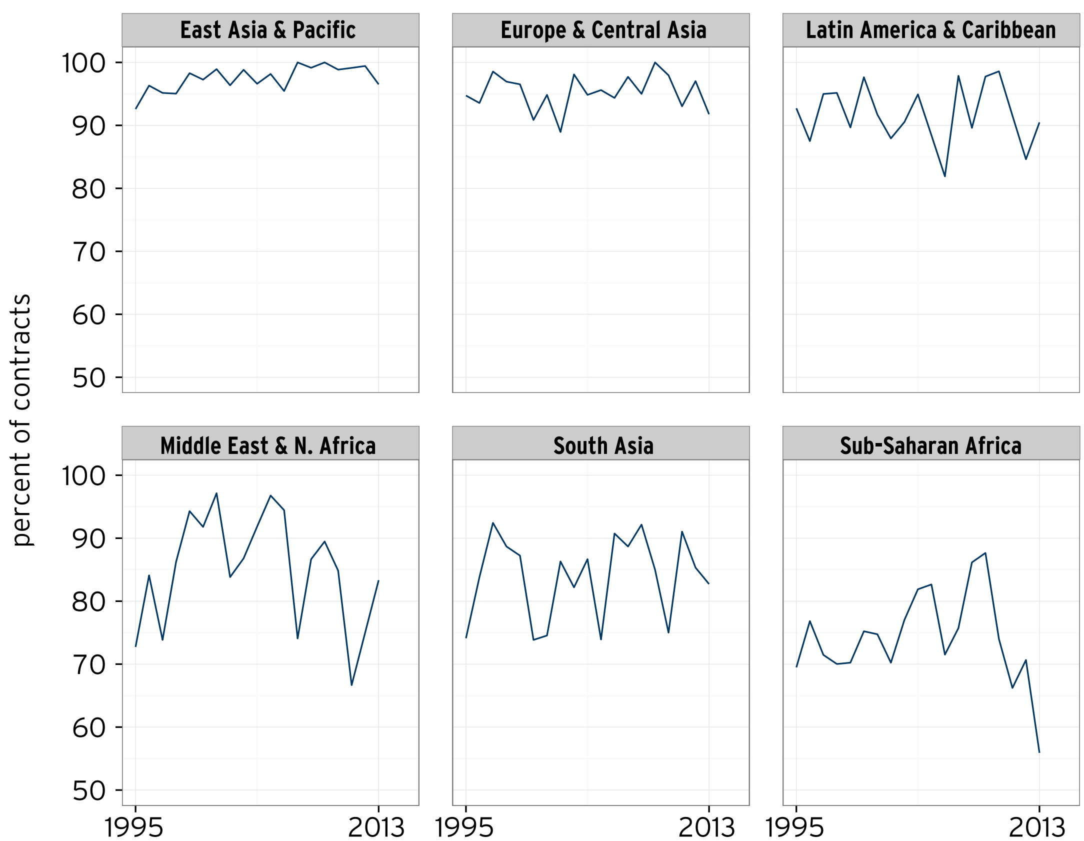
### *Regional patterns in civil works*

The remainder of this paper discusses regional patterns in civil works procurement, both on a general level and in sub-Saharan Africa in particular. We choose to focus on civil works because it is often one of the initial sectors to "emerge," according to our theoretical framework.

The ICB contracts in the World Bank's dataset are for projects in developing, or "borrower," countries. Recall that it is our contention that as such countries develop domestic capacity, their local firms will become more competitive with foreign firms. In terms of ICB procurement, this implies that regions where local industry has developed will see more of their contracts supplied by within-region firms.

Figures 4 and 5 present the percentage of regionally supplied contracts, respectively by value and by number of contracts. Because we wish to examine the emergence of *developing country* supplier firms, we exclude firms from high-income countries that supply

**Figure 5. Percent of regionally supplied civil works contracts, by number of contracts, FY 1995-2013**




Source: Authors' calculations based on World Bank (2014).

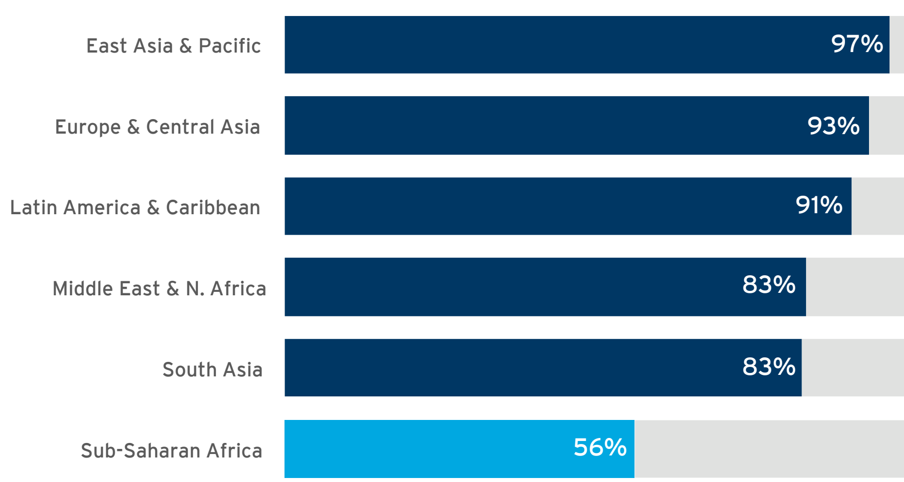
to their own region. Note the different scaling for the two figures; we set the baseline at 50 percent (instead of 0 percent) for Figure 5, since in most regions well over 50 percent of ICB contracts (by number) were supplied regionally during the period.

The shares fluctuate from year to year, especially when examining the data by value. Many regions are seeing the share of regionally supplied contracts decline on a by-value basis (Figure 4). Europe and Central Asia, Latin America and the Caribbean, the Middle East and North Africa, and sub-Saharan Africa in particular stand out as regions where the share in 2013 is *smaller* than in 1995.

It is important to note three things with regard to examining contracts by value. First, a few large-value contracts can easily distort proportions in a given year. For instance, Europe and Central Asia appears to have a much lower share of contracts supplied regionally in fiscal years 2011 and 2013. However, this is due in large part to two contracts linked to the South West Roads Project in Kazakhstan, where a contractor from Iran supplied road construction services amounting to $116 million in 2011 and $104 million in 2013. Second, the Middle East and North Africa region has relatively few borrower countries, so the small sample size may further create distortions. Finally, as we illustrated in the previous section, developing country firms may not be competitive enough to win high-*value* contracts in their own regions, despite winning a large *number* of ICB contracts.

For the above reasons, we have chosen to focus on the share of regionally supplied contracts by number of ICB contracts. In Figure 5, we see that for civil works, sub-Saharan Africa has experienced a steep fall in its share of regionally supplied contracts in recent years; it is the only region for which this share is significantly *lower* in 2013 than in 1995. Moreover, in 2013, sub-Saharan Africa's share is the lowest of all regions (Figure 6). This so-called civil works lag lends support to the notion that Africa has by and large failed to move toward the structural transformations necessary for development of its local capacity in the construction industry.[24,25]

**Figure 6. Percent of internationally bid World Bank civil works contracts won by local and regional firms, FY 2013**




Source: Authors' calculations based on World Bank (2014).

## SECTION III: A QUESTION FOR AFRICA

The main observation from the data is that sub-Saharan Africa is not competing well for World Bank-supported civil works projects compared with the record in other regions. Less evident are the underlying causes for Africa's "civil works lag." Is it due to *external* competition from countries outside the region—notably China and India—not faced by other regions at the time of their development? Or are there *internal* factors at play, namely insufficient capacity and slow development of Africa's construction industry?

Clearly both questions demand more detailed research. To the extent that our data allow, we offer some insight in this section.

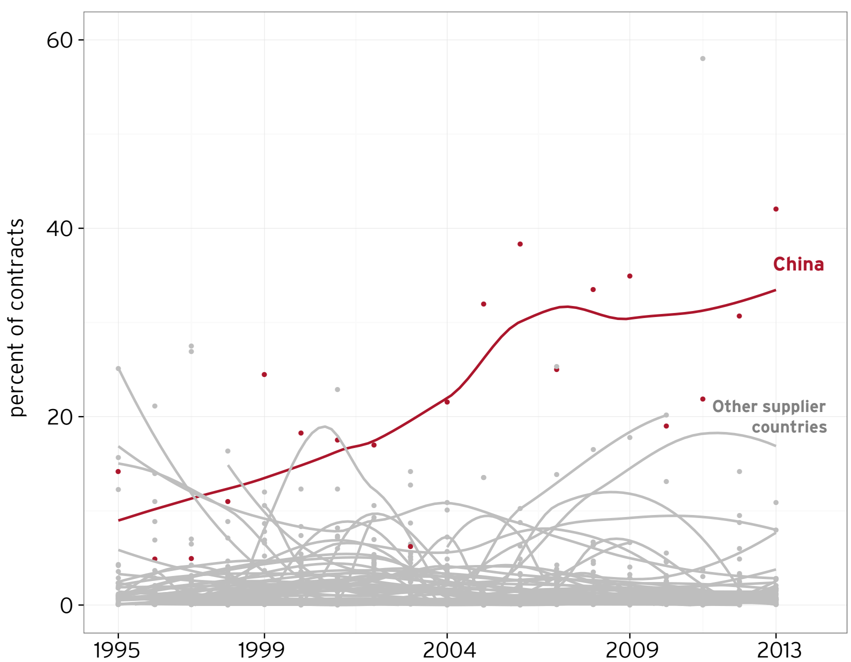
## Outside competition

### *The China factor*

The growth of China's construction sector has been remarkable by any metric, and its role in African civil works is undeniable. Under World Bank ICB, Chinese firms were the top civil works suppliers to sub-Saharan Africa in 2013. On a by-value basis, the rise of China over time is striking (Figure 7). As of 2013, it leads by far, accounting for 42 percent of the total dollar amount of civil works contracts supplied to the region, according to our data. It is not our intention in this paper to provide a full discussion of China's official overseas financing.[26] However, given the importance of Chinese contractors over those of other nationalities in our data, it is helpful to consider how this has occurred.

**Figure 7. World Bank-financed African civil works contracts under ICB, FY 1995-2013 (fitted lines)**

*China is the dominant player by value in African civil works.*




Source: Authors' calculations based on World Bank (2014).

Sino-African relations have developed substantially in recent years. Over the past decade, China has overtaken the U.S. as sub-Saharan Africa's largest trading partner, and the last three meetings of the Forum on China-African Cooperation since 2006 have seen China double its financing commitment to the region.[27,28]

Infrastructure and thus construction is particularly important for Chinese interests in sub-Saharan Africa, and it is in this area where China's presence has arguably made the "largest commercial footprint."[29] The Export-Import Bank (Eximbank) of China is the main source of financing for its infrastructure projects in Africa.[30] Typical of an export credit agency, the goal of China Eximbank is to promote the export of Chinese goods and services and the "internationalization" of Chinese companies.[31]

To that end, China Eximbank provides lending in the form of export credits and preferential foreign loans.[32] Export sellers' credits in particular have helped Chinese construction firms (especially state-owned enterprises) finance their overseas operations.[33] As part of China's development finance activities, China Eximbank also gives preferential export buyers' credits at lower-than-market rates and concessional (official foreign aid) loans to developing countries.[34,35] Concessional loan-backed projects must be executed by Chinese contractors, which are selected through a competitive national bidding process, and theoretically at least 50 percent of the goods or services used to carry them out must come from China.[36,37]

Thus, Chinese firms have benefitted from access to low-cost governmental lines of credit, as well as the "tied" financing of China's overseas concessional loans. Having established substantial presence in Africa, they are well-suited to compete for—and win—international contracts tendered under ICB. Their recent dominance in World Bank-financed civil works projects is a testament to China's enhanced competitiveness in the region, relative to other firms, both Western and non-Western. Given the market penetration of Chinese firms, and their tendency to use Chinese sub-contractors in the project implementation stage, it is not surprising that they have captured such a large share of contracts.

Taking into consideration China Eximbank's mandate to encourage Chinese trade, its preferential treatment for domestic companies is not atypical. Export credits and "tied" bilateral funds are still employed by other export credit agencies from wealthier countries; with export credits in particular, China's model appears to be following the example set by Western countries in the 1990s.[38] India is taking a similar approach to its infrastructure projects overseas, as we will see below.

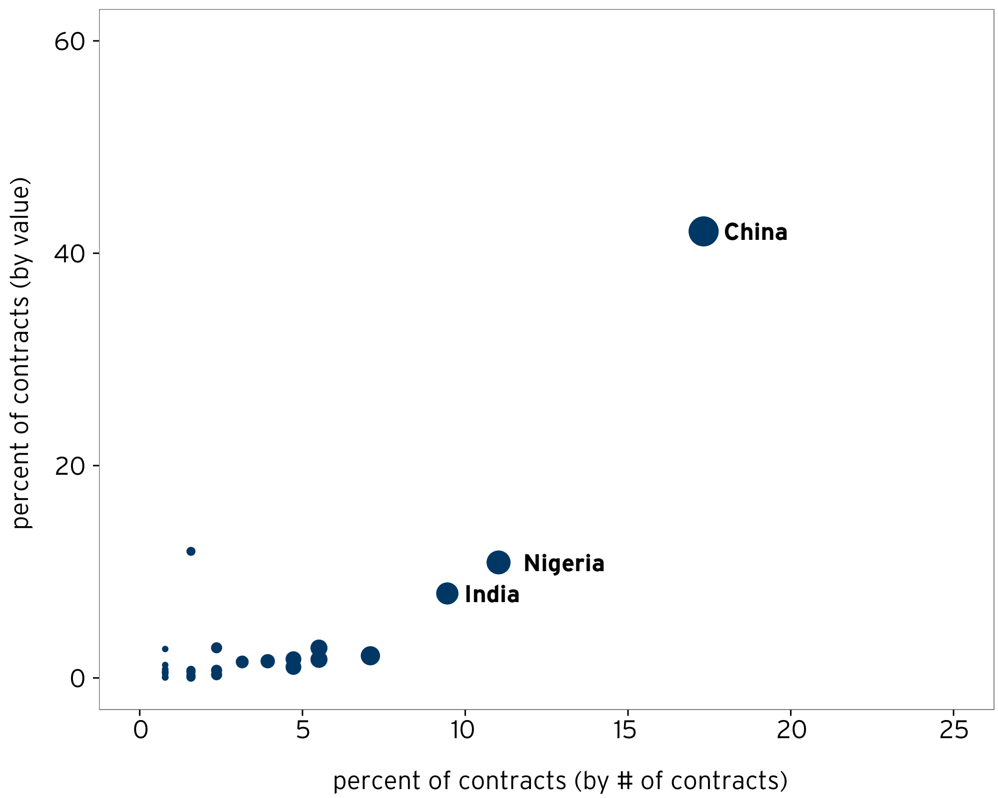
### *India and Africa*

Examining the data purely by value as in Figure 7 is misleading, since it fails to account for many smaller wins that may accrue to firms from a given country. Figure 8 plots the share of ICB contracts won in Africa by number of contracts against the share by value. On a by-contracts basis, China still dominates in 2013, but its lead—17 percent of the total number of 2013 African civil works contracts—is slightly less pronounced, with Nigeria (11 percent) and India (9 percent) not very far behind.

The relative positions of China, India, and Nigeria in African civil works have shifted considerably in terms of contracts supplied to the region (Figure 9). Chinese and Indian firms have captured an increasing share of African contracts between 1995 and 2013, while the Nigerian share has—volatility notwithstanding—

**Figure 8. World Bank-financed African civil works contracts under ICB, FY 2013**

*On a by-contracts basis, China's lead is less pronounced.*



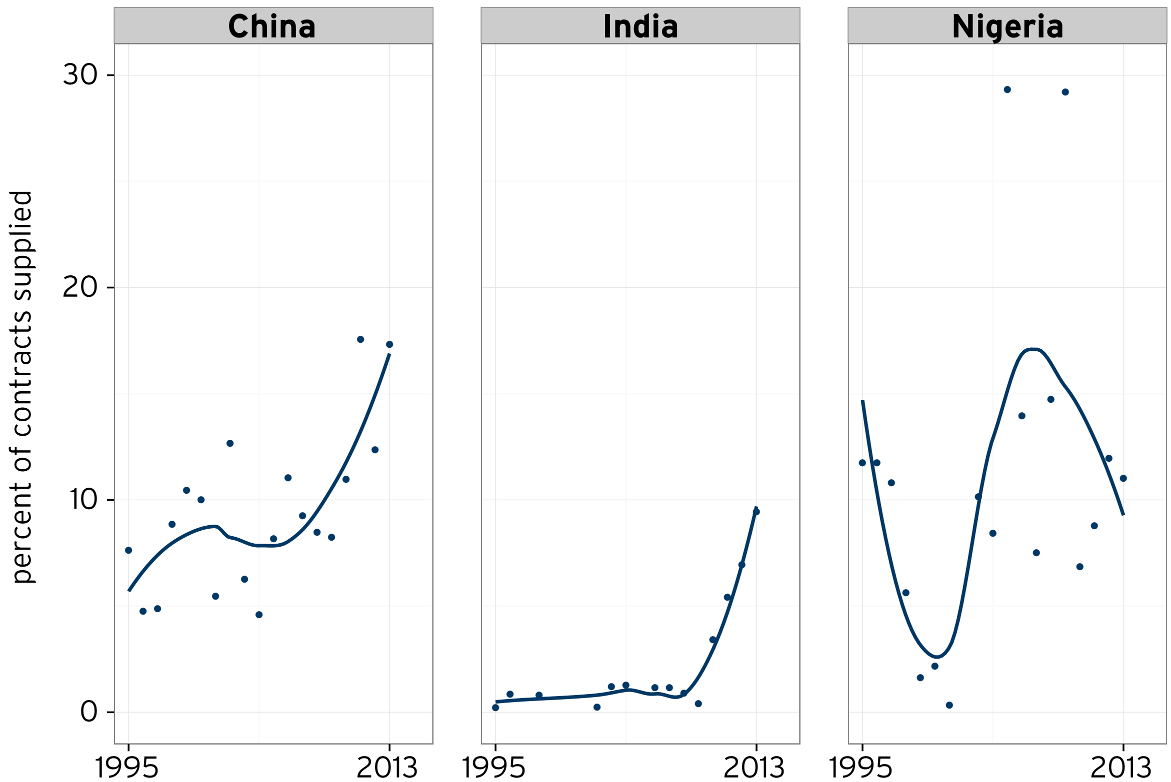

Source: Authors' calculations based on World Bank (2014).

remained largely flat over the same time frame. India stands out as quickly catching up, and it is the only country in our dataset whose share of contracts has monotonically increased in the five-year period from 2009 to 2013.

India's entry into African infrastructure has been aided by its export credit agency, the Export-Import (Exim) Bank of India. India Exim Bank's portfolio consists of similar types of instruments; namely, loans and credits for Indian firms who wish to undertake overseas operations in addition to lines of credit to other countries. The Bank offers its own commercial (non-concessional) lines of credit as well as Indian government-supported (concessional) lines of credit. Contracts financed with concessional loans are "tied" in that they must be undertaken by Indian firms, which are selected through a nationally competitive bidding process.[39] Contracts financed with non-concessional loans have the additional stipulation that at least 85 percent of the goods and services used to carry them out must be sourced from India.[40] So, like China, India has been able to buoy its domestic construction firms through "South-South" arrangements made by its Exim Bank.

**Figure 9. China, India, and Nigeria's share of World Bank-financed African civil works contracts under ICB, FY 1995-2013 (fitted lines)**

*India has recently emerged in the African civil works market.*




Source: Authors' calculations based on World Bank (2014).

Certainly, India's experience in Africa parallels China's in many ways. The India-Africa Forum Summit, established in 2000, is a clear counterpart to the Forum on China-African Cooperation, and its third meeting will be held in October 2015. The previous two meetings have seen India Exim Bank pledge to increase its lines of credit to African countries.[41] And like Chinese firms, Indian firms have won an increasing share of World Bank-financed ICB contracts, though the two countries tend to operate in different areas. For example, over the last three years, the top civil works area for Indian firms has been energy and mining, while for Chinese firms it has been transportation, according to our calculations.

### *Looking inward*

How well Chinese and Indian firms have fared under ICB is a strong indicator of their growing engagement in sub-Saharan Africa. In large part, their arrival is thought to have put them in competition with traditional players, mainly from Europe as well as Nigeria and South Africa.[42] Our data lend some credence to this belief; removing China and India from the equation, Nigeria and South Africa—the largest African economies—are the top two supplier countries by value for the 1995 to 2013 period. The next five countries are France, Italy, the United Kingdom, Germany, and Switzerland, respectively. So it is true that there was already considerable foreign (Western) competition in the region prior to the ascendance of China and India. But it is also true that African firms were more successful in bidding in the 1990s than they are now.

Moreover, it is not clear how the presence of China and India will affect Africa's local capacity development going forward. Though it is often said, for instance, that Chinese contractors "ship in" Chinese laborers rather than employing African workers, the reality is more nuanced and depends on various factors, including each country's domestic policies on work permits and visas.[43] African leaders have been increasingly attuned to this; on a state visit to China, Zambia's President Edgar Lungu called for the use of Zambian contractors and laborers on infrastructure projects backed by Chinese investments.[44] Further, it is a challenge for overseas firms (regardless of where they are from) to fully "localize" during project implementation if there are low levels of capacity to start with. Deborah Brautigam, director of the China Africa Research Initiative, points out that in the aid context, Chinese projects usually employ more African than Chinese workers.[45] But knowledge and skills transfers present the greatest difficulties, for Chinese, Indian, and traditional suppliers alike.[46]

Analysis of productivity growth in the construction sector is very limited for the countries in the region.[47] Ongoing work by Jill Wells, senior policy and research advisor at Engineers Against Poverty, offers insight into the current state of Tanzanian construction. The engagement of private firms was stymied by legacy policies; "it was not until the late 1980s that the private sector was encouraged to play a role in the implementation of government construction programmes."[48] Today, local contractors in Tanzania are overwhelmingly smaller organizations, most of which do not reach sufficient scale to compete on the level of ICB.[49] For such firms, opportunities to gain the experience remain a challenge, and a kind of vicious cycle is created as foreign contractors who are reluctant to use local subcontractors now dominate the industry.[50]

Ultimately, how to create a local construction industry and mobilize a skilled workforce in Africa is a question for Africa itself.

## SECTION IV: KEY FINDINGS AND RECOMMENDATIONS

### Key findings

The emergence of markets is in many ways a formative aspect of global development. A key part of the world economy, public procurement can play an important role in enabling this emergence. In developing countries, procurement for large projects financed by multilateral institutions is subject to international bidding procedures. The emphasis on international competition, while originally established to ensure worldwide access to developing country markets, has provided a channel for local competitiveness to develop across these countries and regions. By analyzing data on World Bank-financed projects from 1995 to 2013, we follow the evolution of industry competitiveness in the developing world, with a focus on civil works. Specifically, how well a country's or a region's firms fare in international bidding for such projects is one measure of the extent to which their competitiveness has effectively advanced.

Our findings illustrate the increasing dominance of domestic and regional firms across the developing world over the past two decades. The main exception to this trend is in sub-Saharan Africa, where the local construction industry has actually lost ground, while an increasing share of contracts are won by Chinese and, more recently, Indian firms. Uncovering the reasons behind the lagging participation of African construction firms requires more detailed analysis, but the strong competition of Chinese and Indian firms, coupled with local industry weaknesses, are important factors to consider.

### Recommendations

With this preliminary study, we hope to inspire further research and discussion. Below are three recommendations in this regard.

1. **Use public procurement data more. At the same time, make it easier to use.**

   Microeconomic procurement data from the World Bank and regional development banks is an unexpectedly powerful source for unlocking macroeconomic trends in the development and competitiveness of local industry. Researchers and policymakers should use it more. The World Bank dataset in this paper, for example, is publicly available, but seldom discussed analytically.[51]

   Of course, more in-depth analysis requires better organization and detail of existing data systems from the international institutions themselves. The World Bank, for its part, has made efforts to enhance the quality and accessibility of its procurement data. It launched a Procurement App for mobile devices in October 2014, making high-level trends less cumbersome to explore for casual users, though the information is not yet downloadable or comprehensive.[52] 2015 will hopefully see additional developments at the World Bank as well as other institutions.

2. **Focus more research on the local construction industry in Africa.**

   Construction is a critical sector. On a broader level, infrastructure challenges persist across both the developed and developing world, and especially in sub-Saharan Africa.[53] A fundamental step toward addressing these challenges is conducting a gap analysis—that is, investigating whether or not local civil works capacity is truly deficient in this region, and, if so, where and why this is the case.

This type of analysis is unfortunately lacking. Establishing an evidence base on why local firms are not competitive in World Bank-financed civil works procurement is essential for addressing the bottlenecks in Africa's industrialization and structural transformation. It is time the broader development community started taking notice of potential "missing links" like the lack of a fully developed African construction industry.

3. **Look at multilateral procurement reform through the lens of local industry development.**

   The World Bank and other multilaterals are in the midst of restructuring the procurement policies and procedures for the projects they finance. The current system of international procurement under ICB and its relatively singular focus on price is being called into question, as alternative approaches, such as sustainable procurement and procurement to promote disadvantaged or minority groups, are being discussed. The Bank and other IFIs should consider these rising "horizontal" procurement objectives alongside the existing objective of using procurement to help develop domestic capacity. Although procurement policies currently have a "domestic preference" clause, they are "restrictive in scope" and rarely applied.[54] Innovative solutions should be taken into account. For example, increasing provisions for the use of serial contracting or framework agreements, which allow the awarding of future contracts to a given supplier firm after a first "win," may facilitate local capacity development.

## CONCLUSION

Procurement is moving away from a standardized set of rules and toward a more complex (and more complicated) system of multiple objectives and new modalities. A renewed focus on procurement's role in the creation of sustainable local supply chains will have huge implications for its impact on development outcomes.

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5. World Bank, "Resource Guide: Procurement Methods," http://go.worldbank.org/LFHBBNPDN0.

6. Mason and Asher, *The World Bank Since Bretton Woods*, 187.

7. The wording in the latest iteration of the Bank's Guidelines for procurement suggests that ICB is now open to all states rather than limited to member states, although today its member states include most of the world's nations in any case.

8. Myrna Alexander and Charles Fletcher III, "The Use and Impact of the Bank's Policy of Domestic Preferences," in *Background Paper: Review of the World Bank's Procurement Policies and Procedures* (2012), 3. http://siteresources.worldbank.org/INTPROCUREMENT/Resources/DomesticPreferenceProcurementPolicyReviewBackgroundPaper-FINAL.pdf.

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18. China's success, while a good example of borrower country "emergence," is however unprecedented in scale due to other factors. These are largely beyond the scope of our study, though Section III discusses them briefly.

19. Listed under "Miscellaneous / Other Reports" here http://go.worldbank.org/BY6HRBV4E0. The reports span from FY 1993-2014; however, information from the other years may be incomplete. We do not include contracts for services in our analysis.

20. Independent Evaluation Group, "Appendixes to Volume II: Achieving Development Effectiveness through Bank Procurement," 2 vols., vol. 2, *The World Bank and Public Procurement: An Independent Evaluation* (World Bank, October 2013), https://ieg.worldbankgroup.org/Data/reports/chapters/procurement_vol2_appendix.pdf. 70.

21. The decline in the total number of ICB contracts could also be a result of a data issue in the publicly released reports by the World Bank. Prior to 2009, contracts spanning more than one major sector were listed separately under each major sector, with the total amount divided across the major sectors. For example, a $100 million contract in both the Agriculture and Transportation major sectors would be listed as a $50 million contract under Agriculture and a $50 million contract under Transportation. Although this may lead to double-counting in the number of contracts, it does not pose an issue for our overall analysis in this paper, which focuses on proportions rather than absolute numbers.

22. Vince McElhinny, "Trends in World Bank Lending Forecast Further Decline in Safeguard Coverage and Signs of a Return to Higher Risk and Higher Reward Lending," in *BIC Info Brief* (2013), 6. http://www.bicusa.org/wp-content/uploads/2013/10/Trends-in-WB-Landing-SG-decline-info-brief.pdf.

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25. In the previous section, we mentioned the "subsidiary" issue, which may exaggerate the amount of contracting won by local or regional firms. To the extent that this issue exists in civil works, it would skew the results toward showing a *higher* share of local procurement across regions. The presence of a "subsidiary" issue would mean the true share for sub-Saharan Africa is even lower than our data suggest.

26. For further reading on the topic, see work by Deborah Brautigam and others, cited below.

27. Paulo Drummond and Estelle Xue Liu, "Africa's Rising Exposure to China: How Large Are Spillovers Through Trade?," *IMF Working Paper* 13, no. 250 (2013).

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31. Corkin, Burke, and Davies, "China's Role in the Development of Africa's Infrastructure," 53.

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35. Export buyers' credits at non-preferential rates are provided to other foreign entities for buying Chinese goods or services, but these are thought to be a much smaller part of China Eximbank's portfolio (Skarp 2015).

36. Foster et al., "Building Bridges: China's Growing Role as Infrastructure Financier for Sub-Saharan Africa."

37. The term "concessional" is used to refer to loans classified as concessional by China (and, later in this paper, India), which may not correspond to the definition as presented in official development aid accounting.

38. Foster et al., "Building Bridges: China's Growing Role as Infrastructure Financier for Sub-Saharan Africa."

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46. Ibid.

47. Homi Kharas, Jeffrey Gutman, and Christine Zhang to *Future Development*, 2014, http://blogs.worldbank.org/futuredevelopment/pay-more-attention-construction-firms-africa.

48. Jill Wells and Ramadhan Mlinga, "Review of the Construction Industry Policy in Tanzania," (2015 (forthcoming)).

49. Ibid.

50. Ibid.

51. "Surely there's a spare economist somewhere amongst the 10,000 plus staff in the institution who could spend a few weeks putting together and analyzing a [procurement] dataset," laments Charles Kenny from the Center for Global Development (2014).

52. Operations Policy and Country Services, "World Bank Procurement App and Open Data," (2014).

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