Policy brief

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Firm performance and participation in public procurement: Evidence from sub-Saharan Africa

In brief

- Public procurement of goods and services accounts for more than 10 percent of GDP in many African countries meaning that governments are an important source of demand.
- This study uses firm-level data from 19 sub-Saharan African countries to assess the productivity performance of firms participating in public procurement.
- The findings suggest that companies that sell more of their outputs to government entities perform better. This is most strongly the case for domestically-owned firms, especially smaller companies with total employment between 10-50 workers, firms engaged in manufacturing activities, and companies that are located in the capital city.
- A positive relationship between participation in public procurement and performance is not observed for foreign-owned firms or services companies.
- The findings suggest that more attention should be devoted to understanding how procurement practices in sub-Saharan African countries impact firm performance. Creating systems for collecting and analysing this data could be important to assessing the potential for procurement to be used as an instrument of industrial policy.

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Background

Governments around the world purchase a wide range of products from the private sector in order to provide public goods and services to citizens. Such public procurement often accounts for a significant share of GDP and thus aggregate demand. In low-income countries, public procurement constitutes 14.4 percent of GDP on average, with even larger values recorded in some of the poorest regions of the world, including South Asia and sub-Saharan Africa (SSA). In addition to seeking to provide public goods and services at the lowest possible cost – summarised by the notion of maximising "value for money" – governments frequently use procurement as a mechanism to pursue distributional and industrial development goals. This may be reflected in measures that encourage government agencies to source goods and services from domestic firms ("buy national" policies). Government procurement can create demand for new or innovative technologies, help firms move into new areas of production and learn by doing, or more generally assist firms in overcoming demand constraints and accessing credit.

Motivation and policy research question

Whether participation in public procurement contracts is associated with the realisation of industrial development goals or enhances the competitiveness of domestic firms by improving firm-level productivity are important policy questions. Most research on the effects of public procurement centres on whether value for money is achieved and the design of specific procurement procedures and mechanisms that will maximise the likelihood that this goal will be realised. Relatively little is known about the effects of public procurement in developing countries on the performance of firms that sell goods and services to the government.

This study uses data from a survey covering roughly 6,700 companies in 19 SSA countries to investigate the potential role that government demand can have as a determinant of firm performance. Over 2,000 of the firms in this study's sample report that low demand is a major cause of capacity underutilisation. In principle, government procurement offers a source of demand that may allow firms to invest more, expand employment, and increase their productivity. Such effects may not materialise, or be attained, if public procurement allocates contracts to less productive firms, reflecting political favouritism, corruption, or other types of market distortions.

Findings

The empirical analysis reveals that public procurement is a significant source of demand for many domestic firms in SSA. Government contracts account for a larger share of sales for domestic firms than foreign-owned ones, and are more important for larger and older firms. We find a strong positive relationship between government demand (selling to government entities) and the performance of firms.

- Increasing the share of output sold to the government by 10 percentage points is associated with a 4 percentage point (p.p.) increase in productivity.
- This association between sales to the government and firm-level performance is more evident for smaller firms (the increase in productivity rising to 7 p.p. for firms with less than 20 employees) than it is for large firms (with more than 100 employees); for domestically-owned firms; and for firms that have weaker productivity performance.
- Participation in public procurement is also positively associated with other dimensions of firm performance such as the development of new products – an indicator of innovation.
- There is on average a 20 percent difference in productivity levels between firms that sell some of their output to government entities (that is, participate in public procurement) and those that do not.

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While selling to the government may help firms to improve their performance, the study finds that this positive association is attained as the share of total sales to the government rises. A turning point is reached when two-thirds of total sales are to the government. Moreover, government demand appears to matter more for firms with lower levels of productivity, which is consistent with the finding that positive correlations between public procurement participation and performance arise for smaller firms – these companies are more likely to be at the bottom of the productivity distribution.

While the study is not able to assess whether the pattern of sales to the government is influenced by specific procurement policies, there is some indicative evidence that the results may reflect underlying industrial development objectives. This can be inferred from the fact that the relationship is not found for sales to international organisations and non-profit organisations (NGOs) – entities that can be expected to have maximising value for money as the overriding objective.

The research findings are based on data for one year. This makes it difficult to assess the direction of causality between participation in public procurement and firm-level productivity of innovation performance. The study tries to address this issue by constructing a control group of firms that do not engage in procurement and that are very comparable in terms of characteristics as firms that sell to the government. This matching methodology results in very similar findings, suggesting that the results of the analysis are not due to so-called selection effects – that is, they do not appear to be driven by the fact that firms that participate in public procurement differ in some important respect from firms that do not.

Policy implications and recommendations

Most public procurement systems aim to achieve value for money and much of the research and policy literature on procurement focuses on this dimension of procurement. Less attention has been given to the prevalence and effectiveness of public procurement as a tool to support (enhance) the performance of domestic firms. The research findings suggest that more attention should be devoted to understanding how procurement practices in SSA countries impact on firm performance.

In this brief, we do not aim to assess to what extent procurement policies are designed to favour local sourcing and what the effects of existing policies are. Many countries have adopted procurement regimes that encourage local sourcing. This is also the case in Africa—for example, Kenya, Tanzania, and Uganda have provisions in their regulatory frameworks for public procurement that provide for the application of preference and reservation schemes to favour sourcing from national firms.

An important policy question is to determine to what extent the results obtained in this study reflect the application of such preferences and other measures that boost the share of total procurement that is allocated to locally-established companies or firms that are owned by nationals of the country concerned. Answering this question requires information on the implementation of procurement and time series data on the participation by local vs. foreign firms in the procurement process and the share of total output that is sold to government entities.

Existing efforts to characterise procurement systems across African countries such as the World Bank initiative *Benchmarking Public Procurement* (http://bpp.worldbank.org/) do not document the policy objectives underlying procurement regulations and do not collect information on how provisions in these regulations that permit or encourage the application of preferences for local firms are applied. Collection of such information is important in assessing the potential for procurement to be used as an instrument of industrial policy, and how this should be designed if the goal is to use procurement as an instrument to improve productivity and support innovation.