

Development Research Group

Knowledge in Development Note 1

Private Sector Development and Growth

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A vigorous and well-regulated private sector is one of the most important drivers of growth and development in a country. Private Sector Development (PSD) is intimately related to innovation, creative destruction, job creation, technology adoption, and productivity improvements, which are central to understanding the microeconomics of the growth process. However, it is only with the recent worldwide collection of firm-level data and systematic measurement of the business environment that research has been able to begin to explore at the microeconomic level the role of policies in aiding private sector development.

PSD research at the Bank has initially had its greatest impact in providing diagnostic tools. Design and implementation of surveys across a range of countries have focused attention on the role of policy in the development of the private sector, spurring business environment policy reforms in many countries. It has also provided new insights and hypotheses to guide research going forward. The Bank's research group is now building on these initial diagnostics to provide a more in-depth analysis of how PSD policy reforms impact firms.

How has private sector development research helped policy recommendations to date?

Drawing attention to the importance of the investment climate and the extent to which it differs within and across countries

The Bank's Enterprise Surveys (formerly known as Investment Climate Surveys), initiated as a joint DEC-PSD program, were launched in 2001 and have now collected comparable data on more than 70,000 firms in over 100 countries. The data are used for benchmarking key indicators across locations (countries and subnational regions) and for evaluating the impact of different investment climate policies on firm performance, including growth, innovation, productivity, and job creation. In some countries, survey coverage has now expanded to incorporate rural and informal enterprises, and the recent availability of two surveys (and more in the future) taken at different times allows studying the effects of investment climate policy changes. Five policy areas receive particular attention: product market regulations and competition; labor regulations and human capital constraints; access to finance; infrastructure services; and governance and the rule of law.¹ Together with the *Doing Business* indicators, the Enterprise Surveys have allowed countries to benchmark indicators of their business environment against one another, spurring reform efforts.

The Enterprise Surveys are a critical input into country-specific Investment Climate Assessments (ICAs). These in turn have been incorporated in numerous Country Assistance Strategies and Poverty Reduction Support Credit and 34 Bank projects worth

\$1.8 billion. Improving the investment climate, the subject of the *World Development Report 2005: A Better Investment Climate for Everyone*, is now one of the two pillars of the World Bank's current development strategy.²

Some of the findings from the existing work include:

Entry, exit, and competition are key determinants of innovation.

Regulatory barriers to entry and exit – from licenses and permits to bankruptcy laws – reduce competition and impose significant costs on firms.³ Net entry contributes up to 30 percent of productivity growth in countries like Latvia where it takes less than 10 days to register a firm, compared to less than 5 percent of productivity growth in Argentina, where it takes over 60 days to register a firm. Firms facing greater competition are two-thirds more likely to innovate or introduce a new product.⁴ Such research has contributed to numerous reforms to simplify regulations and easy entry in countries such as Algeria, Cambodia, Moldova, Mozambique, and Uganda.

Small firms often face greater growth obstacles, and as a result, can realize rapid gains from relaxing their constraints.

The costs of regulatory burdens, bribes, weak property rights, poor infrastructure, and low access to finance are up to a third higher for smaller firms than for larger or foreign firms. Some of this is due to fixed costs, which are proportionately higher for smaller firms. But some is due to the alternative means of larger firms to compensate for a weak investment climate (such as purchasing generators, obtaining capital overseas, or even influencing officials in ways that favor them).⁵ As a consequence, many small firms are operating at below their optimal size. Randomized experiments in Sri Lanka and Mexico which gave microenterprises grants of capital stock found real returns on capital of over 5 percent *per month*, showing that the average small firm does have the ability to experience rapid growth when constraints are relaxed.⁶

Effective regulation, rather than ownership, is essential to improving infrastructure services and expanding their contribution to growth and poverty reduction

Private sector participation in infrastructure has prompted increased investment and expanded services coverage.⁷ Between 1990 and 2001 more than \$750 billion was invested in 2,500 private projects in developing and transition countries. The last 15 years of experience with privatization clearly demonstrates that regulation can provide a credible commitment to safeguarding the interests of both investors and customers—and is crucial to attracting the needed long-term private investment.⁸ Regulatory processes must encourage competition, be open and transparent, and be designed *before* privatization. Moreover, regulatory practices and infrastructure development should ensure more broadly that services are provided equitably and that the poor enjoy adequate access.⁹ Some of the strongest results are seen in telecommunications, where privatized networks subject to competition have frequently expanded two to three times faster than state-owned monopolies.¹⁰ Continuing to get infrastructure reform right is essential to achieving the MDGs for increasing growth, reducing child mortality, and empowering women.¹¹

Current and future research directions

Promoting Entrepreneurship, Firm Productivity, and Growth

Our work focuses on understanding the determinants of firm entry, exit and performance, and their consequences for economy-wide productivity and growth. Central to this research are the interacting themes of *entrepreneurship* and *firm dynamics*. A better understanding of the determinants of entrepreneurship and of how changes in the composition of the private sector over time affect firm productivity and growth are essential for understanding the microeconomics of growth. The existing literature has only recently begun to study the role of the business environment in driving firm dynamics and entrepreneurship, and our ongoing work seeks to prioritize the types of policy interventions which can have greatest impact in unlocking these drivers of private sector development. The findings of our work in this area can help the World Bank develop policies to encourage new firm entry, promote self-employment, and enhance the growth of firms, both small and large.

Areas under investigation include:

- What are the determinants and consequences of informality? Informal firms account for roughly one-third of production and one half to three-quarters of the non-agricultural labor force in developing countries and the informal sector is particularly important as a source of employment for the poor. However limited data and a focus on formal firms means relatively little is known about the productivity of these firms, the barriers they face for growth, and their spillover effects on the formal economy. Our research includes coupling the detailed business environment data collected by the Bank with analysis of detailed firm-level cross-country data, and the development and analysis of new in-depth single country surveys.
- What determines innovation and technology adoption? Many economists consider innovation and technological progress essential for economic growth and development.¹² Hence it is important to study the determinants of the rate at which firms across developing countries innovate and adapt their organizations to meet market conditions. Most firms in emerging markets are engaged in activities far from the technological frontier and entrepreneurs innovate not just through original inventions but also by adopting new means of production, new products and new forms of organization. Hence, our work in this area defines the innovation process broadly, to include not only core innovative activities such as the introduction of new products and new technologies, but also other types of activities that promote knowledge transfers signing joint ventures with foreign partners or obtaining new licensing agreements, and other actions, such as opening a new plant or outsourcing a productive activity, that adapt the organization of the firm's business activities. Our research will use the investment climate firm surveys to investigate the role of different policies in influencing the innovation process.

- What is the impact of corporate governance on firm performance? Corporate governance covers a broad range of issues of allocation of control rights within a firm, and thus defines how the authority is exercised and the quasi-rents generated by firm are allocated among different classes of stakeholders. A more narrow definition of governance covers the mechanisms in which suppliers of finance to corporations assure themselves of getting a return on their investment. Papers under this area investigate the impact of the institutional development and business environment on firms' governance structures, and how internal and external governance affects firm performance. Our ongoing research in this area focuses on detailed firm surveys in China and Russia, countries in which many firms have experienced rapid changes in corporate governance.
- How do the business environment and its reforms affect firm performance? The diagnostics provided by the new firm surveys find that firms report many features of their business environment as obstacles to their growth. Firms report being affected by inadequate security and enforcement of property rights, inefficient functioning of financial markets, poor provision of infrastructure services, inefficient regulations and taxation, and broader governance features such as corruption and macroeconomic instability. However, although firms report being affected by various factors, not all the obstacles reported by firms are equally constraining – and not all reforms are equally effective. Our research here therefore has two focuses. The first is seeking to identify binding constraints, which has important policy implications for the priority of reform efforts.¹³ Secondly, the use of natural and randomized experiments to evaluate the impact of reform efforts will enable us to provide policy advice on which reforms work, which don't, and why.
- How does microeconomic efficiency affect aggregate growth? The work explores the aggregate consequences of microeconomic efficiency and firm dynamics. It investigates the extent to which the inability to allocate resources to their most productive uses underlies less developed countries' lower productivity and income levels. There is broad agreement that long-run differences in per capita income across countries mostly reflect differences in productivity. In turn, poor countries' low aggregate productivity can be the result of low productivity of the average firm (or plant), or of an inefficient allocation of factors of production across firms. The research builds from disaggregated, firm-level data to assess the aggregate productivity consequences of microeconomic allocation. It examines the extent to which key dimensions of the business environment affect the efficiency of the allocation of resources and the speed with which reallocation occurs.

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Endnotes

Most Bank documents cited in this summary are available through the documents and reports portal of the World Bank <http://www-wds.worldbank.org/>. The word “processed” describes informally reproduced works that may not be commonly available through library systems.

¹ See ru.worldbank.org/external/cicic/portal.htm for links to data, reports, standard tables and methodology, and ru.worldbank.org/InvestmentClimate/ for interactive web tool comparing key indicators across countries and firm characteristics.

² It complements the second pillar, investing in and empowering people to take advantage of these opportunities.

³ See L. Klapper, L. Laeven and R. Rajan. 2006. “Business Environment and Firm Entry: Evidence from International Data.” *Journal of Financial Economics* 82(3): 591-629 for evidence that entry restrictions can hamper entry and reduce growth, especially in industries which naturally have high entry.

⁴ [*World Development Report 2005: A Better Investment Climate for Everyone*](#). Washington D.C., World Bank.

⁵ See T. Beck, A. Demircuc-Kunt and V. Maksimovic. 2005. “Financial and Legal Constraints to Growth: Does Firm Size Matter?” *Journal of Finance* (1): 137-177; M. Hallward-Driemeier and D. Stewart. 2004. “How Do Investment Climate Conditions Vary Across Countries and Types of Firms?” World Bank, Washington, DC, processed; D. Dollar, M. Hallward-Driemeier, and T. Mengistae. 2005. “Investment Climate and Firm Performance in Developing Economies.” *Economic Development and Cultural Change* 54(1): 1-31.

⁶ S. de Mel, D. McKenzie and C. Woodruff. 2007. “[Returns to Capital in Microenterprises: Evidence from a Field Experiment](#).” Policy Research Working Paper 4230, World Bank, Washington, DC; and D. McKenzie and C. Woodruff. 2007. “Experimental Evidence on Returns to Capital and Access to Finance in Mexico,” World Bank, Washington DC, Processed.

⁷ For a comprehensive summary of the latest research findings, please see [Reforming Infrastructure: Privatization, Regulation, and Competition: A Policy Research Report](#). Washington D.C.: World Bank, 2004.

⁸ The appropriateness of privatization differs by sector. Telecommunications provide the most compelling case in developing countries, while power and especially water are more problematic. In the water sector, concessions and leases are recommended as more effective ways to achieve the efficiencies of competition while retaining strong public oversight.

⁹ I. Kessides. 2005. “Infrastructure Privatization and Regulation: Promises and Perils.” *World Bank Research Observer* 20(1): 81–108; R. Zaghera, ed., [Economic Growth in the 1990s: Learning From A Decade of Reform](#). Washington, DC: World Bank.

¹⁰ Specific examples: (1) Jamaica’s telecommunications firm increased its annual network expansion rate from 4.5 percent in the 11 years before privatization to 18 percent in the 4 years immediately following. In electricity. (2) Argentina’s installed capacity grew from 13,267 megawatts in 1992 to 22,831 megawatts in 2002 and energy losses have shrunk from 21 percent in 1986 to 9 percent in 1996. (3) Access to safe water increased by more than 30 percent after privatization in Manila and 25 percent in Conarky, Guinea.

¹¹ For examples of how research influences operational work, see World Bank. 2000. “Economic Principles to Guide Reform in the Czech Infrastructure Sectors.”; World Bank. 2000. “Romania: Regulatory and Structural Assessment in the Network Utilities.”; World Bank. 2000. “Hungary: A Regulatory and Structural Review of Selected Infrastructure Sectors.”; World Bank. 1995. “Regulation of the Argentine

Network Utilities: Issues and Options for the National Government.”; World Bank. 1994. “The Brazilian Railroad Industry: Options for Organizational Restructuring.”

¹² J.A. Schumpeter. 1947. *Capitalism, Socialism, and Democracy*. New York: Harper Brothers; Robert M. Solow. 1957. “Technical Change and the Aggregate Production Function.” *Review of Economics and Statistics* 39 (August):. 312-320; D.S. Landes. 1969. *The Unbound Prometheus: Technological Change and Industrial Development in Western Europe from 1750 to the Present*. Cambridge: Cambridge University Press; N. Rosenberg. 1982. *Inside the Black Box: Technology and Economics*. Cambridge: Cambridge University Press; J. Mokyr. 1990. *The Lever of Riches: Technological Creativity and Economic Progress*. Oxford University Press.

¹³ R. Aterido, M. Hallward-Driemeier, and G. Iarossi. 2007. “From Benchmarking to Impact: Identifying Which Dimensions Matter.” In *The African Competitiveness Report*, World Economic Forum; M.A. Ayyagari,, A. Demirgüç-Kunt, and V. Maksimovic. 2006. “[How Important are Financing Constraints? The Role of Finance in the Business Environment](#).” Policy Research Working Paper 3820, World Bank, Washington, DC.