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Private Enterprise Development in Low-Income Countries

A CEPR / DFID Research Initiative

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Private Enterprise Development in Low-Income Countries (PEDL) is a joint research initiative of CEPR and DFID. It will pursue, over the period 2011-2016, a research agenda focusing on private-sector development. It starts from the need to develop a better understanding of what determines the strength of market forces driving efficiency in LICs. Existing research suggests that the private sector in these countries faces a multitude of constraints. These constraints interact with one another. For example, the strategic interaction of firms with market power will be affected by the regulatory regime governing both new entrants and incumbent firms. What is needed is research which allows us to understand how these constraints interact.

In late 2011 PEDL will launch a competitive research grants programme, a mixture of major research grants and exploratory research grants. Grants will be awarded on a competitive basis, with applications solicited from researchers throughout the world. Since the number of grants and their amounts are significant, PEDL will devote significant resources to the evaluation, selection and oversight of these grants.

In 2012 PEDL will undertake a range of other activities aimed at building a research community in private enterprise development in low-income countries:

- research workshops;
- a PEDL working paper series reporting on the research carried out under the auspices of the Initiative;
- training workshops; and,
- open events, at which the results of PEDL research will be presented and discussed with policymakers and practitioners.

The goal of the research programme is to influence policy in LICs. Policy impact requires dialogue between researchers and policymakers. Communication can be through individual meetings, conferences and workshops, or through written documents, but must start at the beginning of the research project and continue until the final results of the research are available. The responsibility for outreach to policymakers will fall on both the funded researchers and CEPR. Researchers will be responsible for developing a Policy Impact Plan (PIP), which must be included as part of the research proposal, and the quality and feasibility of the PIP will be one of the evaluation criteria. The PIP will define a plan for outreach to the members of the policy community and private sector most directly interested in the research (which will depend on the country and the thematic focus). Funded researchers will be expected to have regular briefings with local stakeholders, which will be scheduled to take advantage of visits by the research team to the country. Where necessary, CEPR, using links with the local DFID office, will assist PIs in making these contacts. In addition, the project will prepare regular policy briefs (at least one each year of the project) for distribution to these key stakeholders.

The Research Agenda

It is impossible for large numbers of people to be lifted out of poverty without sustained growth, and impossible to have sustained growth without a vibrant private sector. In important ways, underdeveloped private sectors are much like Tolstoy's unhappy families: each is underdeveloped in its own way. Some dysfunctional domestic private sectors coexist with dynamic export sectors. Some are in countries which are conflict ridden or prone to natural disasters. Some have almost a total lack of small and medium-sized enterprises, while others have fairly dynamic small firms. A research programme which can inform policies for private sector development must therefore address a variety of issues and incorporate a variety of approaches.

These approaches must, however, reflect one key aspect of growth dynamics: sustained growth in average income is impossible to achieve without growth in productivity. A simple decomposition of the underlying components of growth indicates that increases in income stem either from improvements in productivity of existing firms, or from the reallocation of output shares from low-productivity to high-productivity firms. An important part of the reallocation process involves exit of low-productivity firms and entry of high productivity firms. Entry plays a particularly important role in this dynamic because new entrants often bring new technologies. But perhaps more critically, new entrants pressure incumbents to improve productivity, and force inefficient incumbents to exit.

In the United States and Europe, data allow a detailed examination of these productivity dynamics. Using U.S. data, for example, Foster, Haltiwanger and Krizan (2006) attribute substantially all of the impressive productivity gains in the retail sector during the 1990s to entry of more productive firms and exit of less productive firms. Using data from six narrowly defined manufacturing sectors, Foster, Haltiwanger and Syverson (2008) find that the direct effect of entry explains only around one-quarter of productivity growth; most productivity growth comes from improvements in incumbent firms. Of course, the pressure from entrants must be at least partially responsible for driving the improvements in productivity among incumbents.

These data paint a picture of a vibrant private sector, with pressure leading to a Darwinian selection of the fittest. There are no comparably comprehensive studies of productivity dynamics in low-income countries. But recent evidence suggests markets in low-income countries exert much less pressure on incumbent firms. Bloom and Van Reenen (2010) show there is substantially more dispersion in management practices in India and China than in the United States and northern Europe. Hsieh and Klenow (2009) present evidence showing more dispersion in total factor productivity in India and China, compared with the United States. By either measure, we see a much thicker left-hand tail of low-productivity firms surviving in China and India. Casual observation suggests that productivity dispersion is also very high in sub-Saharan Africa and other LICs, though a lack of data has made formalising this a challenge. The Initiative will give high priority to addressing this challenge.

The evidence on management practices and productivity suggests that the markets do not exert the same pressure on firms to improve productivity. Why should this be so? A well-established literature shows the role of underdeveloped financial markets and regulatory barriers in suppressing entry. (See, for example, Djankov et al 2002, Beck et al 2008.) But differences between markets in high-income and low-income countries are much broader and more fundamental than finance and entry costs. There is a greater reluctance in low-income countries to switch trading partners, even for standardised products. (See, for example, Johnson, McMillan and Woodruff 2002.) Information about reliability of firms and products is poor and closely held. Formal legal remedies for contractual non-compliance are slow, expensive and unreliable. Decision-making is more centralised because owners are unwilling or unable to delegate responsibility outside a narrow circle, often limited to family members. Finally, macroeconomic instability and high levels of uncertainty more generally magnify these failings, increasing the perceived costs of establishing new trading relationships (McMillan and Woodruff 2002). Extreme instability is a feature of many low-income countries, especially in conflict ridden areas where the state is unable to maintain basic order. In dysfunctional states, public governance of private sector trading gives way to creation of non-state institutions, which are often imperfect substitutes (McMillan and Woodruff, 2000).

All of these result in higher levels of friction in markets in low-income countries. The friction make markets less competitive and so tempers the selection pressure exerted by well functioning markets. The cost of switching trading partners is high, and, as a result, the demand faced by any individual firm is less elastic. Firms that increase productivity do not gain market share; firms that fail to increase productivity are not forced out of the market. Where reducing costs instead leads both to higher margins and greater market share, the incentive to reduce costs will be greater. Where reducing costs is required for survival, this incentive is even greater. Understanding market friction is also key to understanding incentives firms face to undertake innovative activities to stay ahead of the competition. In this regard, PEDL will complement the DFID's Country Case Studies on Innovation and Growth. PEDL will, of course, take a somewhat different approach, relying on econometric analysis and quantitative modelling, but this should complement the case studies, and the new datasets that PEDL is likely to generate may prove useful to the ten case studies.

Research can inform policy by illuminating the costs of continuing existing policies or the benefits of policy changes. Randomized control trials (RCTs) have been particularly effective in this regard. PEDL recognizes the value and contribution of RCTs, while also recognising their limitations. While RCTs are excellent tools for understanding individual decision-making, we believe an understanding of growth processes requires analysis at a more systemic level than is typically possible with RCTs. We will encourage work which incorporates a general equilibrium framework, and which explicitly accounts for the interactions of market participants. For example, recent empirical work in industrial organisation illuminates how interactions among firms affect pricing, entry barriers, and market efficiency. International trade and micro-founded macroeconomic models also take explicit account of general equilibrium effects. These theory-based approaches provide the possibility of understanding how

constraints interact, and how particular sectors have been able to grow by overcoming those constraints.

These aggregate approaches are often subject to the criticism that they do not cleanly identify causal effects. Experiments - natural, policy, and randomised trials-are the cornerstone of what Angrist and Pischke call “the credibility revolution.” While we will not focus explicitly on randomised trials, we will pay careful attention to identification of causal effects. What is important is that the studies be convincing not only to sceptical academics, but to perhaps even more sceptical policymakers.

Four Research Themes

The research agenda focuses on private-sector development in LICs, and is organised around four specific themes.

1. Modelling market frictions in LICs using newly available data
2. Understanding how constraints interact using micro-founded macro models
3. The dynamics of SMEs: Informality and entrepreneurship
4. The role of export-oriented industries in driving growth

1. Modelling Market Frictions in LICs Using Newly Available Data

The available evidence on the impact of various constraints to enterprise development comes from either cross-country regressions or simple regression analysis using very basic firm-level data. While this evidence has had an important impact on some aspects of policy in LICs - for example, regulations governing establishment of businesses - the impact on other aspects of the business environment has been more limited. What is needed is an approach which examines the impact of constraints in a much more detailed manner. Perhaps more critically, what is important is an understanding not just the effect of constraints on individual firms, but the effect of these constraints on market dynamics - that is, their effect on the how firms interact in a given market.

Recently developed empirical methods and newly available data have the potential to address these concerns. To date, these methods have been applied largely to data from high-income countries. But detailed data, such as transaction-level export/import data and Scantron data on purchases, are now more widely available in low-income countries. These data dramatically expand our ability to examine markets at a very detailed level. In some cases, fully exploiting these administrative data may require gathering of new data through surveys. Given the centrality of data in decision-making, we will welcome proposals which include gathering data. The researchers must, however, justify why the data are needed and what their value added is. They must also show that they are not duplicating other data gathering efforts. All data gathered with project funding will be subject to ESRC public use guidelines. Research under this theme may also benefit from data obtained through the extension of the World Bank's Enterprise Surveys, which is being funded by DFID under a separate project.

Economists from the field of industrial organisation have recently developed ways of using these detailed data to build models of the strategic interactions between firms in a specific market. These methods are particularly appropriate for analysing the behaviour of large firms, or interactions between a few large firms and the larger number of smaller firms in a sector. PEDL will encourage researchers to extend this "structural" approach to markets in LICs. The approach will allow us to measure frictions in these markets and explore issues such as the relationship between these frictions and a hostile investment climate. PEDL will encourage this important line of research.

Examples of the questions that might be addressed in this theme are:

- How does the investment climate affect firm dynamics in specific sectors? For example, are buyers less willing to switch to lower-cost sellers in when reliable information and efficient legal remedies are missing?
- How do mechanisms which firms devise to govern their trading relations in fragile and conflict affected states (FCAS) affect market frictions and competitive environments?
- How do market frictions affect the incentives of the owners and managers of firms to innovate and increase productivity?
- How does the entry of MNCs or new very large domestic firms affect market dynamics and incentives for smaller incumbent firms?
- How does the investment climate affect entry and exit rates in industries?

2. Understanding how Constraints Interact Using Micro-Founded Macro Models

Constraints on enterprise growth are most often analysed one at a time. But firms often face constraints that come in bundles. For example, they may face serious financial constraints and weak legal systems, or instead well developed financial markets and well developed legal systems. This has made separating the impacts of various constraints, and offering specific policy advice, challenging. We need an approach that allows us to understand how constraints interact.

In addition, constraints on one industry have knock-on effects on other industries. To date, these general equilibrium effects have been taken into account only in the most aggregated, cross-country studies. But recent work with micro-founded macro models opens up the possibility of a much more detailed understanding of the aggregate effects of constraints. To date, these methods have been applied most directly to explore the role of financial constraints. PEDL will apply these models to other constraints, including regulation of firm entry, labour markets, and other aspects of the investment climate. This will allow a more detailed understanding of how constraints affect overall growth dynamics in LICs, including the distributional effects of that growth. This approach often starts with an analysis of the effects of specific policy reforms. So, for example, it may be used to understand the effect of reforms which improve (or make worse) the investment climate. This provides the potential for a clearer understanding of how particular reforms affect the dynamics of private sector development.

Examples of the questions that might be addressed in this theme are:

- How do constraints to enterprise growth interact with one another? Are there qualitative differences between environments, in which there are a few serious constraints; and fragile and conflict affected states, where there are many
- How does the impact of the investment climate on one sector spill over to other sectors?
- What does the general equilibrium approach to investment climate tell us about how investment climate affects performance at a more conceptual level?
- What are the distributional consequences of a hostile investment climate? In particular, what is the effect on the poor and on women?

3. The Dynamics of SMEs: Informality and Entrepreneurship

An overwhelming characteristic of most LICs is the very large number of microenterprises. These firms are 'informal,' operating outside the regulatory structure of the state. There is a debate about whether informality enables business owners to escape excessive regulation or reflects unfair competition as some businesses escape efforts of the state to regulate the economy in a reasonable manner. The role of the informal sector has particular relevance for poverty, as a large share of the low-income households, particularly those in urban areas, earn their livelihoods from informal employment.

The relationship between informality and entrepreneurship is also unclear. Informality may also represent an entry point for nascent entrepreneurs; alternatively the burdens of becoming and being formal may prevent micro entrepreneurs from growing and realising their potential. The second case has implications for the competitiveness of the broader economy: if high-ability entrepreneurs are unable to grow because of burdensome regulations, then small firms will be unable to exert competitive pressure on larger incumbents. Moreover, the entrepreneurial ability of those running larger firms will be sub-optimal, as only individuals with special connections will be able to operate larger firms. In that case, the process through which markets select entrepreneurs will differ markedly between LIC and high income countries.

The lack of data makes research in this area particularly challenging. While comprehensive, longitudinal firm-level data sets are becoming more common in LICs, these data sets often miss, or at least undercount, informal firms. In countries where a third to a half of economic activity is informal, this creates a challenge to data-driven efforts to understand firm dynamics. In some countries, however, there is now an opportunity to gain a broader understanding of firm dynamics through more comprehensive data sets, created by a combination of firm census data (where informal firms are underrepresented) with household-based survey data (which capture more informal firms than do census data). PEDL will encourage projects that combine existing LIC data sets in ways that allow an analysis of the role of the informal sector in enterprise dynamics, and projects that identify innovative and cost-effective ways to gather new data to fill in gaps in the existing data sets.

Examples of the questions which might be addressed in this theme are:

- Are informal firms a potential source of dynamic enterprises?
- Who becomes an entrepreneur in LICs, and how does the selection into entrepreneurship compare with selection in high-income countries, for both men and women?
- How do regulatory constraints to formalisation affect the incomes of the poorest entrepreneurs operating informally?
- How do the dynamics of enterprise growth and the characteristics of entrepreneurs differ in fragile and conflict affected states?
- More generally, where do the most dynamic entrepreneurs come from? Are there policies which are successful in encouraging these more dynamic entrepreneurs to start businesses?

4. The Role of Export-Oriented Industries in Driving Growth

The evidence suggests that exporters and MNCs play a role in aggregate growth which is disproportionate to their share in output. First, MNCs, and exporters more generally, are a conduit for knowledge transfers that may (to varying degrees) spill over to the rest of the economy. Because export markets are highly competitive, they provide very strong incentives for productivity improvements; because foreign consumers often have a higher willingness to pay for quality, exporters also face stronger incentives to upgrade both capital and labour used in production.

In spite of business environments which are hostile, there are many dynamic, growing sectors in LICs that are driven primarily by exporters - garments in Bangladesh, information services in India, and cut flowers in Kenya, to name a few. Trade economists have examined the effects of exports on productivity, but research that combines the tools of industrial organisation and trade is still rare. For example, how does the entry of MNCs into export markets affect the nature of competition in both export markets directly and in other sectors of the economy indirectly? This is an area of great potential, and PEDL will encourage research that combines the trade and IO perspectives in order to address key policy issues.

Examples of the questions which might be addressed in this theme are:

- What is the role of MNCs in the development of new export oriented sectors, and how and when do domestically-owned firms enter these sectors?
- Does the need to produce higher quality goods for the export market have important spillovers for the domestic sectors, either through training of workers or demand for more efficient local partners?
- Which sectors of society benefit from export sectors, and what policies can help ensure that the benefits extend to households in the lowest income deciles?
- What is the relationship between export sectors and the overall business environment? Do exporters create pressure for better institutions?
- Can export sectors survive in fragile and conflict affected states?

Crosscutting Themes

PEDL will give particular encouragement to proposals which address issues of:

- fragile and conflict affected states;
- gender; and,
- climate, environment and social compliance.

Fragile and Conflict Affected States: The issue of private sector development in fragile and conflict affected states has tremendous potential for innovative research. Recent studies suggest there is an important interaction between private sector development and the incentives of individuals to participate in civil conflicts. For example, Miguel, Satyanath and Sergenti (2004) show that higher rainfall reduces participation in civil conflict in 41 African countries, while Dube and Vargas (2010) show that increases in coffee prices led to decreases in the intensity of civil conflicts in Colombia. In both cases, growth is seen to increase an individual's opportunity cost of participation in the conflict, and hence, to decrease levels of participation in conflict. The importance of the interaction between growth and conflict provides a very compelling case for supporting research in this area. Of course, private sector development is particularly challenging in conflict-ridden areas. A critical bottleneck to research on firms in conflict-ridden areas is the availability of data. But if researchers are able to overcome this issue, we believe there is tremendous potential for research on private enterprise development in conflict-ridden states.

Gender: Gender issues are most obviously relevant for proposals related to small and medium sized enterprises. In SMEs, the identity of the owner is usually clear, and hence, differences between female- and male-owned enterprises can be examined. In MNCs and larger domestic firms, ownership is most often diversified and of mixed gender. Of course, in these larger firms, gender issues are very relevant for employment and management dynamics. But employment issues are the focus of another DFID-funded research programme being carried out by IZA. In the interest of coordination, we defer to the IZA research programme for the primary focus on the employment / management issues. But for proposals for research on issues which operate at the level of the enterprise, we will encourage proposals which take into account differences in gender.

Climate, Environment and Social Compliance: Attention to environmental and social compliance may have implications for productivity and growth dynamics in LICs. In the first instance, compliance may increase production costs, making firms less competitive. But this initial effect on costs may also encourage firms to focus more carefully on productivity improvement. (See, for example, Bloom et al 2010b.). As we have noted, recent research suggests there is very large dispersion of productivity among firms in LICs, and great potential for productivity improvements. This interaction is an example of how we will encourage research which incorporates environmental and social compliance.