Entry Regulation and the Formalization of Microenterprises in Developing Countries

Miriam Bruhn and David McKenzie

The majority of microenterprises in most developing countries remain informal despite more than a decade of reforms aimed at making it easier and cheaper for them to formalize. This paper summarizes the evidence on the effects of entry reforms and related policy actions to promote firm formalization. Most of these policies result in only a modest increase in the number of formal firms, if there is any increase at all. Most informal firms appear to not benefit on net from formalizing. As a consequence, ease of formalization along will not induce most of them to become formal. Increased enforcement of rules can increase formality. Although there is a fiscal benefit of doing this with larger informal firms, it is unclear whether there is a public rationale for attempting to formalize subsistence enterprises. Informality, Entry regulation, Self-employment, Regulatory enforcement. JEL codes: O12, O17, D22, L26

Making it easier to formally register a business is the area of business regulatory policy that has seen most attention from policymakers over the past decade. The Doing Business project of the World Bank found that 368 reforms took place in 149 economies between 2003 and 2012. As a result of these reforms, the world average time to start a business has decreased from 50 to 30 days, and the cost of starting a business is one-third of what it was previously (World Bank 2013).

However, despite these reforms, the majority of businesses in most developing countries remain informal. By formality, we mean whether a business is registered for relevant municipal licenses and with the tax department. For example, Brazil simplified its taxation system for small businesses, and the state of Minas Gerais introduced a “one-stop shop”, which has become a popular way of streamlining the registration process for firms worldwide. After these efforts, a government survey found that 72 percent of enterprises in the state remained informal (Andrade et al. 2013).
Informality rates are highest for low-scale enterprises; de Mel et al. (2013) report that only 39 percent of Sri Lankan businesses with one worker are registered for taxes, compared to 68 percent of those with five workers and 78 percent of those with 10 workers. Most small firms in developing countries have only one or two workers. For example, in Mauritius, of the 91,980 units with nine or fewer workers, 70.6 percent have only one or two workers, and only 6.2 percent have five to nine workers (McKenzie 2011). By virtue of the sheer quantity of one- and two-person firms and their much greater likelihood of being informal, most of the stock of informal firms in developing countries is low-scale enterprises consisting of the owner and, at most, one other paid worker.

The key question for policymakers is then what, if anything, they should attempt to do about this vast quantity of small-scale informal firms. One view, popularized by Hernando de Soto (1989), is that these informal firm owners would like to be formal but costly regulations and bureaucracy prevent them from doing so, causing a productivity loss for these firms. The implication is that policymakers should attempt to reduce these barriers and bring these firms into the formal sector. A competing view, associated with Maloney (2004) and others, is that firms that would benefit from formalizing do so, whereas smaller and less productive firms rationally opt out of the formal sector because they perceive little benefit from becoming formal. A related view is the segmented labor market perspective, in which the informal sector is seen as “the free entry sector of last resort” catering to individuals who would prefer paid employment but are unable to find formal wage jobs (Fields 2004). The implication is that it is not privately optimal for these firms to formalize, so policymakers should only attempt to bring them into the formal sector if there is a compelling public rationale for doing so.

In practice, the large number of informal firms with a few workers at most is likely to include a mix of different types of firms, including subsistence enterprises and individuals who would rather be wage workers as well as potential entrepreneurs with the desire and, sometimes, the ability to grow their businesses over time. De Mel et al. (2010) classify the self-employed in Sri Lanka using statistical methods designed for species classification in biology and find that between one-quarter and one-third of the self-employed appear to share characteristics that give them the potential to be owners of somewhat larger firms, whereas the remaining two-thirds to three-quarters look much more like wage workers. Our focus is the role of business regulations on the formalization decisions of this group of small-scale enterprises before we turn to a discussion of the extent to which policy can differentiate among them. We note that although our focus is regulatory policy, governments have a number of other policy tools, such as credit and labor market policies, that also affect the decisions of individuals to operate firms at all and, if so, to do so formally or informally.
Discussion of Key Findings

We divide our discussion of key findings into two subsections. The first considers the extent to which business regulations appear to be barriers to firms becoming formal and whether efforts to make it easier for firms to formalize or more difficult to remain informal have succeeded in bringing low-scale enterprises into the formal sector. The second subsection examines the extent to which being formal benefits these types of firms. Attempts to answer both sets of questions must address the fact that places that change regulations may differ systematically from those that do not and that firms that choose to become formal are likely to differ in many unobservable ways from those that choose to remain informal.

Measuring the Impacts of Formalization Efforts and of Becoming Formal

Simple comparisons of formal and informal firms usually reveal that formal firms are more productive and profitable. A series of high-profile sector studies by the McKinsey Global Institute comparing the operation of formal and informal firms in several countries around the world concluded that informality has a very negative impact on productivity, accounting for nearly 50 percent of the overall productivity gap between countries such as Portugal and Turkey and the United States (Farrell 2004). La Porta and Shleifer (2008) use World Bank firm surveys to compare the productivity of informal and formal firms and find the formal firms to have substantially higher productivity levels.

However, such estimates assume that firms do not choose whether to be formal. In practice, however, firms are likely to weigh the potential benefits of being formal (greater access to credit, greater scope for marketing, participation in government contracts and programs, reputation effects, less risk of fines) with the costs of becoming formal (the time and money costs of registering) and of being formal (ongoing taxes, accounting costs, paperwork). As a result, individuals who see large benefits to becoming formal will do so, whereas less productive and smaller firms that see little benefit in formalizing will likely choose to remain informal. As a result, lower productivity is likely to be as much a cause as a consequence of informality, and simple comparisons of formal and informal firms will greatly overstate the productivity benefits of formalizing.

To account for the likelihood that firms that choose to become formal differ from those that remain informal, ideally, one would randomly choose some firms to make formal and leave similar firms informal before comparing the two groups. This approach is known as the randomized experimental approach and has been used in a number of attempts to formalize firms by providing them with information and lower costs of registering (Jaramillo 2009; Alcázar et al. 2010; de Mel et al. 2013; De Giorgi and Rahman 2013; Andrade et al. 2013).
When randomization has not been possible, studies have used a variety of non-experimental econometric methods designed to ensure that they can measure the causal effect of policy efforts to spur formality or the consequences of formalizing. For example, McKenzie and Sakho (2010) use an instrumental variables method to measure the consequences of being formal in Bolivia, arguing that firms that are closer to the municipal tax office have more information and lower costs of registering than similar firms located elsewhere in the same city. Bruhn (2011) uses a difference-in-differences method, comparing changes in the formalization rates of firms in municipalities in which entry regulation was simplified earlier to those in similar municipalities in which the reform came later. These non-experimental methods require more assumptions to establish causality than are required for randomized experiments, but they also represent serious attempts to address the self-selection of firms into formal or informal status.

The following section discusses findings from both randomized and non-experimental studies on the causal effect of policies to promote firm formalization (see table 1 for a summary of the key results from these studies).

**Becoming Formal**

*The Effect of Business Entry Reforms on the Number of Firm Registrations.* A number of studies have examined the impact of business entry reforms on firm registration in different Latin American countries, exploiting cross-time and cross-municipality variation in the implementation of these reforms. A common element in these reforms is that they opened one-stop shop service points and thus eliminated the need to visit several different government offices for completing the registration process, lowering the time and/or cost needed to register a business. These studies find that a large reduction in the cost and time taken to register a firm leads to a modest increase in the number of formal firms.

A reform in Mexico, which was implemented in some of the most populous and economically developed municipalities starting in 2002, reduced the number of days needed to start a business from 30.1 to 1.4. Bruhn (2011) uses data on individuals’ employment status from the Mexican Labor Market Survey (ENE) to show that this reform increased the number of registered business owners by 5 percent. Kaplan, Piedra, and Seira (2011) use administrative data and find that the same reform increased the number of new firm registrations with the Mexican Social Security Institute (IMSS) by 5 percent.

The Colombian government implemented a one-stop shop that reduced the time required to register a business from 55 to less than 9 days and lowered registration fees by 30 percent. Cárdenas and Rozo (2007) use administrative data from Chambers from Commerce in six major cities to show that the reform led to a 5 percent increase in business registrations.

*Bruhn and McKenzie*
Table 1. Summary of Studies on the Causal Effect of Policies to Promote Firm Formalization

<table>
<thead>
<tr>
<th>Study</th>
<th>Policy or program studied</th>
<th>Econometric Approach</th>
<th>Main results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Panel A: Effect of business entry reforms on number of firm registrations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bruhn (2011), Kaplan, Piedra, and Seira (2011)</td>
<td>One-stop shop (combining municipal, state, and federal business registration procedures) in urban areas in Mexico</td>
<td>Difference-in-Differences</td>
<td>Reform increased business registrations approximately 5 percent and increased employment; Bruhn shows that the increase in registered businesses was mainly due to previous wage earners opening new businesses</td>
</tr>
<tr>
<td>Bruhn and McKenzie (2013)</td>
<td>One-stop shop in less populous municipalities in Minas Gerais, Brazil</td>
<td>Difference-in-Differences</td>
<td>Program led to a reduction in number of firms registering during the first two months of implementation, with no subsequent increase</td>
</tr>
<tr>
<td>Cárdenas and Rozo (2007)</td>
<td>One-stop shop in six major cities in Colombia</td>
<td>Difference-in-Differences</td>
<td>Reform increased business registrations by 5 percent</td>
</tr>
<tr>
<td><strong>Panel B: Effect of business entry reforms on formalization of informal firms</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bruhn (2013)</td>
<td>One-stop shop in urban areas in Mexico</td>
<td>Difference-in-Differences</td>
<td>Some informal business owners become wage workers due the reform, some register their business, but these effects are small</td>
</tr>
<tr>
<td>Mullainathan and Schnabl (2010)</td>
<td>Municipal licensing reform in Lima, Peru</td>
<td>Before-After</td>
<td>Reform increased number of provisional licenses issued to informal firms, but many firms do not renew their license later</td>
</tr>
<tr>
<td><strong>Panel C: Effect of information, waived costs, and enforcement on formalization of informal firms</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcázar et al. (2010)</td>
<td>Offer a subsidy for the cost of obtaining a municipal license to informal firms in Lima, Peru</td>
<td>Randomized Experiment</td>
<td>Subsidized cost offer led to 10 to 12 percent of informal firms obtaining a municipal license</td>
</tr>
<tr>
<td>Andrade et al. (2013)</td>
<td>Three interventions for informal firms in Belo Horizonte, Brazil (a) deliver brochures with information about registration process and potential benefits; (b) waive registration costs; (c) receive municipal inspector</td>
<td>Randomized Experiment</td>
<td>Information and waived registration costs had no effect on formalization rate; municipal inspections increased formalization rate by 22 to 27 percentage points</td>
</tr>
<tr>
<td>de Mel et al. (2013)</td>
<td>Provide information and reimburse registration costs for informal firms in Sri Lanka</td>
<td>Randomized Experiment</td>
<td>Information and cost reimbursement had no effect on formalization rate</td>
</tr>
<tr>
<td>De Giorgi and Rahman (2013)</td>
<td>Deliver brochures with information to informal firms in Bangladesh</td>
<td>Randomized Experiment</td>
<td>Information had no effect on formalization rate</td>
</tr>
</tbody>
</table>

Source: Authors’ summary of the literature
Entry reforms appear to have less of an effect on business registrations in less populous and more remote areas. Bruhn and McKenzie (2013) analyze the impact of the Minas Fácil Expresso program in the state of Minas Gerais, Brazil. This program aimed to extend the benefits of a one-stop shop to less populous municipalities, thereby removing the need for firms to register separately at their municipality and then travel to register with state and federal governments in a larger town or city. They find that this program actually led to a reduction in the number of firms registering during the first two months of implementation (perhaps due to officials learning to use the new system), with no subsequent increase.

The majority of these studies cannot disentangle whether the increase in registrations is due to informal firms registering or to new firms being created by individuals who did not previously run businesses. The labor market survey used by Bruhn (2011) is an exception; she finds that the increase in registered businesses was due to wage earners opening new businesses.

In contrast to the literature on business entry reforms, we are aware of very few studies that rigorously examine the impacts of reforms in the ongoing regulations facing formal firms on the decision to become formal. An exception is the Brazilian SIMPLES reform, which reduced the complexity and rates of taxes facing small firms without changing the entry procedures. Monteiro and Assunção (2012) use a difference-in-differences approach to compare the legal status of firms in sectors affected and unaffected by the reform that were created before and after the program. They find no significant overall effect, but they do find that retail firms created after the reform appear to be more likely to be formal. Complementary evidence comes from Waseem (2013), who examines the converse policy reform: dramatically increasing the tax burden facing small partnerships in Pakistan. He finds a large response: 57 percent of taxpayers leave the formal system, and those remaining substantially reduce their reported earnings.

The Effect of Business Entry Reforms on the Formalization of Informal Firms. A follow-up study by Bruhn (2013) examines the impact of the business registration reform in Mexico on informal business owners in more detail. This paper takes into account that informal business owners are heterogeneous and that some may be looking for a wage job instead of aiming to continue or to grow their business. Bruhn divides the group of informal business owners into those who have personal characteristics similar to formal business owners and those who have the characteristics of wage earners and examines the impact of the reform for each of these groups. The results show that wage earner types are less likely to register their businesses due to the reform but are more likely to become wage workers because the reform created jobs. In contrast, informal business owners with characteristics similar to formal business owners are more likely to register, but only in municipalities with high pre-reform constraints on formal entrepreneurship. However, the
effects are relatively small, and most informal business owners remain informal even after the reform.

Some countries experience a large spike in firm registrations after the introduction of a business registration reform. For example, Mullainathan and Schnabl (2010) document that the number of firm registrations increased from 1,758 in the year before a municipal licensing reform in Lima, Peru, to 8,517 in the year after the reform. They conduct a survey to show that approximately 75 percent of the firms that registered in the year after the reform were previously informal and that 25 percent were new firms. However, the majority of newly issued licenses were provisional, meaning that they had to be renewed every year. Many firms do not seem to have renewed their licenses after the year was over because the number of registrations dropped to 3,500 in the second year after the reform, suggesting that the increase in formalization was temporary.

*The Effect of Providing Information about How to Register or Lowering the Cost of Formalizing on Formalization Rates*

Surveys of microenterprises typically show that many informal firms are not very well informed about either the process of formalizing or the costs involved. They often overestimate the time and cost involved, particularly following efforts to simplify the registration process. For example, in Sri Lanka, de Mel et al. (2013) report that only 17 percent of informal firm owners know the cost of registering. Most believe that the process of registering takes more than a month compared to one week or less in practice, and only 2 percent know that lower incomes are not liable for business income taxes. In Bolivia, McKenzie and Sakho (2010) report that only one-third of informal owners know the location of the tax office (which is the registration location) and that only 10 percent have even heard of the commerce registry.

A natural policy response to this lack of information is to attempt to provide information to firms about how to register and about the possible benefits of formalizing. However, two randomized experiments which have done this have found no resulting increase in formalization. In Belo Horizonte, Brazil, Andrade et al. (2013) gave a glossy brochure prepared by a State Government marketing team to 208 informal firms and found that firms that received this brochure were not more likely to register over the following year. In Bangladesh, de Giorgi and Rahman (2013) had field staff deliver information and brochures to 1,500 informal firms. They found that fewer than 5 percent registered and that this number was not larger than the number among the control group firms not given the information.

Two randomized experiments have also investigated the impact of lowering the cost of formalizing along with this information. In Sri Lanka, de Mel et al. (2013) provided information and agreed to reimburse the full cost of registering for taxes
(approximately US$10) to 104 firms, with only one firm accepting the offer and formalizing. In Belo Horizonte, Brazil, Andrade et al. (2013) provided information, had the government waive all registration costs and sanitary and inspection taxes for the first year (approximately US$200), and provided free mandatory accounting services for the first year (approximately US$1800). This package of information and reduced costs was offered to 255 informal firms, again with only one firm accepting the offer. Lowering the cost of registering for taxes thus appears to have very little impact on the registration of existing firms. One reason for this finding may be that the ongoing costs of being registered, including tax payments, accountant costs, and other fees, deter firms from registering, even if the process of doing so is simplified.

In many countries, the formalization process requires registration with more than one government agency and thus involves different ongoing costs of being registered with each agency. A municipal license is often the first license that informal firms receive. Because a municipal license typically requires only a small annual license fee but no sizeable local tax payments, it is less expensive for firms than registering with the national (and state) governments for business taxes. Therefore, we might expect firms to be more willing to obtain this license if its cost is lowered. Evidence along these lines comes from a randomized experiment conducted by Alcázar et al. (2010) in Lima, Peru. They follow up on a reform that reduced the time to obtain a municipal license from 160 days to 1.6 days by attempting to induce 300 informal firms to obtain a municipal license by offering a subsidy of between 27 and 35 percent of the cost of the license (or approximately US$30). They find that the subsidized cost offer led approximately 10 to 12 percent of informal firms to obtain a municipal license.

Does Increased Enforcement Cause More Firms to Formalize?

Policy and research attention has focused on attempting to simplify the regulations facing firms, but much less attention has been given to the effects of better enforcement of the regulations which are in place. A sizeable minority of informal firms report having received some type of inspection visit over the past year (most often from the municipality), but in the countries where we have collected data, very few firms report being fined. For example, in Sri Lanka, 43 percent of informal firms were visited by a municipal official, but only 0.8 percent paid any fines (or bribes); in Brazil, 33 percent of firms were visited by a municipal official, but only 2.1 percent paid a fine; and in Bolivia, fewer than 2 percent of informal firms report having been fined.

A randomized experiment by Andrade et al. (2013) shows that more enforcement by inspectors can induce some informal firms to become formal. They randomly allocated 577 firms to receive inspection visits from municipal inspectors.
Their results point both to the difficulties in inspecting informal firms (the inspectors were unable to locate some of these firms or talk to their owners) and to the potential impact on formalization: the authors estimate that between 22 and 27 percent of firms that received an inspection as a result of their intervention registered with the municipality.

**Enforcing Formality in the Tax and Labor Domains**

In practice, even after firms formally register, they face a number of other regulations, and they choose the extent to which they comply with these regulations. In particular, formally registered firms may be partly informal with regard to their compliance with tax and labor regulations. Several studies examine the role of enforcement in increasing formality along these dimensions.

Gordon and Li (2009) provide an overview of tax policy in developing countries and note that the possibility of evasion by not reporting cash transactions helps explain why tax policies in developing countries take the structure they do. One approach to enforcement is to increase auditing. Pomeranz (2013) examines this approach in the context of the Chilean VAT system. The Chilean tax authority sent letters intended to generate a perceived increase in audit probability to randomly selected firms. Pomeranz finds that these letters increase the median declared income for firms by 12 percent, with this effect concentrated in firms that sell to final consumers (because other firms already effectively face enforcement through the VAT paper trail). The effect is larger for small firms, which is consistent with larger firms' lower likelihood of evading taxes.

A complementary approach is to establish incentives for customers to demand that firms be formal. One way to do this is a lottery tax receipt system in which each tax receipt is printed with a lottery number. A drawing for monetary prizes gives customers an incentive to ask for receipts. Such a system has been used in Taiwan, Korea, China, Brazil, and Puerto Rico. Wan (2010) compares changes in tax revenues in districts in China that introduced this reform to those that did not and finds that the introduction of this tax receipt lottery increased sales tax revenue by 17 percent. Naritomi (2013) uses a difference-in-differences approach to compare changes in tax revenue in Sao Paulo from retail stores (which were subject to consumer monitoring) to those in wholesale stores (which were not) and finds that the introduction of a tax receipt lottery increases tax revenue by 23 percent.

Increased enforcement has also been found to affect the extent to which firms comply with labor regulations. Almeida and Carneiro (2012) study the impact of greater enforcement of labor regulations in Brazil by using geographical variation in the likelihood of enforcement. They find that an increase in the enforcement of mandated benefits in the formal sector leads to a reduction in formal wages and an increase in formal sector employment. However, the authors have data on workers,
Despite Formalization Policies, the Majority of Small-scale Firms in Developing Countries Remain Informal

As noted in the motivation section, the majority of self-employed individuals and firms with only one or two workers remain informal in many developing countries, despite the decade of reforms intended to simplify business registrations. All of the studies described above that have provided information and lowered the cost of formalizing have found that, at most, a small fraction of informal firms choose to formalize when given help to do so. This finding contrasts with the view of de Soto (1989) and suggests that in many cases, firms decide that the benefits of formalizing do not exceed the costs. An experiment in Sri Lanka provides the strongest evidence for this view, showing that more firms become formal as the benefits of doing so increase.

De Mel et al. (2013) offered informal firms different amounts of money to become formal, ranging from just enough to cover the cost of tax registration to 40,000 Sri Lankan Rupees (US$350). The largest amount was equivalent to approximately two months’ profits for the median firm. They find that although no additional firms registered when only the cost of registering was covered, 20 percent of firms registered when offered 10,000 Sri Lankan Rupees, and 47 percent registered when offered the maximum amount of 40,000. By combining these incentives to register with the initial registration costs and the discounted value of future tax payments facing these firms, these authors are able to examine how the demand for formalizing varies with the net cost of registration. We observe a steep downward demand curve (Figure 1), with the proportion of firms that are willing to become formal dropping quickly as the cost of formality increases. We expect firms to formalize if they view the net benefits as exceeding these costs, so another way of reading this figure is to note that fewer than 15 percent of informal firms seem to view the net benefits of being formal as greater than zero.

De Mel et al. (2013) note that many of the firms that did not formalize when offered the maximum amount cited other barriers, such as land titling issues (the costs of overcoming these other barriers are not included in the net cost), whereas others said that they did not believe that the benefits would outweigh the costs even
with this monetary incentive. Next, we consider the benefits to firms of being formal.

**Being Formal**

Informal firms are often referred to as “operating in the shadows”, afraid to market themselves widely or locate in visible locations for fear of attracting the attention of the law. In addition, firms that do not issue tax receipts may not be able to sell to certain customers, such as the government or larger firms. As a result, one of the channels through which formalizing may help firms is by expanding their customer base. This is the channel that has the most support from various studies in the literature. In Bolivia, McKenzie and Sakho (2010) find that firms that become formal as a result of being located slightly closer to the tax office issue more tax receipts and have greater sales. In Brazil, Fajnzylber et al. (2011) find that firms that opened just after the introduction of the SIMPLES program, which simplified regulation by combining different types of tax registrations and payments, were more likely to operate in a permanent location, although this finding could reflect a change in the types of individuals that decide to open firms after the reform rather than a causal impact of formalizing. In Sri Lanka, firms that formalize as a result of experimental inducement are 26 percentage points more likely to advertise (de Mel et al. 2013).

**Figure 1.** The Demand for Formality in Sri Lankan Firms as a Function of the Net Cost of Formalizing

![Graph showing the demand for formality in Sri Lankan firms as a function of the net cost of formalizing.](image)

*Source: Based on de Mel et al. (2013), Figure 3.*
Two other main channels through which formalization is often hypothesized to benefit firms are improved relationships with the financial sector and increased access to government benefits. Existing studies find no evidence of these effects. In Sri Lanka, de Mel et al. (2013) find that firms that formalize are not more likely to obtain a business bank account or business loan, make sales to the government, or participate in a government program. In Bolivia, McKenzie and Sakho (2010) find no impact on the likelihood of a bank loan or of sales to the government. A likely explanation is that many informal firms would not receive credit even if they did register, whereas those for whom registration is the only barrier preventing them from obtaining credit have already chosen to become formal. The same situation is likely to apply to government contracting: most small-scale firms are unlikely to sell to the government, and those that do formalize when this need arises.

Consistent with the viewpoint that most firms rationally choose whether to formalize by comparing the expected benefits of becoming formal to the costs of doing so, studies have found that informal firms that have been induced to become formal by subsidized costs have experienced little benefit from doing so, on average. Alcázar et al. (2010) find no significant impact of obtaining a municipal license on firm profits or revenues in Lima. McKenzie and Sakho (2010) find that firms that would formalize if they were slightly closer to the tax registration office would appear to increase profits by doing so, but the average informal firm would not. De Mel et al. (2013) find a significant increase in average profitability, but they show that this average increase is driven by a handful of firms growing substantially after formalization, whereas most firms show no improvement.

Limitations and Gaps

The past five years have seen a number of innovative experimental studies measuring the impacts of policy efforts to increase formality along with several relatively rigorous non-experimental studies. However, a number of limitations and gaps remain:

- The existing research comes from only a few countries concentrated in Latin America and Southeast Asia. Thus, it is unclear to what extent the findings can be generalized to regions such as Africa, the Middle East, and Eastern Europe, where little evidence is currently available.
- Existing research has largely focused on the registration and tax regulations facing small-scale enterprises, with little work on the importance of other regulatory barriers for firm growth. The experimental studies by de Mel et al. (2013) and Alcázar et al. (2010) note that land zoning and titling regulations are key barriers which that appeared to prevent firms formalizing, and more work is needed on the impacts of policy efforts to improve these types of regulations.
In addition, more evidence is needed on the role of reductions in the ongoing costs and complexity of being formal on the initial formalization decision.

- There is a need for better measurement of both the regulations facing small-scale enterprises and their interactions with these regulations. For example, the Doing Business project attempts to measure key regulatory burdens facing businesses around the world, but it focuses on limited liability companies, not small-scale enterprises. The ease of starting a business measure considers a company with start-up capital of 10 times per capita income, turnover of at least 100 times per capita income, and between 10 and 50 employees (World Bank 2013). This measure may not reflect the regulations facing small businesses. Few countries have data on the characteristics of firms that register and whether they are new or existing firms.

- Existing research has largely focused on the private costs and benefits of formalizing for informal firms. Two key public policy rationales for formalization require more research. The first is the claim that informality leads to inefficient resource allocation, since informal firms who don’t pay taxes can compete away customers from more efficient tax-paying formal firms. The second is the view that formalization is socially optimal because it increases government revenues and a culture of respect for the rule of law.

Summary and Policy Advice

Efforts to dramatically lower the cost of registration and simplify the registration process have left most small-scale enterprises operating informally in many developing countries. Although these firms would gain some benefits from formalizing in terms of the ability to advertise more and issue tax receipts, they typically view these benefits as smaller than the costs of becoming formal and the ongoing taxes they must pay for being formal. Existing evidence suggests that most of these firms are making what is a privately optimal decision, and so the policy rationale for attempting to bring small-scale informal firms into the formal sector should not rely on the belief that doing so will provide benefits to these firms. This does not mean that there is no cost of inefficient and costly regulations; requiring firm owners to spend extra time and effort in registering their firms is usually a purely social cost. Therefore, efforts to simplify regulations will benefit those firms that choose to go through this process.

A key issue for policymakers is whether there is a public rationale for attempting to formalize small-scale firms. There are several compelling reasons to attempt to bring larger and more profitable informal firms into the formal system. First, the need of most developing countries to widen the tax base is likely to include a public rationale for collecting taxes from relatively well-off owners of informal firms and for the revenue collected from them to justify the costs of formalizing. Indeed,
Andrade et al. (2013) suggest that inspecting informal firms in Brazil that earn an average of US$1000 a month in profits would formalize more than enough firms to pay for the costs of such enforcement. Second, these larger and more successful informal firms are more likely to be the ones competing with formal firms for customers. Therefore, ensuring that such firms also become formal may reduce unfair competition that prevents more efficient formal firms from growing faster. The challenge is then how to encourage the formalization of such firms. Based on the evidence reviewed here, reducing the cost and complexity of registration seems a necessary but not sufficient step. Policymakers also need to increase enforcement of the simplified rules and perhaps to experiment with innovative approaches to encourage suppliers or customers to demand formality. One approach that has been attempted in several countries is to link each tax receipt number to a lottery so that customers have an incentive to demand a tax receipt for each transaction.

What about subsistence enterprises? Existing evidence seems to suggest that such firms see no benefits from formalizing and would typically contribute very little to taxes if they did formalize. They may still compete with larger firms, but in the absence of other job opportunities for these individuals, the government may prefer to leave them alone rather than to have them close down. The only remaining public rationale for attempting to bring them into the formal sector is that the presence of so many informal firms may send a message to the public that obeying the law is optional and may dissuade more prosperous informal firms from formalizing. This “broken-windows” theory of crime has some support in developed countries (Keizer et al. 2008), but we are unaware of any such studies or efforts applied to informality in developing countries. An alternative approach used in some countries is to write the law in a way that does not require firms with income below a certain threshold to register, making them in compliance with the law. However, unless such a threshold is set very high, it is still likely that many firms above the threshold will choose not to register.

Finally, given the limited existing evidence base and examples of policies that have not accomplished their intended effects, policymakers attempting to innovate in this area would be well served to build in rigorous impact evaluations, in order to measure whether any new efforts are achieving their desired goals. In addition to regulatory policy changes, this should include evaluations of the effects of other government policy choices that seek to change the relative costs and benefits of being formal, such as credit and labor market policies.

Note

*Miriam Bruhn and David McKenzie are Senior Economist and Lead Economist respectively in the Finance and Private Sector Unit of the World Bank’s Development Research Group.*
Email: mbruhn@worldbank.org and dmckenzie@worldbank.org (corresponding author). Address: MSN MC3-307, 1818 H Street N.W., Washington D.C. 20433, U.S.A. The authors gratefully acknowledge funding for their work on informality from DFID, the Ewing Marion Kauffman Foundation, the Knowledge for Change Trust fund, the State Government of Minas Gerais, and the World Bank. We thank the editor and three anonymous reviewers for helpful comments.

1. Levy (2008) also highlights the role of social policies such as the provision of health insurance in determining the relative attractiveness of the formal versus the informal sectors to workers, which, in turn, affects incentives to enter self-employment.

References


