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# Is there Demand for Formality among Informal Firms?

Evidence from microfirms in downtown Lima

*Miguel Jaramillo*



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Miguel Jaramillo

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## Abstract

Experimental data from microfirms in downtown Lima is exploited to analyse the demand for formality, i.e., obtaining an operating license. The results are paradoxical: most firms report greater disadvantages than advantages of being informal, yet when encouraged to obtain the license, only one out of four firms takes up the incentive. Thus, for some firms formalisation may not be desirable at any cost. This is likely to be associated with the recurrent costs of being formal, the low perceived value of the benefits of formalisation, and the limited growth perspectives of these firms.

*Keywords:* firm behaviour, informality, demand for formality, Peru

*JEL codes:* D21, E26, L25, 017





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## 1 Introduction

After several decades of academic debate, informality is still a central policy issue in developing countries. Informality imposes costs on society in the form of a small tax revenue base, congestion of public services, which must serve a much broader population than that contributing to its financing, and unfair competition, factors which tend to translate into lower economic growth. Weak state structures have thus far made it impossible to keep track of the increase in the number of informal enterprises, let alone to find ways to lead those already active onto the path of legality. Presently, the stock of output and employment attributable to the informal sector is a sizable part of the economies even of middle income and the countries of the Organisation for Economic Co-operation and Development (OECD).<sup>1</sup> Clearly, informal firms are a heterogeneous lot and portions of them (the so-called subsistence units) lack the productivity levels they would need to pay most regulatory costs. However, another significant portion may be able to reap benefits from formalising their activities. Thus, policy measures should target this group of firms and induce them to formalise by reducing the costs of being in the formal sector as well as enhancing its benefits. There is, however, little evidence on the motivations and conditioning factors that shape the decision of informal entrepreneurs to stay informal or move to the formal sector.

In this paper new empirical evidence on the motivations and circumstances of informal firms is used to analyse the demand for formality. The data come from two rounds of a recent survey of informal microfirms in Lima's downtown area (El Cercado), carried out as part of a panel/tracer study to evaluate the impact of having an operating license on firms' performance indicators, which includes an effort to generate experimental data.<sup>2</sup> The experiment consisted in encouraging a random sample of the firms interviewed in the first survey round to formalise by subsidising the full money cost and providing guidance through the process. The data set includes general features of the entrepreneur and the firm, including access to capital and service markets, basic performance indicators, as well as aspects related to the motivations involved in the decision to formalise/stay informal. Cross-sectional data from the two rounds is exploited to identify factors associated with the potential demand for formality. The results are paradoxical: most firms report greater disadvantages than advantages of being informal, yet when encouraged to obtain the license, only one out of four firms takes up the incentive. Thus, for some firms formalisation may not be desirable at any cost. This is likely associated with the recurrent costs of being formal and the limited growth perspectives of these firms.

The paper is organised as follows. Following this introduction, the literature on formality and firm behaviour is reviewed in order to locate our questions within the ongoing academic and policy debate. Section 3 describes the data. Section 4 presents the general characteristics of the firms and entrepreneurs in our sample. Section 5 considers the evidence concerning the rationale for formality/informality and analyses firm-level factors associated with formalisation. Section 6 concludes and discusses policy implications.

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1 Schneider (2007) estimates the size of the informal economy for 145 countries. The average size for developing and transition countries is around 40 % of gross domestic product (GDP), while in OECD countries it is 16.3 %, with 5 out of 21 countries topping the 20 % mark.

2 Alcázar / Andrade / Jaramillo (2007). The study is funded by State Secretariat for Economic Affairs (SECO) through the International Finance Corporation.

## 2 Literature review

The question of formal versus informal status goes back quite a while in the economics literature. Its origins date back to the classic dual labour markets models of Lewis (1954) and Harris-Todaro (1970). In these models self-employment is a consequence of the incapacity of the modern/formal sector to incorporate an elastic supply of labour leaving low-productivity rural activities. Confronted with insufficient opportunities for salaried employment, workers opt to generate their own employment. These self-generated jobs may, however, be quickly abandoned in the face of an opportunity to engage in wage labour in the formal sector. The result is a segmented labour market, where self-employment is not really an option but a refuge.<sup>3</sup>

This view still prevails in part of the literature.<sup>4</sup> Another strand, however, takes a different view: the self-employed may not be a residual from the formal sector but a natural entrepreneur forced to produce outside the legal boundaries by an institutional environment littered with hurdles and barriers to private productive initiative.<sup>5</sup> The regulatory hurdles and barriers translate into a level of costs that the entrepreneur cannot afford, given his/her firm's low productivity levels. The question of the effects of regulation on entrepreneurship has produced an ever growing body of literature. One source of empirical support for the idea of the negative role of regulation is macro-level cross-country data analysis, which shows that cost of regulation correlates positively with level of informality (Djankov et al. 2002; Loayza / Oviedo / Serven 2005). Using data for European countries, Klapper / Laeven / Rajan (2006) conclude that costly regulations hamper the creation of new firms, particularly in industries that should naturally have high entry. Also, new entrants tend to be larger and incumbent firms in naturally high-entry industries tend to grow more slowly.

However, other studies diverge from these conclusions. Van Stel / Storey / Thurik (2007), using a database of 39 countries across the five continents (including 13 poor countries), find that lowering entry barriers may result in lower levels of informality but not in higher entrepreneurship rates. Their findings indicate that entry regulation influences the distribution of business activity between the formal and the informal economy, rather than influencing the total volume of activity. Therefore, they question the view that 'heavily regulated' countries as regards firm entry need only to lower entry barriers in order to become more enterprising, and thus wealthy. Hence, deregulation, while useful to curb informality, seems insufficient to promote entrepreneurship.

In spite of the continuing academic debate, the idea that regulatory costs hurt entrepreneurship and cause informality has already had a major influence in policy making. This is the idea, for instance, behind the influential *Doing Business Project* (World Bank / IFC 2003–2009). By annually publishing indicators of the ease of doing business in a large set of countries, this research has led to a call for a lowering of regulatory barriers in order to

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3 A useful and recent review of these models may be found in Fields (2005).

4 See, for instance, Tokman (2007).

5 De Soto (1986) has popularized this view, but see also the broad survey by Schneider / Enste (2000) for a view that sees institutional factors, extending from increasing taxation to regulatory burden, as the driving force behind informality.

enable formalisation and stimulate growth.<sup>6</sup> The visibility of this work has put pressure on politicians and generated strong momentum for reforming regulations to address informality.

However, this approach has also attracted substantial criticism. Arruñada (2007) argues that there is an excessive and pernicious focus on initial costs of setting up a firm while both the value of services provided by registration and the reduction of transaction costs over the life-cycle of a firm are disregarded. Altenburg / von Drachenfels (2006) label the *Doing Business* approach minimalist and question its potential to address both informality and private sector development. Their central contention is that this approach is far from sufficient to deliver on its promise. Specifically, they argue that the idea that formalisation and growth of formerly informal firms will take place once deregulation is implemented is based on two questionable assumptions about firms operating in the informal economy. First, that a majority of the people in the informal economy are vibrant entrepreneurs who are only waiting for their chance to expand their businesses once they are formalised and, second, that cumbersome registration procedures are the major barrier to growth. Testing the second assumption requires assessing empirically different types of obstacles to business growth, from poor human capital endowments to credit constraints to lack of access to technology, and modelling their interactions with the institutional environment. This has yet to be done. The first assumption has, however, already been put to the test in the literature, and it brings us back to the question of whether the informal sector is a refuge sought by “necessity entrepreneurs” or a source of natural entrepreneurship.

Clearly, how much entrepreneurial potential there really is in the informal economy it is a matter of dispute. To contribute to this debate, which they dub the de Soto (mostly “opportunity entrepreneurship” constrained by ‘unfair’ regulations) vs. Tokman (mostly “necessity entrepreneurship” constrained by multiple deprivations) debate, De Mel / McKenzie / Woodruff (2008) study a panel of Sri Lankan firms and compare the characteristics of microentrepreneurs, self-employed, and wage earners. They conclude that no less than two-thirds of own-account workers can be classified as wage workers rather than entrepreneurs. Woodruff (2007) has extended this argument, characterizing the self-employment sector as a self-help safety net.

In the other direction, looking at the Peruvian labour market, Yamada (1996) concludes that in a context marked by strong heterogeneity, self-employment is not a refuge but an option. He finds that, on average, self-employed workers earn 20 % more than what they would if they were wage earners in the formal sector. This differential is explained by the entrepreneurial ability of the self-employed, who, the author concludes, overwhelmingly self-select themselves out of the wage labour force. Only about one third of the self-employed would do better as wage earners. Along this line, Maloney (2004) has examined transitions between wage labour and self-employment as well as characteristics and choices of microentrepreneurs in Mexico, Brazil, and Argentina. He concludes that the informal sector in Latin America may best be described as a basically voluntary entrepreneurial sector.

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6 In the latest edition, the *Doing Business Report* deals with the costs caused by regulations for 181 countries with regard to starting a business, employing workers, getting credit, enforcing contracts, closing a business, registering property, dealing with licenses, protecting investors, paying taxes, and trading across borders. These costs are measured as direct costs, such as license fees, and indirect costs, like the number of procedures it takes to comply with regulations.

One clear conclusion from this debate is that the informal sector is quite heterogeneous and a place where one may find those left out of the formal wage labour market, but also potential entrepreneurs. At the centre of the debate is the question which group is dominant. The actual mix may differ from country to country. While there is no necessary link, one would expect that subsistence units run by ‘necessity entrepreneurs’ would find little incentive to become formal, while ‘opportunity entrepreneurs’ would be more likely to formalise.<sup>7</sup> Thus, one might expect formalisation not to be attractive for everyone in the informal sector, and consequently, no matter how much the cost of formalising is lowered, as long as it remains greater than zero, there will be informal firms. Also, one would expect that it is among those firms that perceive the greater potential gains from changing their status that demand for formalisation would be concentrated. However, we do not find many studies that focus on transitions from informality to formality among microfirms.<sup>8</sup> Why some (informal) firms formalise and others do not is a question on which little empirical evidence has been produced. In this paper I try to cast light on it by examining initial data from a unique experiment among informal firms in downtown Lima.

### 3 Data description

The data used in this analysis comes from two rounds of a panel of informal firms located in downtown Lima (El Cercado). These are part of a data collection effort that aims to assess the impact of a specific type of formality that associated with having an operating license granted by the municipality, on firms’ performance. The two rounds were implemented in 2008. The first round served to construct a baseline for the study. A total of 604 firm operators were interviewed. Lacking a sample framework for the informal sector, firms were identified through fieldwork covering the areas where, according to municipal authorities, informality is concentrated. We excluded shopping malls (‘galerías’) and permanent fairs (‘campos feriales’), as firms operating in these areas are not required by law to have an operating license. Thus, we cannot claim that our sample represents informal microfirms in El Cercado, although it is likely that it represents well microfirms in El Cercado not operating in galleries or permanent fairs. The questionnaire covers information about firms’ outcomes, such as sales; inputs, such as investment, access to credit, and labour; and other features, such as size and age of firm; as well as characteristics of the entrepreneur. Another set of questions was included to provide contextual information that would help us to interpret the results, such as entrepreneurs’ perceived benefits and costs associated with formalisation.

The second round was implemented six months later, after we had conducted a process of encouraging a random sample of the firms to get their operating license. We do not use the panel structure of the data, but instead exploit the two cross-sections. The first-round data allows us to examine the *ex ante* motivations for formalising, while in the second-round data we exploit the fact that not all firms encouraged took up the incentive in order to analyse factors associated with formalisation.

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7 The link is not necessary because it may be that, for instance, opportunity entrepreneurs find room to thrive in informality, at least at some stage of their firms’ development. Conversely, necessity entrepreneurs may find it desirable to formalise if, for instance, there is a serious enforcement effort by authorities.

8 This is no doubt related to the scarcity of longitudinal data sets that follow the trajectories of informal firms over time. One interesting approach is that in Nelson / De Bruijn (2005), who propose a phenomenological model of the transition based on five cases of successful transition in Tanzania.

## 4 Characteristics of the firms

### *Who are the informal?*

Table 1, below, summarizes the main features of firms and entrepreneurs in our sample. All firms qualify as microfirms as they have no more than 6 workers. Most (61.6 %) have only 1 worker and the second largest group (23.1 %) has 2 workers only. Thus, the group of firms is at the lower end of the size distribution of firms. This is also reflected in their area size, which averages around 32 square meters. This seems particularly small if we consider that there are a good number (23 %) of restaurants, cafes, and other food-dispensing businesses in the sample.

With regard to activity, most of the firms are in commerce. This includes a diverse set of establishments, from neighbourhood convenience stores to jewellers or information technology (IT) supplies providers. The second largest group is in the food sector and includes restaurants, cafes, ice-cream parlours, and bakers. The third largest group is in the service sector (20.3 %) and includes printing, internet and phoning services, beauty parlours, and repair shops. Very few of these businesses, independent of the sector they belong to, have an autonomous legal existence. That is, most of them have not incorporated. Also, they are almost exclusively individually owned businesses, with less than 5 % involving partnerships.

<b>Firms characteristics</b>	Mean	Standard deviation	Min.	Max.
Number of workers	1.6	0.96	1	6
Area size (m <sup>2</sup> )	31.7	34.2	2	430
Age (years)	2.6	4.5	0.9	45
Trade sector (%)	52.1			
Food sector (%)	22.8			
Service sector (%)	20.3			
Incorporated (%)	6.6			
Partnership (%)	4.5			
<b>Owners characteristics</b>				
Age	41.3	12.3	18	84
Experience in business (years)	5.5	7	0.9	45
Age at first business	31	10.6	16	62
Female (%)	56			
Did not complete secondary education (%)	16.2			
Completed secondary (%)	43.1			
Vocational post-secondary (%)	24.0			
University (%)	16.5			
First business (%)	78.7			
Owns locale (%)	27			
Source: Own compilation				

Looking at the owners' characteristics, somewhat surprisingly most of them (56 %) turn out to be women. This gender ratio compares favourably with the population of self-employed in Metropolitan Lima that have at least one employee, among which 50.3 % are women. However, if we further narrow the category to include only self-employed women in the trade or service sector, the proportion of women increases to 51.9 %, and if we further restrict it to those with 1 to 6 employees, it jumps to 61.9 %. Thus, far from being an anomaly, predominance of women entrepreneurs among the type of business we are focusing on seems to be the rule.<sup>9</sup>

As for education, most entrepreneurs in our sample have at least completed secondary education (43.1 %) and a good portion of them (40.5 %) have post-secondary studies. Also, among those with some post-secondary education, four out of ten did their studies at the university level, while the rest attended vocational/technical schools. How does this compare with Lima's labour force? Table A1 in the appendix allows this comparison. The educational profile of El Cercado's informal entrepreneurs seems a bit different than that of Lima's labour force. A larger portion of the former has completed secondary (43 % versus 35 %) and also a slightly larger portion has some post-secondary education (40.5 % vs. 36 %). On the other hand, however, the mix among those with post-secondary education is less favourable to Cercado's entrepreneurs, as non-university attendees predominate among them, while in the case of Metropolitan Lima the opposite is true. Thus, though on average the entrepreneurs in our sample fare better educationally than Lima's overall labour force at the basic level, it tends to have a larger concentration of people from vocational/technical schools at the post-secondary level.

The average entrepreneur in our sample is 41 years old. These entrepreneurs have had significant experience in business, 5.5 years on average. If we compare this figure with that of the age of their present business, we conclude that on average half of this experience has been acquired in their present business. For about four out of five entrepreneurs in the sample, the present business venture is their first. Finally, slightly more than one quarter of our entrepreneurs report that they own the locale of their businesses. In most of these cases, four out of five, the locale is also the owner's house.

Table 2 summarises the information concerning the more operational features of the firms in our sample. As far as credit goes, one out of five firms requested credit from formal financial entities in the last three years and more than 90 % of them obtained it. This rate of success may seem large, but two factors need to be considered. First, this is a self-selected sample, as those that perceive that they have a low probability of success probably did not bother to apply. Second, some respondents may be ashamed to admit that their credit applications were rejected. It may also be noted that an additional 11.7 % requested, and all of them got, credit from informal sources. The main source in this case is family and friends, but informal lenders figure as well.

The amounts granted by formal financial entities are not small for the type of firm, close US\$ 2,200, but the variance is quite large. The median is below the average, US\$ 1,700, indicating that most credits are for amounts below the average. Interest rates charged by informal sources are lower than those from formal entities, which is explained by the fact that the informal sources tend to be relatives and friends.

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9 This finding contrasts with Carr / Chen (2004) and Chen et al. (2005), who suggest a minor role for women as employers in the informal sector.



<b>Table 2: Business features</b>				
Access to credit	Average	Standard deviation	Min.	Max.
Asked for credit from formal entities (%)	18.4 %			
Obtained credit from formal entities (%)	16.1 %			
Credit amount from formal entities (US\$)	2,171	2,503	172	12,069
Credit amount from informal entities	654	694	35	3,448
Interest rate from formal entities	35.3	30.1	7.1	164
Interest rate from informal entities	25.8	18.4	8	92
<b>Training</b>				
Access to training (%)	13.7 %			
<b>Networking</b>				
Belongs to producers association (%)	2.5 %			
<b>Recent investments</b>				
Machinery/equipment (%)	19.3 %			
Infrastructure (%)	18,9 %			
Monthly expenditures (US\$)*	1307,2	1684,5	21.8	13206,9
Monthly revenue (US\$)*	1784,6	2059,3	16.1	16896,6
Monthly profits (US\$)*	490,1	558,6	3.4	4482,8
*Based on an exchange rate of 2.90 nuevos soles per dollar				
Source: Own compilation				

Access to training is very limited, as only 1 out of every 7 firms had any during the previous year. The proportion increases to 1 in every 5 if we exclude firms with 2 or less employees. In both cases training was mostly used by the owner; this occurred two thirds of the time. The main reasons given for not having made any use of training are lack of information (61 %) and no time (28 %). Cost (7 %) is much less important.

The firms in our sample are very isolated, as only a tiny minority belong to any producers or business association. Only about one out of five has made investments in the last six months in either equipment or infrastructure. Finally, the average monthly expenditure is about US\$ 1,300, while reported revenues border on US\$ 1,800, reported net income or profit are around US\$ 500, which represents about three times the minimum wage. Considering that the minimum wage is around the median of labour earnings in Peru, our sample of businesses produce income for their owners that is in the top half of the income distribution.<sup>10</sup> Note also that the variance of these numbers is quite large, far larger than the variance in the indicators of size.

10 See Jaramillo / Lopez (2006) for an analysis of the role of the minimum wage in the distribution of earnings in Peru over the decade 1995–2004. Unpublished estimates for 2005 indicate that the minimum wage is around the middle of the distribution of labour earnings for private sector salaried workers in urban Peru.

## 5 The demand for formality: rationale for being formal

If we are to analyse the demand for formalisation among small firms, a starting point is to ask for what reasons an entrepreneur would decide to formalise or not formalise his or her firm. Since our baseline data set includes a (small) portion of firms (11 %) that report having a provisional license, we can ask them why they got their operating license.<sup>11</sup> Table 3 sets out the different types of reasons for becoming formal. Two comments seem in order. First, “being on the legal side” seems to have some value for entrepreneurs, as nine out of ten entrepreneurs mention it as a reason to become formal. This evidence calls into question the idea of informality as part of an alternative culture that tends to disregard or downplay the legal system. How much of this is just lip service without much content is an open question, however. Second, if we classify reasons in two groups, one with those aspects entrepreneurs want to avoid, let us call them ‘negative reasons’, and the other with those aspects that the entrepreneur wants to take advantage of, let us call them ‘positive reasons’, we find that it is the former that predominates. In effect, avoiding fines or bribes is the reason most often mentioned to be formal. Among the ‘positive reasons’, greater visibility (through publicity) and access to credit are the most important, but enlarging their market through business with larger firms or participation in public biddings is also mentioned, as well as participating in public programs.

Among those businesses that have not gotten their licenses, the reasons for not obtaining the license (see Table 4) can be classified in four groups. The first is timing: the business is new and they have not had the time to start the process of registering. One third of the firms report this. The second has to do with the perceived costs and administrative burden of the process. Close to half of the firms in the sample (45 %) argue that the process of getting a license is long and tedious, while more than a third (36 %) thinks that the license is too expensive. Since it was possible to mark more than one answer, it is possible that there is considerable overlap among those that marked these two answers. The third group of causes is associated with information issues. One out of ten businesses claim that their type business does not have a license and an additional 6 % that a license is not mandatory. Finally, the fourth group includes those firms that believe that they do not meet the prerequisites, regarding safety (7 %) or other aspects (15 %).

In addition to their stated reasons for being/not being formal, the entrepreneurs have a perception of what the advantages or disadvantages are of having/not having a license, based on their own experience. Table 5 presents the perceptions of those that have a license. Aside from the fact one out of five entrepreneurs do not perceive any practical advantage, the answers are pretty much consistent with the reasons for becoming formal. The one most frequently mentioned is that they do not have to pay fines anymore; about three out of five firms mention this as an advantage. Not having to pay bribes is also a frequent answer, involving one out of five firms. Among the “positive” advantages, being able to use publicity (25 %) and to access credit (22 %) are the most important. Market expansion is also perceived by some firms as an advantage of having license, as one out of ten firms mention having business with larger firms, and one out of fifteen mention participation in public biddings. Finally, very few firms (3 %) find an advantage in being able to participate in public programs.

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11 There is a larger group (23 % of the sample) that reports having started the process of obtaining a license. While we have collected data from them, we are sceptical about these reports, since these persons may just be trying to avoid reporting themselves as informal. We will be able to test the grounds for our scepticism after the second data collection round, in six months.

<b>Table 3: Reasons for obtaining a license</b>			
	<b>N=64</b>		
	<b>Yes</b>	<b>% Yes / Total</b>	<b>% Yes / Business</b>
Being on the legal side	58	43.9 %	91 %
Avoid paying fines	35	26.5 %	55 %
Avoid paying bribes	11	8.3 %	17 %
Have business with larger firms	4	3.0 %	6 %
Do advertising	8	6.1 %	13 %
Access credit	8	6.1 %	13 %
Participate in public biddings	1	0.8 %	2 %
Participate in public programs	4	3.0 %	6 %
Others	3	2.3 %	5 %
<b>Total</b>	<b>132</b>	<b>100.0 %</b>	
Source: Own compilation			

<b>Table 4: Reasons for not obtaining a license</b>			
	<b>N=540</b>		
	<b>Yes</b>	<b>% Yes / Total</b>	<b>% Yes / Business</b>
License is not mandatory	35	4 %	6 %
No business like mine has a license	54	6 %	10 %
Too expensive	194	21 %	36 %
The procedure is lengthy and tedious	245	27 %	45 %
My business is new, so I have not had time to get the license	174	19 %	32 %
I do not fulfill the safety requirements	38	4 %	7 %
I do not fulfill other requirements	82	9 %	15 %
Others	32	4 %	6 %
The business is small	6	1 %	1 %
I do not know if I will continue in the locale/business	15	2 %	3 %
Problems with the locale	12	1 %	2 %
License is in the process	18	2 %	3 %
<b>Total</b>	<b>905</b>	<b>10 0%</b>	
Source: Own compilation			

In addition to their stated reasons for being/not being formal, the entrepreneurs have a perception of what the advantages or disadvantages are of having/not having a license, based on their own experience. Table 5 presents the perceptions of those that have a license. Aside from the fact one out of five entrepreneurs do not perceive any practical advantage, the answers are pretty much consistent with the reasons for becoming formal. The one most frequently mentioned is that they do not have to pay fines anymore; about

<b>Table 5: Advantages and disadvantages of having a license: perceptions of those that have a license</b>			
<b>Advantages of having license</b>			
	<b>N=64</b>		
	<b>Yes</b>	<b>% Yes / Total</b>	<b>% Yes / Business</b>
I do not have to pay fines	37	34 %	58 %
I do not have to pay bribes	14	13 %	22 %
I can have business with larger firms	6	5 %	9 %
I can access credit	14	13 %	22 %
I can participate in public biddings	4	4 %	6 %
I can do advertising	16	15 %	25 %
I can participate in public programs	2	2 %	3 %
No advantage	12	11 %	19 %
Others	5	5 %	8 %
<b>Total</b>	110	100 %	
<b>Disadvantages of having license</b>			
	<b>N=64</b>		
	<b>Yes</b>	<b>% Yes / Total</b>	<b>% Yes / Business</b>
I have to pay taxes	9	12 %	14 %
I receive inspections from the municipality	14	19 %	22 %
I receive inspections from civil defense	5	7 %	8 %
I have to spend for accounting	1	1 %	2 %
No disadvantage	39	53 %	61 %
Others	5	7 %	8 %
<b>Total</b>	73	100 %	
Source: Own compilation			

three out of five firms mention this as an advantage. Not having to pay bribes is also a frequent answer, involving one out of five firms. Among the “positive” advantages, being able to use publicity (25 %) and to access credit (22 %) are the most important. Market expansion is also perceived by some firms as an advantage of having license, as one out of ten firms mention having business with larger firms, and one out of fifteen mention participation in public biddings. Finally, very few firms (3 %) find an advantage in being able to participate in public programs.

Six out of ten firms perceive no disadvantage in having the operating license. Among the disadvantages mentioned, the most frequent is related to inspection visits from the municipality or safety authorities. This is mentioned by more than half of those firms perceiving some disadvantage. What is surprising is that it rates above paying taxes, which is the next most frequently mentioned, by about one out four firms that identified some disadvantage. This is an important finding for its policy implications: inspections may be a stronger factor discouraging formalisation than taxes.

<b>Table 6: Advantages and disadvantages of having a license: perceptions of those that DO NOT have a license</b>			
<b>Advantages of not having license</b>			
	<b>N=540</b>		
	<b>Yes</b>	<b>% Yes / Total</b>	<b>%Yes / Business</b>
I do not have to pay fines	67	11 %	12 %
I do not have to pay municipal taxes	91	15 %	17 %
I do not receive inspections from the municipality	63	10 %	12 %
I do not receive safety inspections	29	5 %	5 %
Others	6	1 %	1 %
No advantage	340	56 %	63 %
Does not know /does not answer	4	1 %	1 %
I do not have to spend money on official procedures	9	1 %	2 %
<b>Total</b>	<b>609</b>	<b>100 %</b>	
<b>Disadvantages of not having license</b>			
	<b>N=540</b>		
	<b>Yes</b>	<b>% Yes / Total</b>	<b>%Yes / Business</b>
I cannot have business with larger firms	58	5 %	11 %
Risk of paying bribes	194	17 %	36 %
Risk of paying fines	367	32 %	68 %
I cannot put a sign	158	14 %	29 %
I cannot access credit	121	11 %	22 %
I have to buy more expensive / lower quality inputs	3	0 %	1 %
I cannot do advertising	95	8 %	18 %
I cannot participate in public biddings	30	3 %	6 %
I cannot participate in public programs	29	3 %	5 %
Others	9	1 %	2 %
No disadvantage	65	6 %	12 %
It is a source of worries	13	1 %	2 %
<b>Total</b>	<b>1142</b>	<b>100 %</b>	
Source: Own compilation			

Table 6 focuses on the views of those that do not have a license. Most of them (63 %) see no advantage in their informal status. Among the perceived advantages, the two most frequently identified are not to have to pay municipal taxes and not to receive inspections, both mentioned with similar frequency, by about one third of those who see advantages. Not having to pay fines is the next important advantage, identified by about one-fourth of those perceiving disadvantages.<sup>12</sup>

12 One reasonable concern is that firm owners' reports may understate the benefits of being informal, because they may not be willing to admit any outright infraction of the law. We have no way to test the validity and importance of this concern. However, we consider this issue in discussing our results below.

A small proportion of informal firms (12 %) perceive no disadvantage arising from their status. Among the disadvantages, the two most commonly mentioned are: the risk of having to pay fines, mentioned by 68 % of the businesses, and the risk of having to pay bribes, identified by 36 % of the businesses. A second group of disadvantages has to do with lack of visibility: not being able to post a sign for their shop (29 %) or, more generally, not being able to use publicity (18 %). Not having access to credit is also identified by 22 % of businesses as a disadvantage associated with not having an operating license. A restricted market also falls in this category, as 11 % of informal businesses claim that they cannot do business with larger firms (11 %) or participate in public biddings (6 %). Finally, only one out of twenty firms feels that not having access to government programs is a disadvantage associated with not having a license. Thus, government programs are not sufficiently attractive or accessible to prompt informal firms to formalise.

To sum up, generally speaking, one would say that the disadvantages identified by those firms that do not have a license mirror the advantages perceived by those that have a license: risk/avoidance of fines, invisibility/visibility, no access/access to credit. Thus, the perceptions of both formal and informal firms tend to confirm one another as regards the advantages and disadvantages of their respective status.

What does this evidence tell us about the demand for formality? First, it is quite clear that there are perceived costs and benefits from being formal / informal in regards to the operating license and the fact that the perceptions of these costs and benefits vary from firm to firm. On balance, however, most firms see more benefits (advantages) than costs (disadvantages) of being formal. In effect, while about one-fifth of formal firms see no advantage to their status, almost two-thirds of informal firms see no advantage to theirs. Conversely, three out of five formal firms see no disadvantage to their status, while only one out of every eight informal firms sees no disadvantage to theirs. The question that naturally arises is, of course, why, then, is there so much informality? According to the entrepreneurs' views, which Table 7 below presents, the issues are still the administrative burden and money cost of formalising

	<b>N=540</b>		
	<b>Yes</b>	<b>% Yes / Total</b>	<b>% Yes / Business</b>
If the price goes down	253	23 %	47 %
If procedures are simplified	374	33 %	69 %
If more information is provided by the municipality	198	18 %	37 %
If it helps to access sources of credit	117	10 %	22 %
If it helps to access training	47	4 %	9 %
If there is more monitoring and enforcement of the law	23	2 %	4 %
If taxes are lower	42	4 %	8 %
Others	36	3 %	7 %
If the municipality would grant me a license	12	1 %	2 %
If business goes well	9	1 %	2 %
If I had more time	6	1 %	1 %
<b>Total</b>	1117	100 %	
Source: Own compilation			

procedures, and lack of information. It is interesting to note that, contrary to De Soto's (2000) predictions, only a small share of firms (one out of five) would be motivated by the fact that the license facilitates access to credit.

## 6 Are microfirms in downtown Lima really willing to formalise?

After the baseline survey was carried out, about one half of our sample of firms was selected to receive an encouragement to get the municipal operating license. The encouragement consisted of paying for the cost of the license and providing guidance through the procedures with the municipality.<sup>14</sup> Using the second round of data collection, we exploit the fact that not all firms encouraged took up the incentive to analyse factors associated with the demand for formalisation.

Table 8 summarizes the outcome of the encouragement process. About one out of four of those firms "encouraged" to get the license actually obtained it. Among those that did not obtain the license, close to one third (30.6 %, or 23 percent of the overall sample) were unable to get it because they did not comply with zoning standards or safety requirements (or both). This is an important finding because it indicates that business informality is linked with other types of informality and that promoting business formality by simplifying the procedure to obtain a license is insufficient. A more comprehensive focus is needed. The second important finding is that about half of the firms in the sample did not get the license even when they reportedly fulfilled the requirements and did not have pay for it. This indicates that a substantial portion of firms are at best indifferent between having

<b>Table 8: Results of encouragement to formalise and reasons for not taking it up</b>		
	Number of entries	% of firms
<i>Encouraged firms</i>	<b>232</b>	
<i>Firms that obtained a license</i>	<b>59</b>	<b>25.4</b>
<i>Firms that did not obtain a license</i>	<b>173</b>	<b>74.6</b>
<b>Reasons for not getting a license:</b>		
I do not fulfill all the requirements		21.2
I do not fulfill the safety requirements		9.4
No business like mine has a license		11.3
The license is very expensive		13.7
The procedure for obtaining a license is lengthy and tedious		21.2
My business is new, so I have not had time to get the license		8.5
The license is not mandatory		4.7
I don't know if I'll continue with this business/locale		2.4
Others		7.5
Total		100.0
Source: Own design		

14 Initially the incentive was to pay for a portion of the license cost, but in the end the offer was raised to cover the whole cost.

or not having a license or, at worst, prefer not to have one. Among the reasons reported for this, burdensome and costly procedures are still the most frequent, even after the offer was made to cover the money costs. Also about one of every six firm owners that did not obtain the license claims either that the license is not mandatory or that it does not apply to his/her type of business, which suggests information problems.

What factors may be affecting the decision to obtain/not to obtain a license? The data collected, though limited in size, makes it possible to explore this question. Excluding from the sample those firms that were unable to get the license because they did not fulfil the requirements, we compare firms that formalised with those that did not. To do this, we ran a *probit* model in which the dependent variable can take one of two values, according to whether or not the firm obtained a license. Explanatory variables include features of the firm and the firm owner, including stated disadvantages of not having a license. Table 9 presents the results from two different specifications, controlling and not controlling for firm sector. In controlling for firm sector, two variables predict formalisation: the fact that the firm owner has post-secondary education and the perception that not having license limits the visibility of the firm. Without controlling for sector, the results persist, but, in addition, number of workers becomes significant as well. Each additional worker increases the chances of getting a license by 5.3 percentage points. Likewise, the owner's having post secondary education increases the chances by 13 percentage points, while the owner's perception that not having a license limits the visibility of her or his firm increases the chances of getting a license by 17 points.

<b>Table 9: Determinants of obtaining a license: probit marginal effects</b>		
<b>Marginal Effects</b>	<b>Model A</b>	<b>Model B</b>
Number of workers	0.04 (0.03)	0.053* (0.03)
Age of business	0.01 (0.01)	0.01 (0.01)
Age of owner	0.0010 (0.003)	0.0011 (0.003)
Gender of owner	-0.007 (0.077)	-0.009 (0.078)
Education	0.13* (0.077)	0.13* (0.078)
First business	0.031 (0.084)	0.036 (0.083)
Sector	0.08 (0.10)	
Can't post a sign or use publicity	0.17* (0.090)	0.17** (0.091)
Can't do business with larger firms		0.0002 (0.131)
Observations	172	172
Pseudo R <sup>2</sup>	0.07	0.07
Standard errors in parentheses ** p<0.05 * p<0.1		
Source: Own compilation		



## 7 Conclusions and policy implications

Our results suggest a paradox: most firms see more benefits (advantages) than costs (disadvantages) in being formal, yet about half of firms do not get their licenses when the associated money cost is substantially reduced.<sup>15</sup> In effect, while just about one-fifth of formal firms see no advantage to their status, as many as two-thirds of informal firms see no advantage to theirs. Conversely, three out of five formal firms see no disadvantage to their status while only one out of every eight informal firms sees no disadvantage to theirs. However, confronted with the opportunity to obtain the license without any payment involved, most informal firms prefer not to obtain it. Hence, the results of our experiment suggest that for some firms formalisation is not desirable at any cost.

A first reason for the reluctance to register may be associated with the recurrent costs of being formal.<sup>16</sup> As shown above, receiving inspections is the most frequently identified disadvantage (or cost) of being formal, ranking above taxes. Making sure that inspections do not constitute an unnecessary burden on the firms is an area where municipalities can work to make formality more attractive to them. Second, it may also be the case that some firms do not perceive much benefit from being formal. As the regression results indicate, most currently assumed potential advantages of having a license, such as doing business with larger firms, participating in public biddings, or getting access to credit, do not correlate significantly with obtaining the license. Only the perception of the firm owner that without a license he or she cannot use publicity to increase the visibility of his/her firm is positively correlated with obtaining the license.

Third, it may be that microfirm owners are understating the actual benefits of informality, because they feel uncomfortable about admitting benefits from an illegal status. Finally, it is important to note that about one out of every four informal firms did not fulfil the requirements to obtain a license. In one third of these cases firms did not meet safety requirements, which can range from inadequate electricity connections all the way to ruinous buildings. In other cases, property titling problems or irregular subdivisions of real state property make it impossible for businesses to obtain a license. The point that this type of evidence suggests is that promotion of business formalisation in terms of getting a license cannot generally be done separately from other types of informality.

As predicted by the literature, the demand for formality is heterogeneous among informal microbusinesses in Lima's Cercado. In addition to the potential gains of greater visibility mentioned above, the only two other factors that correlate significantly with obtaining a license are the owner's having post-secondary education and size of firm. It should be noted, however, that there may be statistical problems because of the reduced size of the sample. Nonetheless, results from difference-in-means tests do not indicate any significant differences between firms that obtained and did not obtain the license in terms of other features of the firm or the owner. The only exception is the age of the business: firms that had a license are older (4.1 years-old on average) than those that did not (2.3 years-old).

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15 One may argue that even if the price of acquiring the license was reduced to zero, there are other costs associated with obtaining the license: collecting the required documents, going to the offices of the municipality, waiting in line, etc.

16 Jaramillo (2004) and Arruñada (2007) have suggested that recurrent costs associated with formality may be more important than initial registration costs.

Once other features of the firm have been controlled for, as done in the regression analysis this effect disappears, however.

It is difficult to identify what type of firms are likely to formalise without looking at their performance over time or their opportunity costs as wage earners. However, one may classify the sample of microfirms in three groups. In the first group are those firms that obtained the license. The owners of these firms are better educated on average and show a desire for greater visibility for their businesses. Obtaining their licenses creates important preconditions for firm upgrading and growth, and it may be taken as an indicator that at least some of these owners qualify as 'opportunity entrepreneurs'. The second group consists of those firms that did not get the license because of zoning standards or safety requirements (or both). One may be inclined to think of this group largely as necessity entrepreneurs, though some of them may be experimenting with an activity whose future returns they are not certain about. In the third group are those that, meeting the basic requirements for obtaining the license, chose not to pursue it. This is the largest group, two fifths of those encouraged, and one where 'opportunity entrepreneurs' would be largely absent. Our evidence suggests that for these firms, at least at this stage of their development, the benefits of having a license / being formal exceed its costs.

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## Annex



<b>Table A1: Metropolitan Lima: educational levels among 25–65 year-olds (2006)</b>			
Educational level	Metropolitan Lima		
	Men	Women	Total
No formal education	0.41 %	2.32 %	1.40 %
Incomplete elementary school	3.79 %	6.99 %	5.45 %
Complete elementary school	6.55 %	8.83 %	7.74 %
Incomplete secondary education	13.05 %	11.76 %	12.38 %
Complete secondary education	37.40 %	34.54 %	35.91 %
Incomplete non-university tertiary education	6.40 %	6.30 %	6.35 %
Complete non-university tertiary education	10.32 %	10.82 %	10.58 %
Incomplete university education	8.76 %	5.79 %	7.22 %
Complete university education	11.43 %	11.48 %	11.45 %
Post-degree education	1.89 %	1.18 %	1.52 %
Source: INEI 2006, elaborated by author			





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