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Causes, Costs, and Policies—A Literature Survey

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Abstract

In this survey we assemble recent theoretical and empirical advances in the literature on economic informality, analyzing the causes and costs of informality in developed and developing economies. In accordance with recent evidence, we discuss the nature and the roots of informal economic activity across countries distinguishing between informality as the result of "exclusion" and "exit." We then provide an extensive review of recent international experience with policies aimed at reducing informality, in particular policies that facilitate the formalization process, create a framework for the transition from informality to formality, lend support to newly created firms, reduce or eliminate inconsistencies across regulation and government agencies, increase information flows, and increase enforcement.

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Chapter 1

Introduction

The aim of this survey is to assemble theoretical and empirical advances in the literature on economic informality, to provide a conceptual framework to analyze it, and to help formulate the appropriate policies to address it in individual cases. The extensive size of informal economic activity in many developing countries is of concern because of potential inefficiencies taking place in the informal sector, because of the lack of protections for informal workers, and also because of potential imbalances between tax collection and the use of publicly provided goods and services.

In this survey, we discuss the nature and the roots of informal economic activity across countries distinguishing between informality as the result of "exclusion" and "exit." Informality as a result of "exclusion" is due to stringent and costly regulations, and lack of opportunities, especially for certain demographic groups in the formal sector. Informality as a result of "exit" is due to mediocre benefits of being formally employed (or formally registered), individual preference for self-employment, and lack of trust in public institutions.[1]

In all countries informality is a mix of exit and exclusion, to varying degrees. In developed economies, informality involves tax evasion and undeclared labor rather than a significant share of unregistered businesses. Typically, social protection benefits cover the entire population, so that there is less of a divide between those who hold formal jobs and the rest. In emerging economies on the other hand, the exclusion factor, coming from costs of formality and limits on the availability of formal jobs, is still quite prevalent, even if there is an important exit component, as recent studies have found. Furthermore, because of a two-tier social protection system, informal workers are often left to cope with unforeseen events such as illness and job loss on their own, with significant costs for society as a whole. Finally, if informal firms do have growth potential that is stifled by their informal situation, there can be significant costs for economic growth as well, although, as this paper argues, the empirical literature has not provided strong enough evidence of a causal relationship from informality to economic growth to make confident predictions in this regard.

Accordingly, the design of appropriate policies to reduce informal activity and promote formalization is likely to require, first, a close look at successful policies in advanced and emerging countries, and second, a careful combination of policies that address all aspects of economic informality. Emerging economies often face an environment of stringent regulation, unreliable institutions, and low productivity, where informality is then the only possibility for a large fraction of the population. In such cases, attempts to reduce informality may simply destroy informal jobs and might lead to even worse outcomes than the status quo. Instead, this paper will argue that a

comprehensive policy package would best encourage formalization, deter informal behavior, help entrepreneurs run successful businesses that create jobs, and reinforce the relationship between private individuals and public institutions. The paper lays out several policies, implemented in many parts of the world, and discusses their efficacy in reducing informality and increasing formalization.

The rest of the paper is organized as follows. The following section, "What Is Informal Economic Activity?" discusses the various definitions of informality used in the literature, as well as measurement issues. "Causes and Costs of Informal Activities" describes the causes and costs of informality across countries, both at the micro level as well as at the aggregate level. "Policies to Reduce Informality" analyzes the different policies that countries have implemented to reduce informality and promote formalization, as well as evidence of their success where such evidence exists. The section "Concluding Remarks" finalizes.

Notes

[1] As it will become apparent in later sections, a lack of opportunities in the formal sector can also be consistent with the voluntary exit of formal sector workers, if the marginal benefits (that is, wages) of informal and formal sector jobs are equal. The main distinction between exit and exclusion depends on whether formal sector jobs make workers better off relative to informal jobs.

Chapter 2

What Is Informal Economic Activity?

Informality means legal economic activity taking place below the radar of government.[1] It takes many forms, from the unregistered small firm, to the street vendor, to the large, registered "formal" firm that employs a share of its workers without offering them written contracts with access to benefits and unemployment protection. Thus the importance of being precise as to what kind of informality one refers to—unregistered firms, unprotected workers, the self-employed—because the appropriate policies are likely to differ depending on the aspect under consideration (see also box 1).

Informal Activity in Developing and Developed Economies

"Exit" versus "exclusion." The taxonomy used in this paper draws heavily from the World Bank's flagship report on the informal sector in Latin America and the Caribbean (Perry et al. 2007). The flagship report is the first piece of analysis that provides a truly comprehensive account of informality. The report characterizes the informal sector as heterogeneous, containing a mixture of economic actors who find themselves in the informal sector for a variety of reasons. According to the report, extensive analysis, done over several years in Latin America, reveals a fundamental distinction in the informal sector between segmented and nonsegmented markets. The traditional view sees informality as the only alternative for a share of the labor force that lacks opportunities in the formal sector, and thus has no other option but to work in substandard conditions and for lower pay than they would get in the formal sector. As a result, the labor market becomes a segmented market, where the "insiders" in the formal sector have higher incomes and more secure jobs than those who are "excluded." While the report does find evidence of an element of exclusion for certain groups of workers—particularly young and old workers with little or no education and women—there is also growing evidence that a large share of formal sector workers choose to quit their job to become self-employed or salaried in an informal business. These voluntary informal workers typically earn equal or higher incomes than formal salaried workers, they have the satisfaction of "being their own boss," and they enjoy greater flexibility to balance their work and family responsibilities ("exit").

Informal activity also takes place, although in general to a much lesser extent, at larger, formally registered firms. These firms declare only a share of their workers to public agencies, and systematically underreport their sales to tax authorities, with the aim of circumventing tax payments and other mandatory contributions. The report

finds the basis for such behavior both in excessive regulations and in the existence of a stable "negative" equilibrium, in which everybody behaves in a similar way because of a weak rule of law.

The formal and informal sectors are best understood as complementary, rather than segmented sectors.[2] Household data for Latin America show that workers move into and out of informal jobs several times over their lifetime. More important, a close analysis of job flows over the business cycle, as provided, for instance, by Bosch and Maloney (2008) for Brazil and Mexico, reveals that during downturns there is an intense churning of workers into and out of the informal sector: on the one hand, the separation rate in the informal sector increases dramatically, leading to higher unemployment, but simultaneously, the decrease in job creation in the formal sector pushes workers into the informal sector. Furthermore, flows between formal and informal jobs appear to be symmetric and pro-cyclical, that is, transitions from formal to informal jobs, and vice versa, accelerate during economic expansions. This, as they point out, is "not consistent with the view of the informal sector as predominantly the disadvantaged end of a segmented labor market, or disguised unemployment."

While individuals' motivations to become informal may differ, the common denominator in the informal sector is low scale and low productivity. Indeed, informal businesses are mostly very small (with five or fewer employees, often operating from the household); some with little or no intention of or potential for growth, while others face serious barriers to expansion because of excessive regulation and lack of access to resources such as capital. Similarly, self-employed and informal salaried workers typically have low human capital, by various measures of education and ability.[3]

Box 2.1: Defining Informality

The hidden nature of informal activity has posed a significant challenge to defining and measuring it accurately. Among the several definitions used in the literature we find a distinction between those that look at informality from the firm's perspective (the "productivity" view), and those that consider rather the status of the firm's employees (the "social protection" view).[a] The first view focuses on the type of firm and its legal status, and it includes small-scale production units with no legal separation from their owners (that is, firms not legally registered as businesses), such as family-based businesses in which one or more family members participate, and microenterprises with at most five employees.[b] This definition has been used in important contributions to the literature, such as the seminal work of de Soto (1989) for Peru. The "social protection" or "legalistic" view focuses on employment, recognizing that in many cases larger, formally registered firms establish informal working contracts with their employees, thus avoiding payment of social security contributions, severance payments, and other penalties in case of dismissal. This second view then allows for informality to take place both in informal and formal production units. The current definition used by the International Labour Office (ILO) contemplates both types of informality, and it includes also households producing goods for their own final use, as well as households employing paid domestic workers, as parts of the informal sector. Yet another dimension of informality relates to firms' compliance with regulations, for instance, tax evasion. Several studies consider lack of regulatory compliance as a part of informal economic activity.[c]

a. See Perry et al. (2007).

b. See Gërxhani (2004) for a partial review of criteria used in the literature to define informality.

c. See, for instance, Schneider and Enste (2000), World Bank (2007), and Gatti and Honorati (2008)

Box 2.2: **Measuring Informality**

Several techniques to measure the size of the informal sector have been developed over the years.[a] There are essentially two methods to measure informality, the first type is a direct (micro) measurement based on individual surveys, such as the World Bank's Enterprise Surveys, which explicitly ask the firm's owner or manager the year when the firm started its operations and the year the firm was legally registered. A discrepancy between the two is typically considered as the time when the firm operated informally. In some household surveys or labor force surveys, interviewees are asked whether in their current employment they have signed a formal contract, or whether they are affiliated to the social security administration (meaning that they, or their employer, are contributing to a pension plan or other protection program). The problem with this measure is that the interviewee's answer depends heavily on the phrasing of the question, and (in the case of firms, for instance) many interviewees will be reluctant to reveal their behavior, so that one has to formulate indirect questions instead, which are likely to be much less accurate. In addition, looking at workers covered by a pension plan, for instance, might be misleading as some countries have recently shifted their participation schemes to include self-employed workers, hence blurring the distinction between pension-plan holders as formal and nonholders as informal.

The tax-audits method basically takes data from tax audits to determine the percentage of the firms audited that evaded taxes and quantifies the amount of tax underreporting as informal activity (one can also determine the legal status of the firm with tax audits). The shortcoming of this information is that typically tax audits are not conducted randomly and hence the information is not representative of the population of firms.

Several indirect techniques use aggregate data instead. The first measure estimates the size of the informal economy as the difference between aggregate income and aggregate expenditure from the National Accounts; however, it has been used in a few developed countries only, as it requires independent calculations of aggregate income and expenditure. From the employment perspective, measures include taking the difference between total labor force and total employment, and an index of pension coverage of the population. The latter has the caveat that in recent years, coverage has been expanded in several countries to the overall population regardless of their employment status.

Other indirect techniques include the physical input approach, which measures the growth of the informal economy as the difference between the growth rate of GDP and the growth rate of electricity consumption. A related measure takes the difference between the fitted values of an estimated money demand equation and the actual amount of cash that circulates in the economy. These measures have several disadvantages. First, they both assume that in the base year of the estimation (chosen arbitrarily according to sample availability) the size of the informal sector is close to zero. Second, they both make unrealistic assumptions about the use of electricity (constant coefficient per unit of GDP, which ignores technological progress) and of money demand (common velocity of circulation in formal and informal sector, and exclusive use of cash in the informal sector). In practice, both measures are highly sensitive to variation in these assumptions: in particular, changing the base year for the estimation of either model produces very different estimates of the size of the informal sector.

Yet another method that has been used in recent years is the Multiple Indicator-Multiple Cause (MIMIC) model, first used by Loayza (1996) for Latin America, and expanded by Schneider (2004) for 145 countries. This model assumes that while informal activity is not observable, its magnitude can be represented by a latent variable (in index form), and both its causes and effects can be observed and measured.

This latent variable is then used in a set of two equations: in the first, the latent variable is the dependent variable and its causes are the explanatory variables; in the second, the effects of informality are modeled as a function of the latent variable. The set is then simultaneously estimated and the fitted values of the latent variable are used to compute an estimate of the size of the informal sector as a share of GDP. This technique, especially as used by Schneider (2004), has been criticized because of the lack of theoretical support for the equations supposed to capture the causes and effects of informal activity, and it has also been argued that the estimation results are sensitive to transformations of the data, to measurement units, and to the sample used. Breusch (2005) provides a critical analysis of this methodology.

(continued)

Box 2.2: Measuring Informality *(continued)*

An important criticism of all these techniques is that they view the informal sector as a "stock" rather than a "flow" variable, hence ignoring all the movements into and out of informality that indeed take place for many individuals (and to some extent for firms as well) throughout their lifetime. A few studies have quantified these movements, among them Flores et al. (2004) and Maloney (1999) for Mexico; Bosch, Goñi, and Maloney (2006) for Brazil; and Bosch and Maloney (2008) for Mexico and Brazil.

Measuring the Size of the Informal Sector

Direct methods (micro)	Voluntary surveys	
	Tax audits	
Indirect methods (macro)	Discrepancy between aggregate income and expenditure	
	Discrepancy between total labor force and formal employment	
	Monetary methods	Velocity of circulation approach
		Currency demand approach
	Physical input (electricity consumption)	Kaufmann-Kaliberda method
		Lacko's method
Model approach	MIMIC and DYMIMIC (macro)	

Source: Perry et al. 2007.

a. For a detailed review of the different techniques, see Perry et al. (2007) and Flores et al. (2004).

In developed economies, the nature of informal activity is somewhat different. Because social protection typically covers the entire population, there is no segmentation of protection according to the labor status of individuals. Additionally, business regulations in developed economies tend to impose relatively light burdens on firms, so that in general the element of "exclusion" is absent from the informal sector in these countries. Instead, informality mostly involves formal firms and workers who underreport their income to the tax authorities, or the use of undeclared labor, often undocumented foreigners, especially in certain activities (construction, home repair, and so on).

Each definition of informality requires specific data and measurement techniques. None of these techniques will be entirely accurate given the difficulties associated with the nature of informality. Box 2 describes the various techniques used in the literature, particularly those that use a micro-based approach by asking specific questions in household and firm surveys, and those that measure informality from a more macroperspective, using aggregate data. We also discuss the weaknesses of each measure.

Micro-based direct measures, however inaccurate, are in general preferable to macro-based indirect measures. Micromeasures allow the researcher to define much more clearly what is understood as an informal worker, informal firm, or informal (nonreported) production, and surveys offer the flexibility to investigate in depth the different faces of informality. For instance, Perry et al. (2007) report that for the purpose of the study, a specific module was designed to be included in several household surveys in order to capture the motivations of employees to accept informal

work arrangements, thus disentangling the exit from the exclusion components of informal employment. Moreover, for the purpose of designing specific policy actions to reduce informality, it is important to know exactly the characteristics of the target group, in order to evaluate the potential benefits of the policies. Indeed, recent research has used labor force surveys and microbusiness surveys in Mexico and Brazil to evaluate the impact of policies to simplify business registration and a simplification of the tax system for small firms on the firm's decision to register.[4] The results of these studies will be discussed in detail in the following.

Notes

[1] Hence, the term *informality* refers to activities that are normally subject to taxation and other regulations, and thus excludes all kinds of activities explicitly considered illegal (drug trafficking and so on).

[2] Maloney (1999) was the first to provide such evidence, later expanded by Maloney (2004), Loayza and Rigolini (2006), Bosch, Goñi, and Maloney (2006), and others. Perry et al. (2007) provide a detailed review on the dynamics of the informal sector in Latin America.

[3] For interesting recent evidence on the ability of the self-employed from Sri Lanka, see de Mel, McKenzie, and Woodruff (2008).

[4] For Mexico, see Kaplan, Piedra, and Seira (2007) and Bruhn (2007); for Brazil, see Fajnzylber, Maloney, and Montes (2007) and de Paula and Scheinkman (2007).

Chapter 3

Causes and Costs of Informal Activities

Informal economic activity has diverse causes and effects. In this section, we first discuss evidence that points to the following potential determinants of informal activity:

- burdensome regulations (high entry costs, strict labor regulations, high taxes, complicated procedures, and so on)
- low institutional quality (corruption, weak rule of law, lack of accountability, and so on)
- low human capital
- high economic inequality
- low trust in institutions
- low quality of public services (infrastructure, social protection)
- lack of access to resources (land, credit, and so on)
- low monitoring and enforcement
- individual preference for independent work

Likewise, the literature argues that informal economic activity has several potential economic costs:

- suboptimal production scales
- low investment
- the "free rider" problem (overuse of public goods, low tax collection)
- unfair competition
- low innovation
- a large fraction of poor population uninsured against income shocks
- workers unprotected by basic safety standards

Causes: Cross-Country vs. Microdata Studies

Informality is systematically correlated with income and development. Cross-country studies of the determinants of the informal sector, such as Schneider and Enste (2000), Torgler and Schneider (2007), Chong and Gradstein (2004), Loayza, Oviedo, and Servén (2006), and Loayza (1996, 2007), typically use as their dependent variables macro-based measures of informality, hence starting off with the weaknesses

associated with these measures discussed in previous sections. Nonetheless, these studies show that, however imperfect, these measures are systematically related with several other macroeconomic indicators of development.

Regulatory burden may be a leading cause of informal activity. In one cross-country study, Loayza, Oviedo, and Servén (2006) test de Soto's view that burdensome regulations thwart the efforts of small entrepreneurs, thus condemning them to stay in the shadows. They find that the informality measure from Schneider (2004) is associated with an excessive regulatory burden, which is readily seen in figure 1, as well as in table 1.[1]

Governance also interacts with regulations to play a role in causing informality. The same authors also find that governance plays an important role interacting with the effect that regulation plays on informality. Indeed, when regulation is interacted with a governance indicator (that reflects the absence of corruption, the prevalence of the rule of law, and the level of democratic accountability), the results indicate that regulation is positively associated to informality only for countries with governance levels beyond a certain threshold (roughly corresponding to countries like Greece and Spain). This suggests that in countries with strong governance, regulations are more likely to benefit the general interest, and also their levels of enforcement are likely to be higher and more even. Loayza (2007) conducts another cross-country study where he compares several measures of informality, in particular self-employment, the lack of a pension plan, and the MIMIC-based measure, and finds that they are all strongly correlated with a weak rule of law, an excessive regulatory burden, a low average level of schooling, and a high level of a composite of other sociodemographic factors (share of youth, share of rural population, and share of agriculture in GDP).[2]

Table 3.1: Determinants of the Informal Sector

	Type of regulation index			
	Overall [1]	**Product Market [2]**	**Labor [3]**	**Fiscal [4]**
Regulation (index ranging from 0 to 1, higher meaning more regulated	41.21	37.87	39.39	7.73
	2.55	2.87	3.51	0.63
Governance-Regulation interaction (Governance index * Regulation index) (Gov. index ranges from 0 to 1, higher meaning better governance)	-65.84	-50.16	-48.76	-42.91
	-3.37	-3.03	-3.74	-3.03
Control Variables:				
Initial GDP per capita (in logs)	-2.52	-3.01	-3.31	-1.93
	-1.93	-2.22	-3.09	-1.33
Constant	48.41	50.18	52.45	57.50
	3.28	3.38	5.13	5.53
No. of observations	72	72	72	72
R-squared	0.56	0.54	0.59	0.57
P-value of Ho: sum of regulation coefficients = 0	0.22	0.44	0.25	0.00

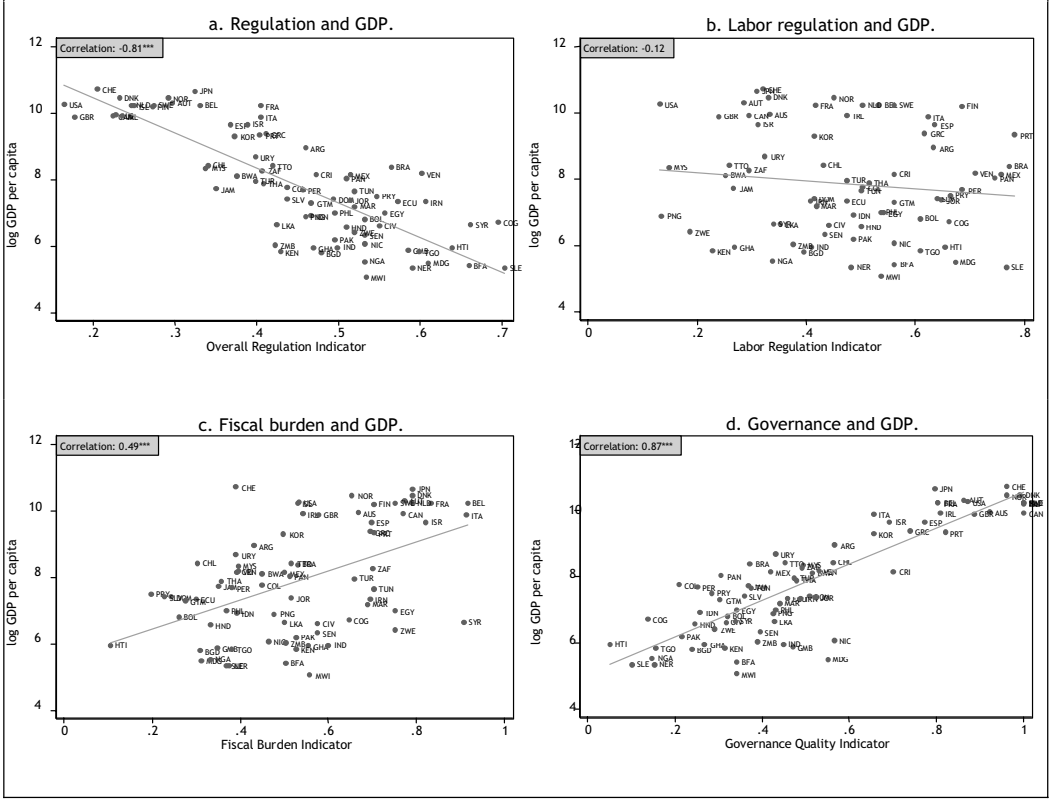
Note:

Standard errors are robust to heteroscedasticity (Newey-West).

t-Statistics are presented below the corresponding coefficient.

Source: Loayza, Oviedo, and Servén 2006.

Figure 3.1: Informality vs. Regulation Indexes



Note: *, **, and *** denote significance at the 10%, 5%, and 1% level respectively.

Source: Loayza, Oviedo, and Servén 2006.

People's perceptions of how well taxation is used to provide services are another important factor. Torgler and Schneider (2007) also look at how institutions affect individuals' decisions to stay informal or to join the formal economy. In particular, they look at how what they call *tax morale* is associated with the size of the informal sector (measured by the MIMIC method) both across and within countries. They measure tax morale using the World Values Survey's question on how justifiable people think it is to avoid paying taxes. Not surprisingly, this measure is highly correlated with all other institutional measures used in this and other papers (rule of law, corruption, and so on). However, this measure is interesting in itself because it highlights the role of people's trust in the ability of the public sector to serve the public interest when they decide to participate in the established social and economic system, versus deciding to stay at the margin.

Correlation need not imply causation from informality to income levels at the aggregate level. The potential reverse-causality issue is not fully resolved in any of these cross-country studies. Nonetheless, there is little question that aspects such as regulation, the rule of law, and the level of human capital ultimately determine the existence of informal economic actors; the real difficulty with these macroanalyses is to

disentangle the mechanisms that lead to—or that keep firms trapped in—informality, leading back to the conceptual distinction between exit and exclusion.

Inequality and poor institutions are also at the root of a large informal sector. Chong and Gradstein (2004) build a theoretical model that captures the evidence first put forward by Maloney (1999): that informal activity is the result of the worker/entrepreneur's rational cost-benefit analysis given the institutional quality, regulatory framework, and social values system of the country. In their model, in order to join the formal sector, an entrepreneur must first invest in an advanced technology, without which the firm cannot compete in the market. Moreover, low institutional quality allows entrepreneurs to invest resources to obtain larger returns from their investments, so that in equilibrium, the richer the entrepreneur, the more profitable the investment. In turn, poor entrepreneurs find it optimal to join the informal sector, where the technology is available to all, but productivity, and hence profits, are low. This model then establishes positive relationships between both poor institutional quality and wealth inequality, and the size of the informal sector. In their empirical investigation, they find evidence supporting these theoretical results. Specifically, they regress the (macro) electricity-consumption-based measure of informality on several measures of inequality and institutional quality, finding positive and significant coefficients for both.[3] Further, they find that the interaction between institutions and inequality has a positive and significant coefficient, which suggests that it is actually the combination of both inequality and poor institutions that are at the root of a large informal sector.

Analysis of microdata strongly supports the claim that informality in developing countries is a complex combination of exclusion and exit. In contrast to macro-based measures, microdata (typically household or labor force surveys) provide a more clear-cut, though complex, picture of the determinants of informality, even in the absence of econometric measures. The evidence provided by these data suggests that informality is the result of a rational choice of individuals (particularly business owners and the self-employed, but also some informal salaried workers), as well as the exclusion of a share of the labor force from the formal labor market. This is particularly the case for the young with little or no education, who often use informal salaried work as an entry into the labor market (some of them successfully move to formal jobs or self-employment, if only temporarily). More important, for those individuals who are kept at the margin of the formal economy, the costs of informality may extend beyond the loss of job security or insurance against illness and old age. Evidence suggests that in Latin America "most individuals (…) are unlikely to see significant improvements in their income or social position, or that of their children, regardless of their ability. Incentives to work, acquire skills, or refrain from socially undesirable behavior are seriously constrained when there is no clear path out of social exclusion" (Inter-American Development Bank [IDB] 2008). As a result, informal workers may have fewer incentives to invest in their own and their children's education, thus increasing the likelihood that their children remain in the informality trap.

Studies of firms give similar results to those found in the aggregate. From the firm's perspective, several micro-based studies confirm the findings of the aggregate studies mentioned earlier. For instance, Johnson et al. (2000) use survey-based, firm-level data for five Eastern European countries, finding that on average the share of

sales that goes underreported to tax authorities in Russian and Ukrainian manufacturing firms can be three to nine times larger than in Poland, Romania, and Slovakia. Although, as they argue, managers in Russia and Ukraine face much higher taxes, report much higher levels of bureaucratic corruption and Mafia extortion, and exhibit a lower trust in their legal and court systems, firm-level regressions suggest that only the prevalence of corruption—measured through firms' reporting of extralegal payments for services or government licenses—has a significant relationship with the percentage of sales unreported for tax purposes, with no effects found for taxation or court efficiency.

In Latin America, labor regulations are found to be an important determinant of firms' decisions about how much to formalize. Using Enterprise Survey data for Argentina, Bolivia, Colombia, Mexico, Panama, Peru, and Uruguay, Perry et al. (2007) evaluate the effect of labor regulations on informality by constructing a dummy variable for firms stating that those regulations significantly affected their hiring and firing decisions during the previous year. For the pooled sample they find that firms constrained by labor regulations evade a higher fraction of taxes or social security contributions. At the individual country level, this is the case only for Argentina, Colombia, and Mexico. In Panama, they also find a significant relationship between the number of times that a firm was visited by tax inspectors and the fractions of sales and workers that go unreported.

What other aspects of the investment climate play a role in a firm's decision to be formal? Ingram, Ramachandran, and Desai (2007) look at this question using Enterprise Surveys data for Kenya, Uganda, Tanzania, Zambia, South Africa, and Senegal, where identical surveys on both formal and informal firms were conducted, making the data easily comparable. They compare the answers that firms provided to a perceptions question on the quality of the investment climate. Specifically, firms are asked to select the top three obstacles to their performance from a list of 18 aspects.[4] The authors then analyze how formal and informal firms rank the different investment climate attributes, and they estimate how each obstacle affects the probability of a firm being informal. They find that the incidence of formality is positively correlated with perceptions regarding the availability of electricity supply, access to finance, and access to land, and negatively correlated with the rate of taxation and corruption. This last finding is consistent with the evidence provided by Johnson et al. (2000) and discussed earlier.

For self-employed workers with low human capital and low productivity, there may be few gains from becoming formal. This could be the case even in a relatively good investment climate, if an individual has low human capital, hence low productivity, and has low expectations about her own future, regardless of the actual possibilities available to her. Because low productivity translates into low profits for the self-employed, informal entrepreneurs might find it optimal to remain under the radar so as to avoid paying taxes and other contributions, even at the expense of being subject to fines or extortion from inspectors.[5] Ample evidence of this has been reported, for instance, by de Paula and Scheinkman (2007), Perry et al. (2007), and Jütting, Parlevliet, and Xenogiani (2008), who argue that this is a plausible—though incomplete—explanation of the existence of the informal sector, and is common to developing and developed economies.[6]

The benefits of formalizing will also depend on the structure of social safety nets. In countries where social safety nets are underdeveloped, or where they are not necessarily tied to a formal job (as is the case for conditional cash transfers, for instance), workers will attribute less value to formal jobs with benefits, especially if these jobs imply less flexibility and more taxation. Moreover, Perry et al. (2007) provide evidence for Latin America that in households where one member already has a formal job with benefits (that usually cover dependents), there may be strong incentives for the others to take informal jobs.

Informality is best understood when worker and firm incentives are taken into account. A number of recent theoretical papers motivate the existence of informal actors as the result of rational choices. These new models, most of them adaptations of the matching literature based on Mortensen and Pissarides (1994), typically describe two sectors—one formal and one informal—producing the same good, and heterogeneous workers (in terms of their productivity). Some of these models distinguish the formal and informal sectors by allowing the formal sector to provide unemployment insurance (Boeri and Garibaldi 2006), or adding to the informal activity a probability of enforcement of the law that results in the destruction of the job (Fugazza and Jacques 2004), or by allowing the life span of a formal sector match to depend on the worker's productivity, whereas the life span of the informal sector job occurs with a fixed probability (Albrecht, Navarro, and Vroman 2007). All these models capture the stylized notion that the informal sector is composed of workers and firms of lower productivity than those in the formal sector, but in these models this sorting occurs endogenously. This is crucial in the sense that workers and firms are initially free to form a match in either sector, that is, they both have access to the formal sector initially; however, in equilibrium some of them will choose the informal sector.

Policies to increase the value of formalizing may complement, or even be preferable to, increased enforcement. One criticism of these models, as with any other theoretical model, is that they oversimplify reality in order to isolate a particular mechanism. Specifically, these models make a few quite strong assumptions about the nature of the formal-informal interactions that limit the interpretation of their results significantly. First, they assume that in equilibrium the number of jobs in both sectors is fixed. Second, they assume that once workers and firms make a match, they stick to it. In other words, the intense flows between the formal and informal sectors, for which there is increasing evidence, are ignored. Taken together, these assumptions rule out the possibility that workers (as well as firms) transit between the formal and informal sectors several times over their lifetime, thus changing the actual size of both sectors depending on cyclical conditions. This contradicts the empirical evidence from Loayza and Rigolini (2006), who show that there are significant fluctuations in participation in the informal sector linked to the business cycle. Nevertheless, these models are proving useful in understanding how the informal sector can react (in the long run) to changes in policy, in particular enforcement, increases in payroll taxes, and in severance payments. Interestingly, they show that (as empirical evidence discussed in the following also suggests) changes in policy designed to reduce the extent of the informal sector may have negative effects on formal employment, average

productivity, and wages. Broadly speaking (keep in mind that these results are sometimes sensitive to the choice of parameter values for the model), these models conclude that (i) policies to encourage formal sector participation are preferable to increased enforcement; and (ii) increasing severance taxes in the formal sector leads to more formal employment but lower aggregate productivity.

Costs of Informality of the Firm

Informality may impose significant costs. Having discussed the determinants of the decision of firms and individuals to opt out of formality, or conversely, the factors that keep firms and individuals from entering formality, we now turn to the evidence on the costs that informality imposes on the economy. Despite the attention of some academics in the 1970s to the "hidden economy," interest in informal economic activity really took off after the seminal work of de Soto (1989).[7] In his book, de Soto argues that the large number of small informal enterprises in Peru results from an overburdening regulatory system, coupled with incompetence and corruption in the public sector, and a weak judicial system. Most important, weak property rights enforcement and a lack of access to property registration lie at the heart of the problem, as small-business owners are trapped in a suboptimal situation in which they lack access to legality and formal credit sources, and they have constantly to escape the control of the state as well as potential extortion from public officials. Hence, many businesses with the potential to grow and create jobs are instead kept at a small scale of production so that they never reach their full potential.

Informality causes negative externalities. On the firm's side, many potential costs have been put forward in the literature both from the economic efficiency and from the public choice point of view. For instance, Loayza (1996, 2007) and the United Kingdom National Audit Office (UK-NAO) (2008), among others, argue that through tax evasion informal firms pose a "free rider" problem because they congest public goods that are provided for by tax contributions from formal firms and workers without contributing to the resources necessary to maintain and expand provision of these public goods. As Loayza (2007) puts it, "the informal sector generates a negative externality that compounds its adverse effect on efficiency: informal activities use and congest public infrastructure without contributing the tax revenue to replenish it."

Corruption or poor public services may reduce workers' and firms' willingness to pay taxes. In this sense, informality leads to a situation where the provision of public goods is always suboptimal, causing frustration in the formal sector, whose actors then see little benefits from being law-abiding citizens. This argument is also developed by Torgler and Schneider (2007) in their analysis of how "tax morale" affects the size of the informal sector. Indeed, they find that in societies where individuals seem more confident about the ability of their institutions to make good use of their taxes, informality tends to be lower. The existence of a large, law-dodging informal sector then has the potential to erode the confidence of individuals in their institutions, diminishing the rule of law and fostering corrupt behavior. For instance, a report by the World Bank (2007) looks at how informality affects the probability of a firm to be subject to extortion from public officials and finds that there is a strong and significant

link between informal behavior of the firm (measured as tax evasion) and the incidence of corruption.

In turn, informal behavior, even within formal firms, is associated with weaker performance. The same World Bank report also finds that "regulatory compliance" measured as the percentage of sales reported by the firm for tax purposes (and hence a measure of formality) affects labor productivity, total factor productivity, and the average wage at the firm.

Many studies emphasize lack of scale in production as a cost of informality. This is another important potential cost often cited in the literature, coming from efficiency considerations. If the large majority of informal firms stay very small, it is possible that they never reach an efficient scale of production. A series of recent studies conducted by the McKinsey Global Institute have received a certain amount of attention, in particular from policy makers and business executives.[8] The reports forcefully conclude not only that, similar to de Soto, "the powerful incentives and dynamics that tie companies to the gray economy keep them subscale and unproductive," but also that "the cost advantages of avoiding taxes and regulations help informal companies take market shares from bigger, more productive formal competitors." These studies attempt to quantify the losses that economies suffer from having large informal sectors and the potential productivity gains that would take place if informal businesses operated formally. For instance, Baser, Farell, and Meen (2006) argue that informality alone can explain 50 percent of the gap between labor productivity in Turkey and in the United States, and that in the absence of "barriers" and in a full-compliance scenario, productivity in Turkey could reach 70 percent of U.S. productivity, in contrast to the current 40 percent, on average.

The evidence on the importance of scale inefficiencies coming from informality is, however, inconclusive. Despite the attention they have received, these studies fail to take into account the many inherent differences between formal and informal firms. As discussed earlier, it has become increasingly evident in recent years that a large fraction of informal businesses inherently lack the potential to grow, in part because of the limitations of their owners in terms of education, ability, and entrepreneurship, and also because of deficiencies in other aspects of the local investment climate, such as infrastructure. Hence, for many of these firms becoming formal is not likely to make any difference in terms of their future gains and, therefore, informality results from choice rather than exclusion. Maloney (2004), McKenzie and Woodruff (2006), and Perry et al. (2007), among others, find that in Latin American countries there is little evidence that firm growth is being stifled by informality. In other words, microfirms are likely to remain small, regardless of their status, which brings back the argument of low productivity being at the core of informality.[9] Indeed, McKenzie and Woodruff (2006) find in a survey of informal microfirms in Mexico that most unregistered firms do not state high costs of registration as a main reason for remaining informal; instead they see no particular benefit from registering formally. Similar numbers have been reported by Perry et al. (2007) for Guatemala and for the Dominican Republic.[10]

In some cases formalization can foster firm growth by expanding the firm's customer base. McKenzie and Seynabou Sakho (2007) find this effect in Bolivia.

Formalization can also potentially increase firms' access to credit markets, although there is mixed evidence of the importance of this: while McKenzie and Woodruff find that in Mexico only a tiny fraction of informal firms has access to credit, and those that do tend to have higher profits, McKenzie and Seynabou-Sakho find that in Bolivia formalization does not increase the use of credit, and Fajnzylber, Maloney, and Montes (2006) find that in Brazil increased performance of formalized firms does not occur through the credit channel.[11]

There is little evidence so far to suggest a significant impact of informality on innovation. As noted before, the McKinsey reports argue that informal firms impose heavy costs on economic growth by operating in parallel to formal businesses. While it is unclear that these firms, and thereby the entire economy, would grow faster if they were integrated into the formal economy, it is likely that because of their low productivity they would have a much lower chance of survival if they had to compete on a level playing field. Instead, an efficient reallocation of factors would have labor and capital from these firms shifted to more productive businesses, provided that they are able to absorb them fully. However, the actual magnitude of the productivity gains if this were to happen is difficult to quantify.[12] Another claim of the McKinsey reports is that the incentives of formal firms to invest in innovation and technology adoption are distorted by the unfair competition of informal firms. This can be debated from a theoretical point of view; the effects of informal competition on investment in innovation and technological adaptation are ambiguous. On one hand, informal competition makes it harder for the innovator to obtain monopoly rents from innovation; on the other hand, when the innovator is able to get the rents, these last longer, as the quality improvements needed to displace current market leaders are more significant.[13] However, there is no convincing empirical evidence so far to suggest an impact of informality on innovation in either direction.

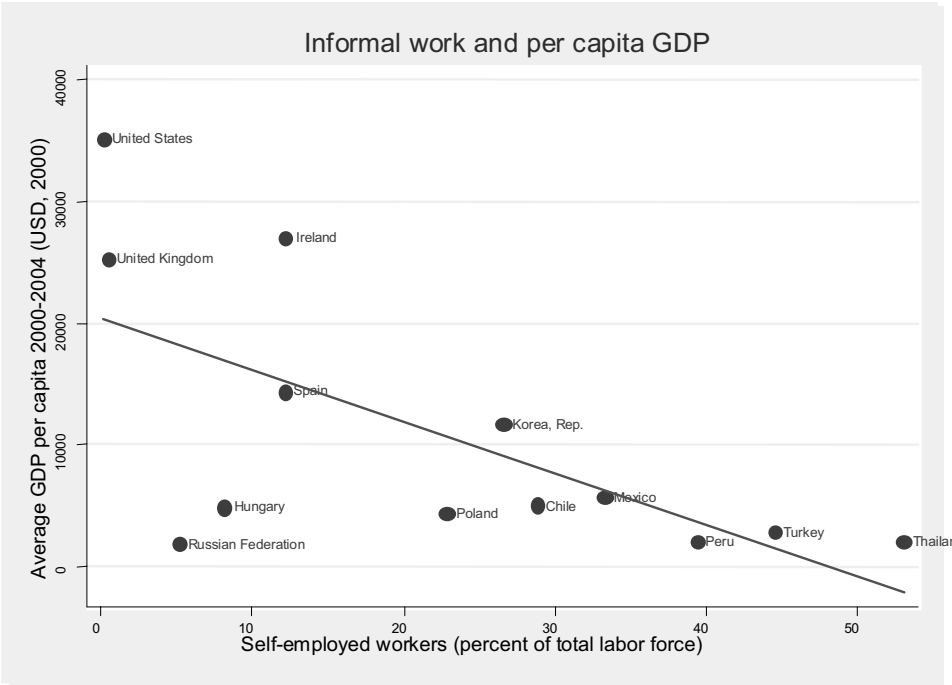
Aggregate Costs

Despite doubts about causality, there is a strong link between informality and income. As we have seen so far, the literature has proposed many potential channels through which informality of firms may impose costs on growth and development: suboptimal taxation and public goods' provision, institutional weakening, suboptimal production scales, lack of access to credit and other productivity-enhancing resources, unfair competition, reduced innovation, and so on. At the microlevel within individual countries, the evidence of the importance of each of these potential channels is mixed. Despite this, at the cross-country level the statistical—though that is not to say causal—link between informality and development is quite strong, as is shown in figure 2.

The relation between informality and income seems to come in fact from common determinants of both. Following the observation of aggregate correlation, a few studies have tried to capture a causal relation statistically. Loayza (2007) takes the average growth of countries over a long period (20 years) as a dependent variable, and estimates the impact on growth of informality for over 100 countries. The partial regression plots controlling for initial GDP per capita (1985) are depicted in figure 2. The "effect" of informality on growth is found to be negative

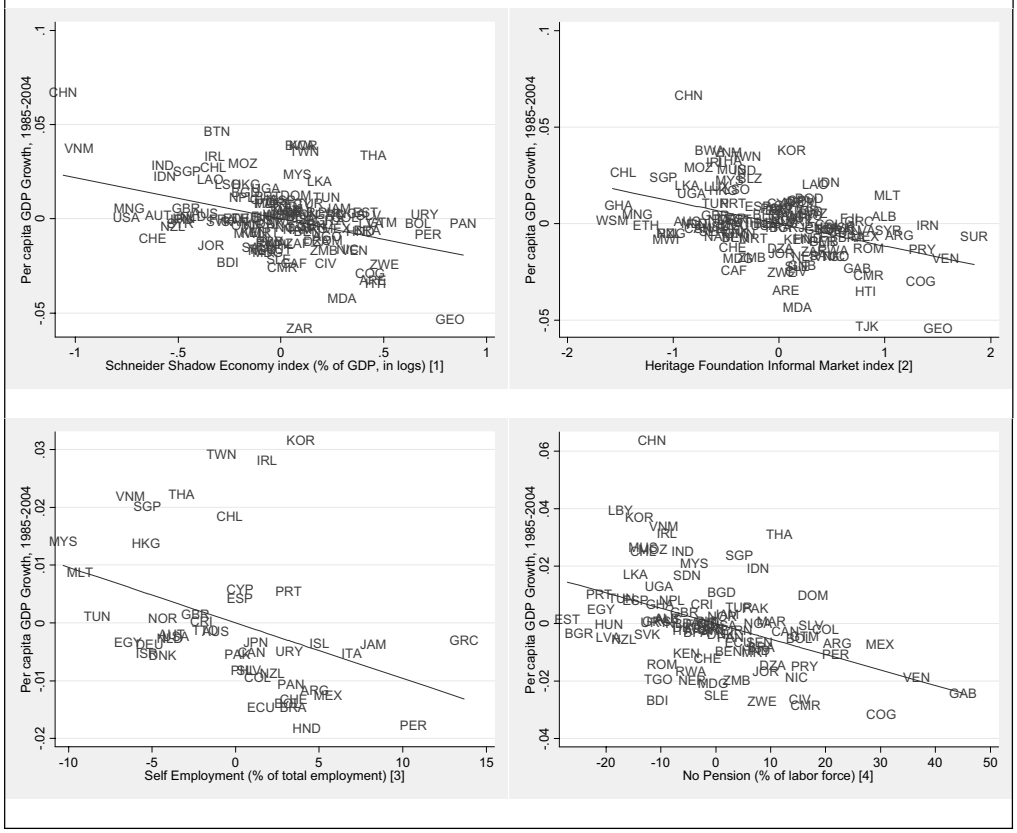
and significant, with a magnitude such that one standard deviation in the size of the informal sector leads to a decline of 1 to 2 percentage points in the rate of per capita GDP growth. The exercise carried out by Loayza shows that there is indeed a strong relationship between informality and growth. However, as the authors in this area generally acknowledge, this relationship may not necessarily be a causal one: it could be that informality is a symptom of other underlying causes, which are themselves at the heart of a weak economic growth rate. Indeed, when other aspects are taken into account in the estimation, informality tends to lose all its explanatory power, suggesting that this "third common causal factor" explanation is in fact the correct one. This is shown by Perry et al. (2007), who also estimate this relationship and find that, on a first pass, using simple estimation techniques, the measure of informality seems to matter.[14] However, they find that the relationship tends to lose its significance once other controls—perhaps indicating more fundamental features of the economy—are introduced (such as education, financial depth, or corruption).

Figure 3.2: Informality and Income



Source: Author's calculations (data from Loayza and Rigolini 2006).

Figure 3.3: Informality and Growth



Source: Loayza 2007.

Note: Four measures of informality—[1] Schneider (2004); [2] Index of Economic Freedom by the Heritage Foundation (range 1–5: higher, more informality); [3] ILO, collected by Loayza and Rigolini (2006); and [4] Share of labor force not contributing to a pension scheme (*World Development Indicators* [*WDI*]).

Costs of Informal Employment

From the social protection point of view, informal employment has potential important costs. Informal workers, whether self-employed or salaried, generally lack the basic protection they need to face unforeseen shocks (illness, disability, and so on), as well as the benefits that will allow them to get through periods when they cannot earn income, such as old age or maternity. As Perry et al. (2007) discuss, despite evidence that poor households are able somewhat to mitigate the impact of shocks to their incomes (for instance, in Latin America, poor households are able to protect between 60 and 75 percent of their per capita consumption in the face of an income shock), this protection is far from perfect. Moreover, evidence also indicates that poor households are particularly vulnerable to health shocks, which typically have compounding costs (treatment, lost income of the ill person and family members) and in many cases lead

families to disinvest in their own future (by pulling children out of school, for instance).

Informal workers are exposed to greater economic vulnerability than formal workers. This puts a large fraction of the population in a situation of uncertainty and vulnerability to shocks, which itself may impose a cost on the economy as a whole. In addition, informal workers are not subject to basic regulations regarding acceptable work conditions: many of them work unusually long hours, or are exposed to high occupational hazard, but receive no additional compensation for it. As discussed earlier, informal salaried workers are more likely than self-employed workers to be informal because of a lack of formal opportunities rather than by choice. These workers are also likely to be the least educated and thus the more vulnerable in terms of their income opportunities. The precariousness of informal salaried work therefore puts these workers particularly at risk.

Long-run social exclusion may be the result. Probably one of the heaviest costs for a society of workers "being on the margin" is their potential long-lasting social exclusion. A recent IDB (2008) report finds that in Latin America a large majority of the population believes that opportunities to overcome poverty are unequal (74.1 percent), and that success depends on personal connections (71.5 percent) rather than hard work (46.2 percent). Likewise, the report gathers estimates of schooling elasticities for various countries, finding a stark contrast between Latin America and some developed countries.[15] For example, this elasticity is 0.7 in Brazil and Colombia, and 0.5 in Mexico, compared to 0.43 in Germany, 0.26 in the United States, and 0.19 in the United Kingdom. As a result, many individuals who find themselves at the margins of society because of their low human capital are likely to believe that, regardless of their effort, neither they nor their children will have any opportunities to move up. This belief can prevent people from making important investment in the human capital of future generations, since they see little potential payoff. As a consequence, the effect of marginalization can potentially extend across generations, imposing present and future costs in terms of economic progress.

Are There Benefits of Informality?

There is growing evidence that for many individuals there are not just monetary gains from being self-employed but also nonmonetary gains. Evidence of this is reported in Perry et al. (2007) for Argentina, Colombia, Bolivia, and the Dominican Republic, where a large proportion of self-employed informal workers cite as the main reasons for being informal that being self-employed brings higher earnings, gives greater flexibility (especially to women), and is a source of satisfaction. In developed economies, Blanchflower and Oswald (1998) find similar entrepreneurial motivation for self-employed workers in the United Kingdom, the United States, and Germany.[16]

Low benefits of formalization may compound the benefits of staying informal. In addition, some (although far fewer) individuals in Latin America report that the social protection benefits offered by formal job contracts do not provide good enough services to be worth the contributions, which are therefore seen as useless taxation. This is particularly relevant for people who live in remote areas, where infrastructure and public service provision is poor. For these people, formal jobs may offer virtually no advantages. In developing countries, informal protection networks also substitute

for the state in many cases, with lower transaction costs and more efficient monitoring, so that again people see little benefit in having access to formal services. For instance, Morduch (1999) reports results from numerous studies that find informal insurance has a significant role in reducing the impact of income shocks. Finally, some informal salaried jobs might offer training opportunities, which are valuable especially for young, uneducated workers, for whom training could increase their chances of landing a formal job later in life.

Overall, the causes of informality are clearer than its costs. The causes of informal activity vary from country to country, but we can find a common denominator in countries where the informal sector is large: namely, a set of stringent and burdensome regulations and procedures, a low level of productivity of informal workers (whether self-employed or salaried), mediocre public service provision, and low trust in public institutions. The argument that informal activity imposes costs on the economy is convincing; however, it has proven difficult to provide solid evidence that quantifies these costs. To be sure, low-productivity firms and unprotected workers may seem unlikely to foster sustained economic growth and development; however, it is not clear whether formalization alone can significantly boost productivity, as some have claimed.

Notes

[1] Their measures of regulation include product market regulations, which combine five elements (entry barriers, contract enforcement quality, bankruptcy barriers, trade barriers, and access to finance), labor regulations, and tax burden. All measures are composites from various sources (see the paper for details). Product market regulations are highly correlated with each other; however, labor market regulations and tax burden are not. The overall index is a simple average of all seven regulation categories.

[2] Moreover, all these measures are negatively associated with economic growth (controlling for initial GDP and public expenditure only).

[3] They measure institutional quality by taking the simple average of the International Country Risk Guide's (ICRG) indexes of government stability, corruption, rule of law, democratic accountability, and quality of the bureaucracy. To measure inequality they use the Gini coefficient and alternatively, income quantiles, income ratios, and the Atkinson-Theil indexes.

[4] Roughly, the list includes the quality of infrastructure (electricity, water, telecommunications); access to resources (land, credit); labor regulations; lack of skilled labor; the judicial system; corruption; crime; taxes; competition from informal firms (only for formal firms); macroeconomic and political instability; and trade barriers.

[5] It is also possible that workers decide to become self-employed purely because of their entrepreneurial spirit, rather than because of a lack of options in the formal sector. As McKenzie and Woodruff (2006) show in their analysis, these individuals tend to have higher profits than those who could not find formal jobs. Another important distinction concerns informal *salaried* workers: evidence for Latin America provided in Perry et al. (2007) indicates that these workers would actually prefer to be in a formal salaried job, but they are not able to get one. For these workers, informality is less a matter of choice than for the self-employed.

[6] See also McKenzie and Seynabou Sakho (2007) for Bolivia.
[7] See Gërxhani (2004) for a review of earlier work on this topic.
[8] These studies see informality mostly as the lack of compliance with regulations, including tax evasion, infringement of copyright laws, and so on. See, for instance, Farell (2004) and Baser, Farell, and Meen (2006).
[9] In a recent study of Sri Lankan microentrepreneurs de Mel, McKenzie, and Woodruff (2008) reach similar conclusions.
[10] For theoretical explanations see also Levenson and Maloney (1998) and de Paula and Scheinkman (2007).
[11] Recent evidence from field experiments conducted in Sri Lanka by de Mel, McKenzie, and Woodruff (2007), as well as previous evidence for Mexico found by McKenzie and Woodruff (2006), suggests that returns to capital are extremely high at very low levels of investment, indeed much higher than market rates. This suggests that credit market imperfections could in fact be severe, in which case informality has clear costs for the firm, as the lack of access to credit prevents it from making profitable investments. However, it is unclear why microbusiness owners do not reinvest a larger share of their own profits, given that returns are so high.
[12] This could be done, for instance, by building a theoretical model similar to Albrecht, Navarro, and Vroman (2007), calibrating it, and measuring the productivity gains from a change in the parameters that cause firms to choose informality. The McKinsey studies do not perform any calculations that have a basis in theoretical models.
[13] See Cunha (2006), cited in Perry et al. (2007).
[14] Results are significant using the Schneider (MIMIC-based) estimate of informality as a share of GDP. Using self-employment, the relationship is insignificant at the 5 percent level.
[15] Schooling elasticity is the coefficient of the correlation between child and parent educational attainment, and it is one of the most widely used measures of intergenerational educational mobility.
[16] Despite similar preferences for self-employment in developed and developing countries alike, the share of self-employed workers falls with the level of development. One explanation of this is that the opportunity cost of self-employment increases with specific skills, human capital, and the productivity of the formal sector.

Chapter 4

Policies to Reduce Informality

Successful policies to reduce informality will encourage a "voluntary accommodation between private enterprise and the state."[1] This accommodation is quite difficult to achieve in practice, because the right policy not only requires regulatory reforms that facilitate the formalization process, but more important, formalization requires "building a culture of compliance." That is, entrepreneurs must be sufficiently informed about the increased benefits of formalization (as well as the increased costs of not formalizing), they must have enough trust in the public sector that reforms will not be reversed, or promises broken, after they have formalized (for instance, tax breaks that never materialize), and they must know that, because formalization offers net benefits, most (competitor) informal entrepreneurs will also decide to formalize.

Because informality takes so many forms, policies that succeed in one place may fail elsewhere. Hence policy packages can comprise a series of "carrots" and "sticks" that need to be adapted to the nature of informality in the country. In some countries, regulatory reform might be more relevant, while in others it could be regulation enforcement and administrative reforms to strengthen information flows among enforcing agencies. Moreover, given the costs and benefits of increased enforcement, optimal policies do not necessarily imply reaching full compliance; instead, the target should always be to make formality the most desirable (and accessible) situation for the individual. In any event, policies need to take into account the level of trust of informal actors in their institutions, and ensure that they are being listened to and included in the policy design process.

International experience in policies to reduce informal activity has widened in the last decade. From the compliance perspective, high-income OECD countries have combated informality most aggressively even if they apparently suffer the least from it. Their policies have mostly targeted tax evasion on the part of formal businesses, as well as the use of undocumented or undeclared workers. A growing number of emerging economies have also implemented policies in recent years with the aim of increasing the efficiency of factor reallocation. In particular, there have been extensive labor regulation reforms, as well as simplification to registration procedures and tax simplifications for small businesses, especially in Latin American countries. The table in the annex lists some of the policies that have been implemented recently and the area of informality they target.[2] A summary of these policies and a discussion of studies that evaluate some of them follow. Each of the policies discussed in the following targets one or more of the following objectives:

- facilitate the formalization process
- create a framework for the transition from informality to formality
- lend support to newly created firms
- reduce or eliminate inconsistencies across regulation and government agencies
- increase information flows
- increase enforcement

Increasing Tax Compliance

Many countries have introduced reforms to their taxation systems with the goal of reducing informality (see annex). In OECD countries, reforms have mostly targeted undeclared work. They include, for example, reduced tax rates for low-wage earners (for instance, in Belgium, Bulgaria, the Netherlands, and France); tax exemptions and reductions in sectors that rely on undeclared work (Hungary, Sweden, Belgium, and France); and reduced VAT in labor-intensive sectors (the Netherlands).[3] Additional actions taken by OECD countries to encourage compliance include researching the motivations of informal firms and workers through surveys as part of a comprehensive compliance policy (Australia and Sweden); targeted educational campaigns at specific sectors (for example, home repair and maintenance or small businesses) and cooperating with trade associations to tackle industries with a high incidence of noncompliance (Australia, Hungary, Belgium, and Sweden); offering voluntary disclosure schemes (United Kingdom, Belgium, and Australia); media campaigns and follow-up surveys (Australia, Canada, and Sweden); community visits, workshops, and specific Internet sites to encourage individuals into the formal economy (Australia and Canada); and schemes to undermine informal activities such as the use of work "vouchers" in Belgium (UK-NAO 2008). Other actions recommended by an OECD report (2004b) emphasize increasing access to information, as well as administrative reforms that improve enforcement activities.

In developing countries, reforms aim instead at encouraging microfirm and small-firm owners to formalize and pay their contributions. Latin American countries have been very proactive in amending their tax legislation to encourage compliance. In Chile, Costa Rica, the Dominican Republic, Guatemala, Honduras, Mexico, Nicaragua, and Paraguay, presumptive taxes levied on gross corporate revenues have replaced either VAT or income taxes. In Argentina, Bolivia, Brazil, and Peru, a single tax has replaced VAT, income tax, and social security contributions.

Despite the great amount of simplification, some of these systems have gone further than others. For example, in Brazil the Integrated System of Taxes and Contributions for Micro and Small Enterprises (SIMPLES) implemented in 1997 unifies the collection of federal tax payments and social security contributions. All firms with revenues below US$1,000,000 that work in services, trade, manufacturing, or agriculture are eligible, which represents 75 percent of the business register and 7 percent of GNI (see de Paula and Scheinkman 2007; Fajnzylber, Maloney, and Montes 2007; Santa María and Rozo 2008; and Kenyon and Kapaz 2005). The SIMPLES program substitutes six types of federal taxes and five types of social security contributions with a progressive tax levied on gross revenues. An important feature of this program is that it has de-linked social security contributions from the number of

(declared) workers employed or the wage bill, instead making the contributions proportional to the firm's revenues. As a result, it has eliminated certain incentives to employ workers without a contract.

The Brazilian example of streamlining may be a good one. By several accounts, this program has been successful: for example, it increased the registration rate of firms by an estimated 10 to 30 percent (de Paula and Scheinkman 2007; Fajnzylber, Maloney, and Montes 2007).

Argentina offers a similar case study. In Argentina, the simplified tax regime for small taxpayers (*Monotributo*) was implemented in 1998. The system applies to services firms with maximum revenues of US$24,000 and retail firms with maximum revenues of US$48,000. Eligible firms cannot have more than three establishments. The presumptive tax is levied on gross income but also takes into account the consumption of certain inputs (for example, electricity) and the scope of the business activity. This regime substitutes federal income taxes, VAT, presumptive minimum taxes, taxes on assets, and social security contributions. In exchange, firms must pay a flat fee of 33 percent of the equivalent tax due by a firm outside the system. This new system has successfully created tax incentives for small firms (Santa María and Rozo 2008).

Bolivia and Chile also have introduced simplified tax systems for small taxpayers; however, their systems are much more complex. In particular, each country has introduced parallel taxation schemes for firms in different areas of activity (as in Bolivia), or to substitute for different taxes (as in Chile). Some argue that although the goal of these reforms is to facilitate compliance, introducing too many different schemes and complexities is likely to diminish the positive impact of these reforms, particularly where the access to information and the level of education of entrepreneurs is limited.

More generally in emerging economies, increasing tax compliance relies on improving three main areas: registration, audit, and collection. Registration can be made more efficient by sharing information between public and private agencies (social security, the banking system). This has been done in most EU countries, where firms and individuals usually have a unique ID number in various agencies and also exchange information to ensure they are registered in all agencies. Some argue that offering tax amnesties can also add to the incentives of informal firms to register.[4] Governments can also improve their audit technologies, as Chile and Spain have done successfully (Perry et al. 2007). Finally, tax collection can be raised substantially by enhancing enforcement, such as Spain did in the 1970s by criminalizing certain tax offenses. Spain's comprehensive tax reform led to a subsequent doubling of the ratio of tax revenue to GDP during the 1980s (see box 3). There is a caveat to the last argument, however. If informal firms indeed have low productivity and profitability, their formalization, though desirable, does not necessarily imply automatic increases in tax collection. Flores et al. (2004) use Mexico's National Microbusiness Survey (ENAMIN) data to compute potential changes in tax collection if informal workers were taxed, finding that in fact tax collection would not change and net spending would increase, as most informal salaried and self-employed workers in Mexico would then be eligible for transfers (negative taxation) as their income is below the threshold for taxable income. Their analysis did not consider potential increases in income after formalization, so in this sense took the perspective of the "worst-case scenario."

Encouraging Business Creation and Growth

Simplified firm registration may help. Since de Soto highlighted the importance of the costly and burdensome registration procedures as a key barrier to firms from accessing the formal sector, policy makers have given great attention to the matter, implementing radical reforms in some cases to reduce the cost and simplify registration procedures. The Doing Business Project at the World Bank has carefully documented the nature of regulations around the world, and has been influential in advocating regulatory reforms in a large number of countries.[5] Increasing evidence suggests that offering greater access to registration does encourage entrepreneurs to formalize. For instance, USAID (2005) reports that after Montenegro reformed its registration process the number of registered firms went from 6,001 in 1999 to 21,724 in 2003.

Mexico appears to have successfully encouraged formalization. There are many examples of reforms that have simplified the registration process; here we discuss only a subset (see the annex for more examples). In 2002 the Mexican government implemented the Fast-Track Business Creation System (Sistema de Apertura Rápida de Empresas: SARE). This program guaranteed that microfirms and small firms could complete the registration process in two days, by reducing the number of procedures from eight to two. Although most firms are eligible, those in the food sector and those whose activity pose environmental risks need to obtain prior clearance from health authorities. Bruhn (2007), Kaplan, Piedra, and Seira (2007), and Fajnzylber, Maloney, and Montes (2008) have estimated the impact of the introduction of the program on the number of new firm registrations, concluding that it has been positive. According to Kaplan, Piedra, and Seira (2007), registrations increased by 4 to 8 percent, while Bruhn (2007) finds the impact to be even more significant. The data do not distinguish between the creation of new firms and the formalization of existing ones, so Kaplan and coauthors try to estimate which effect is more important. Since the increase in registrations took place mostly within the first 10 months following the introduction of SARE, they conclude that its success was to encourage informal firms to formalize rather than to foster the creation of new firms.

Colombia provides another example. Business Service Centers (Centros de Atención Empresarial: CAE) were created within the premises of the local chamber of commerce in six Colombian municipalities, with the goal of ensuring business registration in "One step, one day, one place, with one interaction, one prerequisite, and at a minimum cost." The general goal of the project was to promote a more transparent and efficient relationship between private enterprises and the public sector. The first phase of the project (comprising six municipalities) was carried out between 2001 and 2004 with support from the IDB, and a second phase (cofinanced by Dutch cooperation) is under way to extend the creation of CAEs to an additional 15 municipalities. The CAEs offer a number of services to entrepreneurs, from information and business counseling to registration facilities. According to an evaluation conducted by Cárdenas and Rozo (2007) the introduction of the CAEs increased registrations by 5.2 percent.

Reforms may also be important at subnational levels. Another successful project was the introduction of a simplified licensing process in the municipality of Entebbe, Uganda, financed by DFID. The new system required entrepreneurs to provide only

basic information and pay a fee, after which they immediately received their license. This reduced average registration time from two days to 30 minutes, and it cut the registration cost by 75 percent. Furthermore, administrative costs fell by 10 percent and staff time used in registration also fell by 25 percent. These reforms were implemented without changes to national-level legislation, which would have been too slow and difficult to achieve. Instead, other legal ways were found to introduce the changes (USAID 2005). This example suggests that it may be important to consider red tape at subnational levels in order to get at all the potential obstacles to formalization that firms face.

Labor regulations are important. Together with costly and cumbersome entry regulations, labor regulations have been identified in the literature as important barriers to firm expansion, and there is convincing evidence that excessive worker protection has adverse effects for employment in general, suggesting that in most cases employment protection legislation only benefits a minority of workers, at the expense of the majority.[6] For instance, high severance payments and other firing costs significantly reduce incentives of firms to hire, hurting mainly women and young people. In extreme cases, they are segmented out of the formal sector, with only informal jobs available to them. Moreover, strict employment protection legislation can also encourage exit from the formal sector for small entrepreneurs who cannot afford to offer such protection to their employees (Perry et al. 2007). Finally, there is also evidence suggesting that when the interaction of labor and entry regulations is strong enough, reform in only one area may not produce the desired effects.[7]

There are examples of successful reforms to labor regulations. Some of the reforms introduced in recent years by European and Latin American countries such as Spain and Colombia have been successful according to various studies (see Kugler 2007). In particular, reducing firing costs have increased worker turnover, suggesting that firms can more easily adjust their labor force according to the current economic environment.

As the Doing Business Project points out, there are many areas where reforms can enhance firm expansion and thereby economic growth. Contract enforcement can be improved with a more transparent and efficient judiciary, trade tariffs and restrictions can be minimized to encourage exports, financial markets can be better regulated to open access to finance for small-firm owners while protecting the economy from widespread financial crises, bankruptcy costs can be reduced, and so on.

Single reforms often need to be followed by other regulative and administrative reforms to be effective. For instance, increased access to land titling for rural workers in Bolivia did not result in significant increases in the demand for credit from individuals, in part because of the still cumbersome business registration procedures and the lack of support for microentrepreneurs and small entrepreneurs (Santa María and Rozo 2008). Similarly, a study in Peru found that of the 512,000 families that received titles to their properties between 1996 and 2000, only about 1 percent subsequently obtained a mortgage from a bank (Winterberg 2005, cited in Kenyon 2007). There are also successful stories, such as from the city of Johannesburg, South Africa, which encouraged the formalization of enterprises in the garments sector by providing them with storage and office space in a designated "fashion district," while giving them training and advice on marketing and business development (Kenyon 2007). According to one study, this initiative led to increased output, employment, product

diversification, and competitive upgrading in these firms (Rogerson 2004, cited in Kenyon 2007).

Strengthening Enforcement

An important element of any successful policy package to reduce informality is enhanced enforcement. Indeed, while the "carrot" element involves making formality more attractive, the "stick" element can actively increase the expected costs of being informal for entrepreneurs. However, too much emphasis on the latter might also have costly effects in sectors and regions where informal jobs are abundant and the formal sector is not able to absorb informal workers in significant numbers.

OECD countries have carried out several actions to increase the efficiency of detection. These include using telephone hotlines to enable the public to report people working undeclared (United Kingdom, Australia); the regular use of data matching to target specific sectors and informal activities, particularly where there is a high incidence of non-compliance (Canada, Sweden); and wider use of external data in data matching to increase the rate of detection (Australia, Canada, United States). In addition, sanctions are being used more systematically, and countries are now adjusting penalties for inflation to increase deterrence. Some governments are also studying how people perceive sanctions as a deterrent (Sweden).[8]

There is also evidence of increased enforcement working in Latin America, but with possible undesirable side effects. The evidence of a deterrent effect of regulations enforcement on informal behavior found in Panama by Perry et al. (2007) is also documented for Brazil by Almeida and Carneiro (2006) and for Argentina by Ronconi (2007). In countries with strict formal employment regulations (translated into high costs of hiring and firing workers), hiring workers informally might be a way for formal firms to adjust their employment level cheaply according to the business cycle (similarly for workers, self-employment is always preferable to unemployment in the absence of unemployment benefits). Thus, preventing firms from using this "illegal" adjustment margin might indeed reduce informal employment, but at the expense of firm performance, if formal employment is kept highly protected. Almeida and Carneiro test this in Brazil by using Enterprise Survey data, census data, and data from the Ministry of Labor with enforcement information at the municipality level. Specifically, they look at how the number of labor inspections in the city affects the performance of formally registered firms, as well as the level of informal employment in the municipality.[9]

Increased enforcement alone may end up reducing output. Labor inspections are found to affect firm performance negatively along several dimensions. They significantly reduce employment, output, sales, capital stock, and job creation (measured in new hires). Moreover, Almeida and Carneiro calculate that each additional inspection per 100 firms reduces output per employee by about 2.5 percent and capital per employee by about 4 percent. Looking at the impact of inspections on informal employment at the city level, they find that a one percentage point increase in labor inspections in the city leads to a 1.5 percent reduction in informal employment, which corresponds to an elasticity of informal employment with respect to enforcement of 0.15. They conclude that "stricter enforcement of regulation reduces the access of firms to informal employment, thereby increasing their employment tax costs, their employment adjustment costs, and adversely affecting their output and investment."

Increased enforcement in Argentina may have increased formal employment. Ronconi (2007) estimates the effects of changes in enforcement of labor regulations on the percentage of private sector workers with legally mandated benefits. He uses labor data from 1995 to 2002 for Argentina's 24 jurisdictions taken from the Argentine Permanent Household Survey, while inspection data comes from the Ministry of Labor. In order to estimate the causal effect of enforcement, Ronconi takes advantage of the fact that enforcement (measured as the number of labor inspections) is positively correlated with the electoral cycle in Argentina (he finds there are on average 19.7 percent more inspectors during election years). Using the election year as an instrument, Ronconi finds that an additional labor inspector per 100,000 people increases the share of formal private sector workers by about 1.4 percentage points. Moreover, he finds that increased enforcement has a net positive effect on formal jobs—that is, more formal jobs are created than informal jobs destroyed—and a close to zero effect on the average wage. The mechanism for the increase in formal employment appears to be through the replacement of overtime work (above the maximum allowed) with additional workers. Following these results, Ronconi concludes that increased enforcement is a desirable policy at the margin in the dataset studied, as it creates formal jobs with no significant costs to workers. However, his analysis fails to assess the effects of increased enforcement on firm performance, as Almeida and Carneiro do for Brazil. While it is not clear whether enforcement hurts firm performance in Argentina as much as in Brazil (since labor regulations are not as strict in Argentina), it is still possible that higher employment combined with wage rigidity result in lower output per worker and lower total factor productivity.

In summary, strengthening enforcement will work best when the appropriate incentives to formalize are created, so that informal firms have a viable transition path from informality into formality. In addition, it is important to acknowledge that increased enforcement might have negative effects on productivity and formal employment, although this will not necessarily always be the case.

Creating a More Inclusive Social Protection System

Suffering systematic exclusion from formal societal arrangements may have long-lasting negative effects on human capital and economic development (IDB 2008). One important element of exclusion in many emerging economies is the lack of access to basic protection and safety nets that allow people to cope with the risks associated with shocks such as illness, job loss, and disability. In countries where these types of social protection are provided by social security agencies financed mainly through payroll taxes, informal salaried and self-employed individuals are automatically excluded from receiving any protection, while formal employees and firm owners are subject to costly contributions that often only result in mediocre services. Such systems not only create a two-tier society where only a few benefit from protection, but their inherent inefficiencies often also discourage people from working formally because the costs are greater than the benefits. Moreover, the fact that in many countries workers swing back and forth between formal and informal jobs often makes them ineligible to receive benefits, since they have not contributed for enough time to be able to claim these benefits. In this case, contributions may be seen by workers as pure taxation with little compensation, so that workers have little incentive to participate.

Box 4.1: Implementing Successful Reforms

Spain is a good example of a country that has carried out extensive reforms since its democratization over 30 years ago in order to modernize its economy. The Spanish reform package included five crucial elements: (i) it reduced the costs of being formal; (ii) it improved its audit technology and increased enforcement; (iii) it improved its communications strategy; (iv) it modernized administrative processes and functions; (v) it provided basic social protection for all.

Among the reforms implemented to lighten the burden on formal firms were: the simplification of the tariff system; the introduction of new employment protection legislation allowing for temporary employment, especially targeting young people and the long-term unemployed; and the reduction of social security contributions for part-time employees. In order to improve tax compliance, the administration improved its audit capacity and reinforced sanctions for offenders. Databases containing taxpayer information were updated by crosschecking information with other public agencies, and all companies with government contracts were automatically audited. The government made efforts to be more transparent by carrying out public media campaigns in order to encourage compliance and to inform the public of new legislation. Administrative agencies also underwent transformations to be made more effective in the audit and collection process. All these reforms resulted in a dramatic increase in tax collection (the ratio of collection to GDP doubled) and a significant reduction in informal employment.

Finally, social protection policies were introduced to de-link certain benefits from labor contracts. Thus the health financing system underwent radical reforms in the 1980s and 1990s, as the country shifted from a social insurance system financed by payroll taxes to a universal health care system financed by general taxation. Today almost 100 percent of Spanish health expenditures are financed by general taxation.

The Spanish case is a good example of a successful policy package because it tackled informality using a holistic approach, by making formality attractive (and accessible) to entrepreneurs and workers, and also by strongly sanctioning noncompliance. It also extended social protection to the entire population, to reduce the exclusion effects of informality.

As some studies argue, one critical element of Spain's success has been the sequential nature of reform. Indeed, the end of Franco's regime was marked first by a progressive consolidation of democracy, with the strengthening of the opposition party, during a time in which economic progress was weak. After the defeat of the ruling party in the following elections, the newly elected party (PSOE) held a solid majority in parliament, which enabled it to focus on economic structural reforms, thus laying the foundations of the subsequent modernization and progress.

Sources: Bermeo (1994), Isbell (2004), Perry *et al.* (2007) and Santa María and Rozo (2008)

Universalizing social protection structures can help mitigate the risks to informal workers. Following this logic, recent policy recommendations advanced by the World Bank and other institutions emphasize de-linking social protection programs from labor contracts, especially health service provision. It is well known that health shocks can have severe consequences for the poor, as treatment costs are compounded by revenue losses for sick people and their families (Perry et al. 2007). There have been successful cases of reform in this direction, for example, in Spain (see box 3), and in other European countries that have reduced contributions for low-income workers and shifted the responsibility of contributions from employers to employees, effectively de-linking coverage from holding a contract (see annex).

At the same time, it is important to keep in mind that universal social protection policies have to be carefully designed to avoid undermining incentives to participate in the formal sector. For example, there is an active debate today as to whether noncontributory pension systems discourage workers from participating in saving schemes before retirement. Policies such as conditional cash transfer programs

implemented in Mexico (*Oportunidades*) or Brazil (*Bolsa Família*), as well as in Turkey, which tie cash transfers to enrolling children in school, are less likely to distort the incentives of poor people to take formal jobs, while still offering basic protection against income shocks.

Building Trust and Collective Incentives

Social trust in public institutions is an important ingredient in the success of policies toward informality. Aside from carrying out regulatory and administrative reforms to increase the benefits of formality and the costs of informality, governments can actively work on strengthening their relations with the public and building public trust. This element—perhaps not the most obvious ingredient of a strategy toward economic informality—is in fact crucial, because people will be willing to participate in formal activities only if they believe that their contributions will ultimately be used to increase their well-being in the future, either by an efficient use of taxes or by a good provision of social services. As Lledo, Schneider, and Moore (2004) point out for Latin America, although tax reforms have been comprehensive in many countries, governments still face challenges regarding equity and redistribution aspects, and most countries still "lack an implicit social contract between governments and the general population of the kind that is embedded in taxation and fiscal principles and practices in politically more stable parts of the world."

Government communications efforts can complement administrative improvements. As part of these efforts to build trust with the public, governments can improve their communications strategies to inform the public about reforms and their associated benefits. Failure to do this can translate into mediocre results even if the reforms are well designed. For example, the new simplified taxation scheme introduced in Tanzania in 2001 to encourage formalization was not properly disseminated. As a result, informal entrepreneurs did not know about this reform and it was left to tax administration officials' initiative to inform people about the program (USAID 2005). Similarly, the land titling initiative in Peru discussed earlier does not seem to have met with major success in improving people's access to credit (Kenyon 2007). From these examples, it can be seen that it is key that governments take their messages regarding the benefits of formalization (and the costs of informality) to the general public in a systematic way, in order to maximize the positive impact of their reforms.

More generally, any society where the social contract is strong has stable and trustworthy institutions. In this sense, improving the transparency of the judiciary system is often a priority in order to restore confidence in the quality of institutions. Several countries are making efforts to improve their credibility and trustworthiness toward their citizens. For instance, in Ukraine, efforts to reform administrative procedures for business licensing have been accompanied by specific actions to increase civil society participation and to fight public sector corruption (USAID 2005).

Increasing such trust in public institutions may take time but can be done in parallel with administrative and economic reforms. Nevertheless, as Locke (2007) argues, countries where confidence in institutions is low are not necessarily doomed. Building trust can be difficult but may still be possible if the society follows "a sequential process that blends together elements of self-interest, government

intervention, and the development of mechanisms of self-governance and monitoring by the actors themselves."

To summarize, the policies described in this section constitute important pieces of a well-designed strategy toward "building a culture of compliance." A good policy package can facilitate the functioning of small enterprises, by simplifying procedures, reducing the cost of compliance, and offering support and counseling to entrepreneurs. Second, the costs of informality can be increased by raising penalties and increasing enforcement. Third, public trust and awareness are necessary to ensure that these policies are sustained in the long term, so that citizens know it is in their own interest to comply. Finally, the provision of basic social protection benefits could in many instances be expanded to the entire population, instead of being tied to having a formal job.

No one policy is likely to work on its own; rather, a package of policies to achieve various goals—economic growth, social protection, inclusion, and trust—may work best. Concrete policies to achieve these goals include:

- simplifying taxation schemes and reducing taxes on microfirms and small firms
- reducing barriers to entry (costs, time, procedures)
- allowing for more flexible hiring and firing of workers (for example, temporary contracts)
- offering flexibility to make payments (for example, via financial institutions, one-stop shops)
- partnering with business associations to offer information and counseling on how to expand businesses
- informing firms about the benefits of formalization and about regulatory reforms
- strengthening enforcement and raising penalties
- fighting public corruption and improving customer service in public administration
- improving and expanding the coverage of social programs through cash transfers and universal health systems

Any policy package to reduce informality can contain both "carrots" and "sticks." The most successful cases of countries reducing informality demonstrate that a comprehensive policy package containing both these elements will be the most effective way to offer a sustainable transition to formality (see the Spanish example in box 3).

Finally, reaching "full compliance" might be too costly to be a reasonable objective. A sensible approach might rather target as a starting point increasing formalization where the benefits can be greater, that is, in sectors that might suffer most from the constraints imposed by informality but that have the clearest potential to grow.

Notes

[1] Kenyon (2007).

[2] This list draws in part from Kuddo (2008), OECD (2004a, 2004b), USAID (2005), and others.

[3] See Mayville (2008) for a thorough discussion of tax administration reform in Bulgaria, and Leibfritz (2008) for Hungary.
[4] See, for instance, USAID (2005). There are views against this, for instance, Farell (2004).
[5] For more information, see www.doingbusiness.org.
[6] For an extensive review of this topic, see Kugler (2007).
[7] See Blanchard and Giavazzi (2003). They also argue in their article that determining the source of rents is crucial to design the optimal policy. For instance, lowering the bargaining power—and thus rents—of workers might lower real wages in the short run, creating clear winners and losers. On the other hand, decreasing entry costs has positive effects for all in the long run. These considerations alter the political economy of enacting reforms, and should be taken into account.
[8] See UK-NAO (2008).
[9] Informal workers are defined as workers employed without a contract and self-employed workers. They instrument labor inspections with the average distance between the location of the firm (city) and all cities within the state that have a labor inspections office. Similar instruments have been used in other papers, for instance, McKenzie and Seynabou Sakho (2007). While it is sensible to think that this distance itself does not affect firm performance, there is still a potential bias coming from the fact that larger cities usually have labor inspections offices, and better performing firms are more likely to choose a larger city for their operations.

Chapter 5

Concluding Remarks

Informal economic activity is an abstract concept that permeates many sectors and levels of activity and encompasses a heterogeneous group of actors. Most people, entrepreneurs, and firms in the informal sector do interact with public institutions to some extent; hence, it is more appropriate to see informal activity as a continuum of compliance, rather than in a dichotomous manner. Moreover, depending on the level of development of the country, the nature of informal activity differs. In developed countries informal activity refers mostly to tax evasion and the use of undeclared labor (often undocumented foreigners). In emerging economies, informal activity is the source of employment for a significant share of the labor force, often making up for the weak potential of the formal sector to create sufficient jobs. The underdevelopment of the formal private sector may stem from a variety of causes, from excessive red tape and inefficient bureaucracies, to low levels of human capital, to low trust in public institutions and low "tax morale."

There is no definitive evidence about the costs of informal activity at the individual level, although it is clear that at the macro level a large informal sector is associated with—though does not necessarily cause—lower levels of income per capita. Many individuals seem to be better off self-employed than as formal sector employees because social security contributions and taxes may be perceived mainly as taxation when the benefits they are tied to are mediocre or insufficient. Likewise, if formal sector jobs do not offer any significant career progression perspectives, for example, via training or other forms of skill-building, then workers have little incentive to stay in those jobs. If there are no formal opportunities for young people and mothers, who need flexibility to attend to their homes and work, then for them the only options left are informal salaried jobs or self-employment. In any event, there is ample evidence that informal firms are typically very small, and have low productivity, low profitability, and little growth potential. Whether these firms would survive as formal firms is unclear. Still, if some of these firms do have the potential to grow but lack the means, the economy as a whole loses if they remain informal and are unable to exploit this potential. For informal workers, lacking the basic protections offered by a social safety net leaves them unnecessarily exposed to risks and natural events such as illness, job loss, and old age, generally resulting in underinvestment in human capital at the societal level.

Recent evidence of formalization policies around the world suggests that there are many actions that governments can take to facilitate the transition of firms and individuals from informality to formality. However, comprehensive policy packages containing both "carrots" and "sticks," rather than single, isolated reforms, have

proven more successful in creating the appropriate incentives to increase formality in the long run, as we have seen with the Spanish example of notable progress, versus less impressive ones, such as those of Bolivia and Peru. The "carrot" elements—simplifying taxation schemes and reducing taxes for microfirms and small firms, and facilitating registration through fewer and cheaper procedures—reduce the costs of formality, but policies can also go further in increasing growth opportunities for these firms, for instance, by offering them counseling and support, as has been done in Colombia and South Africa. On the other hand, "sticks" can include a toughening of the enforcement process, from increased collaboration between government agencies to shared information about noncompliers, to higher penalties for offenders. Moreover, individuals should enjoy basic protections against risks independent of their labor status, and hence offering universal health care and other support systems for the poor will reduce the risk that in the face of adversity the most vulnerable disinvest in the human capital of future generations. Finally, individuals need to trust their institutions in order to be willing to commit to establishing long-lasting relationships with the public sector. In this sense, fighting corruption within public administration may be seen as one way to restore public confidence in the ethical standards and integrity of public institutions and thus reducing the relative attraction of informality versus formalization.

Appendix

Policy Table

Area	Goal	Policy	Country
Taxation	Reducing tax burden for compliers	Reduction of corporate income tax	Hungary, Poland, Slovakia
		Tax exemptions for employing underprivileged workers	Hungary
		Tax concessions in industries with high percentage of undeclared workers (domestic work, home improvement, and so on)	Sweden, Belgium, France
		Tax relief for new employees	Montenegro
		Tax amnesty	Cyprus, Turkey
		Tax exemption on reinvested earnings	Estonia
		Reduction of personal income tax (PIT)/introduce flat PIT	Estonia, Slovakia
		Tax credits for jobs created	Netherlands, United Kingdom
		Reduction of VAT for labor-intensive services	Netherlands, Bolivia
		Reduce aggregate tax burden (as a % GDP)	Most EU27 countries
		Increase nontaxable income threshold/introduce tax reductions for low-wage earners	Bulgaria, Belgium, Netherlands, France
	Encouraging compliance/ increasing tax base	Establish flat rate daily tax for nonresidents	Montenegro
		Introduce online filing and payment	Estonia
		Harmonization of tax regulations/forms	Austria, Greece, Netherlands, France, Portugal, Denmark
		Simplified tax system for SMEs	Kenya, Tanzania, Uruguay
		Replace VAT/income tax/social security contributions of small businesses with presumptive tax/single tax	Argentina, Bolivia, Brazil, Chile, Costa Rica, Dominican Republic, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru

Area	Goal	Policy	Country
Social security	Encouraging worker enrollment	Contractor is liable for SS contributions of contracted firm (construction sector)	Germany, Netherlands, United Kingdom
		Reduce social security contributions	Bulgaria
		Social benefits proportional to personal contributions and income tax payments	Estonia, most EU27 countries
		Shift payments of contributions from employers to employees	Latvia, Poland, Slovenia
		Reduced contributions for underprivileged working people	Hungary
		Reduce contribution burden for newly self-employed	Poland
Labor regulation	Hiring flexibility	Registered unemployed workers allowed to work part-time occasionally while still receiving benefits (up to a limit)	Czech Republic
		Introduce part-time contracts for out-of-labor force people	Slovakia
		Introduce temporary contracts with renewal/increase flexibility of temporary contracts	Spain, Slovakia, Argentina, Bolivia, Brazil, Chile, Colombia, Peru
	Wage flexibility	Limit increases in minimum wage to CPI (instead of average wages), introduce differentiated minimum wages (by age, region, and so on)	Poland
	Firing flexibility	Reduction of severance benefits	Lithuania, Chile, Colombia, Argentina, Brazil, Panama, Peru
		Redefine “just causes” for dismissal	Colombia
		Eliminate union approval to dismiss a worker	Slovakia
		Eliminate requirement to retrain worker prior to dismissal	Slovakia
	Encouraging worker registration	Reduce dependency of unemployed/inactive people from social assistance, and assist them in job search	Bulgaria, Hungary, Lithuania, Slovakia, United Kingdom
		Introduce “transition jobs” for long-term unemployed	Germany
		Introduce legislation to legalize undocumented workers	United States (1986), Spain, Italy
		Simplification of wage regulations	Lithuania

Area	Goal	Policy	Country
	Enforcement of labor laws	Mandate/enforce obligation to register all new workers with a social security agency	Bulgaria, France
		Encourage denunciation of unfair competition (undeclared workers) by trade unions and employers	Most EU15 countries
		Increased ability to monitor undeclared workers by strengthening/creating new monitoring agencies	Most EU15 countries
		Increase communication between agencies	Most EU15 countries
		Targeted actions in specific industries (domestic work, agriculture, and so on) where undeclared work is abundant	Netherlands, Austria, Spain, Sweden, Denmark
		Monitor employers of undeclared workers by allowing workers to claim certain social benefits	Japan
Business regulations	Facilitate formal entry	Facilitate registration of property	Bolivia, Croatia, Peru
		Improve enforcement of property rights	Croatia
		Reduce days, procedures, and costs of business registration	Mexico, Portugal, Poland, United Kingdom
		Create online “one-stop-shop” registration	Australia, Belgium, Ukraine, Estonia, Lithuania, Colombia, Uganda
		Introduce single common business ID	Finland
		Temporary amnesty for entrepreneurs who decide to formalize their business (no penalties)	Italy
		Establish time limits for courts to issue business registration approvals	Bosnia
	Encourage licensing	Simplify rules for licensing, introduce automatic licensing	Georgia
		Simplify trade licensing procedures/automatic renewals	Uganda, Tanzania
	Reduce exit costs	Simplify procedures to close a business, raise standards for public workers	Macedonia, FYR

Area	Goal	Policy	Country
Strengthen enforcement		Information exchange between agencies and inspectorates (social security agencies, unemployment agencies, tax bureaus)—for example, automatic database linking and updates	Most EU15 countries
		Unique ID numbers/worker SS ID that inspectors can check at all times	Most EU15 countries
		Frequency of inspections increased	Most EU15 countries
		Increase power of state inspections agencies	Lithuania, Germany
		Enact/strengthen legislation to punish informal employment	Austria, Belgium, Denmark, Germany, Ireland, Slovenia, Spain
		Reinforce staff at inspection agencies	Austria, Germany
		Create national-level firm/employee registers	Poland
		Enact anticorruption laws and internal policies to curb corruption in public agencies; adopt codes of conduct/ethic standards for public and private sector	Most EU15 countries
		Launch public awareness campaigns/improve communication strategy	Denmark, Sweden, France, United Kingdom, Lithuania, Estonia, Romania
		Hire private detectives to track informal workers	Germany
		Publish names of noncompliers	Ireland
		Compensate businesses for delays in procedures	India

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