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Re-thinking the Approach to Informal Businesses

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Typologies, Evidence and Future Exploration

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FINANCE, COMPETITIVENESS & INNOVATION

INVESTMENT CLIMATE

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Introduction

Interventions to incentivize business formalization over the past decades have shown mixed results (Bruhn and McKenzie, 2013; Bruhn and McKenzie, 2018; Floridi et al., 2019) and brought limited knowledge on how to address informality in a systematic way. Adding to the challenge is determining whether informality should be a direct target, or is rather something indirectly impacted through development, improved governance, better regulation and improved public services (Loayza 2016; Loayza, 2007; Perry et al., 2007; World Bank, 2009).

The informal sector includes businesses, workers, and activities operating outside the legal and regulatory systems (Loayza 2016). The scale of the informal sector in emerging and developing economies, which accounts for 25 to 40 percent of GDP and often more than 60 percent of employment (World Bank 2020), merits rethinking approaches to formalization.

This effort is even more relevant in the current context of the COVID-19 pandemic. Many formal businesses worldwide, hit hard by the pandemic's economic effects, are likely to be forced to pursue income sources through unregistered economic activities, increasing the scale of the informal sector despite its deficiencies as a safety net. Furthermore, both formal MSMEs that fall into informality and already informal businesses have limited access to government support, increasing their instability and risk of closure. COVID-related growth in the informal sector accentuates the need for appropriate and strategic policy responses.

Although the informal sector consists of both informal businesses and informal workers (with informal workers being a characteristic of informal businesses), this note will focus on the research on informal businesses and the reforms and interventions conducted in an effort to nudge their willingness and support their ability to move towards formalization.

Based on a review of relevant literature on informality and efforts to promote formalization, this note will discuss the use of the term 'informality' to align with the heterogeneity that exists within the informal sector and identify factors that drive formality. It aims to motivate the testing of new approaches to informality hinged on a deepening of our understanding of the needs of informal businesses.

To support greater rates of formalization, this note proposes four specific areas for further research and pilot interventions: 1) supporting informal clusters, 2) providing support to informal businesses without a target of formalization, 3) simplified, intermediate and temporary legal statuses of informal businesses to better align with business needs and government goals, and 4) understanding behavioral insights that influence businesses' decisions to inform policymaking.

The Concern with Informality

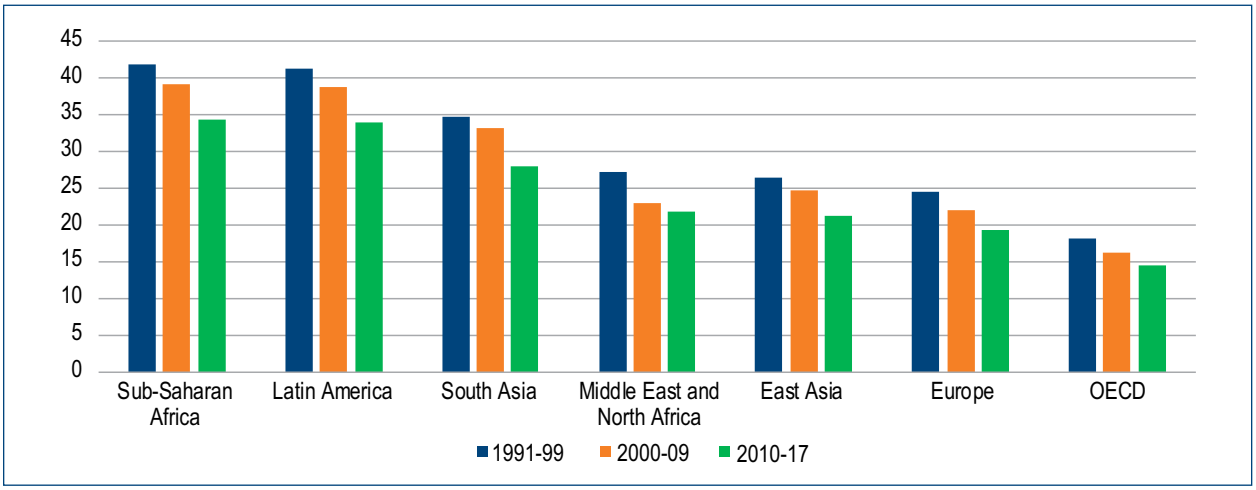
The term 'informal business' can encompass many different profiles and different degrees of informality, namely: Legal, Fiscal, and Labor. Legal informality often refers to whether the business is registered or not; fiscal informality to the extent the businesses pay taxes, have bank accounts and maintain bookkeeping; and labor informality reflects the use of contracts and benefits made available to employees. These are not exclusive of each other and businesses may be informal across any or all of these dimensions.

Pro-formalization interventions (informative or deregulatory) have had limited effect and one of the key reasons appears to be inappropriate segmenting and targeting. More differentiated approaches may be needed. For example, regulatory simplification of business registration alone may not be attractive enough for the smallest subsistence/household businesses where the costs of formalization much outweigh the benefits. An intermediate legal status to support formalization of the status quo could potentially be a beneficial first step. Larger, more dynamic and growth-oriented informal businesses might be better targeted through strategic public support addressing the specific obstacles limiting their pursuit of formalization, rather than indirect universalistic support based on deregulation. This can include targeting those firms most likely to formalize and/or with the lowest opportunity cost to formalize.

The informal sector is substantial in many countries, and in some cases dominates the economy (figure 1). In some low-income African countries such as Malawi an estimated 93 percent of businesses have not registered with the government (Campos et al., 2018). This is a concern because informal businesses tend to be less productive and pay workers less than their formal counterparts (Hartia and Shamruk, 2013), while also being perceived as unfair competition to formal businesses (Gonzalez and Lamanna, 2007; Friesen and Wacker, 2013). The informal sector also disproportionately includes women and minorities who have less access to social protection such as health care, labor rights, and insurance (Chant and Pedwell, 2008). Many governments are interested in ways to "jump-start" the formalization process for informal businesses. Their motivations include broadening the tax base and helping businesses access the formal economy so that they might access markets and grow more. They also have indirect objectives of strengthening the rule of law and gaining information on the structure of the economy to better inform future policy development (Campos et al., 2018).

Figure 1 notes the scale of informality as a percent of regional GDP and shows that the transition of

Figure 1. Average Informality Rates by Region as a percent of GDP



Source: Medina and Schneider, 2019

the economy to become formal is slow. Medina and Schneider (2019) measured average informality rates by region over three time periods (Figure 1). The consistent decline in the proportion of informality relative to GDP is likely a result of economic growth (La Porta and Shleifer, 2014) but this transition is slowed with larger growth in the workforce.

Theories of and Approaches to Informal Businesses

Why does informality occur? Some of the leading theories include:

Exclusion view: Businesses are 'excluded' from the formal economy due to high entry costs. This encompasses the *legalist* view as well, which notes that high costs of registration, regulatory and tax compliance lead to businesses being excluded from the formal economy (De Soto 2003; Friedman et al. 2000; Floridi et al., 2016). A sub-set of this view is the 'parasite view' whereby businesses intentionally stay small and informal to avoid detection by authorities (Porta and Schleifer, 2008).

Exit view: Businesses 'exit' the formal economy after assessing costs and benefits of formalization. This may also be termed the voluntarist view, which notes that businesses voluntarily choose to be informal (Maloney 2004).

Dual Economy / Dualist view: This view states that there are not enough jobs in the formal economy, so the informal economy is a necessary space for overflow workers and their small businesses (Porta and Shleifer 2008; USAID 2005). This is also termed the survivalist view.

Structuralist view: A cross-cutting view, the structuralists consider the informal economy to be a subordinate complement to the formal economy (Portes and Haller 2010; Basile and Cecchi 2001; Portes and Schauffler 1993). The informal economy provides the formal economy low-cost inputs and flexibility from operating unregulated.

These views may be complementary and tend to exist within the two previously mentioned root causes of informality: 1) lack of development and 2) bad governance.

The Mixed Results

Costs and benefits of formalization are numerous and variable in scale. Benefits realized by formalized businesses may include higher profits and greater value added through increased productivity (Boly, 2018; Medvedev and Oviedo, 2015). Financially intangible benefits are important to many firms as well. The desire to be in compliance with registration regulations (Gatti et al., 2014; World Bank, 2007) is linked to feeling more secure and protected, building trust with customers, and having good publicity (De Mel et al., 2013). However, the perceived costs and obstacles of registration, taxation, licensing, insurance, land rights, among others, often look greater than the potential benefits, particularly since those benefits such as larger customers and sales in foreign markets take years to accrue (Gatti et al., 2014; World Bank, 2007; De Mel et al., 2013).

These costs and benefits have informed the development of interventions to address informality. But, the current approaches to informality have not led to the desired changes in rates of formalization (Bruhn and McKenzie, 2018) and brought limited knowledge of how to address informality beyond recognition of strong correlations with factors such as a better business environment. Existing studies are geographically focused on countries in Latin America, South Asia and Sub-Saharan Africa (Gatti et al., 2014), often start with targeting legal informality (e.g. registration) or fiscal informality (e.g. increased tax compliance), and have typically covered the following four approaches[1] (Floridi et al., 2019):

- Reducing the financial and transaction costs of registration, the number of procedures and minimum capital requirements (Branstetter et

[1] See appendix for details on each of these five interventions.

al., 2013; de Andrade et al. 2013; de Mel et al., 2013; Galiani et al., 2015; Bettcher et al., 2009). This may be done by establishing one-stop shops (Bruhn, 2011, 2013; Rothenberg et al., 2015).

- Providing information on procedures and benefits of becoming a formal business (e.g. cash incentive) and entrepreneur training (e.g. on filling forms) (de Andrade et al., 2013; Benhassine et al., 2016; Campos et al., 2015, 2018; de Mel et al., 2013; Galiani et al., 2015).
- Increasing enforcement (de Andrade et al., 2013; De Giorgio et al., 2015; Almeida and Carneiro, 2005; USAID, 2017).
- Reducing the tax burden and providing tax incentives (Bruhn and Loeprick, 2014; Galiani et al., 2015; Kugler et al., 2017; Bernal et al., 2015; Fajnzylber et al., 2011; Mihaylova and Poff, 2018).

These interventions are often expensive, have mixed results, and have limited transferability, keeping a widespread programmatic approach to informality out of reach (Bruhn and McKenzie, 2014; Floridi et al., 2019). Bruhn and McKenzie (2018), in a literature review, note that interventions providing information alone or paired with other cost reductions have limited impact on formalization. Even when formalization did take place, the costs of the government interventions were high while the benefits for businesses were unclear. In an impact evaluation conducted in Benin, Benhassine et al. (2016) found that businesses which formalized as a result of a combination of government incentives, did not appear to benefit much from this status in the first two years afterwards. While they accessed more business training and paid lower taxes, they were not more likely to have business bank accounts, gain new customers, have higher profits or sales, or hire additional workers.

Similarly, increased enforcement efforts have shown some small positive changes in the rates of formalization, as seen in Brazil (de Andrade et al., 2013). But they often do little to generate benefits for the business. The benefits of formalization are often not large enough except for those businesses pursuing new opportunities that may require working with a formal business, such as accessing new customers, working with new suppliers, bidding for and receiving government contracts, obtaining government incentives, etc.

Re-Thinking the Factors Driving Informality and the Heterogeneity of Informal Businesses

There are many factors that influence a business' decision to formalize. These range from business culture, individual business characteristics, institutional structure, market conditions, costs of doing business, labor skills, etc. Gaps in the available literature and data for many of these factors results in limited understanding of where the prominent weaknesses lie that would curtail movement towards formalization and maximization of the benefits generated from an intervention.

The recognition of the factors of formality serves as a framing for understanding the types of relationships that may be occurring in the market and how certain market features may be pushing against the desired outcomes of a given intervention. Future research is needed to gain a better understanding of how the factors interact with the degrees of informality. For example, Bruhn (2013) notes that with the implementation of one-stop registration in Mexico, 14.9% informal business owners with characteristics similar to formal ones (e.g. older, more educated, head of household, etc.) formalized their businesses, while only 6% of those business owners with characteristics similar to wage workers formalized (e.g. younger, less educated, unmarried, etc.). The individual business characteristics (e.g. number of employees, use of bookkeeping, etc.), a factor of formality, was shown to be influential in rates of formalization, although appears to encompass only a part of the story as many other businesses did not formalize.

Part of understanding the variability of factors of formality and the mixed results experienced by formalization efforts is tied to the heterogeneity of the informal businesses themselves (Berner et al. 2012; Floridi, Wagner, and Cameron 2016; Williams and Shahid 2016; Floridi, Demena, and Wagner 2019).

Clarity in how we discuss informality and agreed-upon terminology of the different types of businesses that fall under the informality umbrella would allow for a more focused study (Diaz et al., 2018; Adoho and Doumbia, 2018; Henley et al., 2006; Fields, 2011; Kanbur and Keen, 2014). The development of an informal sector classification into which all businesses can be placed could help in this regard. Stein et al. (2013) took a leading step towards this, noting that businesses can be grouped based on their willingness and/or capacity to formalize.

Table 1 outlines a structure for mapping business differentiation and dimensions of informality – detailing the classification of informal businesses and those factors that influence whether a business is willing and able to formalize. The previously mentioned influencing factors of formality may be combined with the business differentiation to serve as the context for the system. Factors will be viewed differently by businesses with different characteristics and lead to differing rates of formalization with potentially varying effects across the three dimensions.

Table 1 elucidates the factors to be taken into consideration, but it also serves as an evidence map for aggregating data with specific characteristics. This structure will help organize the metadata, the contextual factors of an intervention, and further understanding of the different dimensions of informality impacted.

Broadening the Scope of Study to Understand More Factors of Formality

Multiple avenues of exploration exist within this context of business differentiation, which support a more complete understanding of the influences experienced by an informal business and potential

Table 1. Possible Future Studies Grouped by Dimension of Informality Addressed and Known Factors of Formalization Present

Business Differentiation Matrix		Dimension(s) of Informality		
		Legal	Fiscal	Labor
Internal Factors of Formality	**Business Characteristics** (# of employees, bookkeeping, productivity, capital, etc.)			
	Entrepreneur Characteristics (age, skilled, educated, gender, etc.)			
	Business Purpose (subsistence, growth, etc.)			
External Factors of Formality	**Market Conditions** (access to credit, market linkages, infrastructure, etc.)			
	Costs of Doing Business & Institutional Conditions (Corruption, trust, public services, etc.)			
	Labor (skills, availability, wages, etc.)			
	Business Culture/Tradition (Tax morale, trust, consumer confidence, discriminatory practices)			
	Business Relationships (associations, clusters, etc.)			

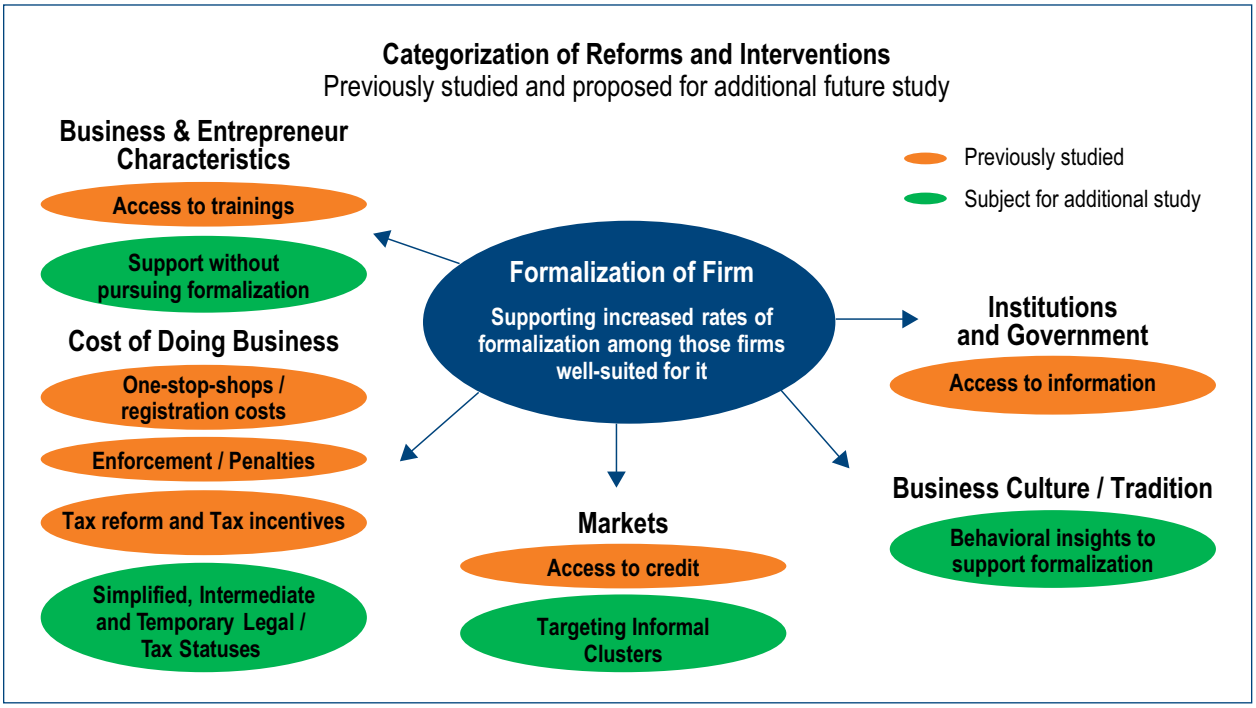
Source: Authors' elaboration.

policy approaches. The four interconnected areas of research include: (1) informal clusters, (2) support without a goal of formalization, (3) simplified, intermediate or temporary legal statuses, and (4) behavioral insights. These four areas of research were selected for their limited, but developing evidence base with regard to formalization, as well as their incorporation of additional factors of formality beyond those traditionally researched. Figure 2 shows a categorization of reforms and interventions studied to date, as well as the four areas, highlighted in green, subject for additional research with regard to their effect on formalization.

Informal Clusters

The benefits and structure of clusters allow them to serve as a channel for delivering interventions that support informal businesses, by both (i) efficiently reaching many businesses, coordinating through a central body that works with the cluster, and (ii) facilitating an eventual transition to a more formal legal status. Identifying the effects of clustering on business performance is difficult to separate from general market trends (Chhair and Newman, 2014), but there are various examples of clusters' positive results for informal sector participants including allowing new entrants with less experience to start a business (Mano et al., 2011), reducing "search and reach costs" to give informal businesses access to customers and traders; and accessing scale economies using division of labor (Mano et al. 2011; Nadvi and Barrientos 2004). Other benefits specific to small, low-income, and therefore often informal businesses include increased profits (Fajnzylber et al., 2006), increased employment (Nadvi and Barrientos, 2004; Sonobe et al., 2013), increased incomes to workers (Nadvi and Barrientos, 2004; Sandee, 2002; Vissere, 1999; Schmitz, 1999), increased market linkages (Mukim, 2013), productivity spillovers within the cluster (Chhair and Newman, 2014), increased government communication (Nadvi and Barrientos, 2004), and increased coordination to support productivity

Figure 2. Highlighting Areas for Potential Additional Research in Relation to Areas Already Studied (Grouped by Corresponding Formality Factors)



Source: Authors' elaboration.

(Weijland, 1999; Nadvi and Barrientos, 2004). Given that the benefits realized from clustering are also often associated with formalization, informal businesses in a cluster may be more likely to both recognize the benefits of formalization and to have greater capacity and willingness to formalize.

At the same time, evidence of clusters' impact on formalization is limited. Focusing interventions on clusters of businesses could utilize formal-informal business linkages and network effects to help generate large amounts of evidence on policy or intervention effectiveness in a short amount of time King, Braimmah, and Brown 2015; Fajnzylber, Maloney, and Montes-Rojas 2006; Nadgrodkiewicz and Siddiqui 2011). Specific public services and cluster support programs can be efficiently made available to many businesses (formal or informal) simultaneously (Yoshino et al., 2011; Zeng, 2008; Otsuka and Sonobe, 2011).

In understanding the perception of clusters by businesses, Mukim (2013) makes the distinction that informal and formal businesses often view clusters differently, as informal businesses see the cluster as a market opportunity in and of itself, while formal businesses are more interested in clustering in order to have better access to markets elsewhere. Interventions geared towards informal clusters, such as information on strategies and requirements to reach new customers, may then serve to re-orient the perceptions of these informal businesses, such that the cluster is not an end itself, but a means to an end. Interventions for informal clusters will be needed to further this understanding.

Support Without the Goal of Formalization

The study of informal sector support without the goal of formalization, which may incidentally lead to formalization, is an area of broad relevance across developing and emerging economies. This approach works to increase understanding of the kind of support an informal business needs most, and how the support may help to increase productivity. With an increase in productivity follows the assumed indirect effect on formalization. The research on this subject, however, typically does not focus on informality as an outcome and hence does not specifically assess the extent to which formalization eventually occurs. The informal sector can be targeted and supported in many ways, including through financing (Degryse, Lu, and Ongena 2013), extending social protections (Da Costa et al. 2011), managerial trainings (La Porta and Shleifer 2014), or improved public service delivery (Ghani and Kanbur 2015).

Box 1. COVID-19 in Context

The concern with informality is relevant during the economic crises tied to the containment of COVID-19, but for many countries and their residents, economic crises are a recurring way of life. In these cases, it may be more appropriate for governments to promote the informal sector for its employment capacity, boosting the quality of employment with social protection supports. The integration of this resiliency effort with the described clusters approach may be well-suited to the COVID-19 crisis. Clusters with informal businesses are often less structured than their formal counterparts (King, Braimah, and Brown 2015) making coordination more difficult. However, coordination is most likely to develop in the face of a collective threat to the businesses' continuation (Nadvi and Barrientos, 2004). It is at these critical junctures where policymakers seeking ways to provide support to their economies may serve a coordination role that would not otherwise have been supported by businesses. This could include collecting feedback for policy reform, direct support provision such as access to market linkages, credit needs, equipment needs, skills development, etc

The studies note the often-heterogeneous effects and unintended outcomes. For example, De Mel, McKenzie, and Woodruff (2011) conduct an intervention providing improved access to credit for high-return microenterprises. However, credit did not reach the highest return businesses as was hoped but those businesses with the most household assets, a characteristic of the businesses that was not initially controlled for in the delivery of the intervention. Taking business differentiation into account in future interventions may increase the effectiveness of the support provided. Additional research will be needed to help distinguish when a support may lead to formalization and when it will be provided only to promote enhanced productivity and incomes.

Simplified, Intermediate and Temporary Legal / Tax Statuses

Reduced costs of formalization may serve as a stepping-stone to greater realization of benefits such as improved business growth, increased productivity, and tax revenue gains and to better economic data for policymakers due to increased tracking of business activity. This may be achieved through simplified, intermediate or temporary legal statuses for informal businesses.[2]

An intermediate legal status could be used for informal businesses before or as they transition to full formal status. Such an intermediate status could make these businesses eligible for certain targeted technical assistance. It could also provide a grace period during which the informal business may be able to receive the benefits of formalization without the associated costs. This would help the business understand the potential benefits to be realized and act as an upfront investment on the part of the government with a view toward fostering long-term productivity and tax revenue gains through increased formalization. Temporary status would also address the issue of hyperbolic discounting by entrepreneurs when resources are scarce. After a given time period the business would be required to pay the requisite costs of formalization to continue enjoying the potential benefits. For example, in Mexico, the Regimen de Incorporación Fiscal (RIF) status offers tax, insurance, social security and credit benefits that gradually phase out over 10 years (González, 2015).

In comparison, simplified legal or tax statuses may serve to help legalize the status quo, in that although few changes are required on the part of the informal business, the government gains data for understanding businesses as it helps them access government supports, credit, and market linkages. Simplified legal or tax statuses are more attainable for microentrepreneurs that would otherwise not consider formalization, such as those not pursuing growth. There have been a few variations of this approach. For example, in Brazil, the SIMPLES status serves as a simplified taxation system for small and micro enterprises (Fajnzylber, Maloney, and Montes-Rojas 2011), and the MEI status serves as a simplified legal status for individual microentrepreneurs (Zucco et al., 2020). As mentioned earlier, in 17 African states, a simplified legal status was launched called the entreprenant and was offered to small informal businesses (Benhassine et al., 2016).

Additional research is needed and will help address questions regarding the type of businesses that adopt these statuses, how well targeted the reforms are in terms of businesses growth potential, and the extent to which further support is required for the benefits of a simplified, intermediate, or temporary legal status to be realized.

Behavioral Insights

The increased integration of behavioral insights and the search for new insights on decision-making beyond "rational" economics have rapidly expanded in the past decade (Alm and Torgler, 2012; Mahmud

[2] A step beyond the simplified legal status is a hybrid legal form termed the 'Simplified Stock Corporation' (SAS) implemented in some Latin American countries such as Mexico and Colombia. It blends the forms of partnerships and corporations, providing increased flexibility to management, legal protections and low cost of formalization (OAS, 2014).

et al., 2017; Shapiro, 2015), and have been studied increasingly in relation to the informal economy. D'Hernoncourt and Méon (2012) find a negative relationship in developing countries between size of the informal economy and level of generalized trust. Williams et al. (2016) find in Pakistan that higher perceived levels of public sector corruption increases the likelihood of a business operating informally. Researchers also note how 'rules of thumb', status-quo biases, and stress alter payoff structures as perceived by informal businesses (Skaperdas, 2003) ; that influence of less tangible factors of formality such as the political economy, government stability, and rule of law (Alm and Torgler, 2006) on the decision to formalize; and the opportunity for the use of 'nudges' to alter business behavior (Thaler and Sunstein, 2008).

Whether and to what extent informal businesses value elements of formalization, is a question that has not been sufficiently studied. Mukorera (2019) in Zimbabwe took a first step towards this by analyzing informal businesses' perception of 20 internal and external growth inhibiting factors and the willingness of businesses to formalize given these factors. They find that several factors were statistically significant including institutional imperfections, the registration process, lack of access to technology, market constraints, and lack of management skills. In a different approach, Mahmud et al. (2017) studied informal workers' willingness to pay for specific job benefits associated with formal employment. Still, there are very few studies that have investigated the perception of benefits of formalization by businesses through tools of behavioral science such as journey mapping,[3] gamification, or mystery shopping.[4] These tools serve as a diagnostic to identify the behavioral obstacles to formalization and would be followed by the implementation of behavioral interventions aimed at formalization. Interventions would serve to address either individual-level behavioral factors (such as the present bias,[5] which may be addressed by a temporary legal status) or applying behavioral insights to improve delivery of an already developed formalization intervention, taking into account common heuristics, cognitive overload, confirmation bias, self-efficacy, etc. which may stand in the way of a profit-maximizing decision to formalize.

Through these types of behavioral insights, factors of formality may come to be better understood, supporting more cost-effective development and delivery of reforms. A greater understanding of the payoff structure facing informal businesses in regard to formalization can support policymakers in the design and adoption of appropriate policies.

Conclusion

The previously described areas of research and piloted interventions: informal clusters, behavioral insights, support without explicit goal of formalization, and simplified, intermediate and temporary legal statuses should be considered as interconnected. While we define these approaches separately, together they support continuous policy improvement with an updated approach to the informal sector that recognizes its importance, seeks ways to work with it, and where reasonable, support growth out of it.

The next step is to design and implement pilot interventions using the features of the four approaches. Business differentiation will serve as an overarching framework applied to the interventions. Learnings from the proposed approaches can in turn affect how businesses are differentiated, further enabling the recognition of the characteristics and opportunities that

[3] Journey mapping is used to visualize the process an individual goes through to accomplish a goal. The mapping process can help policy makers recognize existing obstacles and create opportunities for reform. This could be simulated in practice with a temporary legal status for informal businesses.

[4] In mystery shopping, businesses or governments can ask anonymous individuals to take part in a shopping or service experience, without the business or government knowing, and provide feedback on the experience. This can serve to complement the development of a journey map or identify other consumer/citizen preferences.

[5] Related to hyperbolic discounting, present bias notes the tendency to prefer a smaller amount of something now rather than a larger amount later.

signal the appropriate policy response. While these will be promising areas of exploration, they do not represent an exhaustive accounting of all remaining areas of research; they can serve as a starting point for using and orienting existing areas of research to better inform our approach to informality. Such interventions will not be without their challenges. Data collection on informal businesses can be an expensive and difficult process that may require engaging with other intermediaries working directly with informal businesses or recruiting members of the informal economy itself.

To conclude, the pursuit of the best approach to reducing informality is ongoing. The path ahead has been well-framed by previous research, but opportunities remain to re-think the approach to informality, how we view it, and how we go about addressing it.

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Appendix A

Interventions and Reforms that Impacted Business Formalization, Including Factors of Formality

The following table details many of the leading publications evaluating the reforms and/or interventions that impacted business formalization. In addition to noting the characteristics of the reform/intervention, the impact achieved and the takeaway, we also note the characteristics of the businesses impacted, the type of study conducted, and the variables (i.e., the previously described factors of formality) changed and impacted.

Country	Author(s)	Reform/ Intervention	Scale of impact	Takeaway
Mexico	Bruhn (2013)	One-stop-shop municipal level business registration	Of Informal business owners with characteristics similar to formal ones - 14.9% formalized their businesses Informal business owners with characteristics similar to wage workers - 6% shifted to wage employment	Different informal business owners respond differently to reforms. Also reforms were limited – only municipal registrations.
	Kaplan, Piedra, Seira (2011)	One-stop-shop municipal level business registration	Start-ups increased by 5% per month but effect is concentrated in first 15 months following implementation.	Significant obstacles of lack of access to credit, taxes, scarcity of marketable ideas limit the impact of business entry deregulation.
	Bruhn (2011)	One-stop-shop municipal level business registration	Number of registered businesses increased 5% as a result of former wage employees starting businesses – not because unregistered businesses decided to register. Wage employment also increased 2%. Income of incumbent firms decreased by 3% due to increased competition.	Business registration deregulation did not entice informal businesses to register. Significant obstacles of lack of access to credit, taxes, scarcity of marketable ideas limit the impact of business entry deregulation.
Portugal	Branstetter et al. (2013)	Reduced time and cost to register firm	Number of firms registered increased by 17%. Created about 7 new jobs a month per 100,000 county inhabitants in eligible industries	Entry deregulation has spurred registration by less qualified firms.
Rwanda, Liberia, South Sudan, Burkina Faso, Sierra Leone	Economist IC Africa	15 reforms implemented for business registration. Registration times have been reduced to just 2-3 days. Registration services have been decentralized in all countries, and the functions of business registries broadened in some cases.	IC reforms have plausibly facilitated the establishment of about 11,000 new operation firms, of which 9,400 in Rwanda and 1,700 in Liberia (after removing those short-lived firms – 40% survived in Rwanda since post reform registration, 63% in Liberia). Sierra Leone and South Sudan, trends in business registrations are quite erratic and no relationship with IC reforms can be established. The same applies to Burkina Faso.	Broad economic considerations were the most common motivations for registering ('wanting to expand', 'better access to customers/ suppliers', 'better access to finance') with participating in public procurement appearing as a recurrent theme. Element of necessity was present in Rwanda ('There is no future for companies that are operating informally')

Country	Author(s)	Reform/ Intervention	Scale of impact	Takeaway
Benin	Benhassine et al. (2016)	Launch of simplified legal status, entreprenant, and includes tax registration. Includes the simplified legal status mentioned above, in addition to personal visit with explanation of benefits of new status and help applying, Includes 2 and 1, as well as access to business training, bank accounts and tax mediation.	Very few informal firms registered for this new status after the legal status was launched. But personalized visits to firms coupled with an explanation of benefits and assistance filling out formed induced 9.6% of informal firms to formalize, and adding access to business training, bank accounts, and tax mediation services increased this to 16.3%.	Firms which formalize do not appear to benefit much from this status in the first two years afterwards. They access more business training and pay lower taxes due to a tax exemption, but are not more likely to have business bank accounts, gain new customers, have higher profits or sales, or hire additional workers.
Georgia	Bruhn and Loeprick (2014)	Introduction of preferential tax regimes for Georgian micro and small businesses in 2010	The new tax regime increased the number of newly registered formal firms below the eligibility threshold of GEL 30,000 by 18–30%. This effect is limited to the first year of the introduction of the reform. Authors find a robust effect of the small business tax regime on formal firm creation in any year. When looking at abuse risks, results show no significant evidence of strategic sorting. Tax compliance only lasts for the first year after the new regime was introduced.	Findings indicate that the design of presumptive tax regimes may indeed be an instrumental policy tool to encourage tax registration, the goal of the Georgian policy reforms, it also suggests that such reforms are, at best, a small piece in a much bigger puzzle.
Brazil	Andrade et al. (2013)	Firms in Belo Horizonte were randomized to a control group or one of four treatment groups, some received information on how to formalize; others receiving information and free registration costs along with the use of an accountant for a year; the third group was assigned to receive an enforcement visit	Authors find zero or negative impacts of information and free cost treatments, and a significant but small increase in formalization from inspections. Our LATE estimates of the impact of actually receiving an inspection are much bigger, giving a 21-27 percentage point increase in the likelihood of formalization	The results show most informal firms won't formalize unless forced to do so, suggesting formality offers little private benefit to them, but the tax revenue benefits to the governments of bringing firms of this size into the formal system more than offset the costs of inspections.

Country	Author(s)	Reform/ Intervention	Scale of impact	Takeaway
	Fajnzylber et al. (2011)	The SIMPLES program reduced the required taxes and social contributions for micro and small businesses by up to 8%.	Evaluation of SIMPLES found that it induced about 7% more firms to register and increased tax payments by 3.1 to 4.6%. Firms that became formal had 55-57% higher revenues and 45-49% higher profits.	This could be partly the result of the reform and partly a result of the fact that more productive firms assess they can benefit from being formal. Those that register appear more likely to have a permanent location and aim for a larger scale of business.
	Almeida and Carneiro (2005)	Labor law enforcement is implemented varyingly across municipalities (although is the same on the books)	Law enforcement reduces informal employment by firms. However, it also reduces the firm's wages, productivity and investment. Authors argue that this is due to the firm's limited access to flexible labor.	Enforcement of labor regulation in the form of fines can be effectively used as a tool for fighting informality. But, informal employment is an important source of unregulated labor for Brazilian firms, allowing them to operate more efficiently, and increasing their incentives to invest in new technology.
Malawi	Campos et al. (2015, 2018)	Randomly allocated firms into a control group and three treatment groups: 1) a group offered assistance for costless business registration, 2) a group offered assistance with costless business registration and separate tax registration, and 3) a group offered assistance for costless business registration, information session at a bank that ended with the offer of business accounts	All three treatments had extremely large impacts on business registration, with 75% of those offered assistance receiving a business registration certificate. Information and assistance has a limited impact on tax registration. Business registration alone has no impact for either men or women on bank account usage, savings, or credit. Combination of formalization assistance and the bank information session results in significant impacts on having a business bank account, financial practices, savings, and use of complementary financial products.	The results highlight the advantages of separating business and tax registration, but also the need to assist firms in benefiting from their new formal status.

Country	Author(s)	Reform/ Intervention	Scale of impact	Takeaway
Bangladesh	De Giorgio et al. (2015)	Authors implement an experiment in which firms are visited by representatives who deliver an official letter form the Bangladesh national Tax Authority stating that the firm is not registered and the threatening punishment if it fails to register.	Up to three months from the intervention, only up to 17% of the firms declare to be registered in the treatment group versus 13 percent in the control group (post intervention), an even smaller share can give us their registration number of TIN (3.4% vs. 1.1%) and even fewer firms are able to show us a valid tax ID card (3.1% vs. .9%). Authors also find that only larger revenue firms at baseline respond to the threat and register	The effects are generally small in level, leaving open the question of why many firms still do not register.
Sri Lanka	De Mel et al. (2013)	Provide information, reimburse registration costs, or directly pay firms to register.	Information about the registration process and reimbursement of direct costs does not increase registration. Payments equivalent to one half to one month of the median firm's profits leads to registration of around one fifth of firms. Follow up surveys 15 - 31 months later show higher mean profits, but largely in a few firms which grew rapidly.	Most firms do not view the benefits as exceeding the costs. 36% of firms said that they had yet to see any benefit from registering. Very few firms claimed to have obtained a loan, or to have received a government contract as a result of formalizing.
Colombia	Galiani et al. (2015)	Workshops for prospective formal sector entrants and arranges personalized meetings for them with agents from the Bogota Chamber of Commerce. The CCB eliminated the costs of the initial procedure of registering as a formal enterprise and provided exemptions from relevant taxes during the first years after formalization.	While a workshop treatment had no effect on firms' formalization decisions, meetings with CCB agents raised the likelihood that a business would begin to operate formally by 5.5 percentage points for all the firms that were invited at random to participate in this arm of the intervention and by 32 percentage for the firms that accepted the invitation. Second, the effect on the treatment firms did not persist over time. After a year of formal operation, it disappeared. Mostly small firms benefited from the law, few micro-enterprises benefited and many were unaware of the law.	These results indicate that substantial reductions in the fixed costs of operating formally are not effective in formalization choices, since such reductions had no lasting effect on formalization decisions.
	Kugler et al. (2017), Bernal et al. (2015)	Under Colombia's 2012 reform, payroll taxes were reduced by 13.5 percentage points.	Colombia's payroll tax reform increased the number of formal jobs by over 3 percent and increased wages by between 1.9 and 4.4 percent, with most of the impact among small and medium-sized enterprises. Steiner and Forero (2015), Anton (2014), and Hernandez (2012) find that the tax reform reduced informality by between 1.4 and 4.2 percent	Evidence that formal employment increases when labor taxes are lowered.

Country	Author(s)	Reform/ Intervention	Scale of impact	Takeaway
China	DeGryse et al. (2011)	A review of the impacts of informal vs. formal finance options (not an intervention)	Informal finance is associated with a higher sales growth rate for small firms, and lower sales growth rate for large firms. Authors identified a complementary effect between informal and formal finance for small firms, but no such effect for large firms. Informal finance offers informational and monitoring advantages, while formal finance offers relatively inexpensive funds.	It may be the case that a certain amount of informal finance enhances the growth of small firms due to the informal financier's advantages in screening potential borrowers and tracking borrower performance. Notably, the role of informal finance does not scale up with firm size, and may even turn detrimental for the growth of larger firms.
Senegal	Mihaylova and Poff (2018) & CIPE draft report	Senegal's parliament passed legislation to reform the Senegal Tax Code for a more streamlined tax code for SMEs with tax rates more proportional to their profit margins.	As a direct result of the new tax regulations, informal sector operators have reported a decreasing number of disputes with local authorities. On average, UNACOIS's national headquarters intervened in over 200 cases per year. Within one year of the new Code taking effect, UNACOIS has been involved in only two such cases.	Utilizing market cooperation, firms can protect against costly harassment
Lima, Peru	Bettcher et al. (2009) & CIPE draft report	The new business registry coordinated procedures of the agencies under one roof and drastically reduced national registration requirements such as: • From 289 days to 1 day • From $1,200 to $174 in costs	During 1991-1994, 382,100 new businesses were registered during those three years. The registered businesses saved $692.5 million in red tape and created 557,770 new formal jobs. Government tax revenues increased by $1.2 billion. The number of Lima's small and micro businesses grew from 72,606 in 1993 to 160,040 in 1996, and 300,000 in 2004.	An improved business environment will foster businesses to register and pay taxes.
Serbia	USAID Serbia (2017) & CIPE draft report	New Law on Inspections Oversight started inspections of unregistered businesses.	More than 23,000 entrepreneurs registered. There were 22% more newly-registered entrepreneurs per month in 2015 compared to the previous year. Informal employment dropped from 23.2% at the end of 2014 to 19.4% at the end of 2015. In 2017, 81% of surveyed businesses said that inspections were well trained, up from 62% in 2013. In addition, public trust in inspections improved (70% positive vs. 30% negative in December 2015, compared to 48% positive vs. 52% negative in July 2014)	Threat of being caught as unregistered is a significant incentive to register.
Indonesia	Rothenberg et al., (2015)	One-stop-shops for business registration program	Authors find no evidence that a large-scale program designed to reduce registration costs increased formality rates.	It appears many firms prefer to remain informal, consistent with the dual economy and rational exit theories of informality.

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