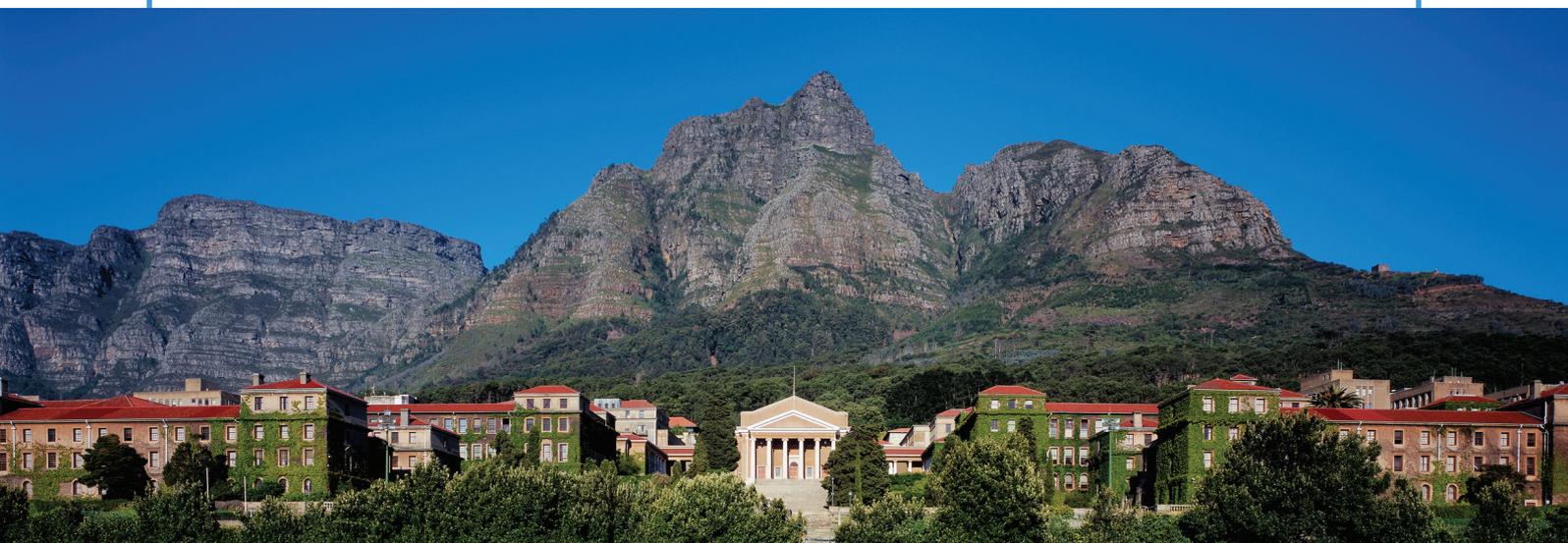


THE URBAN INFORMAL SECTOR IN FRANCOPHONE AFRICA:
Large Versus Small Enterprises in Benin,
Burkina Faso and Senegal

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DPRU WORKING PAPER 201405
DECEMBER 2014



A DPRU Working Paper* commissioned for the



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Working Paper 201405
ISBN 978-1-920633-17-2

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Abstract:

The informal sector is often associated with micro- and family-based firms. In West Africa, however, some informal firms are very large. Based on detailed surveys and interviews carried out in Benin, Burkina Faso and Senegal, we compare the characteristics of formal, large informal and small informal firms. This paper discusses the survey methodology, the main industries in which large informal firms operate, and the characteristics and functioning of firms. It shows that large informal firms have some features of both their formal and small informal counterparts, but in terms of management structure and functioning they are more like informal firms than formal firms. Policy should adopt a differentiated approach towards large versus small informal firms, as they have different effects on poverty alleviation and economic development.

Keywords: Informal sector, economic development, West Africa, Senegal, Burkina Faso, Benin

Acknowledgements:

This paper draws on the findings of a large-scale multi-year project undertaken by the Centre de Recherches Economiques Appliquées (CREA) at the Université Cheikh Anta Diop de Dakar. The authors are grateful to the numerous researchers who assisted with the fieldwork, to the International Development Research Centre (Canada) and the World Bank for funding, and for assistance from the West African Economic and Monetary Union (WAEMU) Commission, government officials, business associations in the formal and informal sectors, and labor unions in West and Central Africa.

Working Papers can be downloaded in PDF (Adobe Acrobat) format from www.dpru.uct.ac.za. A limited number of printed copies are available from the Communications Manager: DPRU, University of Cape Town, Private Bag X3, Rondebosch, Cape Town, 7700, South Africa. Tel: +27 (0)21 650 5701, email: sarah.marriott@uct.ac.za

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Recommended citation

Mbaye, A.A., Benjamin, N.C. and Golub, S.S., & Ekomie J-J.T. (2014). "The Urban Informal Sector in Francophone Africa: Large Versus Small Enterprises in Benin, Burkina Faso and Senegal". Development Policy Research Unit Working Paper 201405. DPRU, University of Cape Town.

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1. INTRODUCTION

It is well-known that the informal sector is a dominant part of African economies (e.g. Schneider and Enste, 2002; Chen, 2001; Xaba et al., 2002; Otsuka and Yamano, 2006; Steel and Snodgrass, 2008; Laporta and Schleifer, 2011).¹ Most studies, however, ignore an important feature of informality in West Africa: the coexistence of very large and politically well-connected informal enterprises and well-organized networks alongside a multitude of very small firms. Notwithstanding its prevalence, there have been relatively few systematic studies of this dual feature of the informal sector in West Africa. In this paper, we break new ground by shedding light on large informal firms. This is important both for understanding West African economies and for developing appropriate policy responses towards the informal sector, since policies are likely to differ between “large” and “small” informal operations.

The literature’s tendency to identify informality in developing countries with (mostly family-based) micro-enterprises, has entailed data-collection strategies focused on household-based activities. This approach by definition excludes the larger firms. Empirical studies of the informal sector have largely followed the International Labor Office’s (ILO) (1995, 2002) pioneering approach.² The ILO defines informality by firm size and lack of registration, effectively confining their sample to household and small enterprises. Other studies of informality have also usually focused on a single dimension of the phenomenon. In addition to the ILO’s focus on firm size and registration, other definitions of informality feature access to the social safety net (Kanbur, 2009), the availability of a fixed workplace, the non-payment of taxes, and the failure to maintain accurate accounts, among others (Heintz, 2012). Furthermore, alternative criteria of informality yield significant differences in the classification of firms and employment into formal versus informal status (Gasparini and Tornarolli, 2007). Fields (2011) summarizes these findings.

In their survey on informality in Africa, Benjamin and Mbaye (2012) stress the substantial heterogeneity among informal firms and develop an approach for classifying firms according to a continuum of characteristics rather than just one or two. Recently, some other authors have also recognized that informality is a matter of degree, best captured by a range of indicators (Steel and Snodgrass, 2008; La Porta and Schleifer, 2011; Dabla-Norris et al., 2008; Guha-Khasnobis and Kanbur, 2006) but none proposed or implemented operational definitions. In this paper, we review six criteria identified by Benjamin and Mbaye (2012) as those most widely used in the previous literature and combine them into a composite measure of informality based on the number of these criteria that a firm satisfies. We use this definition in particular for distinguishing “large” informal firms from formal firms and the remainder of the informal sector. The main goal is to understand the characteristics of the large informal sector, the main industries in which they operate, and their interactions with the small informal sector and the formal sector.

This study focuses on the urban informal sector in three major cities: Dakar (Senegal), Cotonou (Benin) and Ouagadougou (Burkina Faso). These three countries are quite representative of francophone West Africa, and to a lesser extent West Africa as a whole. Senegal is a coastal Sahelian country; Burkina is land-locked; while Benin is coastal but sub-tropical. In all three cases, as elsewhere in West Africa, the informal sector constitutes over half of national output and over 90 percent of employment, according to national accounts data.

The results reported in this paper are the result of a large-scale data collection effort. We obtained a rich mix of quantitative and qualitative data obtained from three main sources: our own surveys of 900 firms in the three cities; follow-up interviews with knowledgeable

¹ The informal sector has also been extensively studied in Latin America. See for example Maloney (2004), Perry et al. (2007) and Henley and Arabsheibani (2009).

² Loayza and Rigolini (2011); and Bohme and Thiele (2012) are recent examples.

stakeholders and participants; and all available secondary data. For the surveys, we designed our sampling strategy to cover three distinctive categories of firms: formal, small informal and large informal. The interviews concentrated on large informal firms to deepen our understanding of this peculiar phenomenon.

2. METHODOLOGY AND DATA

2.1 Definition of Informality

Our surveys measure six firm-level criteria of informality: size, registration, honesty of accounts, fixity of workplace, access to credit, and tax status, all of which were determined by lengthy and careful survey interviews rather than officially-reported data. Most significantly, sales figures obtained during interviews were often far above sales these firms report to the tax authorities.

1. *Size.* A firm satisfies the small size criterion of informality if it has less than \$100,000 in annual sales.³
2. *Registration.* A firm is informal if it is not registered with any public administration.
3. *Honesty of accounts.* A firm is informal if it does not maintain a full set of accounts, or if those accounts are incomplete or false.⁴
4. *Fixity of workplace.* A firm is deemed informal if it has no fixed workplace.
5. *Access to credit.* A firm is informal if it has not had access to a formal bank loan in the last five years.
6. *Tax Status.* A firm is informal if it does not pay regular business income tax, i.e. it pays no tax at all, or more likely, pays a special lump-sum tax in lieu of regular business taxes. This lump-sum tax regime for informal firms is applicable with slight differences throughout Francophone West Africa. Firms with sales of \$100,000 or more are supposed to be subject to regular business tax regime, but in practice frequently underreport sales.

Although these six criteria, taken together, are more comprehensive than what others have used, they do not capture some dimensions of informality such as management practices and participation in social security programs. This latter criterion is particularly important for defining informal employment but much less so for characterizing informal firms. Indeed, even formal firms typically employ a significant number of informal employees (ILO 2002). Similarly, large informal firms may have some employees who are covered by Social Security. Thus, whether workers are covered by social insurance is not a major difference between formal and large informal firms. These six criteria can be combined to create indicators of levels of formality depending on how many of the six a particular firm meets. The two extremes of purely informal firms, satisfying all criteria, and purely formal firms, satisfying all criteria, are relatively rare.

For purposes of this paper, we defined formal firms as those which satisfy all six criteria of formality. The remaining firms correspond to various levels of informality that can further be aggregated into large and small informal based on our estimates of their sales. Large informal firms are those with estimated sales in excess of \$100,000 yet pay the presumptive lump-sum tax. That is, their actual sales – as determined in surveys as opposed to figures reported to fiscal authorities – would call for regular business taxes but in fact they pay the presumptive tax because they underreport sales to the fiscal authorities. In almost all cases, these large informal firms satisfy all six criteria of formality except for the third: their accounts massively

³ All figures are reported in US dollars, based on a conversion rate of 500 CFA francs = \$1.

⁴ Our questionnaire used several filters to determine the honesty of accounting statements of the responding firms. For example, when firms report sales superior to the \$100,000 threshold while being under the lump-sum tax regime (see below), we concluded that this firm's statements to the tax authorities were false. Comparisons of sales figures with detailed cost estimates provide a further check on the honesty of accounts.

underreport sales. Although their official accounts suggest otherwise, large informal firms are typically comparable in size to those of the modern sector. They usually fulfil other criteria for formality: they are almost always registered and have a fixed workplace, have access to bank credit, are subject to regular business taxes, and annual sales of \$100,000 or more. On the other hand, large informal firms behave much like other informal firms in less tangible respects not covered in our criteria, such as management structure and personal attributes.

2.2 Data

Given the complexity of the informal sector and the difficulties of obtaining accurate information, we used several approaches. We made use of standard national accounts and other public databases, e.g. those from customs, fiscal authorities and national statistical institutes. While useful for cross-checking and providing an overview of the significance of the informal sector, these databases do not enable in-depth analysis of informal sector firms. Consequently, we initiated a large-scale two-part primary data collection effort consisting of quantitative surveys and qualitative interviews. We interviewed key stakeholders and experts on the informal sector from both public and private sectors.

In order to have a mix of formal, large informal and small informal firms in the surveys we used a stratified sampling strategy. That is, we sought random samples within three-by-three categories comprised of a) formal, small informal and large informal enterprises and b) industry, commerce and other services. A first set of surveys was conducted in 2007, with a sample of 300 enterprises in Dakar, Ouagadougou and Cotonou, for a total of 900 units surveyed in the three cities combined. In 2009, follow-up interviews were conducted in the three cities with a smaller number of firms, focusing on large informal and formal firms.

Our approach targets firms rather than households, as in most previous studies. The general population of firms consists of all firms in each of the three countries, which is split into three sub-groups:

- a) Those firms paying regular business taxes,
- b) Those firms paying lump-sum presumptive taxes and
- c) All others, including those that are not known to the fiscal authorities or not subject to either of the above two tax regimes.

The lists of enterprises facing regular business taxes or presumptive taxes are available from the fiscal authorities.⁵ The others are generally unregistered with the fiscal authorities and their number is thus unknown. For categories a) and b) the samples are selected from the lists maintained by the national tax agencies. Sub-samples for categories a) and b) are respectively further stratified into three main subsectors: industry, commerce, and other services.

For category c), a different approach is required given the predominance of self-employment and family enterprises in the countries under consideration. A purely random sample of the general population of firms would consist overwhelmingly of firms in category c), defeating the purpose of understanding the differences between formal, large informal and small informal firms. For example, in Senegal, firms in categories a) and b) registered with the fiscal authorities number about 10,000, in contrast to the approximately 280,000 informal firms reported by the Senegalese 123 survey. A random sample of the general population of firms would thus include only 3.4 percent of type a) and b) firms! Therefore the enumerators were directed into the respective zones where firms operating in industry, commerce, and other services are concentrated, and micro-enterprises selected randomly within these zones. Identification of these zones of concentration is based on the results of the previous "123"

⁵ Some large firms paying the regular business income tax are nevertheless classified as informal in view of their underreporting of income.

studies of the informal sector carried out in the countries under consideration, which focused on category c) type operators. As is typically the case for small informal firms, these enterprises generally lack fixed workplaces and an address, even if it exists, is unreliable and subject to change.

The next step is to identify the share of each category of firms (a, b, c) in the total sample and its distribution in the three sectors of interest (commerce, other services, and industry). One possibility would be to use the distribution of value added rather than number of firms in the general population. Such an approach, however, does not fully resolve the problem because firms of type c) would still dominate the sample, although to a considerably lesser extent, given that these microenterprises account for a very large share of GDP despite their small size. In Benin, for example, category c) firms contribute about 70 percent of total value added; thus, a random sample of all firms would yield only 30 percent of firms in categories a) and b) combined. Instead, we set a target number of firms of category c) to sample, roughly equal to the number of sampled firms in categories a) and b), deliberately under-sampling firms in category c) relative to both their contributions to global value added and number in the general population of firms.

Within each category of firms a), b) and c), however, we replicated the shares of global value added in the respective subsamples for commerce, other services, and industry. We used national accounts data on GDP by industry for categories a) and b), and results of the 123 surveys for category c).

Using the resulting database, collected in 2007, we then apply the various criteria of informality described in Section 2.1 to determine the number of criteria each sampled firm satisfies and then classify firms into the three categories of formal, large informal and small informal firms as explained above. In a second phase of research in 2009, the firms identified as large informal in the first phase were revisited for another round of surveys along with semi-structured interviews, providing qualitative and quantitative information supplementing the first stage surveys.

Thus, we approached the issue of the “large informal” sector from several angles. First, as noted above, we designed our survey sample in such way that large informal firms are well represented. Second, we interviewed both government officials and managers/owners of formal and informal firms in the three countries. Third, we matched reported sales and import data for firms that suggested that some firms are grossly underreporting sales. Fourth, we reviewed press accounts of conflicts and scandals regarding some of the largest informal operators. In the following sections we discuss the characteristics of the large informal sector, the main industries in which they operate, and the interactions between the large informal sector, the small informal sector, and the formal sector. We also report on case studies of some of the largest informal firms and the sectors in which they operate, much of which revolves around importing, wholesale/retail and other services.

3. SURVEY FINDINGS ON FIRM CHARACTERISTICS

Our survey results allowed for comparison of a wide variety of characteristics of informal and formal firms. We summarize some of our more important findings here, focusing on the defining characteristics of large informal firms, which in some respects resemble those of formal firms but in others are closer to the rest of the informal sector.

3.1 Sectoral Distribution of Firms

Both national data, previous studies, and our surveys largely confirm the tendency of the informal sector to cluster in certain sectors, with small and large informal firms concentrated in commerce, handicrafts, transport, new and used clothes. These sectors are all characterized

by their lack of technological sophistication and low capital-intensity. Domestic and export-import trade are the largest. The well-known 123 Survey⁶ found that, for all three countries, around 50 percent of informal enterprises are involved in wholesale-retail trade, and a large part of this involves importing.

Table 1 presents the distribution of the sampled firms by industry in the sample. 48 percent of small informal firms operate in industry (mostly manufacturing) compared with 38 percent of large informal firms, and 18 percent of formal firms. The large number of manufacturing firms in the sample reflects the preponderance of informal operators in construction and in artisanal manufacturing of wood products and clothing. Seventeen percent of small informal firms in our sample produce non-marketable services other than trade. The large informal and formal sectors are more involved with wholesale/retail trade, with 59 percent and 52 percent of their total staff, respectively, engaged in this sector. Banking and insurance entities, on the other hand, are all in the formal sector, as a result of the stringent regulation by regional organizations, notably the West African Economic Union (WAEMU) central bank.

Table 1: Distribution of Sample firms by Industry

	Benin		Burkina Faso		Senegal	
	<i>number</i>	<i>%</i>	<i>number</i>	<i>%</i>	<i>number</i>	<i>%</i>
Industry	67	22.7	61	20.3	120	38.9
Commerce	104	35.3	155	51.7	122	39.6
Service	124	42	84	28	66	21.5
Total	295	100	300	100	308	100

3.2 Size of Firms

Table 2 presents average size of firms, as measured by sales and employees of formal, large informal and small informal businesses in the three cities. Formal sectors are typically much larger than large informal firms by both measures, with the notable exception of Cotonou, where the average number of employees in the large informal firms matches that of the formal sector, reflecting the role of these firms in Benin's thriving informal cross-border trade. Large informal firms have much larger sales than small informal firms, by definition, but the differences in number of employees are much less marked, except for Cotonou. For example, in Ouagadougou the number of employees of the large informal firms is virtually the same as for their small counterparts but sales are nearly 20 times greater for large informal firms. Sole proprietorships, where the owner is the sole permanent employee, are quite numerous at all levels of sales. For example, 75 percent of companies in Senegal with a turnover below \$10,000 and 67 percent of companies with turnover between \$1.2 million and \$2 million are single-employee firms, reflecting the fact that most large informal businesses are sole proprietorships.

⁶ The 123 Survey covers small informal firms. Our interviews and the second wave of our surveys focusing on large informal firms showed that a similarly high proportion of large informal firms are involved in trading activities.

Table 2: Some Descriptive Statistics for the Three Levels of Informality in the Three Countries

		Share in total country sample	Average sales (millions CFA francs)	Average Number of Employees (including temporary workers)
FORMAL	Dakar	24%	833	9.6
	Ouagadougou	13%	615	21.2
	Cotonou	23%	725	22.1
LARGE INFORMAL	Dakar	16%	117	4.5
	Ouagadougou	11%	155	6.1
	Cotonou	15%	319	22.6
SMALL INFORMAL	Dakar	60%	13	4.2
	Ouagadougou	76%	11	5.4
	Cotonou	62%	13	5.8

The majority of firms in the sample, even in the formal sector, have a small number of employees. In Dakar, for example, 50 percent of formal firms have fewer than five employees, compared to 76 percent for the informal sector as a whole. Only 18 percent of firms in the formal sector, 14 percent of firms in the large informal sector, and 6 percent for firms in the small informal sector have more than 10 employees.

3.3 Characteristics of Firms, Employees and Managers

In general, quantitative measures of large informal firms' social and economic characteristics, as determined from our survey results, tend to fall somewhere in the middle between formal and small informal firms, suggesting that large informal firms are a hybrid of the other two types. For instance, the level of education of workers is lowest in the small informal sector and highest in the formal sector (Figure 1 – see Appendix), with variations across countries as well. In Cotonou, for example, 47 percent of formal sector workers, 44 percent of large informal sector workers and 28 percent of small informal sector workers have attended university, all exceeding the corresponding figures for Dakar and Ouagadougou. Relatively few firms export in general but formal firms are slightly more likely to export than large informal firms, which in turn are considerably more frequently exporters than small informal firms (Figure 2 – see Appendix). Exporting firms are more numerous among formal and large informal firms in Cotonou due to that city's role as a major trade entrepot, largely for smuggling. Also, formal firms are much more likely to make use of information and communication technologies (ICT) than small informal firms, with large informal firms in the middle (Figure 3 – see Appendix). Compliance of social security obligations is the norm for formal firms, rare for small informal firms and occurs roughly half the time for large informal firms (Figure 4 – see Appendix).

In some other respects, however, formal, large and small informal firms differ little. In particular, managers and employees are predominantly male in both formal and informal sectors (Table 3 – see Appendix) with the partial exception of the small informal sector in Ouagadougou where 38 percent of managers are women. Male management is particularly dominant in the large informal sector.

The structure of financing is also less differentiated by firm status than one might expect, with even formal firms predominantly relying on internal funding and rarely availing themselves of bank loans (Table 4 – see Appendix). All firms face high nominal and real⁷ interest rates on bank loans and onerous collateral requirements, but interest rates are considerably higher for

⁷ Inflation rates are low in all three economies related to participation in the WAEMU currency, the CFA franc, which is pegged to the Euro.

informal firms, especially smaller firms, than formal firms (Table 5 – see Appendix). For example, in Cotonou, the average bank loan rate for formal firms was about 15 percent compared to 22 percent for large informal firms and 24 percent for small informal firms. The gap is much wider in Ouagadougou.

3.4 Productivity

As in many previous studies (e.g. Gelb et al., 2009; Laporta and Schleifer, 2008), we identified a large productivity gap between formal and informal firms. Our results unambiguously corroborate this fact in the three cities. Figure 5 shows the distribution of firm labor productivity according to formal or informal status. Labor productivity is measured as value added divided by total employment, including temporary workers. In all three cities small informal firms constitute about 80-90 percent of low-productivity enterprises (value added per worker below \$10,000). Conversely, formal firms account for about 80 percent of high productivity firms (value added per worker of more than \$30,000) in Dakar and Cotonou, although less so in Ouagadougou (50 percent), with small informal firms almost never having high productivity. Large informal firms tend to have intermediate to high labor productivity. Overall, in terms of productivity performance, large informal firms resemble formal firms much more than their smaller informal counterparts. This finding is robust with respect to alternative definitions of informality.

The correlation between productivity and informality may reflect two-way causation. Low productivity may lead to informal sector status through self-selection of firms by quality of management. The most talented managers choose to formalize because they reap greater benefits from access to public services provided government has the necessary enforcement capabilities and the business environment is sufficiently favorable (Gelb et al., 2009). Reverse causation running from firm status to productivity could be due to the reduced access to public services that informality entails. Informality also prevents companies from acquiring modern management skills and worker training, further reducing productivity. Lack of finance in particular means firms are unable to invest, resulting in lower capital-intensity and hence lower labor productivity.

4. NATURE AND FUNCTIONING OF LARGE INFORMAL FIRMS

4.1 Distinctive Features of Large Informal Firms

Our interviews provided a deeper understanding of the nature and functioning of large informal firms, illuminating qualitative aspects not covered by the surveys. Although these firms have a large volume of sales and relatively high productivity, the interviews revealed that these firms behave much more like small informal firms than formal firms in terms of their family-based organization and management. In this section we outline the commonalities of large informal firms; Section 6 below provides descriptions of their operations in a few sectors in which they are prevalent while Section 7 presents case studies of several large informal entrepreneurs in Senegal.

Typically, large informal firms start small and prosper under the leadership of a particularly talented, hard-working, and perhaps lucky entrepreneur, often with assistance from ethnic and religious trading groups. As they grow, these firms almost always remain controlled by an individual owner and do not survive his death or incapacitation, as those in the line of succession are often unable to unite and resolve disagreements, or lack his talents. These entrepreneurs, although very talented and hardworking, often have little formal education and lack modern managerial capacities. The assets and liabilities of the firm and the owner are intertwined. Formal firms of the same size have distinct departments (e.g. production, sales, human resources, finance) and a transparent organizational structure, whereas all the functions of large informal firms are usually managed by the owner, in the same manner as in

an informal microenterprise. Apart from the owner and a few permanent employees (rarely more than five), the personnel of large informal firms are primarily temporary. Permanent employees are normally confined to an accountant, a chauffeur and/or a messenger.

Bookkeeping of large informal firms is usually outsourced to an informal accounting firm, while all medium-size formal firms have in-house accounting departments. As a result, accountants with minimal education do the books for a number of firms simultaneously, paid by the task for end-of-year reporting. Outsourcing of accounting has become so widespread that the business associations of accountants of the sub-region have asked fiscal authorities to accept only financial documents signed by an authorized accounting expert. This demand has hardly stopped the spread of fraudulent accounting. Instead, there is now just a higher level of complicity between informal accountants and their formal counterparts. The informal accountants do the work, and the authorized accountants provide their seal of approval. The absence of honest accounting is one of the distinctive features of the informal sector, particularly the large informal sector.

It is common knowledge that most of large informal firms engage in tax evasion and smuggling. It is also widely believed that they benefit from acquiescence or even collusion from high government officials. Despite their size and political connections, however, large informal firms are vulnerable to government crackdowns because they follow practices of small informal firms yet are visible to the government and public opinion.

The fragility of large informal firms is illustrated in Table 6 showing the share of firms that survived and disappeared between 2007 and 2009 in Ouagadougou. Only 54 percent of large informal firms surveyed in 2007 had survived as of 2009, while for formal businesses the survival rate was 76 percent. The survival rate of large informal firms may be understated, however, as firms often closed and reappeared in a different form.

Table 6: Survival rates of large informal and formal firms in Ouagadougou

Firms	Surviving	Disappeared
Formal	76%	24%
Large Informal	54%	46%
Total	64%	36%

4.2 Connections between Formal, Small Informal and Large Informal Firms

Relations between formal and informal firms are complex, with cases of both competition and cooperation. Many formal firms rely on informal distributors. Commerce and construction involve particularly developed ties and subcontracting between formal and informal operators. Customs clearance for imports illustrates these interactions. Many unauthorized customs clearance agents work, in collusion with the legally authorized agents. The informal actors clear merchandise from the port at much lower costs, using the authorized agent's seal in exchange for a side-payment to the latter.⁸ Similarly, in the construction sector, government procurement and other large contracts are usually reserved for formal firms but these firms then subcontract most of the work to informal firms.

Table 7 (see Appendix) shows business relationships for various categories of firms (formal, large informal and small informal). Rows show their customers and suppliers, separated into public sector, large enterprises, small enterprises, households and direct exports. For example, for formal firms in Dakar, the public sector constitutes 23 percent of customers and 6.8 percent of suppliers. Several features emerge. Not surprisingly, formal firms tend to

⁸ A recent World Bank (2013) study of Cameroon also illustrates the role of informal customs clearance agents.

transact more with larger enterprises and the public sector than do large informal and small informal firms. Conversely, small informal firms tend to purchase and sell more to small enterprises. Large informal firms' customers and clients are as usual an intermediate case. However, large and small firms do a substantial volume of business together, supporting the complementarity relationships discussed above among various types of firms.

In other areas, competition from informal firms, particularly importers, undermines formal producers and distributors. A major part of the informal sector revolves around smuggling to evade import barriers designed to protect local manufacturers, e.g., in sugar and clothing. Many other goods are smuggled in, notably used cars, used clothes, and pharmaceuticals (including counterfeit drugs), undercutting formal distributors of these products who are subject to payment of import duties, particularly in Benin.⁹

There are three categories of small informal firms who succeed in transitioning to either the formal sector or the large informal sector as they grow: those who remain entirely informal; those who move to an intermediate stage of formality; and those that become part of the formal sector. Owners in the first category almost always have a low level of education, and remain individually-operated enterprises despite handling sales reaching millions of dollars. These actors are found mainly in retail, transportation, or importing and exporting. They conceal their activities completely, or reveal only a small fraction of revenues subject to a presumptive tax. These firms frequently declare bankruptcy only to reappear under a different name, as noted above. They use premises that disguise their activities, pay low rents, employ few permanent employees (mainly family members) and sometimes have several fiscal identification numbers under different family members' names, each used for fraudulent import activities. In the second category, there are firms that declare themselves as formal, but maintain many informal practices. They tend to be in construction and in certain service sectors. They often rely on government procurement and would be unable to obtain contracts without de facto formalization, including payment of regular business taxes. Nevertheless, they retain many informal practices, particularly fraudulent bookkeeping. Firms in the final category are essentially part of the formal sector. These are quite rare, and are limited to those with experience in government or in other formal private companies. They had left their previous occupations to start up their own business, but, lacking capital, they began with small-scale activities. As they grew, they progressively transitioned to formal status.

Few firms are completely formal firm in West Africa. Many entrepreneurs that we met from the formal sector admitted to selling products to firms in the informal sector without declaring or paying the value added tax. Other times, they fail to record transactions in their official accounts. Most of these firms claim that tax evasion is necessary to compete with informal firms. Other firms have both formal and informal divisions. They decide on which entity to use – formal or informal – depending on the nature of the market in which they are operating.

5. EVIDENCE OF UNDER-REPORTING OF SALES FROM CUSTOMS DATA

To provide some evidence on the magnitude of under-reporting of sales by the large informal sector we carried out a comparison for Senegal of firm-level imports, reported by customs, and sales as reported to the tax authorities and recorded by the government statistical agency. We randomly selected a number of firms that paid the lump-sum presumptive tax (in principle reserved for small informal firms). The data set was limited to importing firms with an identification number that allowed matching firm-level imports and reported sales on tax returns. Given that most importing firms do not have an identification number (an identifier is surprisingly not a requirement for importing in most Francophone African countries), we were able to match only 134 firms in the fiscal and customs statistics, representing a small proportion of the firms that pay the presumptive tax. Moreover, it is not possible to fully identify the largest

⁹ See Golub and Mbaye (2009), Golub (2012) and Benjamin, Golub and Mbaye (2014).

informal operators from these data. Large informal firms often have many identification numbers and fragment their imports, making it difficult to determine their total imports. Indeed, of the 134 identification numbers whose imports and sales we were able to cross-check, it would not be surprising if a good number belonged to a few individuals.

Notwithstanding these limitations, our analysis starkly reveals the extent of under-reporting of sales. Of the 134 firm observations, 55 have imports recorded by customs greater than total sales reported to the fiscal authorities. The median import-to-sales ratio is 69 percent and the average is 189 percent. In a few cases, imports are 10 times greater than sales, and are often several times greater. Imports could exceed sales if imports were for capital equipment or wound up in unsold inventories. But the discrepancies are much too large to be explained as investment, particularly given the largely commercial nature of the activities concerned; underreporting of sales is a far more likely source.

False declarations are facilitated by the lack of cooperation and exchange of data between customs and the fiscal agency. In fact, the discrepancies between imports and reported sales may be even larger than our results suggest, given that imports can also be understated by smuggling and under-invoicing.

The government officials we interviewed are well aware of this situation and acknowledged that fraud is common. Joint squads of customs and tax agents identify a significant number of fraudulent tax filings. When they identify tax evasion, they subject the firms to penalties and regular business taxes.

6. CASE STUDIES OF INDUSTRIES

In this section, we discuss a few sectors in which large informal firms operate, based on our interviews and other research. Most of the examples in this and the following sections are related to commerce, as this is by far the most important sector in which the informal sector operates. Particularly in Benin but also in the other countries, smuggling is a major arena for the large formal firms. The findings from the interviews largely corroborate those of the surveys, showing that the large informal firms' organization and characteristics are closer to those of the small informal sector than the formal sector.

6.1 The Used Vehicle Market in Benin

The used car market plays a crucial role in Benin's economy, accounting for perhaps 10 percent of GDP. The used vehicle market in Benin is mostly oriented towards informal re-exports to Nigeria, where used car imports are severely restricted, and land-locked countries to the north (Chad, Niger, Mali and Burkina Faso). The value chain includes a large number of participants including shippers, customs clearance agents, used vehicles salesmen, car parks, and drivers, etc.

In Benin's capital, large open-air parking lots have been developed to serve the used vehicle market, for both cars and trucks. These parks are privately owned but lack a strict administrative structure, as is typical of the informal sector. All parks have a director and a general manager responsible for issuing certificates of exit from the park. Apart from these two individuals, there are temporary workers with a variety of tasks. The parks claim to serve clients from both the formal and informal sectors. Each car park houses a large number of importers with a designated area for displaying their cars.

The firms operating in the parking lots import an average of 100 to 150 vehicles per year each. The vehicles are an average of 15 years old and generally too dilapidated and too old to be in demand in developed countries, but are prized by low-income Africans who do not have the

means to purchase newer vehicles. Vehicles are shipped from Europe, North America and Japan to Cotonou.

To an even greater degree than in the rest of the informal sector, a majority of the workers at the parking lot are male. Among workers, levels of education vary: some are illiterate, while others have a high school education or higher. Most of the workers we met had had previous professional experience, both in the formal or informal sectors, and sometimes in formal firms in other countries. Parental relations are common among employees; one manager even admitted to having his wife as his secretary. Others may not have immediate family, but involve cousins, in-laws, or close friends.

Every manager we interviewed claimed that their business is registered. They all stated that they had a fiscal identifier, required for an importer card. They all added, however, that it is almost impossible to conduct business in their country without participating in fraudulent activities. For example, some admitted to submitting financial statements to fiscal authorities that misrepresented their sales and profits. In addition, some acknowledged importing on behalf of a third party and billing them afterwards. They stated that they often bribe government agents to expedite the paperwork, which otherwise would be bogged down with indefinite delays. While all those we interviewed are under the lump-sum presumptive tax regime, their annual sales figures are at least \$400,000 – four times the limit required to be taxed a lump sum. Their headquarters are often small, with monthly rents at our below \$40. They lack internal accounting services and hire external accountants to handle their accounts.

6.2 Construction in Burkina Faso

Construction firms are also frequently very large. In Burkina Faso, for example, the manager of one of the firms we interviewed owns two enterprises, with three permanent employees at the first enterprise and five at the second. He also employs numerous contractual employees. The two firms share headquarters, and the combined turnover for the two firms is \$2 million. He views himself as formal, claiming to have a tax identification number and separate certified annual statements of accounts for each firm. He is subject to regular business taxes for the two firms, and hires an accounting firm to prepare the accounting statements each year. He previously managed a small formal commercial enterprise and has a master's degree in law. All of his employees have a university level of education. He told us that, "our enterprise started with a turnover of \$100,000 and has remained a sole proprietorship. We voluntarily participate in the formal sector and pay regular business taxes, with a sales figure of just above the required amount. As an informal firm, we would not be able deduct the VAT. When we created the firm we started with a few employees, and that has not changed." He acknowledged that many firms, even corporations such as his own, produce two sets of accounting documents. This is facilitated by the lack of collaboration between customs and tax agencies. He admits that he sometimes creates fake invoices, does not always invoice the value added tax, and omits some activities from his official accounts. He justifies these actions on the grounds that the government misuses public funds.

7. CAUSES AND CONSEQUENCES OF LARGE INFORMAL FIRMS

The literature on the causes and effects of the informal sector in developing countries focuses on small informal firms. Consideration of the existence of large informal operators alters the perspective substantially.

7.1 Causes

A large number of causes have been cited for the growth of the informal sector (see for example Gerxhani, 2004). Some authors, e.g. Calves and Schoumaker (2004) view the informal sector as the locus of small-scale survival activities in situations of endemic poverty

or dislocations associated with structural adjustment. This perspective coincides with the identification of informality with microenterprises or self-employment. It cannot explain the growth of large informal firms.

Another strand of literature, beginning with De Soto (1989), emphasizes state failures as the source of informal-sector growth. In this view, firms opt for informal status when the costs of formalization outweigh the benefits. Many recent studies adopt this approach, e.g. Perry et al. (2007), Kanbur (2009), Djankov et al. (2002), Loayza et al. (2005), Ishengoma and Kappel (2006), Arterido et al. 2007, and Marcouiller and Young (1995). This perspective is consistent with the existence of large informal firms, as these firms are large enough to be formal but choose to be informal. The following considerations affect firms' choice of informal sector status:

1. The benefits of formalization: quality of public services and differential access to these services for formal and informal firms.
2. The costs of formalization in the form of higher taxes and regulatory compliance costs
3. The extent to which informal firms are sanctioned for failing to comply with tax and regulatory obligations.

The first two apply equally to both large and small informal firms, whereas the third is particularly relevant for large informal firms. These firms are well-known to the authorities and are able to comply with formal sector requirements, but they are often not sanctioned if they fail to do so. In West Africa, corruption and state weakness enable large firms to operate with relative impunity, as the case studies above indicate. Connections with powerful religious and ethnic networks also provide cover for large informal firms.

As discussed above, large informal entrepreneurs, like their smaller counterparts, typically lack formal education and managerial training, and continue to operate informally even as they grow large. That is, in addition to the benefits of tax and regulatory avoidance, successful entrepreneurs may remain informal as a matter of style and preference.

7.2 Consequences

A major policy issue regarding the informal sector is whether or not it is detrimental to economic development and if so, the appropriate degree of pressure that should be exerted on firms to formalize. The literature identifies positive and negative effects of informal firms. A common argument is that informal employment serves as a sort of safety net and thereby contributes to poverty alleviation and even survival (e.g. Calves and Schoumaker, 2004). Furthermore, the flexibility of informal labor markets, particularly insofar as they avoid labor market regulations, enables informal firms to adapt their hiring to economic conditions and provides them with a competitive advantage in terms of lower wage and fringe benefits costs relative to formal firms. The downside of informality results from lack of compliance with laws and regulations, particularly payment of taxes and social security contributions, thereby undermining government revenues. The failure to pay taxes and adhere to regulations also means that informal firms have an unfair competitive advantage over formal firms, particularly foreign investors, with the latter bearing a disproportionate fiscal burden. This can result in a vicious circle of a dwindling formal sector and booming informal sector, as formal firms exit or shift to informal status, further reducing the tax base, etc. As a result, the formal private sector is very weak in West Africa as illustrated in Golub and Mbaye (2002) for Senegal. Moreover, lack of compliance with tax and regulatory obligations undermines "tax morale" and respect for the rule of law more generally (Perry et al., 2007). In this view, the informal sector is both cause and consequence of state weakness. Finally, the informal sector tends to supply low-quality goods (Gautier, 2002) that may be hazardous to consumers' health, such as counterfeit medications and smuggled gasoline.

This social cost-benefit analysis of informality is much more unfavorable for large firms than small firms. The safety-net rationale for informality applies to small firms, whereas the problems of tax evasion and regulatory non-compliance are much more pernicious for large firms. Overall, the policy implications are that costs of formalization are very high and should be dramatically reduced, to encourage firms to formalize. Moreover, the authorities should be much more vigorous in prosecuting large firms than small firms. Of course, the problem is that these large firms can exist precisely because of their political and economic influence, and can often block government efforts to crack down on them.

8. CONCLUSION

The existence of large informal firms is one of the most important aspects of the informal sector in West Africa, yet has been almost completely ignored in the literature until now. There are no publically-available data on these firms given that they massively understate their sales and income, yet in the countries themselves they are well known. In this paper we have examined large informal firms in three West African countries: Senegal, Benin and Burkina Faso. We used several methods to obtain information: our own surveys, semi-structured interviews, firm-level data from customs and tax authorities, and press reports, which together enable a good understanding of the nature and operation of these firms.

The following conclusions are applicable to the three countries studied. This reflects the many similarities between these countries as well as other members of WAEMU. They share a common currency and have harmonized macroeconomic, sectoral and trade policies. They have broadly similar socio-economic characteristics shaped by common historical factors, going back to the pre-colonial and colonial eras. As former French colonies with continuing strong French influence, WAEMU country institutions often resemble those of France, including labor- and product-market regulations and policy-making structures.

In terms of volume of sales and other measures of activity, our surveys find that large informal firms do not differ greatly from their formal counterparts. In general, large informal firms' measured social and economic characteristics, e.g. education of managers and workers, as determined from our survey results, tend to fall somewhere in the middle between formal and small informal firms. In terms of firm organization and managerial practices, however, our interviews and case studies reveal that large informal firms are more similar to small informal firms than formal firms.

Like others in the informal sector, large informal entrepreneurs have limited formal education, and begin as small operators. A select few become very wealthy and influential due to superior entrepreneurial ability and work ethic, along with assistance from ethnic and religious trading groups. The main sectors in which they operate include import-export trade, domestic wholesale-retail, transportation, and construction. In terms of family-based organization and management, they remain very much like small informal firms even when they grow large. In addition, they are fragile insofar as they often are run by a single individual who may dissolve the business either because of a conflict with tax or customs officials and/or to reappear under another name.

The existence of large informal firms raises a fundamental question of whether these firms play a positive role in raising incomes, or whether they are a symptom of a discouraging business climate and instead have a negative effect on economic performance and development. Both have some validity. Certainly, large informal firms are successful in many respects, and their growth illustrates the skills and work ethic of their owners. However, the fact that these firms choose to remain informal and devote considerable efforts to evade compliance with tax and regulatory obligations is indicative of serious underlying problems with the business climate and the ability of the state to enforce the rule of law.

Our findings regarding the heterogeneity of the informal sector have important policy implications. Improvements in the business climate (reduced corruption, simplified government regulation and taxation, and better public services) are important for inducing both large and small informal firms to formalize. In other respects, however, policy should differentiate between large and small firms. As has been widely recognized, small informal firms should be assisted and nudged towards formal status gradually, given their weakness and their role as a safety net for the poor. More robust enforcement of fiscal and regulatory obligations should be directed at large informal firms, who remain informal by choice rather than necessity. Large informal firms engage in large-scale tax evasion and contribute to a business environment that is inimical to investment by formal firms, including foreign direct investment. The small formal sector shoulders a disproportionate share of the tax burden and suffers a competitive disadvantage from adhering to government regulations. The existence of successful large informal firms is a testimony to the entrepreneurial potential of West African economies. This dynamism is throttled, however, by weak business climate and lack of enforcement, which encourage and allow large informal operators to operate with near impunity.

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APPENDIX

Table 4: Sources of financing for firms in the three cities
Method of Financing

		Internal funding or retained earnings	Bank credit	Loan from a family member of friend	Savings, gift, inheritance
Dakar	Formal	64%	20%	4%	12%
	Large Informal	62%	16%	8%	14%
	Small informal	64%	8%	2%	26%
	Total	64%	13%	4%	20%
Cotonou	Formal	76%	15%	7%	2%
	Large Informal	64%	8%	14%	14%
	Small informal	68%	15%	0%	16%
	Total	70%	14%	4%	12%
Ouaga	Formal	67%	19%	14%	0%
	Large Informal	55%	14%	23%	9%
	Small informal	56%	8%	20%	16%
	Total	59%	10%	19%	12%

Table 5: Interest rates on bank loans

	Dakar	Cotonou	Ouagadougou
Formal	15.3%	15.2%	12%
Large informal	20.7%	22%	35%
Small informal	23.2%	24%	36.1%

Table 6: Survival rates of large informal and formal firms in Ouagadougou

Firms	Surviving	Disappeared
Formal	76%	24%
Large Informal	54%	46%
Total	64%	36%

Table 7: Business relationships between various categories of firms (formal, large informal, small informal)

	Formal (%)		Large informal (%)		Small informal (%)		Total (%)	
	<i>Customer</i>	<i>Supplier</i>	<i>Customer</i>	<i>Supplier</i>	<i>Customer</i>	<i>Supplier</i>	<i>Customer</i>	<i>Supplier</i>
Dakar								
Public Sector	23.0	6.8	8.0	4.0	8.2	7.1	11.7	6.5
Large Entreprise	18.9	66.2	22.0	62.0	4.4	34.2	10.7	46.4
Small entreprise	6.8	12.2	8.0	16.0	9.2	43.5	8.4	31.5
Household	47.3	1.4	58.0	8.0	77.7	8.2	67.2	6.5
Direct exports	4.1	13.5	4.0	10.0	0.5	7.1	2.0	9.1
<i>Total</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>
Cotonou								
Public Sector	20.3	17.5	16.7	9.8	7.3	7.5	11.6	10.1
Large Entreprise	31.3	35.1	21.4	29.3	10.1	33.8	16.6	33.3
Small entreprise	20.3	5.3	14.3	17.1	16.3	39.4	16.9	28.3
Household	20.3	5.3	42.9	4.9	64.6	8.1	51.4	7.0
Direct exports	7.8	36.8	4.8	39.0	1.7	11.3	3.5	21.3
<i>Total</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>
Ouagadougou								
Public Sector	51.3	10.3	27.3	6.7	8.9	5.8	16.6	6.5
Large Entreprise	20.5	61.5	18.2	60.0	5.8	43.9	9.1	48.0
Small entreprise	12.8	7.7	12.1	6.7	15.2	34.5	14.5	28.1
Household	15.4	2.6	42.4	6.7	68.3	6.7	58.5	6.2
Direct exports	0.0	18.0	0.0	20.0	1.8	8.5	1.4	11.0
<i>Total</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>

Figure 1: Distribution of educational attainment of workers by sector

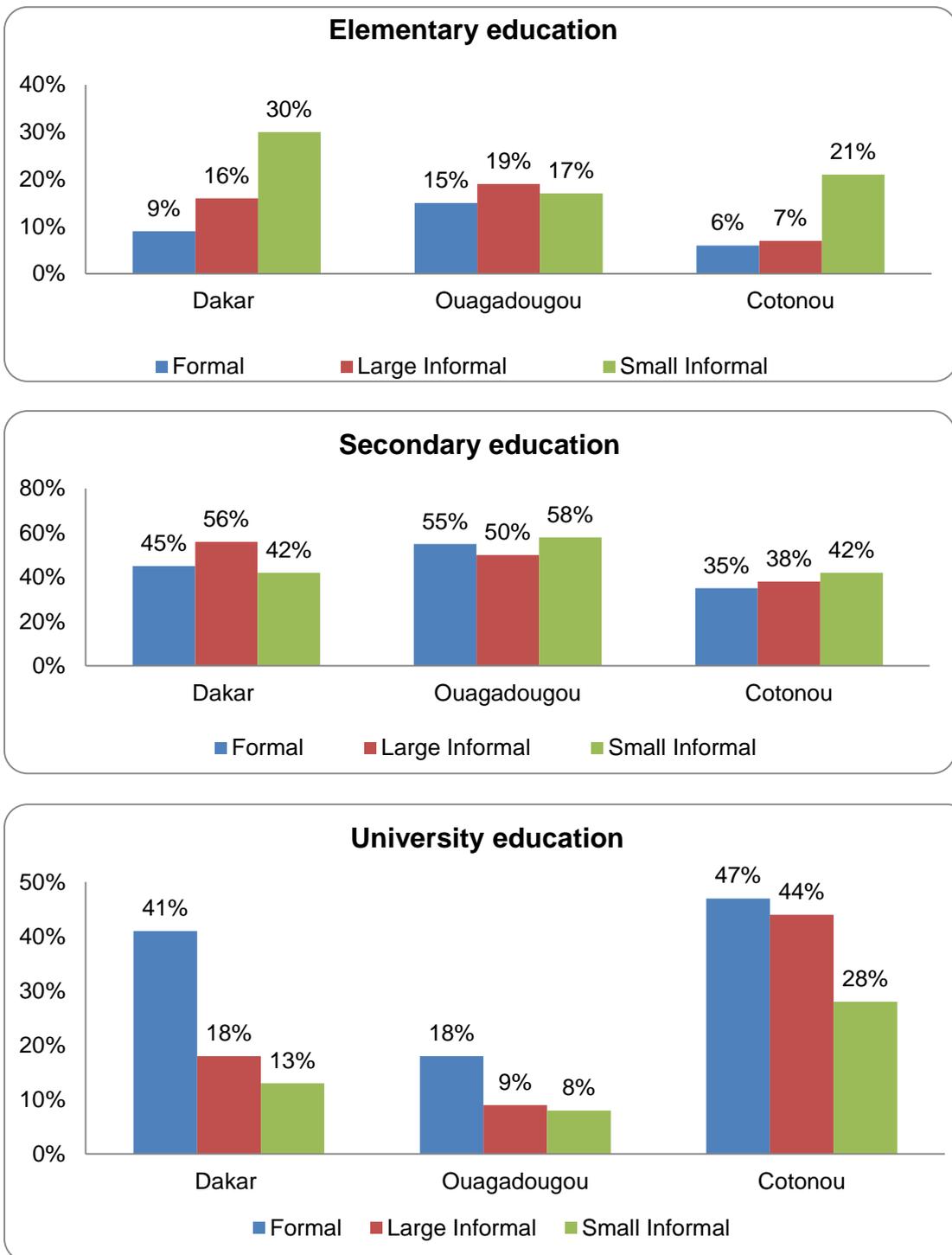


Figure 2: Share of exports in total sales according to formal or informal status

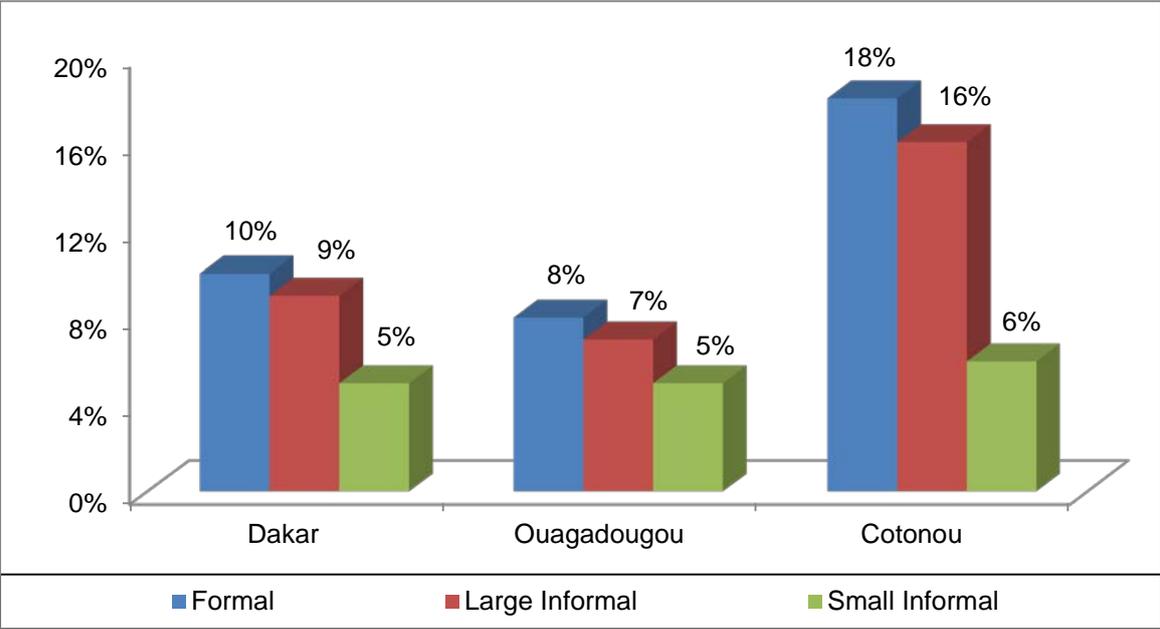


Figure 3: Proportion of firms using ICT, by sector, three cities

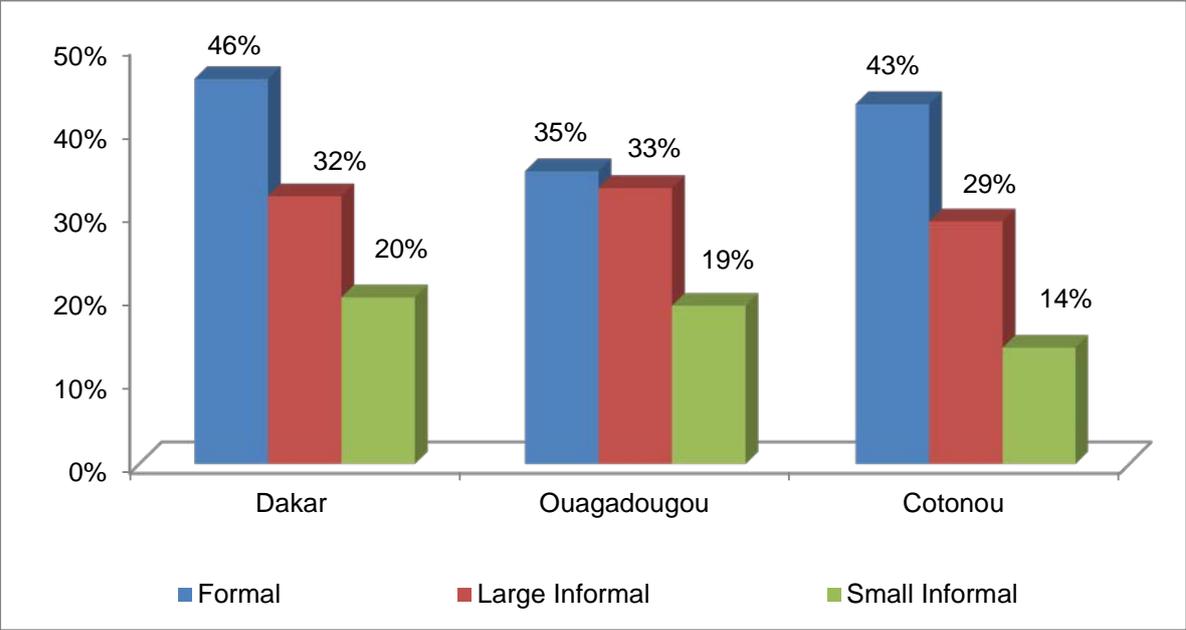


Figure 4: Share of firms complying with social security obligations

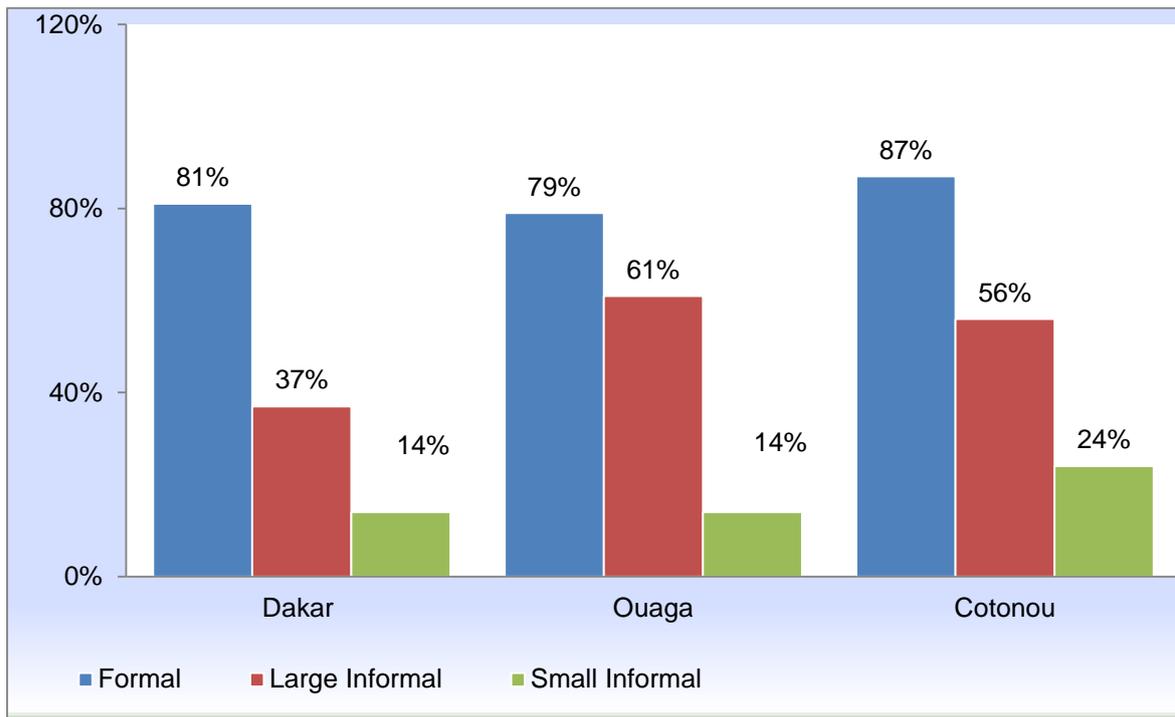
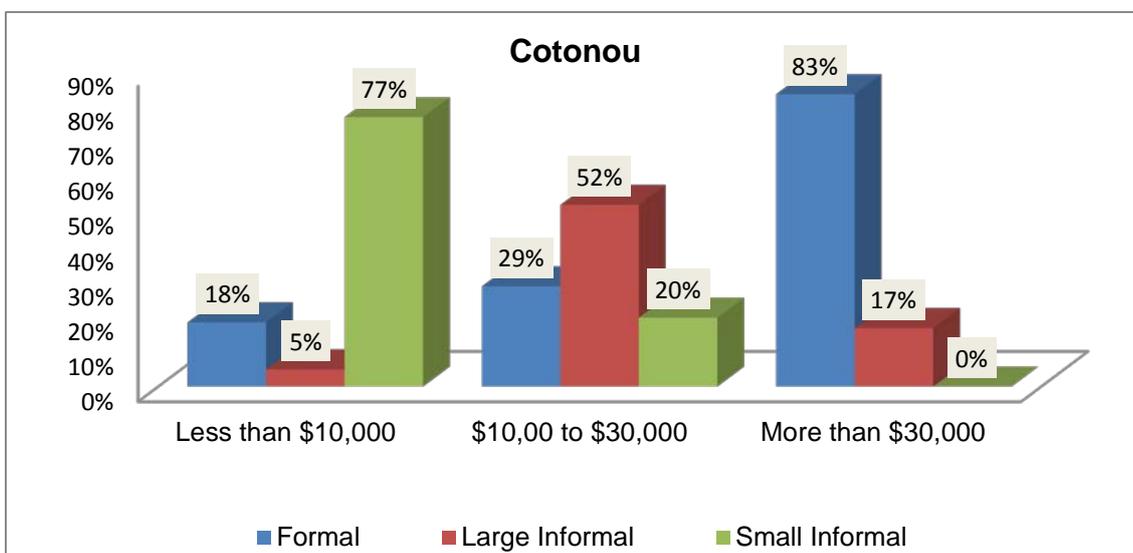
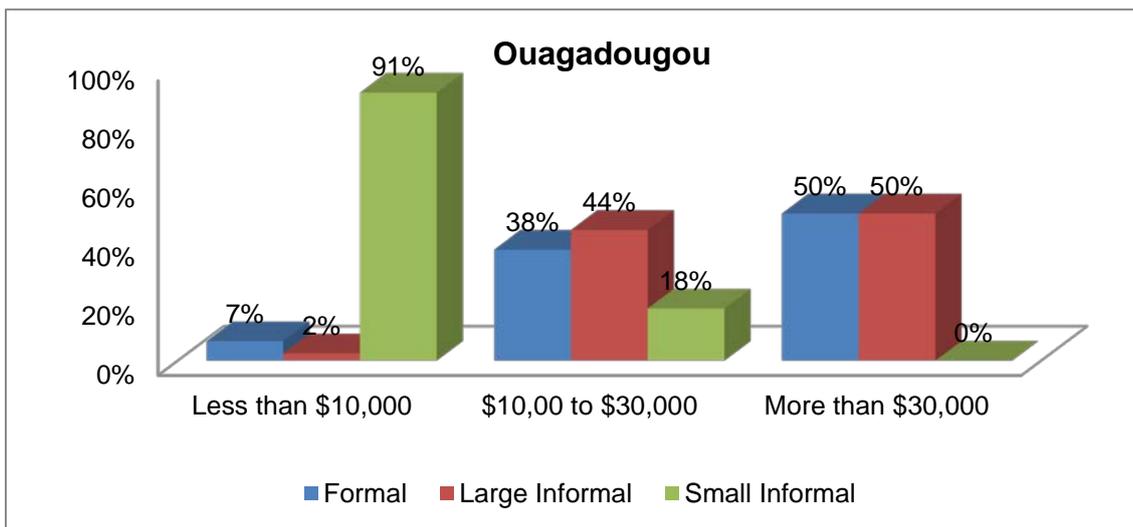
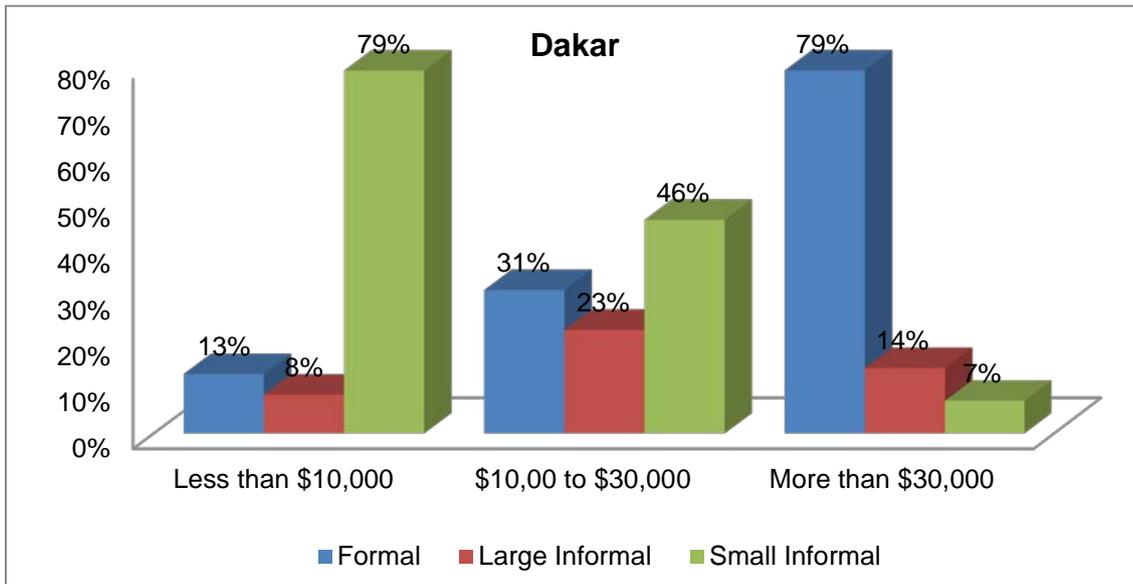


Figure 5: Distribution of firms by productivity and informality (share of firms by status within each productivity range)





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