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INFORMAL SECTOR, FRAGILITY, AND CONFLICT IN THE SAHEL: THE CASE OF MALI

In Mali, as in most West African countries, the informal sector accounts for nearly 55% of GDP, with strong sectoral differences. Its share of value added thus ranges from nearly 98% in the primary sector to 22% in the secondary sector and 66% in the tertiary sector. While the structure of the Malian economy does not differ significantly from that of most other African countries, certain characteristics of underdevelopment appear far more pronounced. Mali is landlocked, classified among the least developed countries, with a very high incidence of poverty. Moreover, the instability and conflict that have prevailed since 2012, driven by the rise of Islamist religious radicalism, have further worsened the situation.

This book forms part of a long series of studies conducted in various countries, involving a wide range of researchers under the direction of Ahmadou Aly Mbaye. These studies, which focus on the informal sector, employ a similar methodology and have covered more than a dozen African cities. The most recent research, carried out in countries affected by conflict (Mali, Niger), has significantly improved our understanding of the informal sector by examining how it manifests itself in contexts of fragility. While institutional factors, such as governance, play a significant role in triggering and exacerbating conflicts, economic vulnerability (unemployment and underemployment) acts as a powerful amplifying factor. In addition, insecurity resulting from the crisis tends to further shrink the formal sector and thereby contribute to the expansion of informality.

The issues discussed in this volume are fully consistent with those examined in other national and regional contexts. As such, it offers interesting comparative perspectives, both with regard to the characteristics and operating modes of actors in the formal and informal sectors, and with respect to the public policies implemented. New themes are also addressed in this book, which are directly or indirectly linked to Mali's status as a country affected by conflict.

Ahmadou Aly Mbaye is Professor of Economics and Public Policy at Cheikh Anta Diop University in Dakar, where he currently serves as Director of the Laboratory for the Analysis of Development Policies (LAPD). Previously, he served as Rector of Cheikh Anta Diop University in Dakar, Dean of the Faculty of Economics and Management at the same university, and President of CIEREA (an organization bringing together deans and directors of economics research centers across 18 Francophone African countries). Professor Mbaye, who has an extensive record of publications in development economics, has also held numerous positions in international research centers and think tanks. Notably, he has been a member of the Programme Committee of the African Economic Research Consortium. He is a Senior Research Fellow at ZEF (Center for Development Research, University of Bonn), a member of the Scientific Council of IDDRI (Institute for Sustainable Development and International Relations), and a Non-Resident Senior Fellow at the Brookings Institution.

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FOREWORD

BY AHMADOU ALY MBAYE

This book forms part of a long series of research projects undertaken by our team on the informal sector in Africa since the second half of the 2000s. The first phase of the research was conducted between 2006 and 2007 in West Africa, initially covering three countries: Benin, Burkina Faso, and Senegal. A second round of surveys was carried out in Senegal and Benin between 2008 and 2010, with the dual objective of revisiting enterprises surveyed during the first round and expanding the scope of the original questionnaire. The second wave of surveys focused on Central Africa, particularly Cameroon and Gabon, between 2014 and 2015. Finally, a last wave targeting conflict-affected countries Niger and Mali was conducted between 2017 and 2018.

All these studies employed the same methodological approach, combining quantitative methods (based on surveys of formal and informal enterprises) and qualitative methods (based on interviews and focus groups). Surveys were carried out in the main cities of the countries concerned : Cotonou (Benin), Ouagadougou (Burkina Faso), Dakar (Senegal), Douala and Yaoundé (Cameroon), Libreville (Gabon), Bamako and Mopti (Mali), and Diffa and Niamey (Niger). In each of these countries, a representative sample of informal enterprises was drawn using an identical methodology and standardized data collection instruments (questionnaires and interview guides), thereby ensuring comparability of the data collected across countries. This did not prevent the questionnaire from evolving over time to reflect changes in our research priorities and to capture certain country-specific features. In the cases of Mali and Niger, conflict-affected areas (Mopti and Diffa) were selected for data collection in addition to the national capitals (Bamako and Niamey).

Moreover, the standard questionnaire was substantially modified to account for the fragility and conflict situations prevailing in these two countries and their implications for formal and informal activities. Available grey literature in the various countries was also used, along with relevant secondary data sources.

These diverse sources and well-targeted methodological approaches enabled us to collect original data, allowing for a deep and detailed understanding of the informal sector its actors (both enterprises and workers), their interactions among themselves and with formal-sector actors, the types of policies targeting the private sector in general and the informal sector in particular, its implications for growth and the country's structural transformation process, its regional and international dimensions (through cross-border trade), and the ethnic, religious, and other networks that structure it.

Research conducted in conflict-affected countries (Mali and Niger) has significantly enhanced our understanding of informality by examining how it manifests itself in conflict contexts. While institutional factors such as governance play a non-negligible role in triggering and exacerbating conflicts, economic vulnerability (unemployment and underemployment) acts as an equally important amplifying factor. In addition, insecurity arising from the crisis

tends to further shrink the formal sector and thus significantly contribute to the expansion of informality. The issues discussed in this volume are fully aligned with those examined in other national and regional contexts and thus offer highly interesting comparative perspectives, both with respect to the characteristics and modes of operation of formal and informal actors and with regard to the public policies implemented. New themes are also addressed in this book that are directly or indirectly linked to Mali's status as a conflict-affected country.

The significant research results presented in this book could not have been achieved without the effective and professional contribution of a number of individuals and institutions, to whom we wish to express our deep gratitude. Our thanks first go to the members of the research team in Mali, which includes colleagues from the Faculty of Economic Sciences at the University of Social Sciences and Management of Bamako, led by Professor Moulèye Touré; the Center for Studies and Capacity Building in Analysis and Advocacy (CERCAP), led by Boubacar Macalou; and Mali's National Institute of Statistics (INSTAT), led by Harouna Koné, with the support of Fatou Dia Ndiaye and Mohamed Kanambaye. These three Malian institutions mobilized a very large number of collaborators at different levels (technicians, enumerators, data entry and statistical analysis operators, logisticians, etc.) to ensure that all data collection activities including those in conflict zones were carried out to completion with the highest level of rigor.

The research team also includes long-standing colleagues and partners who played a leading role in all phases of our research on the informal sector in Francophone Africa (both West and Central Africa). They include Stephen Golub (Swarthmore College), Nancy Benjamin (World Bank and the Development Policy Research Unit, University of Cape Town), and Dominique Haughton (Bentley College). Their extensive expertise and experience in research were invaluable assets in the conduct of this project. Ibrahima Tall of ANSD (Senegal) also provided substantial assistance in the design of data collection instruments and in data analysis.

We also extend our gratitude to several Malian institutions that shared perspectives and relevant documentation with our team to help better understand the phenomenon of informality in Mali. These include employers' organizations and the chamber of commerce, trade unions, and various government services such as the Tax Directorate, the Treasury, the Directorate of Trade, and many central departments of the Malian public administration.

International organizations based in Mali, as well as formal and informal enterprises that generously responded to our questions, are also gratefully acknowledged.

Regrettably, two major contributors who played a decisive role in the design and implementation of the project passed away well before the finalization of this book. Stephen Golub died in 2021, and a few months later, Fatou Guèye passed away in 2022. The absence of these two pillars of our team has been deeply felt.

Finally, these results could not have been achieved without the generous financial support of donors who provided substantial funding to cover the significant costs associated with large-scale fieldwork projects of this nature. Generous funding from the World Bank complemented earlier funding from the Agence Française de Développement (AFD) to cover the cost of the project. AFD also made available a technical team that played an important role in evaluating the project's deliverables throughout its implementation. Mihoub Mezhouagi, Rohen d'Aiglepierre, Mathias Kuepie, and Nathalie Guilbert were the main coordinators of this team. We express our sincere gratitude to all of them.

All phases of the project were designed and coordinated by Ahmadou Aly Mbaye, with the assistance of Fatou Guèye. These included, in particular, the preparation of the research project, the design of the questionnaire, interview guides, and sampling methodology, the supervision of data collection, analysis, and manuscript writing, and finally dissemination activities in Mali and abroad. We also thank the anonymous reviewers whose comments provided valuable assistance in revising the manuscript.

CHAPTER I
SUMMARY AND CONCLUSIONS

In Mali, as in most West African countries, the informal sector accounts for a very large share of GDP (55%), with, as elsewhere, pronounced sectoral disparities. Informality thus represents nearly ninety-eight percent of activity in the primary sector, twenty-two percent in the secondary sector, and sixty-six percent in the tertiary sector (INSTAT, 2015). While the economic challenges facing Mali are broadly similar to those confronting most African countries, they take on a particularly acute form in this country. As a landlocked country, Mali belongs to the category of least developed countries, with development indicators that compare rather unfavorably with the continental average. Moreover, the political instability that has prevailed since the early 2010s, driven by the rise of Islamist religious radicalism, has played a pernicious role in the evolution of these indicators.

If one refers solely to Mali's national accounts, the security crisis affecting the country has significantly impacted overall production levels. Nevertheless, cotton production reached record levels in the pre-COVID period, placing Mali at the forefront of producers in the sub-region. Officials of the National Institute of Statistics of Bamako (INSTAT) whom we interviewed explain this situation by the historically low share of the northern regions those most affected by the crisis in the country's Gross Domestic Product (GDP). However, other actors in the Malian economy whom we met through interviews and focus groups tend instead to point to weaknesses in the statistical compilation system as an explanation for this paradox. These actors emphasize the enormous production losses observed across the country in areas as diverse as livestock farming, river transport, and the financial sector. The results of our interviews and focus groups appear, to some extent, to confirm these production losses.

Indeed, there seems to be an increasing concentration of informal activities in certain sectors such as retail trade, import export, and artisanal extractive activities following the crisis. Equally undeniable is the development of a shadow economy, marked by the proliferation of illicit activities of all kinds, such as arms and drug trafficking, which further exacerbates insecurity (Anderson, 2015). In addition, our surveys reveal substantial losses in production and investment incurred by both formal and informal enterprises as a result of the insecurity generated by the crisis. Finally, an analysis of certain value chains in Mopti such as air and river transport, hospitality, catering, and the banking system reveals very large losses in value added.

Research Objectives

The main objective of this research is to improve our understanding of informal entrepreneurship and employment in Mali, and of how the informal economy has been affected by the crisis. Depending on whether they belong to the formal or informal sector, whether they are small or large, and whether they operate in certain sectors rather than others, enterprises may have been positively or negatively affected by the crisis. Has the informal sector,

by virtue of its flexibility, been able to reclaim certain markets previously managed by the formal sector? Have small informal actors suffered from the influx of migrants from crisis-affected regions, who represent a new source of competition? Or has this influx instead translated into increased demand for certain goods and services? Specific issues relating to the economic integration of youth and their choices between the formal and informal economy as well as between legal and illegal activities (including aspects of violent extremism) are also addressed.

More specifically, the study seeks to shed light on the following issues:

- the complex interrelationships between political instability, vulnerability, the informal sector, and armed conflict in Mali;
- the profile of private entrepreneurship in Mali and the ways in which it is structured by informality;
- the profile of informal employment in Mali and the role played by women and young people within it;
- the factors explaining the dominant role of the informal sector in the Malian economy and the part played by conflict;
- the productive activities and actors most affected by the crisis, as well as those who benefited from it;
- the strategies implemented to cope with the crisis;
- the zones of insecurity resulting from the conflict and the consequent reshaping of trade patterns (goods exchanged, routes used, actors involved, etc.).

Methodology and Data

In this study, we employ a combination of quantitative and qualitative approaches based on the collection of primary and secondary data, semi-structured interviews, and bibliographic and documentary analysis. The objective is to produce public policy recommendations grounded in rigorously constructed scientific evidence.

Quantitative data come from surveys conducted in the cities of Bamako and Mopti in 2018, while qualitative data were collected through interviews and focus groups carried out during the same period.

In our surveys, we use seven criteria to define informality: the size of the activity; registration of the activity with a given administrative authority; payment of taxes, or the type of tax paid; the keeping of accurate accounts; mobility of the workplace; access to bank credit; and the existence of social protection coverage for employees. See Benjamin and Mbaye (2012), and Mbaye, Gueye, and Golub (2020) for a review of these criteria and the limitations associated with each. In this work, we consider informality as a continuum rather than a purely dichotomous phenomenon.

The target population of the survey consists of all formal and informal enterprises in Bamako and Mopti. The sample is stratified, with three groups of interest. Group 1 consists of formal enterprises; Group 2 includes large informal enterprises; and Group 3 comprises small informal enterprises. The sampling frames used for these target groups are, respectively : all enterprises subject to the real tax regime; all enterprises subject to the lump-sum tax regime while generating turnover above a certain threshold (20 million CFA francs); and informal production units subject to the presumptive tax regime, including both those that pay the presumptive tax and those that pay no tax at all. The sample size comprises four hundred (400) production units in Bamako and three hundred (300) production units in Mopti.

Qualitative analysis consists primarily of conducting semi-structured interviews and focus groups in order to collect the views of various actors on different dimensions of informality. It followed the same logic as in our previous studies (Benjamin and Mbaye, 2012; Mbaye, Gueye, and Golub, 2020).

One particularly important result emerging from the data collected in Mali is the validation of the hypothesis that informality is better captured as a continuum of variables rather than as a purely dichotomous concept. When we use our seven informality criteria to classify the different enterprises in our database, the results diverge considerably, with each criterion yielding a classification that differs significantly from the others.

I.1. Dominant Features of the Labor Market in Mali

One of the defining characteristics of the Malian labor market is the relatively high rate of population growth, which directly affects the growth of the working-age population. With a population growth rate of around three percent (3%), Mali is characterized by a very young population that is unevenly distributed across the territory. The majority of the population is concentrated in Bamako, creating significant economic and social challenges, including the expansion of informal settlements, insecurity, unemployment, and job precarity.

Analysis of labor force participation rates shows that men participate more actively than women in the labor market. Unemployment is much more pronounced in the regions of Bamako and Koulikoro, where it far exceeds the national average of ten percent (10%), and it affects women much more than men in Mali. Self-employment is a defining feature of informality in Mali. There is also a significant gap between average wages in the formal sector in the two cities. The average wage is approximately one hundred and fifty thousand CFA francs (CFAF 150,000) in Bamako, compared with seventy-four thousand CFA francs (CFAF 74,000) in Mopti. This gap is much smaller in the informal sector.

The channels through which employees are recruited also attracted our attention. Social connections appear to play a predominant role in recruitment dynamics. In both cities studied, nearly one-fifth of formal-sector employees surveyed reported having family ties with their employer. This connection is much more pronounced in Mopti than in Bamako. The training profile of employees by firm status is also highlighted in our results. Formal vocational training concerns very few employees across the different firm segments. It applies to a proportion ranging from one percent (1%) to seven percent (7%) in firms in Bamako and is almost nonexistent in Mopti. Working conditions in the informal sector are often highly precarious and contrast sharply with the much better conditions observed in the formal sector. Social benefits are virtually nonexistent in the informal sector.

I.2. Female Entrepreneurship

Analysis of the role played by gender in informal employment and entrepreneurship occupies an important place in our research.

Gender inequalities, which are observed in many spheres of African societies, are also evident in Mali's entrepreneurial ecosystem and labor market, particularly in rural areas.

Analysis of the dominant features of female entrepreneurship in Mali shows that it most often involves small informal activities, most of which are more excluded than their male counterparts from access to basic social services (training, finance, use of information and communication technologies (ICT), etc.). For example, in Bamako, the proportion of enterprises headed by women is only ten percent (10%) in the formal sector and eight percent (8%) in large informal enterprises. This proportion rises to eighty-three percent (83%) in the small informal sector. In Mopti, only eight percent (8%) of formal enterprises are headed by women, compared with forty percent (40%) of informal enterprises.

Financial exclusion is a dominant feature of entrepreneurship in Africa, from which even the formal sector is not entirely spared. However, exclusion affects women more than men. Women operating in the informal sector have almost no access to bank credit, unlike their male counterparts, whose access though limited is significantly higher.

I.3. Informality, Precarity, and Conflict in the Sahel

The correlation between economic precariousness of which informality appears to be one of the symptoms and the emergence of armed conflict has been widely debated in fragile countries, particularly in the Sahel. As noted above, the crisis has significantly shifted productive activities toward the informal sector. In all sectors, formal value added has contracted in favor of informal value added. Not only has the redistribution of productive activities shifted markedly toward informality, but illicit commercial activities also appear to have overtaken licit ones. A war economy has emerged in which drug trafficking, arms trafficking, and even human trafficking have taken precedence over the licit informal trade that had previously prevailed in the Sahelian–Saharan space (Meagher, 2015; Anderson, 2015). The development of these activities has been facilitated by a combination of factors, including the erosion of state authority, lack of opportunities, and rising inequalities (Blattman and Ralston, 2015).

Lack of opportunity in most African countries stemming from unemployment, underemployment, and job precariousness is considered by many authors to be the main determinant of violent conflict (Urdal, 2012; Collier and Hoeffler, 2004, among others). In such a context, demographic structure plays a major amplifying role. In particular, the greater the share of youth in the total population, the higher the risk of armed conflict. When this proportion exceeds twenty percent (20%) as is the case in most Sahelian countries the likelihood of armed conflict increases. This risk rises by one hundred and fifty percent (150%) when the share of youth exceeds thirty-five percent (35%). Studies conducted among young soldiers in armed rebel movements confirm that lack of opportunity played a major role in their

recruitment. This perspective must nevertheless be nuanced when considering terrorism-related violence, where the correlation with economic conditions appears less clear.

Public interventions targeting informal actors that are most likely to succeed are not necessarily the same in conflict-affected countries as in other contexts. Direct cash or capital transfers appear to be more effective in supporting the livelihoods of poor households than credit-based interventions. In any case, once conflict has erupted, the erosion of state authority combined with the relatively weak responsiveness of violence to income- and employment-related variables means that conventional policies aimed at the informal sector have little chance of success (Schoofs, 2015; Jacob et al., 2014).

In Mali's case, the armed uprisings that began with the first attacks by rebel groups starting in 2011 and rapidly spread throughout the north appear to have been facilitated both by economic difficulties (including those related to climate change) and by certain governance failures observed in the country (Mbaye, 2020).

I.4. Armed Conflict and the Informal Sector: Evidence from Our Survey Data

The assessment by business leaders of the crisis and its effects on their immediate environment and activities is also among the topics examined in this study. Regarding the origins of the crisis, most respondents point to governance-related issues, such as the poor management of the long-standing farmer herder conflict, mismanagement of land tenure, and inadequate handling of organized crime. Their assessment of modern conflict-prevention mechanisms is rather mixed.

Moreover, according to our surveys, the crisis has had tangible effects on the Malian economy. In Bamako, approximately forty-five percent (45%) of enterprises experienced stable or declining levels of production, while eighty percent (80%) of enterprises in Mopti believe that the crisis contributed to a decline in their production. Customer bases declined for a substantial share of formal enterprises (50%) in Bamako, whereas the situation remained stable for informal enterprises. In Mopti, more than eighty percent (80%) of both formal and informal enterprises reported a decline in their clientele as a result of the crisis.

The interrelationships between formal and informal firms also attracted our attention. As in other countries where similar data are available, these relationships are sometimes cooperative and at other times non-cooperative. However, a significant number of small enterprises particularly informal ones reported a substantial decline in the level of subcontracting they previously received from large enterprises prior to the crisis. For example, in Mopti, more than seventy-five percent (75%) of surveyed firms reported a decline in subcontracting relationships as a result of the crisis.

The results of our interviews show that the crisis has particularly affected the hospitality and restaurant sector due to the sharp decline in visitors. This led to substantial losses in the sector, resulting in the closure of establishments, layoffs in some hotels, and temporary layoffs ("technical unemployment") in others. Banking activities, like other branches of the private sector, have suffered damage in the form of losses of cash holdings in banks, expo-

sure to supply risks, and physical damage to assets. The occupation of the northern regions had negative consequences for banking activity in terms of :

- the suspension of new credit disbursements;
- non-repayment of outstanding loan installments;
- the inability to generate net banking income (NBI) in the affected areas due to the absence of banking operations (loans, deposits, banking services);
- etc.

In addition, it should be noted that bank branches were closed, particularly in Mopti, Gao, Kidal, and Timbuktu.

I.5. Informality–Productivity Relationship

At the core of the impact of informality on development lies its relationship with productivity. Our results confirm the existence of a productivity gap between formal and informal enterprises in Mali. In general, firms in Bamako are significantly more productive than those in Mopti. Productivity shows a clear downward trend as informality increases: the more formal an enterprise tends to be, the higher its productivity. The productivity gap between formal and informal firms appears robust to alternative measures of informality. We examined the relationship between productivity and each of the criteria individually used to define informality, and the productivity gap is consistently observed. According to our regression results, capital intensity, degree of informality, the education level of the firm manager, and the manager's age are the factors with the greatest impact on productivity.

I.6. Business Environment and the Informal Sector

Our surveys confirm that weaknesses in the business environment are keenly felt by both formal and informal enterprises, but more so by the latter. Approximately eighty-seven percent (87%) of formal enterprises in Bamako have access to water, compared with thirty-six percent (36%) in Mopti. In Mopti, on average, five percent (5%) of small informal enterprises own a generator to cope with recurrent power outages, compared with less than one percent (1%) in Bamako.

Access to finance is a major constraint affecting both the formal and informal sectors. In Bamako, two percent (2%) of small informal enterprises have access to credit, compared with one half of one percent (0.5%) in Mopti. By contrast, about nine percent (9%) of formal enterprises in Bamako have access to bank credit, compared with eight percent (8%) in Mopti. As a result, enterprises rely on alternate sources of financing personal savings, retained earnings, family loans, gifts, and inheritance to finance their investments. Approximately eighty percent (80%) of small informal enterprises and seventy percent (70%) of large informal enterprises in Mopti report personal savings as their main source of financing.

Information and communication technologies (ICTs) are an important aspect of modernizing business management and controlling costs. Their adoption depends on many factors, including the quality of connectivity and service costs at the national level, as well as the

education and training levels of actors and the availability of support programs. Unsurprisingly, the highest levels of use of new information and communication technologies (NICTs) are found in the formal sector, followed by large informal enterprises, while small informal enterprises lag far behind. Thus, the proportion of small informal enterprises with an email address is less than five percent (5%) in both Mopti and Bamako. Regarding the use of web-based services, thirty-two percent (32%) and twenty-two percent (22%) of formal enterprises in Bamako and Mopti, respectively, use such services, compared with less than twenty percent (20%) in the informal sector in both cities. However, the picture changes somewhat with respect to mobile phone use: fourteen percent (14%) of small informal actors in Bamako and fifty-four percent (54%) in Mopti, as well as twenty-two percent (22%) and eighty-six percent (86%) of large informal actors in Bamako and Mopti, respectively, use mobile phones. This finding is particularly important from an economic policy perspective, as most ICT-related services are increasingly available via mobile platforms. Consequently, major innovations related to banking services and access to information are becoming more accessible through mobile technology.

The quality of social services (infrastructure, justice, finance) affects firms' choices insofar as one of the advantages of formal status lies in greater access to these services. When such services are of poor quality, there is, naturally, less incentive for firms to become formal.

I.7. Taxation and Informality in Mali

Mali's tax system comprises two types of taxes: direct taxes and indirect taxes. These are supplemented by registration and stamp duties, as well as border taxation related to duties and taxes applicable to imports of goods and equipment. The presumptive (synthetic) tax regime applies to enterprises with annual turnover below fifty million (50,000,000) CFA francs before tax (the so-called lump-sum regime), whereas the real profit regime applies to enterprises with annual turnover equal to or exceeding fifty million (50,000,000) CFA francs before tax.

In Mali, the share of enterprises identified by the tax authorities and taxed under the real profit regime varies by city. Under this regime, firms are required to provide full accounting and financial documentation relating to their activities, enabling the tax authority to determine their tax liability in a more objective and relatively reliable manner. For all other firms not subject to the real regime, the tax authority generally lacks the necessary tools to accurately assess taxable income.

As a result, in Mali as in most other Francophone African countries the bulk of direct tax revenue comes from the minority of enterprises subject to the real profit regime, particularly those falling under the large-enterprise regime. There is a clear phenomenon of fiscal inequity, whereby the main burden of tax collection rests on the shoulders of a small number of enterprises.

More generally, business leaders' perceptions of the tax system are quite revealing, and this holds true across all categories of enterprises, both formal and informal. For example, the length of queues for tax payments is considered abnormally long by many business owners.

I.8. Informal Value Chains in Mali

We also analyzed several informal value chains in Mali, allowing for a detailed description of how informality operates and for contextualization of the data obtained from our surveys. These analyses were based on interviews, focus groups, and documentary analysis. The activities covered include artisanal dyeing, agro-food processing, and artisanal gold mining.

Textile dyeing is an ancient tradition whose earliest traces date back to the Ghana Empire. From the 1970s onward, the quality and beauty of Malian dyed fabrics attracted many traders from the sub-region, particularly from Côte d'Ivoire and Senegal. Beyond the sub-regional countries, many Malians residing in Europe, North America, and elsewhere import large quantities of dyed fabrics from Mali to meet demand in their countries of residence. Practiced along the banks of the Niger River, in marshlands, and within household compounds, dyeing is a predominantly female activity (80 percent women).

The processing of agricultural products constitutes another important segment of industrial activity in Mali, contributing substantially to value added, turnover, and employment in the sector. It includes a large number of informal enterprises. This activity is also dominated by women and encompasses a wide range of operations, such as fruit juice production, fonio processing, peanut paste production, and other food products that require relatively limited investment. It is an activity that does not require a high level of education; the highest level of schooling is generally secondary education. According to national accounts data, the value added generated by agro-food industries over the past five years increased from one hundred ninety-one billion CFA francs (CFAF 191,000,000,000) in 2011 to three hundred two billion CFA francs (CFAF 302,000,000,000) in 2015, of which 81 percent is attributable to informal production. Most agro-food manufacturing enterprises eighty percent (80%) are sole proprietorships with at least one employee.

Gold is Mali's second largest export product after cotton. Following the cotton crisis of 1999, gold rose to first place among Mali's export products. Artisanal gold mining is an informal and spontaneous mining activity that does not comply with the existing regulatory framework. It is an ancestral activity that is normally carried out during the agricultural off-season. This activity is mainly practiced in the regions of Kayes, Koulikoro, and Sikasso. Mining techniques are rudimentary, and work sites change from one year to the next. The technology used is evolving slowly with the introduction of ore crushers, motor pumps, motorcycle carts, and washing stations. Artisanal gold mining generates significant migratory movements, particularly during the rainy season, when neighboring countries close mining sites for security reasons. It also represents an important avenue for combating youth unemployment and poverty. The largest share of the labor force is in the age group between sixteen (16) and thirty-five (35) years, confirming the youthfulness of the population engaged in artisanal gold mining.

I.9. Evaluation of Policies Supporting the Informal Sector

In recent years, the Malian government has sought to strengthen the framework for improving the business climate by reinforcing public institutions responsible for enterprise support,

taxation, and access to finance. These efforts have focused in particular on institutions such as the Investment Promotion Agency (API-Mali), the Export Promotion Agency (APEX), the Chamber of Commerce and Industry of Mali (CCIM), and the National Employers' Council of Mali (CNPM).

In addition to tax and customs services, many other public administrations are involved in managing informality, particularly with respect to business registration (Ministry of Trade), financing, support services, training, and related activities.

Approved management centers represent one form of support provided by governments in the sub-region to small and medium-sized enterprises, particularly informal ones, in terms of financial and accounting management. Other initiatives include the project supporting retail traders and the Technical Unit for Business Climate Reform.

Upon evaluation, this support framework appears ineffective, characterized by overlapping services, limited funding, and very few tangible results.

I.10. Public Policy Recommendations

In this section, we formulate economic policy recommendations based on the findings of our quantitative and qualitative research. Some of these recommendations, which are broader in scope, also apply to other African countries where informality often takes similar forms and operates through comparable mechanisms. Given Mali's conflict situation, certain public policy instruments that may be effective in other African countries could prove inoperative in this context.

Transforming the Demographic Challenge into an Opportunity

Toward Better Targeting of Specialization Sectors and the Establishment of a More Business-Friendly Environment

Despite having one of the most dynamic demographic trajectories in the world, African countries generally face significant challenges in exploiting their comparative advantage in labor-intensive activities, which are the most important generators of growth. The expansion of the informal sector thus reflects the atrophy of the modern sector, which is too weak to absorb the vast majority of the working-age population.

The state should work to remove the obstacles hindering the growth and competitiveness of these sectors by undertaking appropriate investments and policy reforms. The successes achieved in this area in countries such as Ethiopia could be studied more closely in order to adapt them to the specific circumstances of each country.

Strengthening Governance and Public–Private Partnerships for the Implementation of Mutually Beneficial Reforms

Our research has revealed the detrimental effect that an overly burdensome business environment has on the growth performance and capacity of formal enterprises to create decent jobs. Conversely, the low quality of public services, combined with their high cost, increas-

es production costs and undermines firms' competitiveness. A win–win situation could emerge from negotiations between the public and private sectors both formal and informal leading to greater willingness to pay taxes in exchange for a higher-quality business environment. This could result in improved economic performance of private enterprises, both in terms of growth and their potential to create decent jobs. It could also lead to a tax system with a broader base and a more equitable distribution of the tax burden among different taxpayers.

In a country like Mali, where state authority has been severely weakened by conflict, the scope for such dialogue is more limited for obvious reasons, and it would only be relevant in southern regions that have been relatively less affected by the crisis.

Improving Conditions Across All Levels of the Informality Spectrum

One of the most important findings of our research is that informality is less a binary phenomenon than a broad spectrum encompassing varying degrees of formality and informality. Public policies targeting the informal sector would therefore benefit from being less generic and more precisely tailored to the different clusters of informality. A better understanding of the operating modes specific to each category would be a major asset in identifying the appropriate levers for effective regulation of the informal sector in all its diversity.

Strengthening Workers' Capacities and Improving Business Services

Our research shows that informal actors have more limited access than their formal counterparts to various productive services, such as training and infrastructure services (water, electricity, etc.). Implementing well-targeted upgrading programs for informal enterprises would help strengthen them by increasing their productivity. This can be achieved through business incubators and accelerators, as well as targeted training programs covering both "hard skills" and "soft skills."

Supporting Small Informal Actors Through Appropriate Financing and Social Protection Systems

Our findings also show that efforts aimed at formalizing informal enterprises particularly through registration have not yielded convincing results. These should be replaced by a more participatory approach that gradually enables informal actors to take ownership of their own development. The establishment of an appropriate and universal social security program, preferably financed through indirect taxation (see Ndiaye et al., 2024, for implementation modalities), should take precedence over strategies based on tax exemptions. Moreover, in conflict-affected areas, it has been shown that direct financing in the form of cash transfers or capital grants is often more effective than credit in improving the incomes of small informal actors (see Blattman and Ralston, 2015, for further details).

CHAPTER II

THE INFORMAL SECTOR AND CONFLICT IN MALI : KEY FEATURES AND MEASUREMENT ELEMENTS

In West Africa, as in other parts of the continent, the structure of the economy is characterized by the predominance of the informal sector, which accounts for a large share of both GDP and employment. Very few sectors of activity escape the pervasive expansion of informality. Ninety-two percent (92%) of value added in the primary sector is informal, reaching nearly one hundred percent (100%) in certain primary sub-sectors (Mbaye and Benjamin, 2015). Similarly, in the secondary sector, informality represents at least forty-five percent (45%) of value added. As for the tertiary sector, it concentrates almost all low-productivity informal services. Mali is by no means an exception in this regard. Informality contributes nearly fifty-five percent (55%) of GDP overall, with as in other countries marked sectoral disparities. Its contribution to value added thus ranges from nearly ninety-eight percent (98%) in the primary sector to twenty-two percent (22%) in the secondary sector and sixty-six percent (66%) in the tertiary sector (INSTAT, 2015).

II.1. Relationship Between the Informal Sector, Employment, and Conflict in the Sahel

The relationship between conflict, informality, and youth employment has attracted increasing attention in the literature. The renewed interest shown by researchers in this issue reflects an emerging consensus that development processes in fragile contexts must take into account informal institutions and non-state actors (Schoofs, 2015).

More specifically, the issue of political violence fueled by jihadist movements in the Sahel is highly complex, lying at the intersection of informality, illicit trade, and extremist movements areas for which there is very limited empirical visibility. One of the objectives of this volume is to help improve our understanding of this reality by combining multiple approaches: surveys, semi-structured interviews and focus groups, documentary analysis, and the use of secondary data sources.

II.1.1. Lack of Opportunities and Political Conflict in the Sahel

Until recently, a defining characteristic of the informal sector in the Sahel was the licit nature of the activities involved. The political instability that has intensified in these countries has gradually transformed them into war economies, where the absence of state authority combined with a drastic decline in licit productive activities has contributed to the expansion of trafficking of all kinds, which both feeds on and fuels violence. As a result, cross-border trade in the Sahel, once flourishing and licit, has given way to trafficking activities (Anderson, 2015).

As Meagher (2015) aptly notes, cross-border trade in Africa prior to the emergence of jihadist movements was always dominated by licit goods and therefore had nothing in common with war economies; on the contrary, it tended to strengthen and integrate states.

By contrast, current trafficking networks are driven primarily by illicit trade in mineral resources and weapons, which tends to weaken states.

It should be noted that there were strong pre-existing conditions in these countries that facilitated illicit activities: the prominence of informality, state fragility, lack of opportunities, and a very unequal distribution of income (Blattman and Ralston, 2015).

Many authors argue that lack of opportunities is the main explanatory factor behind political conflicts and civil wars (Cincotta et al., 2003; Heinsohn, 2003; Urdal, 2004). According to Urdal (2006, 2012), Collier and Hoeffler (2002), and Miguel et al. (2004), unemployment and underemployment are the primary drivers of political and economic instability. From a purely economic perspective, Justino (2010), Collier (2004), Grossman (2002), Hirshleifer (2001), Keen (1997, 1998), and Walter (2004) all argue that the availability of decent employment is strongly and negatively correlated with the ease with which rebel movements are able to recruit fighters.

II.1.2. Terrorist Violence and Economic Motives

While challenges related to youth employment appear to be correlated with political instability, the specific issue of terrorism has given rise to divergent interpretations among scholars. Cramer (2010) argues that the hypothesis that lack of economic opportunities determines young people's involvement in terrorist activities is not supported by the evidence and is overly simplistic. Frey (2005) finds that terrorist behavior generally constitutes a response to overly repressive policies (Bowles, 2008; Fehr and Gächter, 2000). Similarly, Wintrobe (2003) challenges the validity of economic models based on rational choice as explanations for terrorism, arguing that terrorists incorporate the values of their reference group into their utility functions.

Other authors go even further, suggesting that poverty and lack of economic opportunities are not correlated with terrorism. Krueger (2007) and Krueger and Malečková (2003), for example, find that terrorists are more frequently drawn from the better educated and more affluent segments of society. Padilla (1992) argues that gang membership provides more than the financial comfort associated with formal employment; it offers respect and a sense of belonging to a social network. Seals (2007), as well as Levitt and Venkatesh (2000), find that between forty percent (40%) and fifty percent (50%) of members of drug-trafficking gangs in Chicago simultaneously held formal-sector jobs. Poutvaara and Priks (2007: 2), in their review of a range of studies and surveys, conclude that unemployment may be correlated with economic crime but has little correlation with violent crime.

In other words, the labor market alone is insufficient to explain recourse to terrorist violence; it must be combined with other factors (Cramer, 2010). Analysis of data from many conflict-affected countries shows that unemployment and terrorist violence do not always move in the same direction.

If the causal link between employment and violence is not well established, neither is the

interpretation that war causes unemployment (Thompson, 1989; White, 1993).

II.1.3. What Public Policies in Conflict-Affected Countries?

The types of policy interventions appropriate in situations of conflict have also attracted scholarly attention. Blattman and Ralston (2015) review various intervention schemes in conflict-affected economies and find that the most common programs focus on training and microfinance, yet show no tangible impact on social stability. By contrast, they find that capital injections in the form of cash, goods, or livestock stimulate self-employment and generate long-term income gains. According to these authors, simply creating jobs does not guarantee a reduction in violence, given the weak responsiveness of violence to income and employment.

According to Schoofs (2005), conventional policies aimed at the informal sector have very little chance of success in conflict situations. The main reason is that the state enters a phase of severe institutional breakdown, depriving it of effective means of intervention. Efforts to formalize the informal sector pursued by many governments fall into this category, as they presuppose a minimum level of state functionality that is lost in conflict settings. According to Jacob et al. (2014), violent conflicts undermine state performance in tax collection. Worse, they often result in the capture of key state prerogatives by armed groups.

II.1.4. The Case of Mali

Since gaining independence, Mali has experienced uprisings by segments of the Tuareg and Moor populations living in the northern part of the country in 1963, 1990, 2006, and 2010. All of these uprisings were rapidly contained and never reached the scale of the one Mali has experienced since early 2012.

The emergence of the political and security crisis in Mali can be traced to a series of successive events that began in November 2011 with the first attacks by rebel groups in northern Mali. These groups included the National Movement for the Liberation of Azawad (MNLA) composed of Tuareg soldiers of different nationalities fleeing the Libyan conflict and returning to Mali with the consent of the authorities in Bamako, as well as certain deserters from the Malian army of Tuareg origin and other Islamist groups, the main ones being Al-Qaeda in the Islamic Maghreb (AQIM), Ansar Dine (Defenders of Islam), the Movement for Unity and Jihad in West Africa (MUJAO), and Boko Haram. Gradually, these groups seized the major cities of the north and ultimately occupied two-thirds of the national territory. Following the general confusion created by the mutiny of March 21–22, a group of soldiers (whose exact composition was not made public), led by Captain Amadou Haya Sanogo, seized power and established the National Committee for the Restoration of Democracy and the State (CNRDRE), thereby triggering a political and institutional crisis. The international community immediately condemned this coup and activated sanctions and negotiation mechanisms aimed at restoring constitutional order.

In Mali's case, it is clear that the lack of economic opportunities played a significant role in the emergence of the conflict. Youth unemployment, the informal and precarious nature

of most jobs, and the impact of climate change on rural livelihoods all contributed to the outbreak of the crisis (Mbaye, 2020). However, governance problems that accumulated over the years and the effects of the Libyan crisis particularly the proliferation of weapons throughout the Sahel undoubtedly exacerbated the security crisis.

II.2. Consequences of the Conflict on the Malian Economy

While the structure of the Malian economy does not differ significantly from that of most other African countries, certain characteristics of underdevelopment are much more pronounced. Mali is a landlocked West African country classified among the least developed countries, with a higher incidence of poverty than in many African countries. In 2023, approximately forty-two point seven percent (42.7%) of the population lived below the poverty line an improvement compared to the rate in 2015, but still above the sub-Saharan African average of thirty-four percent (34%) (World Bank, 2023). Access to drinking water improved to seventy percent (70%) in 2021 but remains below the regional average of seventy-six percent (76%) (WHO, 2021). Infant mortality also declined, from one hundred two (102) per thousand live births in 2015 to sixty-six (66) in 2022, compared with a regional average of fifty-two (52) (UNICEF, 2022). Life expectancy, although rising to fifty-nine (59) years in 2022, remains below the sub-Saharan African average of sixty-two (62) years (World Bank, 2022). State fragility, exacerbated by conflicts since 2012, continues to hinder development, with the informal economy serving as the primary source of income for the majority of the population (UNDP, 2023).

Assessments of the crisis's impact on economic performance vary widely. Statistics published by INSTAT (INSTAT, 2017) tend to show that economic activity in Mali does not appear to have been significantly affected by the crisis. Not only have agricultural and gold production continued to display strong momentum, but cotton production has also reached record levels, making Mali the leading regional producer of cotton. According to INSTAT estimates, the limited impact of the crisis on overall economic activity would be explained by the historically low contribution of the northern regions those most affected by the crisis to total value added.

This view is strongly contested by the main actors of the Malian economy whom we met during interviews and focus groups. These actors emphasize the substantial production losses linked to the crisis in sectors such as livestock, tourism, and river transport. They instead point to weaknesses in the system for collecting and compiling national statistics, which they argue fails to adequately capture the significant economic and social losses associated with the crisis.

The case of the Mopti region provides a more comprehensive picture of the sectors affected by the crisis. For a long time, Mopti—located near the Niger and Senegal rivers[1] attracted a significant range of highly diversified economic activities, including tourism, agriculture, and trade. However, since Islamist groups took control of nearly two-thirds of Malian territory, boats have remained moored and economic activity has stagnated. Revenues from

1. CMRA. http://www.cmra.fr/actualite-129-crise-au-mali-mopti-une-ville-en-otage.html?m=12&a=2016

river transport and tourism have declined sharply. Prior to the kidnapping of tourists by Al-Qaeda, Mali received nearly two hundred thousand (200,000) tourists per year, most of whom passed through Mopti. Charter flights connected European capitals directly to Mopti. More recently, the few planes landing at the airport mainly transport humanitarian aid. Most hotels and restaurants have closed.

Tourist arrivals declined from one hundred forty thousand (140,000) in 2008 to one hundred thousand (100,000) in 2012 a drop of twenty-two percent (22%). International arrivals at Bamako Sénou Airport fell from one hundred twenty-eight thousand five hundred seventeen (128,517) in 2008 to fifty-three thousand eight hundred forty (53,840) in 2013. At Mopti's Hambodédjo Airport, arrivals dropped from thirty-eight thousand eight hundred six (38,806) in 2008 to six hundred eighty-six (686) in 2013. In Mopti, the number of tourists fell from twenty-eight thousand eight hundred sixty-one (28,861) in 2011 to two thousand three hundred seventy-nine (2,379) in 2013 a decline of ninety-one percent (91%) in three years. The region recorded the highest rate of layoffs and temporary unemployment[2]. An estimated two point twenty-four (2.24) million people were directly affected, including three hundred sixty-six thousand (366,000) displaced persons (OCHA, 2012). In 2014, approximately one point nineteen (1.19) million people were considered severely food insecure (OCHA, 2014). Job losses in the artisanal and tourism sectors are estimated at one thousand six hundred forty-nine (1,649).

Regardless of the perspective adopted on the impact of the Malian crisis on productive activity and income distribution, there is near-universal consensus that certain sectors were severely affected, particularly tourism, river transport, and livestock. Moreover, based on the results of our focus groups, it appears that the concentration of informal activities in sectors such as retail trade, import–export, and artisanal extractive activities has become increasingly evident. Equally undeniable is the development of a shadow economy marked by the proliferation of illicit activities of all kinds, including arms and drug trafficking (Anderson, 2015).

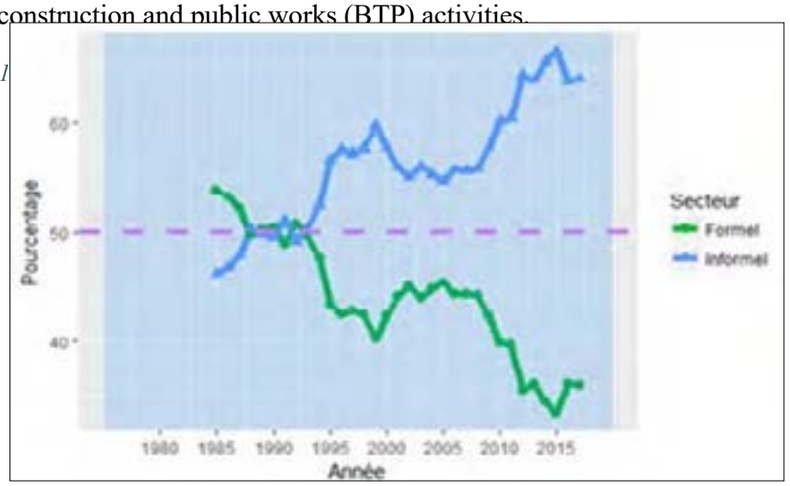
II.3. Informality in the Malian Economy: An Analysis Based on National Accounts

According to national accounts data, the informal sector accounted for approximately sixty-three percent (63%) of Mali's value added in 2017 (Figure 2-3-1). As shown in Figure 2-2, the primary sector is overwhelmingly informal, while in the secondary sector the formal segment is dominant, accounting for more than eighty percent (80%) of total sectoral value added over the period 1985–2017 (Figure 2-3). In the tertiary sector, there has been a gradual decline of the formal segment, giving way to informality . The formal share of value added in the tertiary sector declined from approximately eighty-five percent (85%) in 1985 to thirty-six percent (36%) in 2017. Conversely, the informal share rose significantly from about fifteen percent (15%) in 1985 to more than sixty-three percent (63%) in 2017 (Figure 2-3-4).

2. http://www.malinet.net/alerte/impact-negatif-de-la-crise-sur-lactivite-touristique-au-mali-dans-la-region-de-mopti-le-flux-est-passe-de-28-861-en-2011-a-2-379-en-2013/

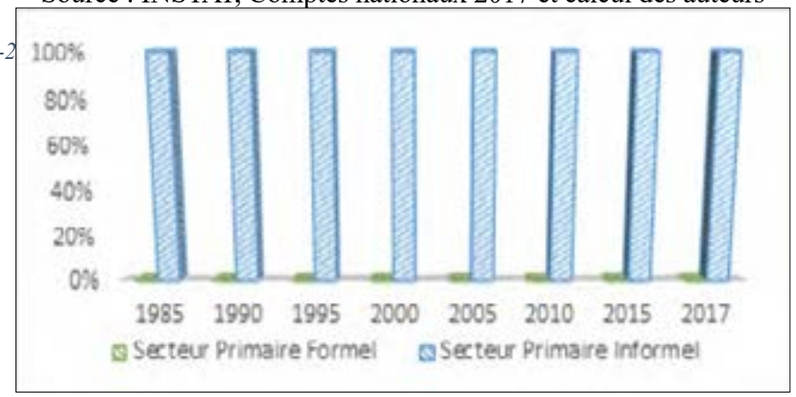
According to Figure 2-5, the share of informality in the services sub-sector increased substantially and exceeded forty percent (40%) in 2017. Informality accounts for seventy-five percent (75%) of general trade activities. Eighty-three percent (83%) of activities related to trade, automobile repair, and household goods sales are informal. Informality represents thirty-nine percent (39%) of accommodation and food services and forty percent (40%) of construction and public works (BTP) activities.

Figure 2-3-1



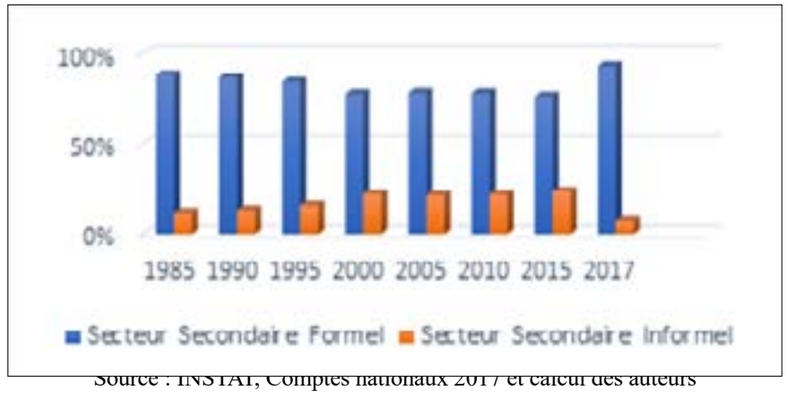
Source : INSTAT, Comptes nationaux 2017 et calcul des auteurs

Figure 2-3-2



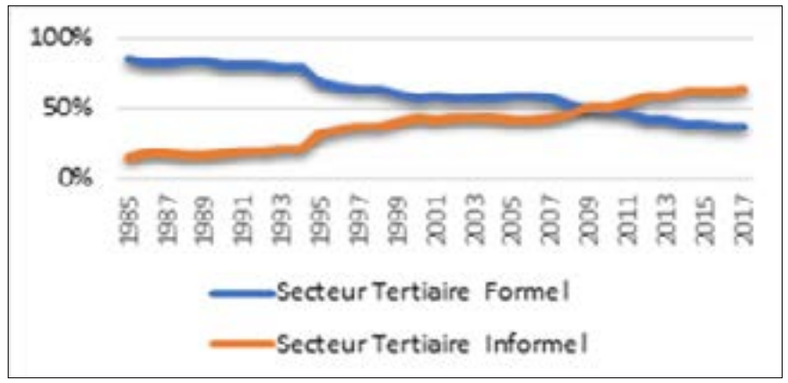
Source : INSTAT, Comptes nationaux 2017 et calcul des auteurs

Figure 2-3-3: Decomposition of value added in the formal and informal sectors



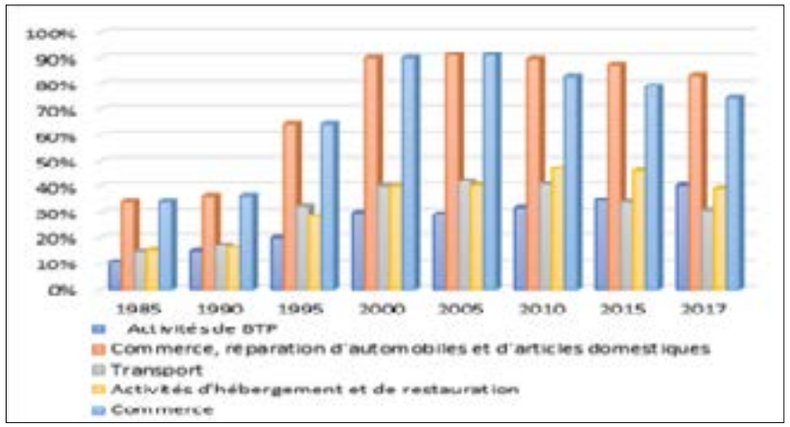
Source : INSTAT, Comptes nationaux 2017 et calcul des auteurs

Figure 2-3-4: Decomposition of value added in the tertiary sector



Source : INSTAT, Comptes nationaux 2017 et calcul des auteurs

Figure 2-3-5: Share of the informal sector in selected service sectors



Source : INSTAT, 2017 et calcul des auteurs

II.4. Methodology and Data

This study uses a combination of quantitative and qualitative data collection methods. Quantitative data come from surveys conducted in the cities of Bamako and Mopti in 2018, while qualitative data were collected through interviews and focus groups carried out during the same period.

II.4.1. Our Approach to Informality

There are several possible approaches to defining informality, and different studies have used a variety of criteria. The most commonly used criteria are firm size, registration with a state authority, and the keeping of accurate accounts. Owing to these differing conceptions of informality, data on the informal sector are collected in different ways, making comparability problematic. We therefore argue that a composite definition is more appropriate (Benjamin and Mbaye, 2012; Mbaye, Gueye, and Golub, 2020).

In what follows, we present a concise critical review of the criteria used in the literature to define informality and explain how we combine them to arrive at a composite definition. We also provide an overview of the sampling strategy. For further details regarding our methodology and data, we refer the reader to our previous publications using a similar methodology (Benjamin and Mbaye, 2012; Mbaye, Gueye, and Golub, 2020).

The criteria most frequently used to define the informal sector are: the size of the activity; registration of the activity with a given administrative authority; payment of taxes, or the type of tax paid; the keeping of accurate accounts; the mobility of the workplace; access to bank credit; and the existence of social security coverage for employees. See Benjamin and Mbaye (2012) for a review of these criteria and the limitations associated with each. Below, we provide a brief description of each.

Firm Size

The most widely used criterion for defining the informal sector is the size of the activity. An enterprise with a size below a given threshold (often five employees) is considered informal. This criterion mainly derives from the approach of the International Labour Organization (ILO, 2002), which defines an informal enterprise as one that is not registered, owned by an individual or household, whose assets are not separate from those of the firm, and for which there is no reliable accounting system allowing firm operations to be traced.

The limitation of this criterion is that it does not capture the full reality of informality in West Africa. Some activities identified as informal are not necessarily small in size. This is what we refer to as the "large informal sector," which includes all informal enterprises that are not small. Conversely, some formal enterprises are small in size, such as law firms, notary offices, and certain companies such as customs brokers.

Registration

Lack of registration with a government authority is another commonly used criterion for defining informality. However, it is unusual for enterprises not to be registered with at least one public body. As a result, most enterprises even informal ones are registered somewhere.

Payment of Taxes and Type of Tax Paid

There are two types of tax regimes in countries within the OHADA space, which includes both the West African Economic and Monetary Union (WAEMU/UEMOA) countries and those of the Central African Economic and Monetary Community (CEMAC): the real profit regime and the presumptive (lump-sum) regime. The latter is intended for small informal enterprises deemed incapable of providing detailed documentation and precise income estimates. However, some large enterprises substantially underreport their revenues and pay the presumptive tax. This is what we refer to as the "large informal sector."

Keeping of Accurate Accounts

Most enterprises operating in the informal sector do not maintain regular and up-to-date accounts that would provide an accurate picture of their operations, making monitoring and taxation particularly difficult. The drawback of this criterion is that it is difficult to verify the authenticity of financial statements produced by firms.

Fixity of the Workplace

Many informal activities are characterized by high mobility of the workplace. While it is reasonable to classify most itinerant activities as informal, many other informal activities operate from fixed locations. Consequently, this criterion captures only part of informality rather than its entirety.

Access to Bank Credit

Limited access to credit is another distinguishing feature of informality. Banks require a range of financial and administrative documents before considering loan applications. However, many enterprises even formal ones are also excluded from formal bank credit.

Social Security Coverage for Employees

This criterion is perhaps the most commonly used to determine whether employment is formal or informal. We considered its inclusion in our approach to informality to be a significant improvement. However, caution is needed in analysis to avoid inferring the formal status of a firm solely on this basis, given that a substantial share of employment even in formal enterprises is still largely informal.

II.4.2. Our Sampling Strategy

In this study, we consider informality as a continuum rather than a dichotomous phenomenon. The target population of the survey consists of all formal and informal enterprises in Bamako and Mopti. The unit of observation is the enterprise.

The sample is stratified, with three groups of interest. Group 1 consists of formal enterprises; Group 2 includes large informal enterprises; and Group 3 comprises small informal enterprises. The sampling frames used for these target groups are as follows:

- Formal enterprises: the sampling frame consists of all enterprises subject to the real tax regime, as listed in the records of the Tax Directorate.
- Large informal enterprises: the sampling frame consists of all enterprises subject to the presumptive tax regime while reporting annual turnover above a certain threshold (20 million CFA francs), as listed in the records of the Tax Directorate.
- Small informal enterprises: this category includes informal production units subject to the presumptive tax regime, taking into account both enterprises that pay the presumptive tax and those that pay no tax at all.

The sample size consists of four hundred (400) production units in Bamako and three hundred (300) production units in Mopti. The sampling procedure differs depending on whether the enterprise belongs to the formal/large informal sector or the small informal sector. The weights of activity sectors depend on their share in total value added excluding public administration and banking services.

The sample of formal and large informal enterprises is a stratified, single-stage sample. All such enterprises are divided among industry, commerce, and other services to form first-level strata. In 2017, the share of industry in total value added was forty-one percent (41%), twenty-eight percent (28%) for commerce, and thirty-one percent (31%) for other services.

For small informal enterprises, the survey teams first carried out preliminary work to identify areas where different informal activities are concentrated. Once this was completed, the sample was evenly distributed across sites. The following table presents the number of enterprises surveyed in the two cities. In total, seven hundred (700) enterprises were surveyed, distributed across the three sectors of activity.

Table 2-4-1: Number of enterprises surveyed across sectors of activity

		Industrie	Commerce	Autres services	Total
Bamako	Formel	43	26	89	132
	Gros Informel	24	14	48	72
	Petit Informel	64	39	132	196
Mopti	Formel	9	36	35	80
	Gros Informel	44	33	15	92
	Petit Informel	47	31	50	128
Total		231	179	369	700

II.4.3. Qualitative Analysis

The qualitative analysis consists of conducting semi-structured interviews and focus groups in order to collect the views of different stakeholders on various dimensions of informality. It follows the same logic as that adopted in our previous studies (Benjamin and Mbaye, 2012). These interviews target a broader audience than the surveys, including public administration officials responsible for employment (ministries and directorates in charge of employment), workers' unions, employers' organizations, the National Institute of Statistics, economic and financial partners involved in employment-related issues, chambers of commerce and industry, tax authorities, ministries responsible for trade, small and medium-sized enterprises, industry and crafts, national agencies responsible for SME development, as well as formal and informal business and producer organizations, among others.

The primary objective of these interviews is to gather the opinions of actors who are well acquainted with the informal sector and therefore capable of providing informed and relevant assessments. They also serve as a basis for validating certain information obtained through the surveys.

Qualitative analysis also involves reviewing all relevant documentation both national and international, academic and non-academic related to informality, employment, and conflict.

II.5. The Continuous Approach to Informality: Application to the Case of Mali

In this section, we use the data obtained from our surveys in Mali to implement the continuum-based approach to informality presented above.

One particularly important result emerging from the data collected in Mali is the validation of the hypothesis that informality is better captured through a continuum of variables rather than through a purely dichotomous approach. When we use our seven informality criteria to classify the enterprises in our database, the resulting classifications differ substantially depending on the criterion applied.

When informality is assessed using firm size, it appears (Figure 2-5-6) that the majority of enterprises in Mopti have fewer than five employees, representing 65 percent. When the

criterion of workplace fixity is applied, approximately 80 percent of firms become classified as formal under this criterion in both Bamako and Mopti (Figure 2-5-7). Many of these enterprises operate from fixed premises such as stalls in public markets, workshops, or warehouses. For example, around 57 percent of large informal enterprises in Bamako have premises in public markets, while 21 percent operate from workshops or warehouses. Similarly, in Mopti, 47 percent of large informal enterprises have fixed premises in public markets, 42 percent operate from workshops, and 1 percent from warehouses (Table 2-4-2).

When the registration criterion is considered, more than 50 percent of firms in both Mopti and Bamako are found to be registered (Figure 2-5-8). This result reflects the significant investments made in recent years by Mali in promoting one-stop-shop services at the local level. The one-stop-shop system allows enterprises to be registered under a Tax Identification Number (NIF) and with the Chamber of Commerce.

When accounting practices are examined, it becomes evident that many firms do not maintain regular accounts. Approximately forty-two percent (42%) of firms in Bamako do not keep regular accounts, compared with fifty-eight percent (58%) in Mopti (Figure 2-5-10). With respect to access to bank credit, about 80 percent of firms in both Bamako and Mopti report having no access to bank financing (Figure 2-5-11). A similar pattern emerges with regard to social security coverage: approximately 85 percent of firms in Mopti do not subscribe to a social security scheme, compared with 68 percent in Bamako (Figure 2-12). In terms of taxation, only 51 percent of firms in Bamako are taxed under the real regime, compared with 30 percent in Mopti (Figure 2-5-13).

Table 2-3 summarizes all firms that do not meet the various criteria retained in this study. These results confirm the conclusion reached by Mbaye and his co-authors, namely that no single criterion is sufficient to capture the phenomenon of informality and that combining criteria is necessary to obtain a more comprehensive view. There exists a continuum of informality levels depending on the number of criteria satisfied by a given enterprise.

In Table 4, we propose a tiered definition of informality based on the number of criteria satisfied by each enterprise. The levels derived from the seven criteria used in this study are as follows:

- Level 0 corresponds to fully formal enterprises that is, firms with more than five employees, fixed professional premises, registration, proper accounting practices, access to bank credit, social security coverage, and taxation under the real regime. This category corresponds to “pure formality.” It represents approximately 8 percent of firms in Bamako and less than 2 percent in Mopti (Table 2-4).
- Level 1 corresponds to enterprises that meet only one informality criterion.
- Level 2 corresponds to enterprises that meet at least two informality criteria, and so forth.
- Level 7 corresponds to enterprises that meet all informality criteria and are therefore fully informal. These represent approximately 14.75 percent of firms in Bamako and about 10 percent in Mopti.

An illustration of the category of “pure informality” in sub-Saharan African countries such as Mali would include street vendors operating along roadsides and near public buildings that attract large numbers of people.

By combining these criteria, we identify varying degrees of informality/formality depending on how many criteria each enterprise satisfies. At the bottom of the scale are enterprises exhibiting all the characteristics of informality described above. At the top are those that meet none of the informality criteria and therefore satisfy all the criteria of formality. Between these two extremes lie enterprises corresponding to intermediate degrees of informality. This intermediate category is typically represented by so-called “large informal” enterprises, which meet most formal criteria but deliberately maintain misleading accounts in order to conceal a substantial share of their revenues, thereby significantly reducing the taxes they pay.

Each of these enterprise categories tends to display distinct characteristics and responds differently to incentive packages or public policies resulting from state intervention.

Another salient finding of our analysis is the concentration of informality in certain sectors. According to Table 2-4-5, approximately 50 percent of formal enterprises in Bamako operate in commerce, compared with 10 percent in industry, 14 percent in construction and public works (BTP), and 23 percent in other services. Large informal enterprises in Bamako are also concentrated in commerce (50%) and services (35%), while 65 percent of small informal enterprises in Bamako operate in commerce and 23 percent in services. In Mopti, both formal and large informal enterprises are concentrated in commerce (approximately 45%) and services (around 40%) (Table 2-4-5).

Figure 2-5-6: Distribution of enterprises by size criterion (%)

Figure 2-5-7: Distribution of firms by the criterion of having no business premises (%)

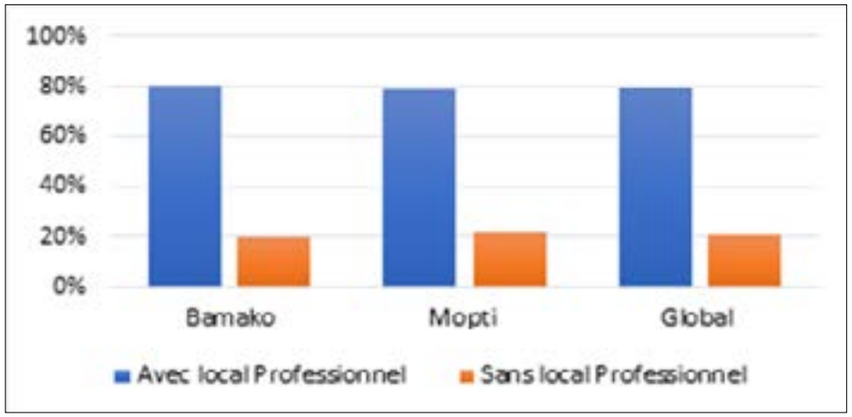


Table 2-4-2: Type of local professional according to firm status (%)

		Local fixe sur un marché public	Atelier, boutique, restaurant, hôtel	Étang	Hangar	Autre	Total
Bamako	Formel	43,28	26,37	9,95	20,40	0	100
	Gros informel	57,89	21,05	0,00	21,05	0	100
	Petit informel	36,56	31,18	4,30	27,96	0	100
	Total	42,17	27,48	7,67	22,68	0	100
Mopti	Formel	34,83	42,70	0,00	1,12	21,35	100
	Gros informel	47,37	31,58	0,00	10,53	10,53	100
	Petit informel	36,89	21,31	1,64	27,05	13,11	100
	Total	36,96	30,43	0,87	15,65	16,09	100

Figure 2-5-8: Distribution of firms by type of registration (%)

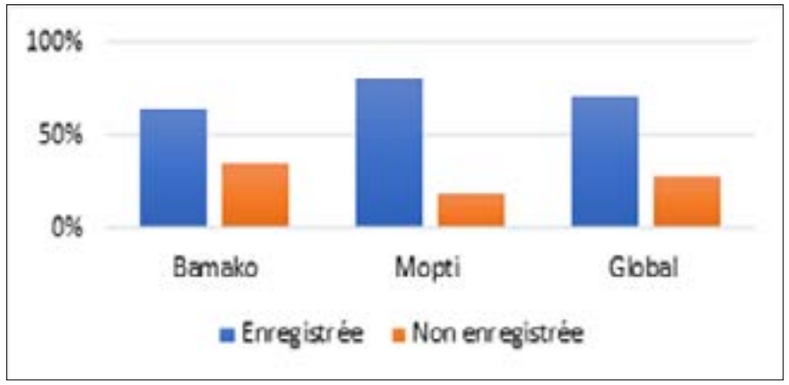


Figure 2-5-9: Share of firms that encountered difficulty in registration (%)

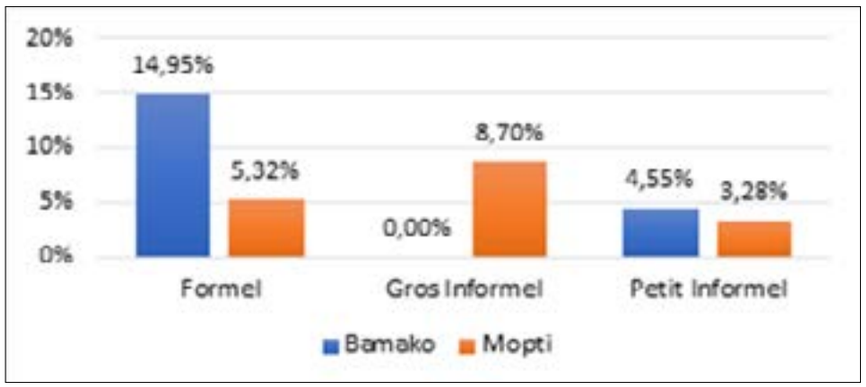


Figure 2-5-10 : Distribution of firms by the criterion of not keeping accounts

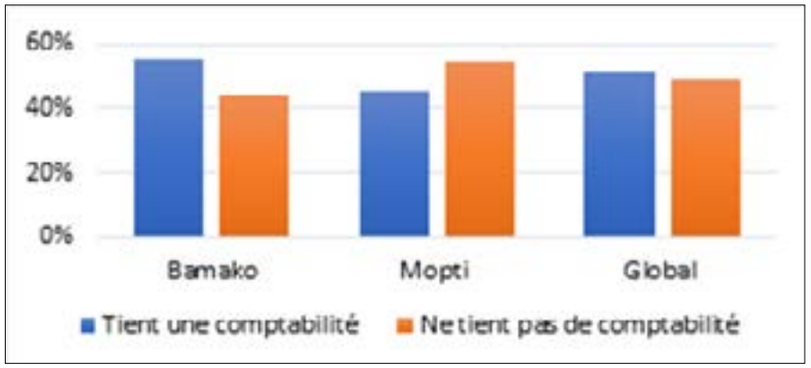


Figure 2-5-11: Distribution of firms by access to bank credit (%)

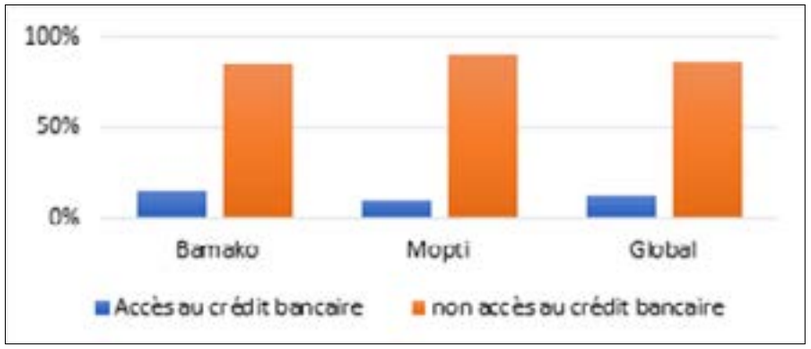


Figure 2-5-12: Distributionof firms that subscribe/do not subscribe to social security

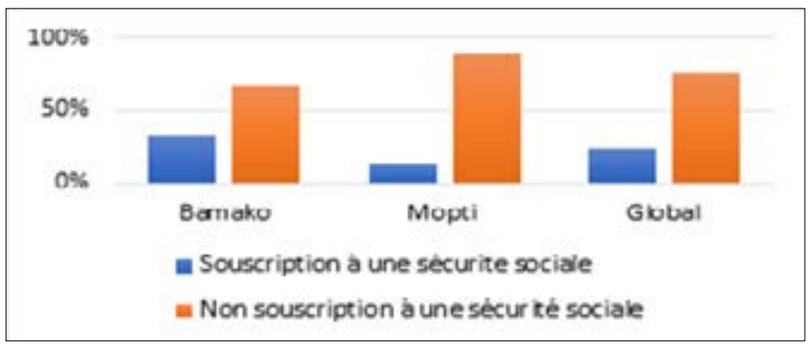


Figure 2-5-13 : Distribution of firms by the criterion of non-taxation under the real regime (%)

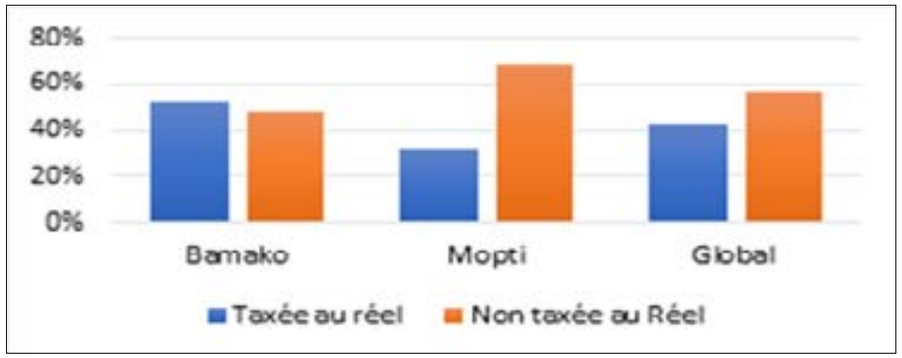


Table 2-4-3: Enterprises not meeting the criteria of formality

Critères	Bamako	Mopti	Global
Moins de 5 employés	47,25	65,00	54,86
Sans local professionnel	19,50	21,67	20,43
N'est pas enregistré	34,75	19,00	28,0
Ne tient pas de comptabilité	44,25	54,67	48,71
Pas obtenu de prêt bancaire	85,00	90,00	87,14
Non inscrit à une mutuelle	67,00	88,00	76,0
Non taxée au réel	47,50	68,67	56,57

Table 2-4-4: Degree of informality of firms (%)

	Bamako	Mopti	Total
Niveau 0	8,75	1,67	5,71
Niveau 1	22,75	6,33	15,71
Niveau 2	16,50	14,33	15,57
Niveau 3	6,75	18,00	11,57
Niveau 4	3,00	14,00	7,71
Niveau 5	11,00	22,67	16,00
Niveau 6	16,50	12,33	14,71
Niveau 7	14,75	10,67	13,00
Total	100,00	100,00	100,00

Table 2-4-5: Distribution of enterprises by sector and status of the firm (%)

	Secteur d'activité	Formel	Gros informel	Petit informel	Total
Bamako	Commerce	50,95	50,00	65,48	57,04
	Industrie	10,95	15,00	8,33	10,05
	BTP	14,29	0,00	2,98	8,79
	Services	23,81	35,00	23,21	24,12
	Total	100,00	100,00	100,00	100,00
Mopti	Commerce	45,74	47,83	21,31	31,00
	Industrie	7,45	21,74	36,07	26,00
	BTP	4,26	0,00	0,55	1,67
	Services	42,55	30,43	42,08	41,33
	Total	100,00	100,00	100,00	100,00

CHAPTER III
GENDER, EMPLOYMENT, AND THE INFORMAL SECTOR

Sub-Saharan Africa and West Africa in particular is one of the regions of the world characterized by some of the highest female labor force participation rates. This region also exhibits some of the highest levels of female participation in informal activities, while at the same time women's economic activity remains largely underestimated (Charmes, 2019). This apparent paradox warrants closer examination, and the present report seeks to provide elements of explanation.

One of the defining characteristics of sub-Saharan African countries is the relatively high pace of demographic growth, as illustrated by the case of Mali. With a population growth rate of around three percent (3%), Mali is characterized by a very young and highly unevenly distributed population. The majority of the population is concentrated in Bamako, creating major economic and social challenges, including the expansion of informal settlements, insecurity, unemployment, and job precariousness.

The rapid increase in population has been made possible by relatively effective health policies, which have contributed to a decline in infant mortality across much of Africa. In Mali, the infant mortality rate fell from 160 per 1,000 in 1980 to 68 per 1,000 in 2017 (Table 3-6). This trend is also explained by the widespread implementation of the mother and child protection program in most sub-Saharan African countries. This program aims to establish health posts in the most remote areas to provide care for mothers and children. The combined effect of declining mortality and persistently high fertility rates is a key feature of the demographic profile of these countries.

Table 3-6: Some demographic indicators of Mali

	1960	1980	1990	2000	2010	2017
Population (hbts)	5 263 733	7 090 126	8 465 188	10 967 690	15 075 085	18 541 980
Densité (hbt/km2)	ND	5,81	6,94	8,99	12,35	15,20
Taux de croiss. Pop. (%)	1,11	1,90	1,86	2,81	3,16	3,00
Taux de natalité (0/00)	50,19	49,67	48,80	48,76	46,36	42,63
Taux de mortalité (0/00)	ND	160,60	130,10	115,50	79,50	68,00
Taux de fertilité (naissances par femme)	6,97	7,15	7,17	6,90	6,55	6,06

Sources : WDI, 2018 et calcul des auteurs

This chapter is divided into three sub-sections. We first present the general characteristics of the labor market based on the results of various national surveys. We then analyze employment in the cities of Bamako and Mopti using our survey data, and finally present the profile of female entrepreneurship in Mali. The emphasis placed on female entrepreneurship in the analysis of informal employment is justified by the fact that female entrepreneurship in Africa conforms to the characterization of informal employment derived from Resolution No. 17 of the International Conference of Labour Statisticians (ICLS).[3]

III.1. General Characteristics of the Labor Market in Mali: An Overview

With a very large youth population, Mali like most sub-Saharan African countries is characterized by a labor force participation rate of over 60%. In Bamako, the participation rate in 2017 was 64%, compared with 81% in Mopti and 85% in Sikasso (Table 3-1-7).

Table 3-1-7: Labor force participation of 15+ year olds by region (%)

Région	2013	2014	2016	2017
Kayes	84,8	81,7	71,1	81,9
Koulikoro	80	65,7	54,3	55,9
Sikasso	85,5	84,9	84,5	85,7
Ségou	80	76,7	73,6	77,1
Mopti	85,2	80,6	79,5	81
Tombouctou	ND	70,2	73,7	75,4
Gao	ND	50,8	47,5	40,4
Bamako	62	63,4	65,2	64,4

Source : EMOP 2011/2012 ; EMOP 2012/2013, EMOP 2013/2014 ; EMOP 2014/2015 ; EMOP2016/2017 ; EMOP 2017/2018 et calcul des auteurs

With regard to the spatial distribution of labor force participation, analysis of Table 8 shows that in 2017 approximately 62% of the urban population participated in the labor market in Mali, compared with 76% in rural areas.

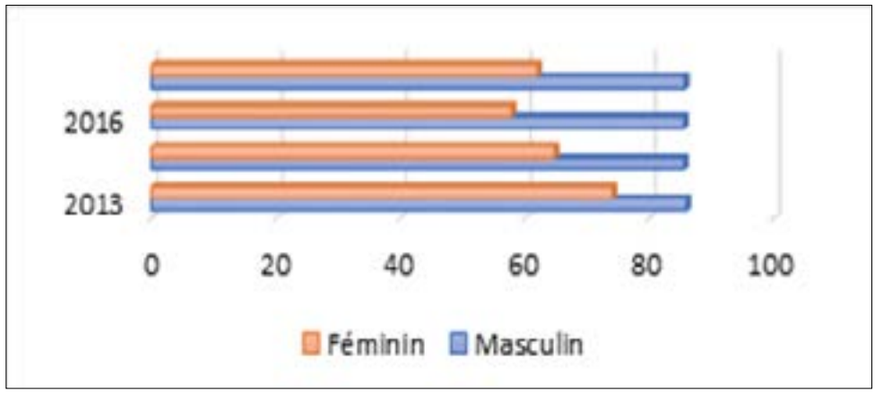
Table 3-1-8: Labor force participation of 15+ year olds by geographic region (%)

Zone géographique	2013	2014	2016	2017
Bamako	62	63,4	65,3	64,4
Autres villes	68,4	63,5	62,2	62,7
Rural	85,9	78,3	73,1	76,4

Source : EMOP 2011/2012 ; EMOP 2012/2013, EMOP 2013/2014 ; EMOP2014/2015 ; EMOP2016/2017 ; EMOP 2017/2018 et calcul des auteurs

Labor force participation is unevenly distributed by gender. Men are more active in the labor market than women. For example, in 2017, more than 85% of men were economically active in Mali, compared with 62% of women (Figure 3-1-14).

Figure 3-1-14: Labor force participation rate of 15+ year olds by gender (%)



Source : EMOP 2011/2012 ; EMOP 2012/2013, EMOP 2013/2014 ; EMOP2014/2015 ; EMOP2016/2017 ; EMOP 2017/2018 et calcul des auteurs

The labor market in West Africa is characterized by the predominance of the agricultural sector. Mali is an agricultural country, with more than 89% of jobs in 2017 located in rural areas. In recent years, due to declining rainfall, the services sector has absorbed an increasing share of the population. In 2017, services accounted for 43% of employment in Bamako, compared with 23% in other cities (Table 3-1-9). Trade represented 42% of employment in Bamako in 2017, compared with 31% in other cities. Clearly, these two sectors constitute the primary refuge for informal activities.

Table 3-1-9: Employment by sector and zone (%)

Activités	Bamako		Autres villes		Rural	
	2014	2017	2014	2017	2014	2017
Primaire	1,4	0,6	46,2	31,7	89,2	80,4
Industrie	20,4	13,8	11,3	12,7	3	4,6
Commerce	38,5	42,1	22,6	31,7	4	7,8
Services	39,7	43,4	19,9	23,9	3,7	7,2

Source : EMOP 2011/2012 ; EMOP 2012/2013, EMOP 2013/2014 ;*EMOP2014/2015 ; EMOP2016/2017 ; EMOP 2017/2018 et calcul des auteurs*

Naturally, the economically active population is mainly employed in private informal enterprises. For example, in the Kayes region, 95% of employees work in the informal sector. In Bamako, informality employs 68.1% of the labor force, compared with 10% in the public sector and 16% in the formal private sector. Depending on location, more than 68% of workers in Bamako are employed in private informal enterprises, compared with 16.1% in the formal private sector (Table 3-1-11). Moreover, women are more likely than men to be employed in the informal sector (Figure 3-1-15). Approximately 79% of women are employed informally, compared with 71% of men.

Table 3-1-10: Distribution of the employed population by type of employer in 2017 (%)

Région	Secteur public	Secteur privé formel	Entreprise privée informelle	ONG,Organisations internationales, associations	Employés de maison
Kayes	1,1	1	70,6	1,5	25,7
Kouli - koro	5,3	2	85,9	0,1	6,7
Sikasso	2	9	61,5	0,5	27,1
Ségou	1,9	1,1	95,3	1,3	0,4
Mopti	0,7	0,5	85,1	0,6	13,1
Tom - bouctou	1,6	0,9	58,9	1,9	36,6
Gao	12,3	16,1	65,3	3,2	3,2
Bamako	10,1	16,1	68,1	1	4,8

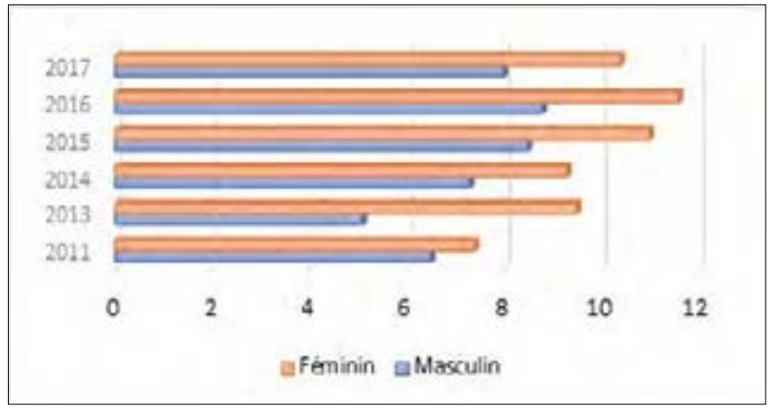
Source : EMOP 2011/2012 ; EMOP 2012/2013, EMOP 2013/2014 ; EMOP2014/2015 ; EMOP2016/2017 ; EMOP 2017/2018 et calcul des auteurs

Table 3-1-11 : Distribution of the employed population by type of employer and georgraphic zone in 2917 (%)

	Secteur public	Secteur privé formel	Entreprise privée informelle	ONG, Organisations internationales, associations	Employés de maison
Bama-ko	10,1	16,1	68,1	1	4,8
Autres villes	9	8,1	68	1,4	13,5
Rural	1,2	2,7	78,4	0,8	16,8

Source : EMOP 2011/2012 ; EMOP 2012/2013, EMOP 2013/2014 ; EMOP 2014/2015 ; EMOP2016/2017 ; EMOP 2017/2018 et calcul des auteurs

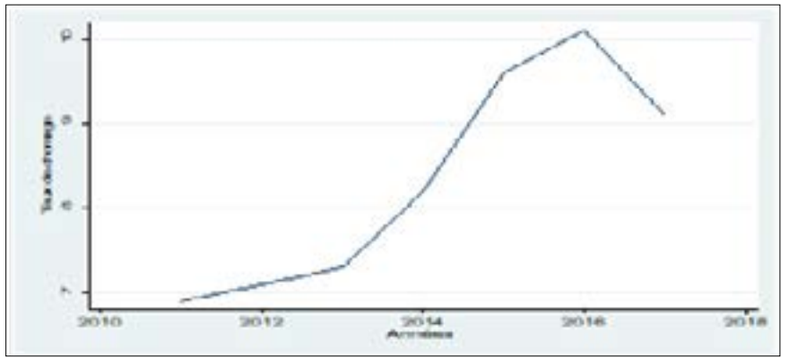
Figure 3-1-15 : Distribution of the labor force by employer and gender in 2017



Source : EMOP 2011/2012 ; EMOP 2012/2013, EMOP 2013/2014 ; EMOP2014/2015; EMOP2016/2017 ; EMOP 2017/2018 et calcul des auteurs

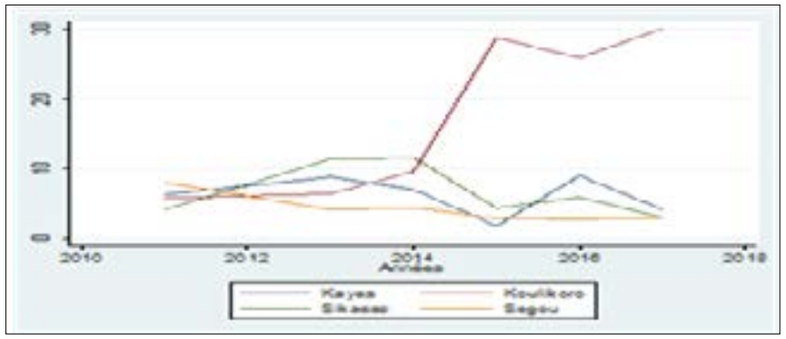
Analysis of Figure 3-16 shows that the unemployment rate reached 10% in 2017. Figure 3-17 indicates that unemployment is much more pronounced in the regions of Bamako and Koulikoro, where it significantly exceeds the national average of 10%. Unemployment affects women more than men in Mali. In 2017, the gender breakdown shows an unemployment rate of 8% for men, compared with 11% for women (Figure 3-1-18). The geographic distribution of unemployment (Table 3-1-12) shows that unemployment is far more concentrated in urban than in rural areas.

Figure 3-1-16: Evolution of the unemployment rate in Mali between 2011 and 2017 (%)

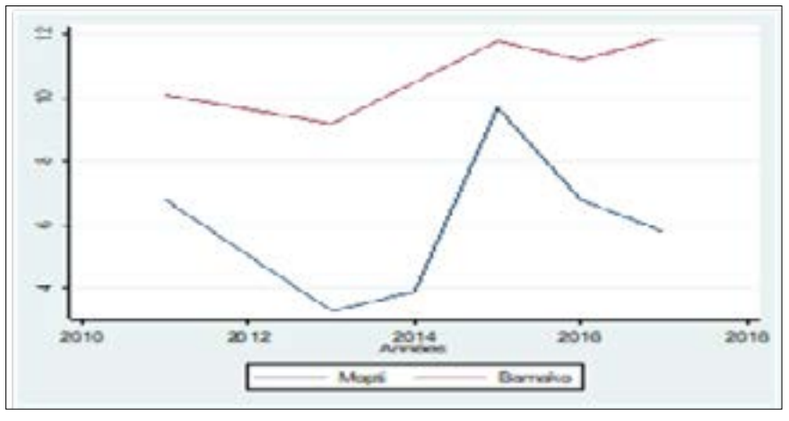


Source : EMOP 2011/2012 ; EMOP 2012/2013, EMOP 2013/2014 ; EMOP2014/2015; EMOP2016/2017 ; EMOP 2017/2018 et calcul des auteurs

Figure 3-1-17: Evolution of the unemployment rate by region (%)



Source : EMOP 2011/2012 ; EMOP 2012/2013, EMOP 2013/2014 ; EMOP2014/2015 ; EMOP2016/2017 ; EMOP 2017/2018 et calcul des auteurs



Source : EMOP 2011/2012 ; EMOP 2012/2013, EMOP 2013/2014 ; EMOP2014/2015 ; EMOP2016/2017 ; EMOP 2017/2018 et calcul des auteurs

Figure 3-1-18: Unemployment rate by gender (%)

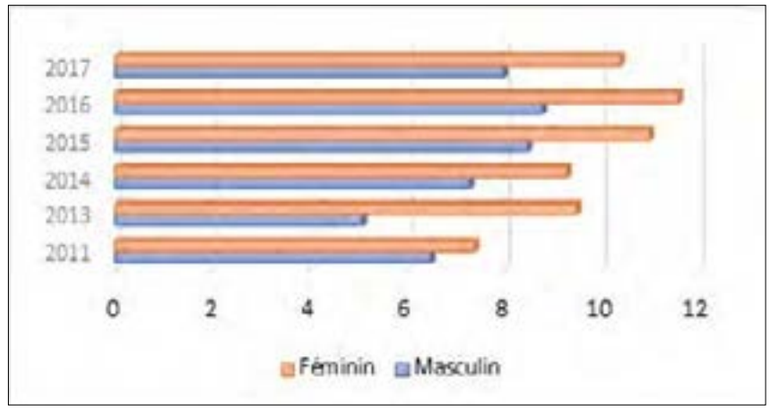


Table 3-1-12: Unemployment rate by geographic location (%)

Zone	2011	2013	2014	2015	2016	2017
Bamako	10	9,2	11,5	11,8	11,2	11,9
Autres villes	6,4	8,6	11,1	11,9	13,5	12,4
Rural	6,5	6,8	7,3	9	9,3	8,1

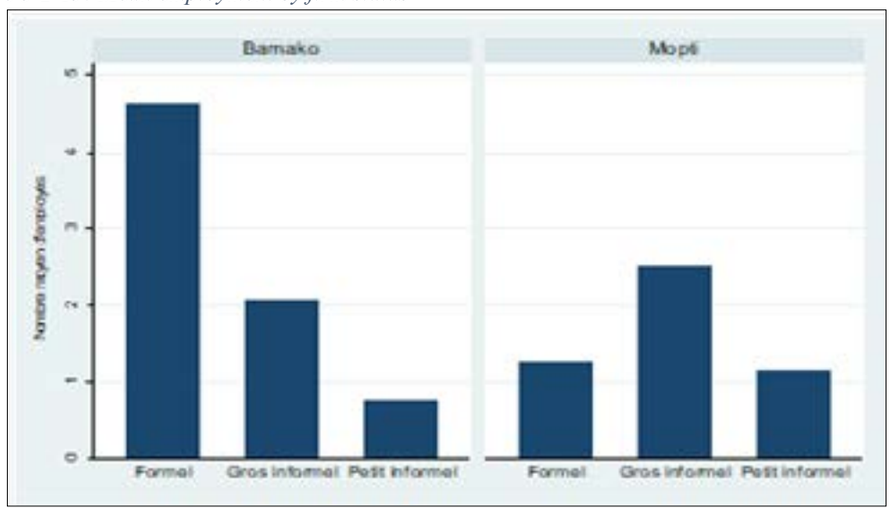
Source : EMOP 2011/2012 ; EMOP 2012/2013, EMOP 2013/2014 ; EMOP2014/2015 ; EMOP2016/2017 ; EMOP 2017/2018 et calcul des auteurs

In summary, Mali's labor market is characterized by a labor force participation rate exceeding 60% and an unemployment rate of around 10%. Women and young people are the most vulnerable groups in the labor market, and informality plays a dominant role.

III.2. Employment, Underemployment, and Precariousness : Evidence from Our Survey Data

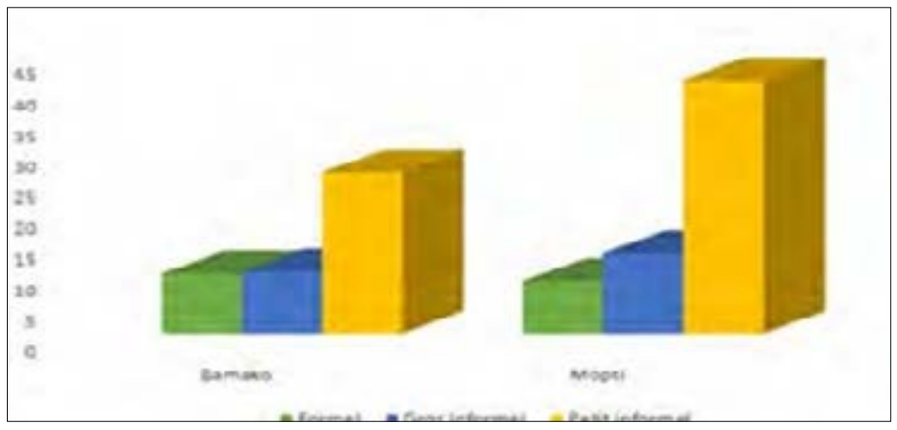
The results of our surveys reveal additional trends in informal employment in Mali. Figure 3-19 shows average employment per enterprise in the two cities. In the formal sector, the average number of employees is around four, compared with two in the large informal sector and one in the small informal sector in Bamako. In Mopti, large informal enterprises are the largest employers, with an average of about two employees, compared with one in both the formal sector and the small informal sector.

Figure 3-2-19: Mean employment by firm status



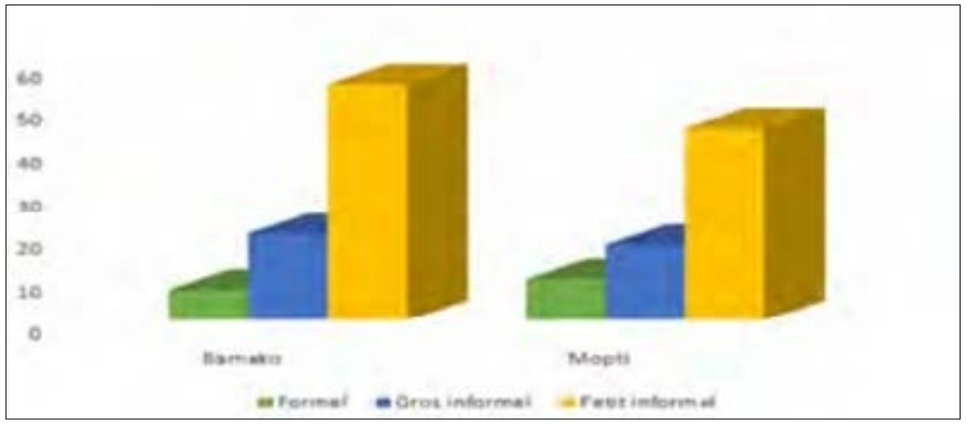
Self-employment is a defining characteristic of informality, particularly in sub-Saharan Africa. In our consolidated database, self-employment accounts for 94.02% of employment in the small informal sector in Dakar, 96.83% in Ouagadougou, and 95.3% in Cotonou. Overall, regardless of the West African city considered, self-employment represents more than 80% of informal employment (Mbaye, Golub, and Gueye, 2020). Similar trends are observed in Mali (Figure 3-2-20).

Figure 3-2-20: Proportion of self-employment by firm status (%)



Another defining feature of informality in sub-Saharan Africa particularly with respect to labor is the strong presence of women in enterprises. Mbaye et al. (2015) show that women are well represented in informal firms in Dakar, Ouagadougou, and Cotonou. Among enterprises with more than 75% female workers, the highest share is observed in Cotonou, where 36.42% of small informal firms fall into this category. For enterprises with female employment shares between 25% and 50%, Dakar records 16% for the large informal sector and 15% for the small informal sector, while Cotonou records 18.75% for the large informal sector and 15.89% for the small informal sector (Mbaye, Golub, Gueye, 2020). In Mali, the pattern is similar: women are more likely to work in the small informal sector than in the large informal sector. The proportion of women in the small informal sector is 30% in Bamako and 45% in Mopti (Figure 3-2-21).

Figure 3-2-21: Proportion of women by firm status



Another characteristic of informality in sub-Saharan Africa is the significant wage differential between the formal and informal sectors. Analysis of Table 3-13 shows a substantial gap between average wages in the formal and informal sectors. In the formal sector, the average wage is approximately one hundred fifty thousand CFA francs (150,000 CFA) in Bamako and seventy-four thousand CFA francs (74,000 CFA) in Mopti, while this gap is much smaller in the informal sector. An employee in the large informal sector earns an average of about sixty-seven thousand five hundred CFA francs (67,500 CFA) in Bamako, compared with eighty-two thousand eight hundred CFA francs (82,800 CFA) in Mopti. For the small informal sector, the wage differential is even smaller.

Furthermore, our findings show that in Bamako, wages in the formal sector are set according to a well-defined salary scale. By contrast, this is not the case in Mopti. In the formal sector in Mopti, 65% of wages are determined through direct negotiation between employer and employee, as in the informal sector (Table 3-2-16). Table 3-15 shows that in Bamako, more than 90% of both men and women receive wages above the SMIG. This is not the case in Mopti, where only 60% of men and 37% of women earn wages above the SMIG.

Table 3-2-13: Mean wages by status of firm

Informalité	Bamako	Mopti
Formel	151700	74100
Gros informel	67500	82800
Petit informel	34600	37600
Total	97700	52500

Table 3-2-14: Share of employees receiving more than the minimum wage by sex of the employee (%)

	Bamako	Mopti
Homme	97,15	60,88
Femme	95,38	37,01
Total	96,75	55,22

Table 3-2-15: Method of determination of wages by firm status (%)

Mode fixation	Bamako			Mopti		
	Formel	Gros Informel	Petit Informel	Formel	Gros Informel	Petit Informel
Grille salariale	41,15	15	2,35	11,58	0	0
Salaire du marché	9,09	0	1,76	6,32	17,39	3,83
Fixé par le manager	19,62	35	20,59	14,74	13,04	17,49
Par négo-ciation	20,57	30	32,94	65,26	65,22	71,04
Autres	9,57	20	42.35	2,11	4,35	7,65

The channels through which employees are recruited also drew our attention. Social connections appear to play a predominant role in recruitment dynamics. In both cities studied, nearly one fifth of employees interviewed in the formal sector reported having kinship ties with their employer. This connection is much more pronounced in Mopti than in Bamako. In Mopti, approximately 50% of formal-sector employees, 56% in the large informal sector, and 53% in the small informal sector are related to the firm's owner. They are either the head of the production unit, the spouse of the head, a child of the head, or someone with other family ties (Tables 3-2-17 and 3-2-18). In Bamako, both formal and informal firms use recruitment channels other than recommendations, whereas in Mopti, 52% and 37% of large and small informal firms, respectively, recruit through recommendations (Table 3-2-19).

Table 3-2-16: Kinship ties with the employer by status of the firm in Bamako (%)

Lien de parenté suivant statut	Formel	Gros Informel	Petit Informel
Chef de l'unité de production	3	5	3
Conjoint du chef	1	10	2
Enfant du chef	2	0	1
Autre parent du chef	14	15	6
Ayant des liens de parenté	2	5	4
Aucun lien de parenté	52	35	12
Autre à préciser	26	30	72
Total	100	100	100

Table 3-2-17: Kinship ties with the employer by status of the firm in Mopti (%)

Lien de parenté suivant statut	Formel	Gros Informel	Petit Informel
Chef de l'unité de production	27	39	33
Conjoint du chef	2	0	1
Enfant du chef	2	9	9
Autre parent du chef	18	4	9
Ayant des liens de parenté	0	4	1
Aucun lien de parenté	32	18	8
Autre à préciser	19	26	39
Total	100	100	100

Table 3-2-18: Channels of obtaining employment by status of the firm (%)

Canaux d'obtention	Bamako			Mopti		
	Formel	Gros Informel	Petit Informel	Formel	Gros Informel	Petit Informel
Sur recom-mandations	15	5	5	18	52	37
Ex-salarié grande société	15	10	2	1	0	0
Ex-salarié petite société	1	0	1	2	0	2
Ex-apprenti	2	5	8	19	26	18
N'importe qui	0	10	6	52	22	39
Autres	66	70	78	8	0	4

The employment rate of young people (under 25 years of age) is very low in the surveyed firms. The average age of employees is over 35 years in the formal sector in both cities, while in the small informal sector it is slightly lower (Figure 3-2-22). By contrast, when

examining employee tenure, it does not appear to vary significantly according to whether firms are formal or informal (Table 3-2-20).

Figure 3-2-22: Average age of employees by firm status

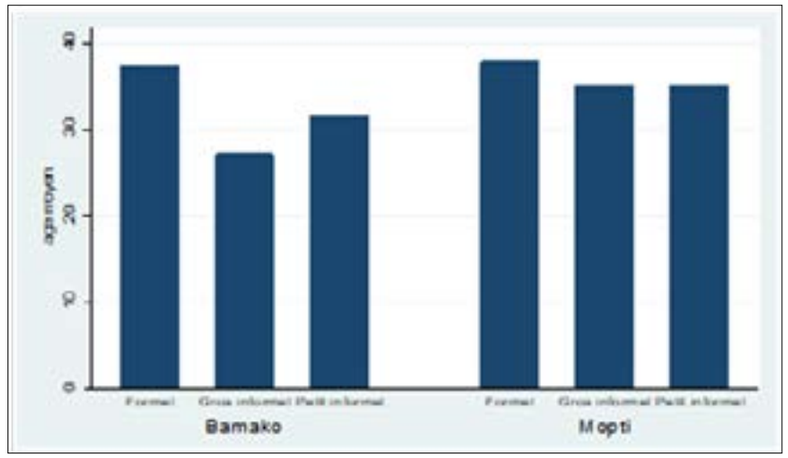


Table 3-2-19 :Tenure of employees by status of the firm (years)

Informalité	Bamako	Mopti
Formel	6	6
Gros informel	4	8
Petit informel	3	7
Global	5	7

The profile of employee training by firm status is also highlighted by our results. Formal vocational training concerns very few employees across all segments of firms. It applies to a proportion ranging between 1% and 7% in firms in Bamako and is almost nonexistent in Mopti (Table 3-2-21). Contrary to a widely held belief, most workers in both the formal and informal sectors have attended school and can at least read or write, with the exception of the small informal sector in Mopti and Bamako, which includes fewer than 20% illiterate workers (Figure 3-2-23). Nevertheless, it is important to note that most informal-sector employees attended public schools. Given that public education in Francophone Africa tends to be more general than vocational, this highlights the difficulties of practical workforce training in Africa, which constitutes a major obstacle to the development of a sound business environment. Another noteworthy result is the relatively high educational attainment of informal-sector employees, including those in the small informal sector in the countries studied: 19% of small informal employees in Bamako and 4.17% in Mopti reached tertiary education. More importantly, 57.6% of small informal employees in Bamako and 34.71% in Mopti attained lower secondary education (Table 3-2-22).

Table 3-2-20: Proportion of employees with vocational training (%)

Informalité	Bamako	Mopti
Formel	7,19	0,53
Gros informel	2,5	0
Petit informel	0,12	0
Global	3,95	0,17

Figure 3-2-23: Share of employees having attended school by status of the firm (%)

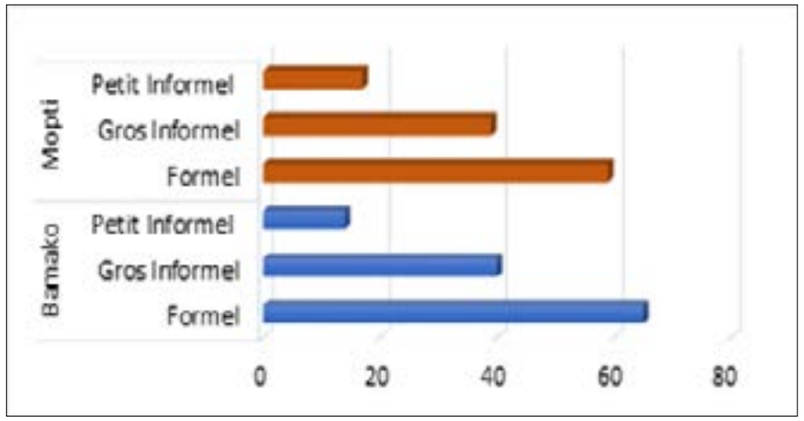


Table 3-2-21: Distribution of employees by level of education and status of the firm (%)

Ville	Informalité	Primaire	Collège	Secondaire	Supérieure
Bamako	Formel	8,22	5,67	6,23	79,89
	Gros Informel	36,96	26,09	0,00	36,96
	Petit Informel	23,08	57,69	0,00	19,23
Mopti	Formel	22,84	29,63	20,37	27,16
	Gros Informel	25,00	41,67	29,17	4,17
	Petit Informel	40,28	34,72	20,83	4,17

Our findings on working conditions for surveyed employees tend to confirm a well-established conclusion in the literature on African labor markets. Working conditions in the informal sector are often very precarious and contrast sharply with much better conditions in the formal sector. Table 3-2-23 seeks to capture the benefits granted to employees in both sectors. These benefits are virtually nonexistent in the large informal sector, while in the small informal sector they are limited to transport and housing allowances.

Table 3-2-22: Proportion of employees receiving benefits as part of their salary (%)

Ville	Types d'indemnités	Formel	Gros informel	Petit informel
Bamako	Indemnités de logement	40,9	0,0	75
	Indemnités eau	16,7	100	25
	Indemnités transport	27,3	0,0	0,0
	Indemnités électricité	0,0	0,0	0,0
	Autres (CNSS, etc.)	15,2	0,0	0,0
Mopti	Indemnités de logement	9,8		0,0
	Indemnités eau	2,0		0,0
	Indemnités transport	9,8		100
	Indemnités électricité	2,0		0,0
	Autres (CNSS, etc.)	76,5		0,0

Another important aspect to note is the absence of trade unions within informal firms. In Mopti, more than 90% of both formal and informal firms do not have a union, whereas the situation is less severe in Bamako (Figure 3-2-24). This may help explain the very low proportion of business owners reporting conflicts with their employees in both Bamako and Mopti (Figure 3-2-25).

Figure 3-2-24: Absence of trade unions by status of firms (%)

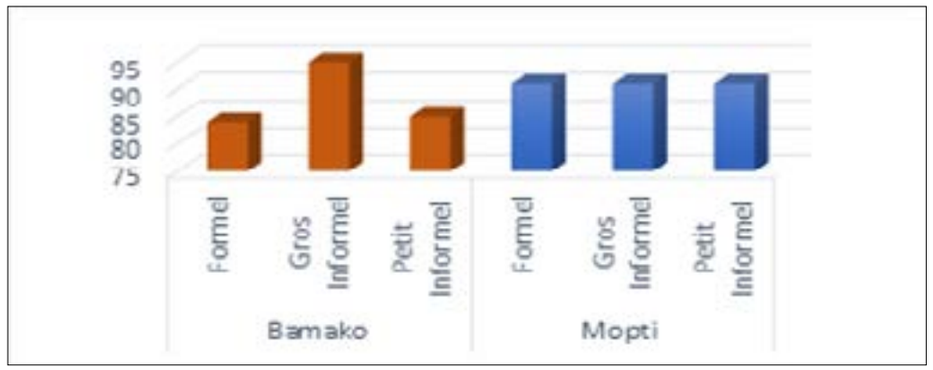
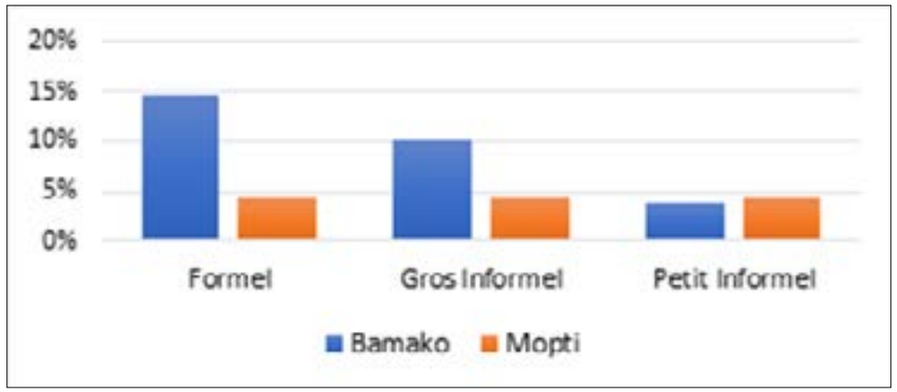


Figure 3-2-25: Proportion of firms experiencing labor-related problems by status (%)



III.3. Women in Employment and Entrepreneurship in Mali

In Mali, despite the demographic weight of women (51% of the population) and their significant contribution to wealth creation, inequalities between men and women persist and constitute one of the root causes of poverty, especially in rural areas. With the advent of the democratic system in 1991, Malian women who played an active role in this transition appear to have strengthened their civic engagement through the creation of thousands of associations and non-governmental organizations aimed at promoting women's social and economic status. Since then, women have been active in all sectors of the country's socioeconomic and cultural development. As entrepreneurship has become a key driver of economic dynamism, it must be noted that women play an important role in its development.

An analysis of the profile of female entrepreneurship in Mali reveals several important findings. It confirms that women tend to be more confined to small informal activities and are therefore more excluded than others from basic social services (training, finance, use of ICTs, etc.).

The predominance of women in the small informal sector is a clear reality in all cities studied. In Bamako, the proportion of firms headed by women is only 10% in the formal sector and 8% in the large informal sector. By contrast, in the small informal sector, it rises to 25%. In Mopti, the share of women business owners in the small informal sector is 40%, compared with 8% in the formal sector (Figure 3-3-26).

Figure 3-3-26: Distribution of firms by the gender of the manager (%)

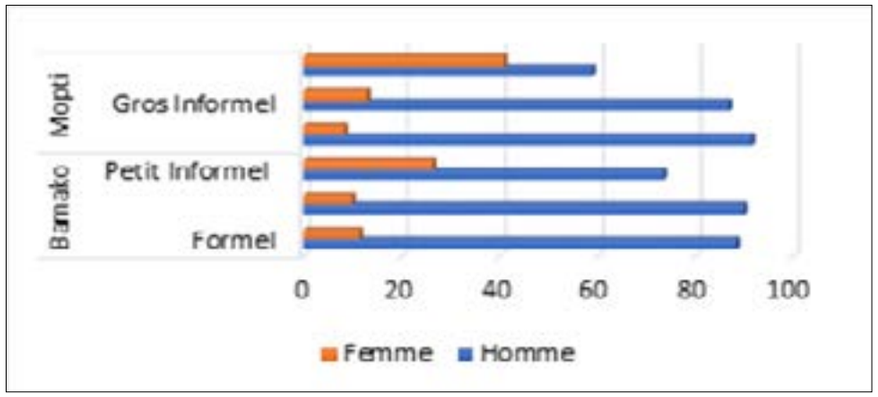


Table 3-3-23: Distribution of firms by sector and gender of head of enterprise (%)

Secteur d'activité	Bamako						Mopti					
	Formel		Gros Informel		Petit Informel		Formel		Gros Informel		petit Informel	
	Homme	Femme	Homme	Femme	Homme	Femme	Homme	Femme	Homme	Femme	Homme	Femme
Industrie	12%	5%	17%	0%	10%	5%	7%	13%	25%	0%	35%	31%
Commerce	51%	60%	56%	0%	60%	84%	45%	38%	45%	67%	19%	25%
Batiment	15%	5%	0%	0%	3%	2%	5%	0%	0%	0%	1%	0%
Service march nonfinancier	2%	0%	0%	0%	3%	0%	10%	13%	15%	0%	18%	28%
Service financiers	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%
Services non marchands	21%	30%	28%	100%	23%	9%	16%	25%	5%	0%	19%	9%
Autre à préciser	0%	0%	0%	0%	0%	0%	15%	13%	10%	33%	5%	7%

The relatively greater presence of women in the small informal sector was also revealed through our interviews. They are found in retail trade, artisanal hairdressing, the sale of prepaid phone cards, and food services (street restaurants), among others. As shown in Table 3-3-24, 84% of small informal firms headed by women in Bamako operate in trade.

We also conducted a more detailed analysis of the characteristics of female entrepreneurship by examining the correlation between the sex of the firm's owner and certain attributes of informality or exclusion. It appears that a majority of women do not keep proper accounts in either city. Those who do keep accounts represent only 30% of the total in Bamako and 17% in Mopti (Table 3-3-25). Another interesting result concerns the mobility of women's workplaces. There are more men than women with a fixed professional workspace. The proportion of women without a fixed place of work is 100% in Bamako and 97% in Mopti in the small informal sector (Table 3-3-27). Women's workplaces are often precarious, and they tend to operate as retail vendors in open-air markets in African cities.

When considering the criterion of registration, fewer than 20% of women in both cities are registered (Figure 3-3-27). This result is not surprising given that this criterion only weakly captures informality. However, one factor that remains strongly correlated with female entrepreneurship is firm size. Most women engage in very small-scale activities (fewer than five employees): 86% in Bamako and 91% in Mopti (Table 3-3-26). It is well known that small-scale informal activities are also the most exposed to precarity: 88% of women in Bamako and 86% in Mopti in the small informal sector have no social protection coverage, whereas the corresponding proportions for their male counterparts are much lower (Table 3-3-28).

Financial exclusion is a defining feature of entrepreneurship in Africa, from which even the formal sector is not entirely exempt. As a result, almost all informal actors are affected. The figures presented in the following sections clearly illustrate this point. What deserves particular emphasis is that exclusion affects women more than men. Women in the informal sector have almost no access to bank credit, unlike their male counterparts, whose access is limited but significantly higher (Table 3-3-29).

Table 3-3-24 : Distribution of enterprises by adoption of accounting and sex of the manager (%)

	Bamako		Mopti	
	Homme	Femme	Homme	Femme
Tenue de comptabilité	60,37	30,30	56,54	17,44
Non tenue de comptabilité	39,63	69,70	43,46	82,56

Table 3-3-25 : Distribution of enterprises by those with less than 5 employees and sex of manager (%)

Ville	Informalité	Homme	Femme
Bamako	Formel	21,01	13,73
	Gros informel	5,80	0,00
	Petit informel	73,19	86,27
Mopti	Formel	29,37	5,80
	Gros informel	9,52	2,90
	Petit informel	61,11	91,30

Figure 3-3-27: Registration status by the gender of the manager (%)

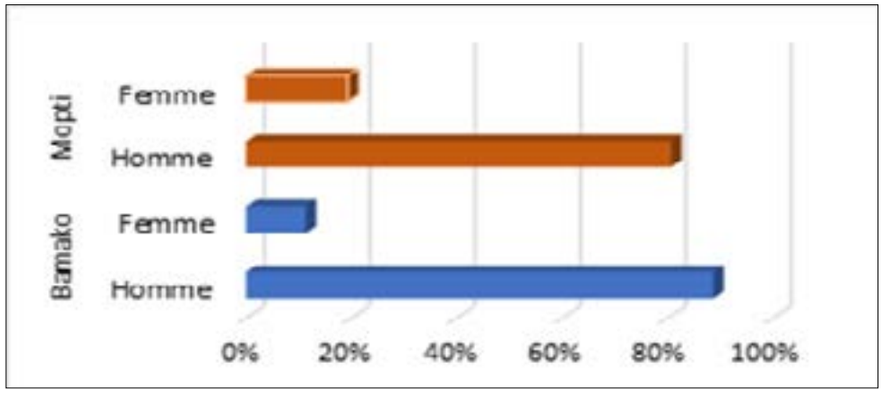


Table 3-3-26: Distribution of enterprises without registration by firm status and sex of manager (%)

Ville	Informalité	Homme	Femme
Bamako	Formel	0,00	0,00
	Gros informel	2,13	0,00
	Petit informel	97,87	100,0
Mopti	Formel	0,00	0,00
	Gros informel	10,71	2,70
	Petit informel	89,29	97,30

Table 3-3-27 : Distribution of enterprises without social security coverage by firm status and sex of manager (%)

Ville	Informalité	Homme	Femme
Bamako	Formel	38,25	7,84
	Gros informel	6,45	3,92
	Petit informel	55,30	88,24
Mopti	Formel	35,00	9,52
	Gros informel	10,56	3,57
	Petit informel	54,44	86,90

Table 3-3-28: Distribution of firms by access to bank credit and sex of the manager (%)

Ville	Informalité	Homme	Femmes
Bamako	Formel	86,54	100,00
	Gros Informel	3,85	0,00
	Petit Informel	9,62	0
Mopti	Formel	55,56	33,33
	Gros Informel	14,81	0,00
	Petit Informel	29,63	66,67

When examining sales volumes, businesses headed by women generate much lower volumes than those headed by men (Table 3-30), while male-led firms are more productive than female-led firms (Figure 3-28).

Table 3-3-29 : Sales volume by firm status and sex of the manager (in millions of CFA Francs)

Ville	Genre	Formel	Gros informel	Petit informel
Bamako	Homme	586,7	181,8	8,6
	Femme	109,4	114,4	6,1
Mopti	Homme	91	154,5	8,2
	Femme	37,1	119,7	5,5

Figure 3-3-28 : Distribution of enterprises by labor productivity and the gender of the manager

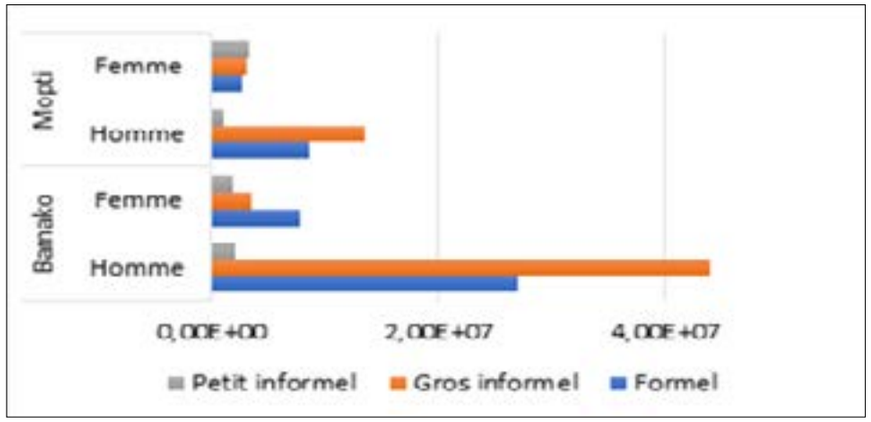


Table 3-3-30: Distribution of enterprises using ITC by sex of the manager (%)

NTIC	Bamako		Mopti	
	Homme	Femme	Homme	Femme
Utilisation d'un e-mail	87,76	12,24	97,73	2,27
Utilisation d'un site web	89,71	10,29	95,65	4,35
Utilisation d'un service mobile	87,80	12,20	74,73	25,27

In addition, women are more excluded than men from water, electricity, and telephone infrastructure services and make less use of ICTs. Women's ICT usage rates are relatively low below 20% compared with those of men (Table 3-3-31).

In summary, women appear to be more exposed than men to most manifestations of informality and precarity. Consequently, the types of activities that concentrate female entrepreneurship are precisely those that require the greatest assistance and support: very small enterprises excluded from most basic social infrastructure services.

CHAPTER IV

INFORMALITY, EMPLOYMENT, AND CONFLICT : AN ANALYSIS BASED ON OUR SURVEY DATA

In this chapter, we use data from our surveys conducted in Bamako and Mopti to analyze the various characteristics and functioning of informal enterprises with respect to conflict. In most of the tables and figures, we retain the classification distinguishing between the formal sector, the large informal sector, and the small informal sector, rather than the more detailed seven-level classification of formality/informality.

In the first section, we examine several issues related to the conflict, including firms' involvement in the crisis, their perceptions of its origins, their assessment of the effectiveness of existing conflict-resolution mechanisms, the effects of the conflict on their activities (sales, investment, etc.), and their subcontracting relationships with the formal sector. In the second section, we focus on the impact of internal migration on the labor market and on the operations of Malian enterprises.

IV.1. Impact of the Crisis on Formal and Informal Activities: Business Leaders' Perceptions

In this section, we analyze business leaders' assessments of the crisis affecting Mali since the 2010s. What is the extent of their awareness of the crisis? How has it affected their performance, and how do they perceive its consequences for the national economy and the existing mechanisms for conflict resolution?

IV.1.1. Level of Awareness of the Crisis and Perceptions of Its Origins among Business Leaders

Business leaders' awareness of young people involved in the armed conflict is relatively high (Table 4-1-32). What is striking in this table, however, is the high proportion of non-responses to these questions, which many respondents considered sensitive during our surveys, interviews, and focus groups. The sense of insecurity is such that many interlocutors indicated the existence of unsuspected levels of complicity with the rebellion in both public and private spheres in Mali. As a result, despite the persistence of our interviewers, the non-response rate to certain questions particularly those related to the conflict is abnormally high.

Table 4-1-31: Business leaders' awareness of young people involved in the armed conflict by status of firm (%)

		Oui	Non	NSP	Total
	Formel	7,53	50,00	42,47	100,00
Bamako	Gros informel	6,67	40,00	53,33	100,00
	Petit informel	3,96	49,50	46,53	100,00
	Total	6,29	49,34	44,37	100,00

Mopti	Formel	12,77	57,45	29,79	100,00
	Gros informel	13,04	43,48	43,48	100,00
	Petit informel	4,92	51,37	43,72	100,00
	Total	8,00	52,67	39,33	100,00

Table 4-1-32: Business leaders' perceptions of the causes of rebellion (a) (%)

Ville	Informalité	Crises politiques	La religion	Problèmes fonciers	Clivages ethniques	La criminalité organisée	La corruption
Bamako	Formel	50,88	39,77	40	39,52	38,32	33,99
	Gros informel	66,67	41,67	50	45,45	54,55	63,64
	Petit informel	48,68	46,05	32	37,5	40,28	41,67
Mopti	Formel	63,83	46,81	34,04	60,64	55,32	51,06
	Gros informel	13,04	34,78	30,43	30,43	47,83	34,78
	Petit informel	36,61	36,61	33,33	50,27	41,53	27,32

Table 4-1-33: Business leaders' perceptions of the causes of rebellion (b) (%)

Ville	Informalité	Difficultés dans l'agriculture	Tracasserie routières	Problèmes de taxation domestique	Grèves des syndicats	Conflits agriculteurs éleveurs	Inégalités économiques
Bamako	Formel	12,79	16,37	8,28	16,47	35,67	48,85
	Gros informel	30,77	23,08	16,67	16,67	41,67	50
	Petit informel	4,6	14,67	7,89	15,79	26,32	35,53
Mopti	Formel	18,09	28,72	9,57	3,19	45,74	52,13
	Gros informel	30,43	26,09	13,04	4,35	30,43	21,74
	Petit informel	18,03	20,77	4,37	1,64	42,08	37,7

Tables 4-1-33 and 4-1-34 summarize business leaders' perceptions of the origins of the crisis. A large proportion believe that farmer–herder conflicts, land tenure problems, and organized crime are the main causes of the rebellion. More than 50% of formal entrepreneurs in Bamako and Mopti consider the political crisis to be a significant contributing factor, while 63% of large informal sector business leaders in Bamako and 34% in Mopti believe corruption is the underlying cause.

IV.1.2. Assessment of the Effectiveness of Conflict-Resolution Mechanisms

The African Union and African regional cooperation organizations such as WAEMU and ECOWAS have long emphasized the importance of effective conflict management in Africa. Numerous summits organized in recent years have reflected on the need for both modern and traditional mechanisms for conflict prevention and management.

Modern mechanisms focus on state-based, administrative, and legal management, relying on positive law, local administration, and judicial structures. Alternative conflict management approaches emerge from recognition of the limitations of traditional methods and the frequent inadequacy of state mechanisms. Promoted by NGOs and local development practitioners, these approaches aim to provide practical responses to the proliferation of conflicts, particularly those related to natural resources and land tenure.

Traditional or customary conflict management often referred to as endogenous methods draws on social capital, cultural heritage, and religious resources. A diverse set of actors is involved, including traditional authorities, community leaders, imams, marabouts, and qadis. Historical reference points, symbolic, ethical, and moral values, as well as inter-community social conventions established over time, serve as key foundations for conflict resolution.

The assessments provided by surveyed firms regarding modern conflict-prevention mechanisms are presented in Table 4-1-35. In Bamako, across all firm types, approximately 50% consider these mechanisms fairly effective. Similarly, in Mopti, 100% of large informal firms consider them fairly effective, compared to 53% of formal firms and 50% of small informal firms.

For traditional and customary mechanisms, perceptions are more mixed. In Bamako, 50% of large informal firms consider these mechanisms fairly effective, 25% consider them very effective, and 25% consider them not effective at all (Table 4-1-36).

Table 4-1-34: Perceptions of modern conflict prevention mechanisms (%)

Ville	Informalité	Très efficace	Assez efficace	Très efficace	Pas du tout efficace	Total
Bamako	Formel	19,23	51,92	23,08	5,77	100
	Gros informel	0,00	50,00	50,00	0,00	100
	Petit informel	6,67	40,00	33,33	20,00	100
	Total	15,94	49,28	26,09	8,70	100
Mopti	Formel	40,00	53,33	6,67	0	100
	Gros informel	0,00	100,00	0,00	0	100
	Petit informel	29,17	50,00	20,83	0	100
	Total	30,95	54,76	14,29	0	100

Table 4-1-35: Perceptions of modern conflict prevention mechanisms (%)

Ville	Informalité	Très efficace	Assez efficace	Pas très efficace	Pas du tout efficace	Total
Bamako	Formel	41,86	30,23	16,28	11,63	100
	Gros informel	25,00	50,00	0,00	25,00	100
	Petit informel	27,27	27,27	18,18	27,27	100
	Total	37,93	31,03	15,52	15,52	100
Mopti	Formel	34,62	53,85	11,54	0	100
	Gros informel	60,00	40,00	0,00	0	100
	Petit informel	45,45	45,45	9,09	0	100
	Total	42,67	48,00	9,33	0	100

IV.1.3. Effects of the Crisis on Sales, Costs, and Investment

The crisis has significantly affected the Malian economy. Table 4-1-37 illustrates its impact on firms' production. In Bamako, approximately 98% of firms experienced stable or declining production levels. In Mopti, around 84% of firms believe the crisis led to a decline in production.

Table 4-1-36: Impact of the crisis on firms' production (%)

Ville	Informalité	Augmentée	Constante	Baissée	Total
Bamako	Formel	0,00	45,80	54,20	100
	Gros informel	0,00	68,75	31,25	100
	Petit informel	5,26	48,42	46,32	100
	Total	2,07	48,35	49,59	100
Mopti	Formel	0,00	13,83	86,17	100
	Gros informel	0,00	8,70	91,30	100
	Petit informel	1,09	16,39	82,51	100
	Total	0,67	15,00	84,33	100

The crisis also resulted in lower sales compared to the pre-crisis period. This decline was more pronounced among formal firms (56% in Bamako and 87% in Mopti) and small informal firms (47% in Bamako and 88% in Mopti). For large informal firms, production losses reached 95% (Table 4-1-38).

Table 4-1-37: Impact of the crisis on sales (%)

Ville	Informalité	Augmentée	Constante	Baissée	Total
Bamako	Formel	0,00	43,26	56,74	100
	Gros informel	0,00	62,50	37,50	100
	Petit informel	3,67	48,62	47,71	100
	Total	1,50	46,62	51,88	100
Mopti	Formel	0,00	12,77	87,23	100
	Gros informel	0,00	4,35	95,65	100
	Petit informel	0,55	10,93	88,52	100
	Total	0,33	11,00	88,67	100

Regarding expenditures and operating costs, the crisis had limited impact in Bamako, where many firms reported unchanged conditions (44% of formal firms, 50% of large informal firms, and 60% of small informal firms). In Mopti, however, 60% of large informal firms reported increased costs, compared to 27% of formal firms and 36% of small informal firms (Table 4-1-39).

Table 4-1-38: Impact of the crisis on expenditures and operating costs (%)

Ville	Informalité	Augmentée	Constante	Baissée	Total
Bamako	Formel	28,95	44,74	26,32	100
	Gros informel	30,00	50,00	20,00	100
	Petit informel	20,25	60,76	18,99	100
	Total	25,62	51,23	23,15	100
Mopti	Formel	27,66	15,96	56,38	100
	Gros informel	60,87	13,04	26,09	100
	Petit informel	36,07	22,40	41,53	100
	Total	35,33	19,67	45,00	100

Supplier relationships remained unchanged for 53% of firms in Bamako, whereas in Mopti more than 70% of both formal and informal firms reported a reduction in the number of suppliers (Table 4-1-40).

Table 4-1-39: Impact of the crisis on suppliers (%)

Ville	Informalité	Augmentée	Constante	Baissée	Total
Bamako	Formel	7,64	49,31	43,06	100
	Gros informel	0,00	75,00	25,00	100
	Petit informel	5,10	55,10	39,80	100
	Total	6,20	53,10	40,70	100
Mopti	Formel	1,06	23,40	75,53	100
	Gros informel	4,35	13,04	82,61	100
	Petit informel	2,73	26,78	70,49	100
	Total	2,33	24,67	73,00	100

Clientele levels declined for a significant share of formal firms in Bamako (59%), while among informal firms the situation remained stable for 52% of small actors. In Mopti, more than 87% of both formal and informal firms experienced a decline in clientele due to the crisis (Table 4-1-41).

Table 4-1-40: Impact of the crisis on clients (%)

Ville	Informalité	Augmentée	Constante	Baissée	Total
Bamako	Formel	2,70	37,84	59,46	100
	Gros informel	6,25	62,50	31,25	100
	Petit informel	4,72	51,89	43,40	100
	Total	3,70	44,81	51,48	100
Mopti	Formel	0,00	3,19	96,81	100
	Gros informel	0,00	8,70	91,30	100
	Petit informel	3,83	8,20	87,98	100
	Total	2,33	6,67	91,00	100

The crisis also affected firms' financing. In Bamako, 88% of large informal firms reported no change relative to the pre-crisis period. In Mopti, however, more than 86% of formal and informal firms reported a decline in financing sources after the crisis (Table 4-1-42).

Table 4-1-41 : Impact of the crisis on sources of finance (%)

Ville	Informalité	Augmentée	Constante	Baissée	Total
Bamako	Formel	4,17	50,00	45,83	100
	Gros informel				
	Petit informel	20,00	60,00	20,00	100
	Total	6,90	51,72	41,38	100
Mopti	Formel	2,13	9,57	88,30	100
	Gros informel	0,00	4,35	95,65	100
	Petit informel	2,19	14,21	83,61	100
	Total	2,00	12,00	86,00	100

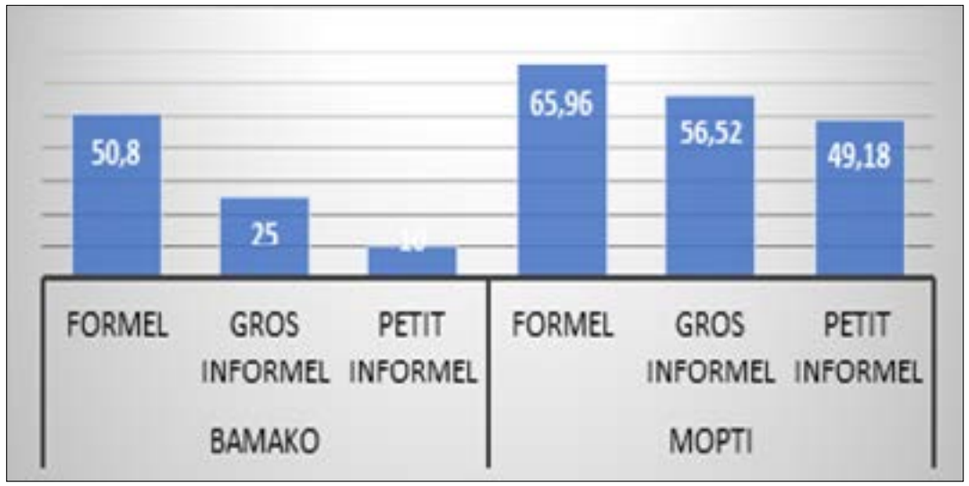
Regarding investment, 43% of formal firms in Bamako, compared to 100% of large informal firms and 89% of small informal firms, reported unchanged conditions relative to the pre-crisis period. This reflects a pronounced trend toward greater informality in the Malian economy following the crisis. In Mopti, 90% of formal firms, 95% of large informal firms, and 82% of small informal firms reported a negative impact of the crisis on investment (Table 4-1-43).

Table 4-1-42 : Impact of the crisis on investment (%)

Ville	Informalité	Augmentée	Constante	Baissée	Total
Bamako	Formel	4,35	43,48	52,17	100
	Gros informel	0,00	100,00	0,00	100
	Petit informel	0,00	88,89	11,11	100
	Total	3,03	57,58	39,39	100
Mopti	Formel	1,06	8,51	90,43	100
	Gros informel	0,00	4,35	95,65	100
	Petit informel	1,09	16,39	82,51	100
	Total	1,00	13,00	86,00	100

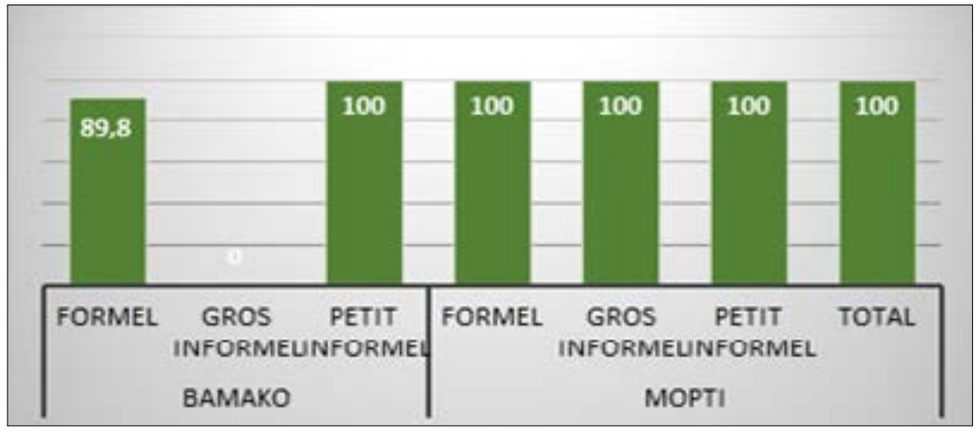
Figure 4-1-29 shows that 75% of large informal firms and 90% of small informal firms in Bamako did not experience changes in taxation due to the crisis, indicating that the crisis had no significant overall effect on taxation in the informal sector. By contrast, 51% of formal firms in Bamako and 66% in Mopti reported tax changes resulting from the crisis.

Figure 4-1-29: Positive impact of the crisis on taxation (%)



Insurance coverage remained unchanged for most firms (90.2%), regardless of firm type (Figure 4-1-30).

Figure 4-1-30: Absence of crisis impact on insurance (%)



IV.1.4. Subcontracting Mechanisms between the Formal and Informal Sectors

We also examined subcontracting relationships between formal and informal firms in Mali. As in most West African countries, these relationships are minimal, indicating limited outsourcing from the formal to the informal sector. This general trend did not appear to change significantly in Bamako due to the crisis, unlike in Mopti. For more than 75% of firms in Bamako, subcontracting relationships remained unchanged. In Mopti, however, approximately 75% of firms reported a decline in subcontracting relationships after the crisis, regardless of firm status (Table 4-1-44).

Table 4-1-43: Impact of the crisis on subcontracting with other enterprises (%)

Ville	Informalité	Augmentée	Constante	Baissée	Total
Bamako	Formel	4,17	75,00	20,83	100
	Gros informel	0,00	83,33	16,67	100
	Petit informel	5,26	84,21	10,53	100
	Total	4,08	79,59	16,33	100
Mopti	Formel	2,17	23,91	73,91	100
	Gros informel	5,56	16,67	77,78	100
	Petit informel	4,48	20,90	74,63	100
	Total	3,82	21,37	74,81	100

IV.1.5. The Crisis and the Services Sector

Our interviews reveal that the crisis particularly affected the hospitality and restaurant sector due to the sharp decline in visitors. This led to substantial losses, resulting in business closures, layoffs in some hotels, and temporary unemployment in others.

Banking activities, like other branches of the private sector, suffered losses including depletion of cash holdings, increased supply risks, and physical damage. The occupation of the north had negative consequences for banking activity, notably the suspension of new credit disbursements, non-repayment of outstanding loans, and the inability to generate net banking income in affected areas due to the absence of banking operations (loans, deposits, banking services, etc.). Bank branches were closed, particularly in Mopti, Gao, Kidal, and Timbuktu.

IV.2. Labor Market and Migration in Mali

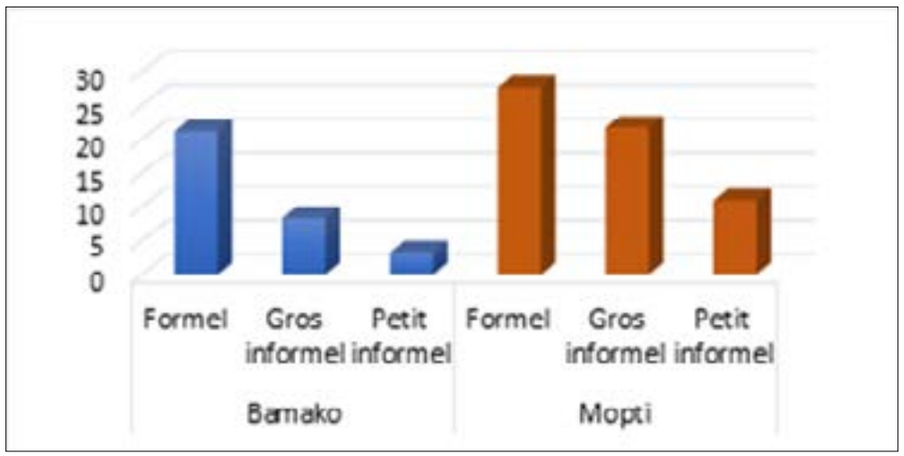
Migration movements primarily from rural areas to cities are a defining feature of labor markets in developing countries. Becker (2004) estimated internal migration flows in developing countries and found them particularly high in certain cases. In Africa, Kessides (2006) found that the urban population nearly doubled over 15 years, mainly due to rural exodus. In this regard, Harris and Todaro (1970) observed :

> *"Despite the existence of positive marginal product in agriculture and high levels of urban unemployment, rural-to-urban migration not only persists but appears to be accelerating."*

In this section, we analyze the impact of migration on the Malian labor market, drawing primarily on our survey data.

Employment of migrants from interior regions of Mali in firms located in Bamako and Mopti emerges as a salient feature. Figure 4-2-31 shows that formal firms employ a higher proportion of migrants (20% in Bamako and 27% in Mopti) than informal firms. However, the share of migrant employees in large informal firms is comparable to that in the formal sector, reaching 21% in Mopti.

Figure 4-2-31: Proportion of migrant workers by status of the firm (%)



For firms in both cities, the main reason for employee migration is the search for better income (Table 4-2-45). In formal firms, the second most common reason is reunification with family or friends.

Table 4-2-44: Distribution of firms by reason for employee migration and status of firm (%)

Ville	Informalité	Pour un revenu meilleur	Pour retrouver de la famille	Pour des raisons de sécurité	Manque d'emploi	Autre à préciser	Total
Bamako	Formel	60,00	28,57	2,86	5,71	2,86	100,00
	Gros Informel	100	0	0	0	0	0
	Petit Informel	100,00	0,00	0,00	0,00	0,00	100,00
	Total	62,16	27,03	2,70	5,41	2,70	100,00
Mopti	Formel	41,94	22,58	3,23	19,35	12,90	100,00
	Gros Informel	50,00	16,67	0,00	16,67	16,67	100,00
	Petit Informel	24,14	24,14	0,00	13,79	37,93	100,00
	Total	34,85	22,73	1,52	16,67	24,24	100,00

Wage levels also vary depending on whether employees are migrants. Table 4-2-46 shows wage differences between migrant and non-migrant employees in Bamako and Mopti, by firm status. In formal firms, non-migrant employees earn on average more than 25,000 FCFA per month than migrants in both cities. This wage gap narrows with increasing informality. For example, in Mopti, migrants in large informal firms earn approximately 73,000 FCFA, compared to 85,000 FCFA for non-migrants. Thus, firms in both Bamako and Mopti tend to pay migrant employees lower wages than resident employees.

Table 4-2-45: Mean wages by employee's migrant status and status of the firm (in millions of CFA Francs)

		Formel	Gros informel	Petit informel
Bamako	Migrants	184,7	65,3	32
	Non migrants	222,2	100	38,5
Mopti	Migrants	92,5	73,5	56,6
	Non migrants	70,8	85,4	33,2

CHAPTER V
THE INFORMAL SECTOR AND FIRM PRODUCTIVITY

Previous research has shown that informality is associated with lower levels of productivity. The productivity gap between the formal and informal sectors may be either a consequence or a cause of informality. The work of Benjamin and Mbaye (2012) confirms that informal firms are less productive than formal firms, with an important nuance: the productivity gap between the formal sector and the *large informal* sector is relatively smaller than that between the formal sector and the *small informal* sector.

In principle, productivity is a relatively simple indicator describing the relationship between output and the inputs required to produce it. Despite the apparent simplicity of this concept, measuring productivity raises a number of challenges, which become critical when comparing productivity growth and levels across countries, either for the economy as a whole or across sectors (Schreyer and Pilat 2001; Mbaye 2002).

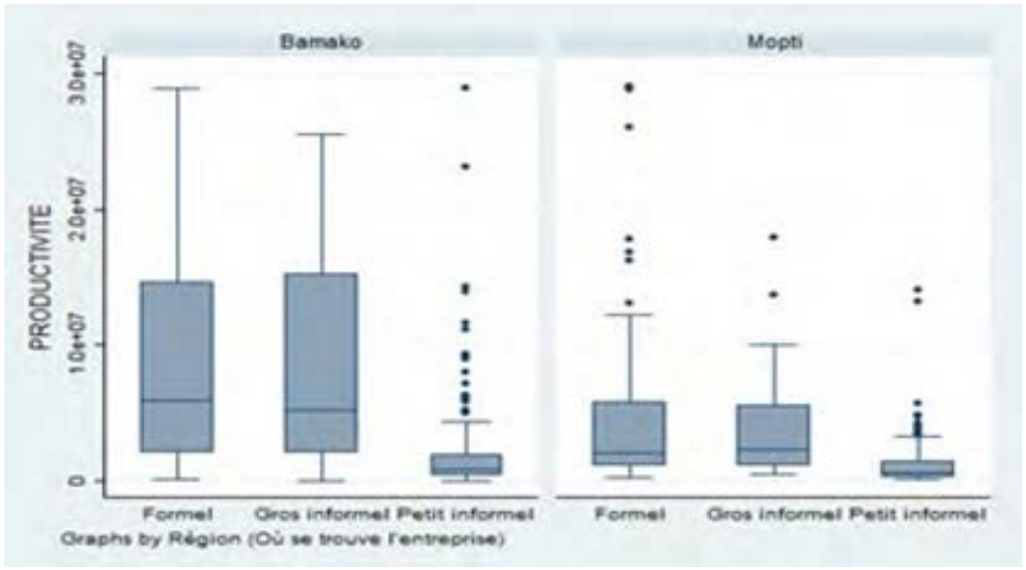
In this chapter, we first examine the productivity gap between the formal and informal sectors; we then analyze the determinants of firm productivity; and finally, we study the econometric relationship between labor productivity and informality.

V.1. The Productivity Gap between the Formal and Informal Sectors

Analysis of our results confirms the existence of a productivity gap between the formal and informal sectors in both Malian cities. This finding corroborates the conclusions of the existing literature on productivity and informality cited above, as well as our results from other countries studied.

Figure 5-1-32 presents productivity levels for the two Malian cities. Firms in Bamako are significantly more productive than those in Mopti. A relatively large productivity gap exists between the formal and small informal sectors. This gap is less pronounced between the formal sector and the large informal sector in Bamako, whereas in Mopti, large informal firms are slightly more productive than formal firms (Figure 5-1-32).

Figure 5-1-32: Productivity of the firm by status of the firm



When we adopt the continuous approach to informality with seven levels—where 0 represents full formality and 7 total informality—productivity exhibits a clear downward trend. Table 5-1-47 shows that the more formal a firm tends to be, the higher its productivity.

Table 5-1-46: Productivity of the firm by degree of informality

Niveau d'informalité	Bamako	Mopti
Niveau 0	12 600 000	6 283 999
Niveau 1	9 744 737	4 540 000
Niveau 2	8 777 861	3 000 000
Niveau 3	4 077 600	1 374 400
Niveau 4	2 201 486	1 005 250
Niveau 5	1 683 571	727 125
Niveau 6	585 000	363 117
Niveau 7	600 000	192 000

The productivity gap between formal and informal firms appears robust to alternative measures of informality. We examined the relationship between productivity and each criterion individually used to define informality. In the following figures, informality is thus measured dichotomously, alternately using the criteria described above: social security coverage for employees, access to bank credit, existence of reliable accounts, registration status, and firm size (see Figures 5-1-33, 5-1-34, 5-1-35, 5-1-36, 5-1-37, and 5-1-38). In all cases, a clear negative correlation emerges between the variable defining informality and

productivity.

Thus, Figure 5-1-33 shows that in both cities, firms with more than five employees are more productive than those with fewer than five employees.

Figure 5-1-33: Distribution of enterprises by worker productivity and size

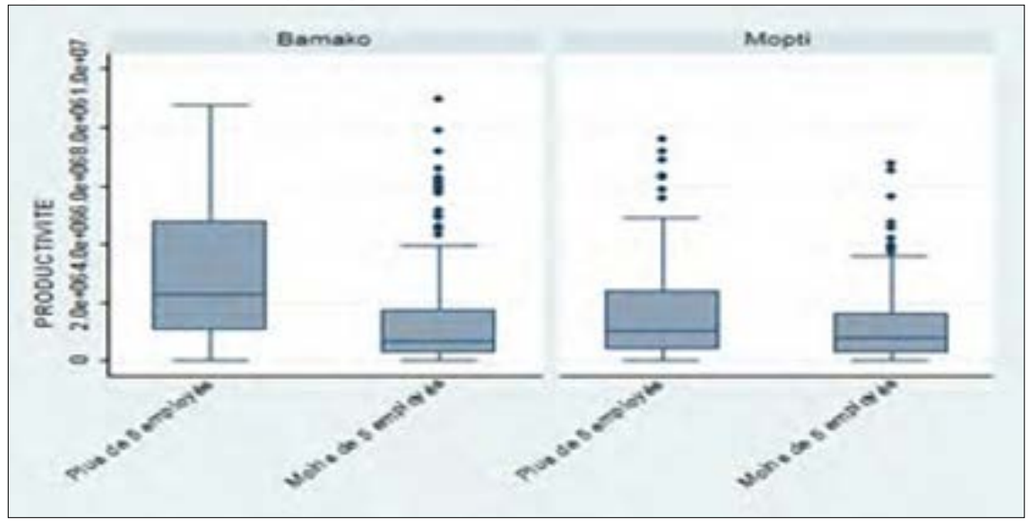


Figure 5-1-34 indicates that both formal and informal firms with a fixed professional premises have higher labor productivity than those without.

Figure 5-1-34: Distribution of enterprises by worker productivity and status of professional premises

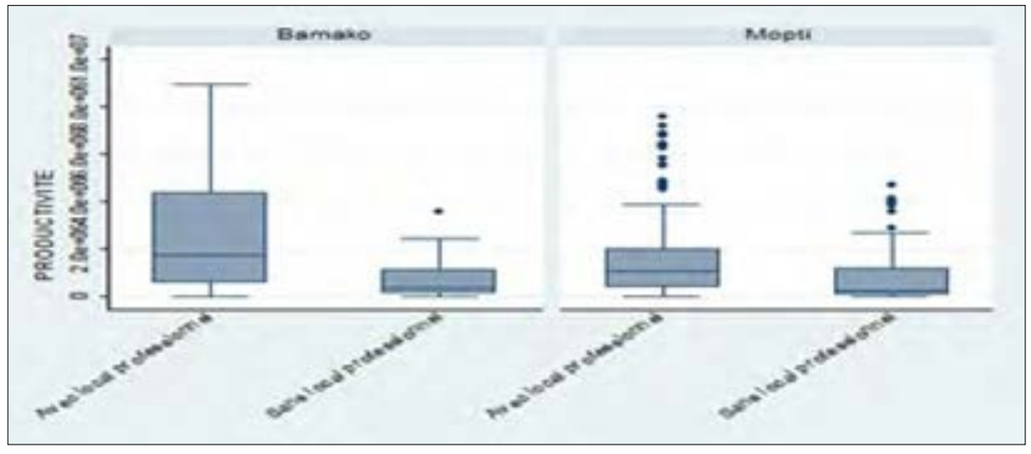
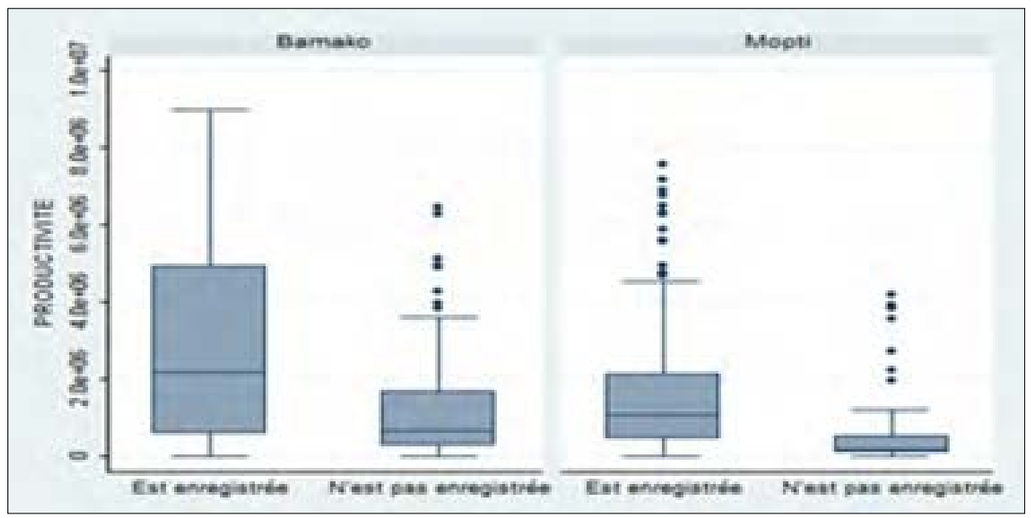


Figure 5-1-35 shows that registered firms have higher productivity than unregistered firms in both cities, with a more pronounced gap in Bamako.

Figure 5-1-35: Distribution of enterprises by worker productivity and registration status



Figures 5-1-36, 5-1-37, and 5-1-38 show that firms taxed under the real regime are substantially more productive than those that do not meet this criterion in both cities.

Figure 5-3-36: Distribution of enterprises by worker productivity and adoption of accounting

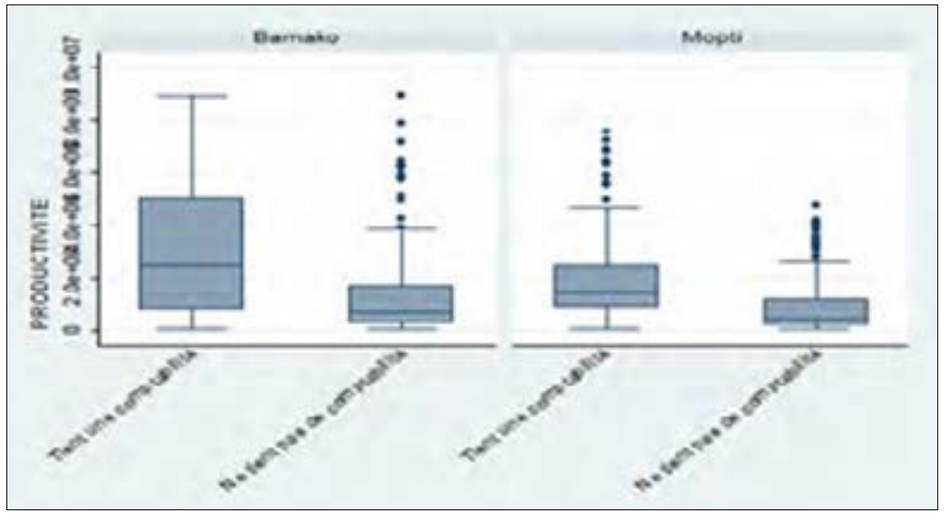


Figure 5-1-37: Distribution of enterprises by worker productivity and access to bank credit

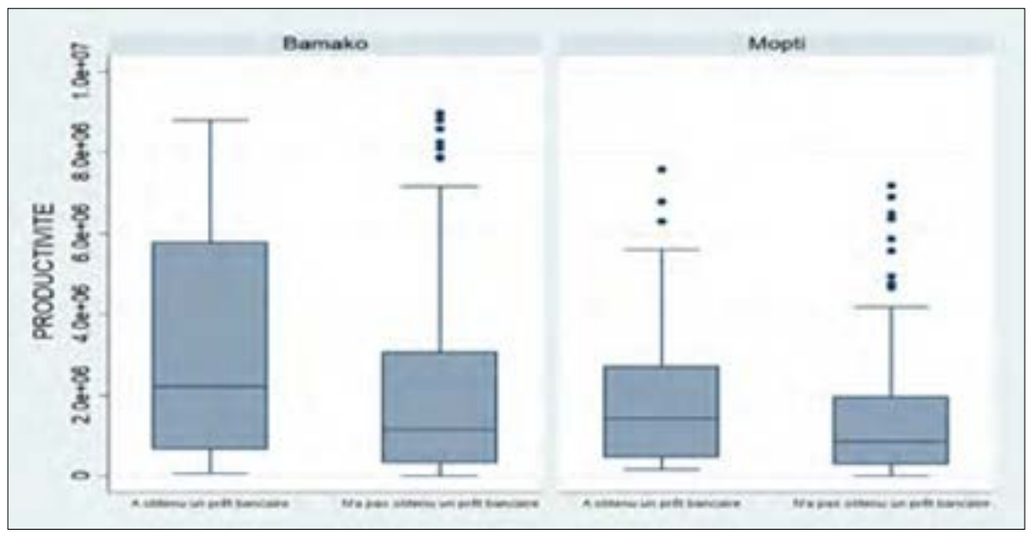


Figure 5-1-38: Distribution of enterprises by worker productivity and mode of taxation

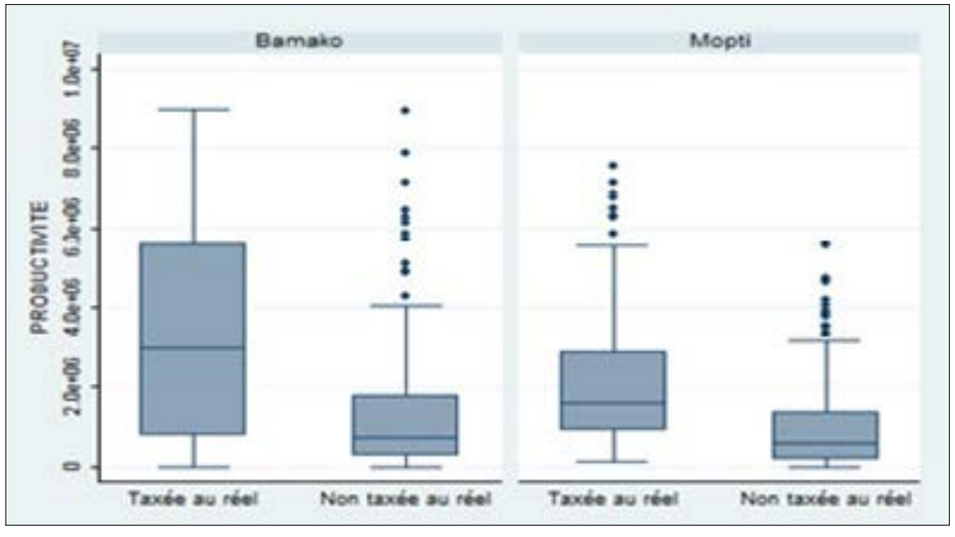


Table 5-1-48 shows that in Bamako, 48% of formal firms have labor productivity above the national average, compared to 45% of large informal firms and 3% of small informal firms. In Mopti, only 30% of large informal firms have productivity above the national average, compared to 18% of formal firms and 1% of small informal firms.

Table 5-1-47: Proportion of firms with productivity compared to the national average (%)

Ville	Informalité	Supérieur	Inférieur	Total
Bamako	Formel	48,57	51,43	100,00
	Gros informel	45,00	55,00	100,00
	Petit informel	3,53	96,47	100,00
	Total	29,25	70,75	100,00
Mopti	Formel	18,09	81,91	100,00
	Gros informel	30,43	69,57	100,00
	Petit informel	1,64	98,36	100,00
	Total	9,00	91,00	100.00

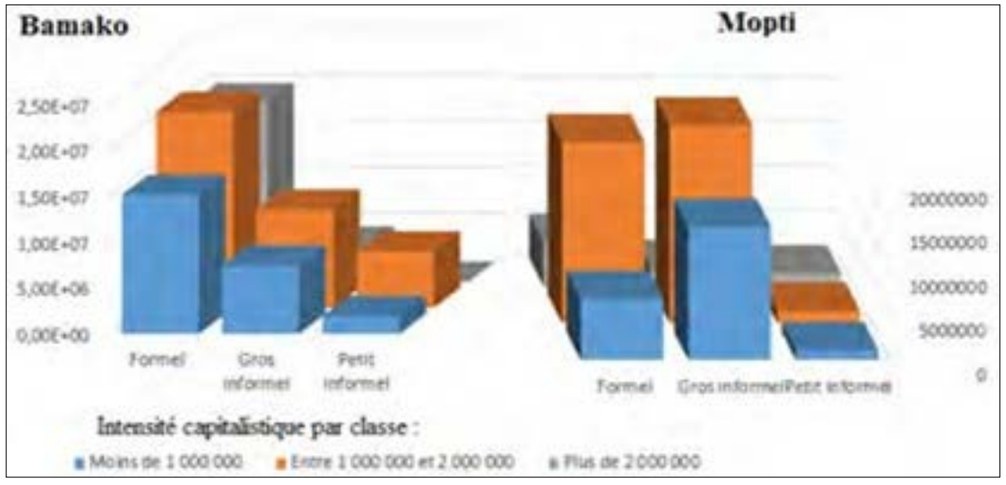
V.2. Determinants of Labor Productivity in Mali

The empirical literature has identified numerous factors explaining productivity differentials, as well as their magnitude, between the formal and informal sectors. In this section, we discuss several of these factors based on a partial dependence analysis.

V.2.1. A Descriptive Analysis of the Informality–Productivity Relationship Based on Our Surveys

Capital intensity is measured as the ratio of a firm's capital stock to its number of employees. To estimate capital stock at the firm level, we sum net investments made over the past five years; for employment, both permanent and seasonal workers are included. Capital intensity is the main factor explaining the observed difference between labor productivity and total factor productivity.

Figure 5-2-39: Worker productivity and capital intensity by status of firm



Analysis of Figure 5-2-39 shows that capital intensity has a positive influence on firm productivity.

Another important factor emerging from our data analysis is the education level of the firm's manager, which plays a significant role in productivity. Figure 5-2-40 shows that firms managed by individuals with tertiary education have much higher productivity than those led by managers with lower levels of education.

Marital status of the manager also appears to matter. Figure 5-2-41 shows that in both cities, firms led by divorced or separated managers appear to be more productive than those led by monogamously married managers or single individuals.

Figure 5-2-40: Productivity of the firm by level of education of the manager and city

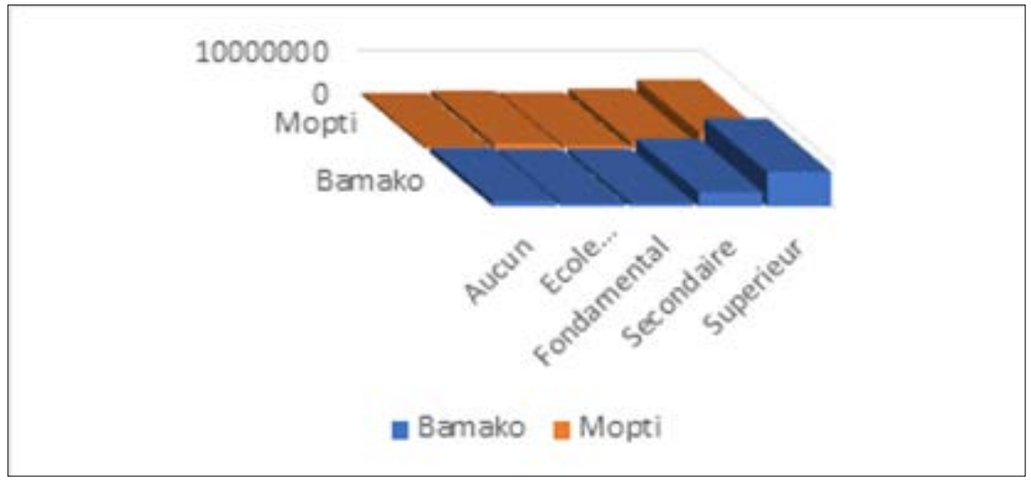
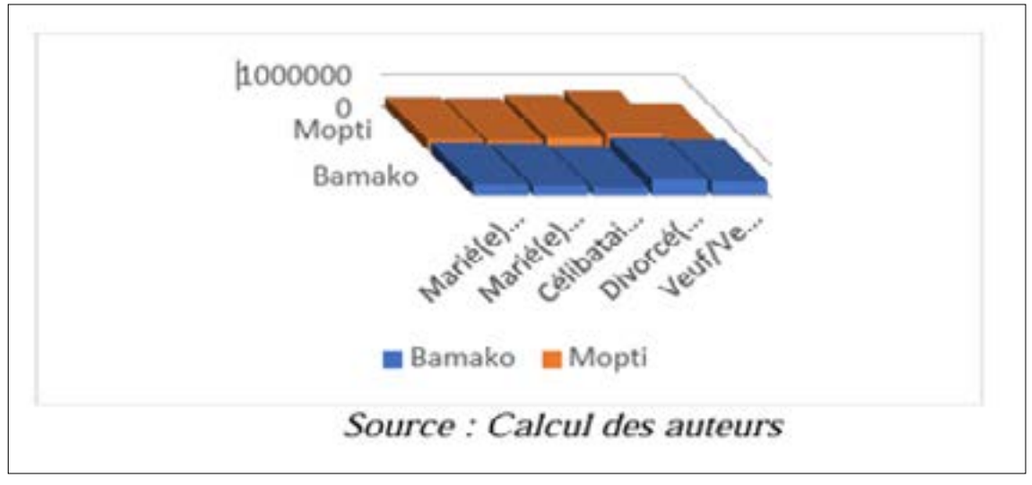


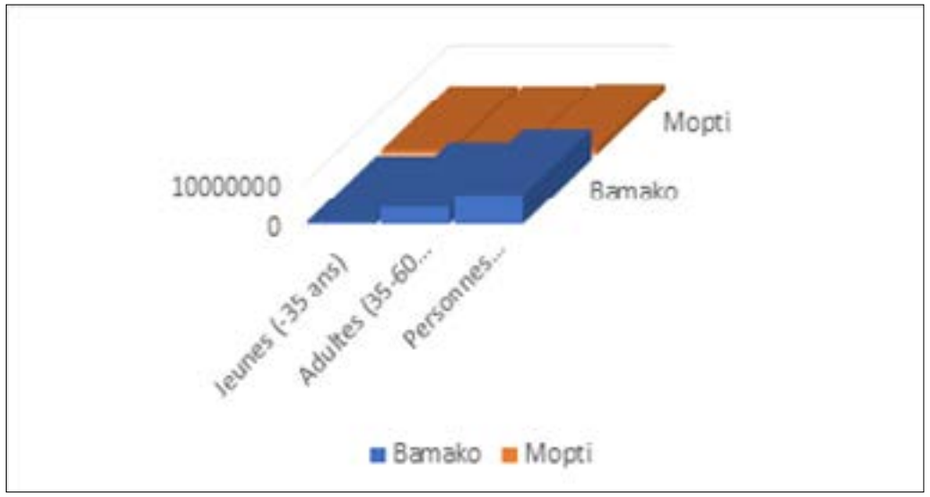
Figure 5-2-41: Productivity of the firm by marital status of the manager and city



Source : Calcul des auteurs

An additional factor that may explain the productivity gap between the formal and informal sectors is the age of the firm's manager. Figure 5-2-42 shows that in Bamako, firms managed by individuals over 60 years of age are significantly more productive than those managed by younger individuals possibly reflecting greater experience and political or social connections. In Mopti, however, the productivity gap across age groups is much smaller.

Figure 5-2-42: Worker productivity by age of the manager and by city



A factor widely discussed in the economics literature is the impact of employees' education levels on firm productivity (Table 5-2-52). Regardless of whether the firm is formal or informal, education level appears correlated with productivity, particularly at the primary and lower-secondary/upper-secondary levels.

Table 5-2-48 : Share of enterprises having higher productivity than the national average by level of education of the employees and status of the firm (%)

Ville	Informalité	Aucun	Fondamental	Lycée	Supérieur	Formation
Bamako	Formel	0,94	18,78	30,05	19,25	30,99
	Gros informel	42,31	57,69	0	0	0
	Petit informel	0	45,45	31,82	18,18	4,55
Mopti	Formel	0	85,71	31,82	18,18	4,55
	Gros informel	0	85,71	14,29	0	0
	Petit informel	0	0	0	0	0

V.3. An Econometric Analysis of the Relationship between Informality and Productivity

In this section, we conduct an econometric analysis of the relationship between informality and firm productivity. We use two approaches :

a) a standard econometric regression;

b) a set of parametric and non-parametric techniques.

In the second approach, we use decision trees, considering a set of candidate variables to determine which best partitions productivity into the most homogeneous possible subgroups. Benjamin and Mbaye (2012) show that this multi-faceted approach is useful for obtaining robust results, particularly when endogeneity may affect regression parameters. The list of candidate variables used in our regressions, along with their expected signs, is presented in Table 5-3-50.

We first estimated productivity using Random Forest methods to identify the most important explanatory variables. This exercise was conducted first on the full dataset (Table 5-3-51), and then separately for Bamako (Table 5-3-52) and Mopti (Table 5-3-53).

Table 5-3-49: Explanatory variables and expected signs of coefficients

Variable	Signe attendu
Socio-démographic caractéristiqof the manager	
Age	-/+
Sex	-/+
Marital status	-/+
Education	+
Illiteracy	-
Position in the household (head of household or other)	-/+
Sectoral Characteristics	
Capital intensity	+
Level of protection of imports	+/-
Share of exports in total output	-/+
Perception of business environment and labor regulations	
Perception of the cost of labor and other nontradable factors	-
Perception of the flexibility of labor regulations	-
Perception of level of fiscal harassment	-
Perception of the capacity of state d'inspection des services	-
Perception of financial constraints	-
Perception of the crédibility of economic policy	-

Table 5-3-50: Estimates of productivity at the national level by Random Forest

Variable	Libellé	Score	
CRITÈRE7	Not taxed under the actual regime	100,00	
DC1_2	Taxes and fees	90,18	
LOGINTENSITÉ_ CAP	Log of capital intensity	31,03	
CRITÈRE2	Without business premises	26,17	
ID2A	Sex of the manager	21,09	
CRITÈRE6	Not registered with a social security service	16,22	
CI3	Future for the entreprise	2,76	
RF14	Opinion on fiscal harassment by the tax authorities	1,12	
TOT_GLOBAL	Number of employees	0,00	
CFC4B	Share of exports	0,00	
DC1_1	Wage bill	0,00	
ID3B	Highest grade level completed by manager	0,00	
ID2B	Age of manager	0,00	
IG8	Number of entreprises owned	0,00	
CRITÈRE5	No bank loan obtained	0,00	
CRITÈRE4	No formal accounting	0,00	
CRITÈRE3	Not registered	0,00	
CRITÈRE1	Fewer than five employees	0,00	
FIE6	Difficulty repaying loans	0,00	
RF12	Assessment of the good management of taxes	0,00	
RF7	Opinion of the quality of tax collection services	0,00	
ID2C	Marital status of the manager	0,00	
IG5	Change in activity of the entreprise since its creation	0,00	
BRANCHE	Branche of activity	0,00	
SECTEUR	Secteur d'activity	0,00	

Table 5-3-51 shows that, in the full sample, the variables that most strongly explain productivity are: taxation, type of taxes and duties, capital intensity, professional premises, gender of the manager, enrollment in a social security scheme, and confidence in the future. Notably, all these variables either represent or are correlated with informality.

Table 5-3-51: Estimates of productivity for Bamako by Random Forest

Variable	Label	Score	
CRITÈRE2	Without business premises	100,00	
LOGINTEN-SITÉ_CAP	Log of capital intensity	97,28	
CRITÈRE7	Not taxed under the actual regime	54,94	
TOT _GL O- BAL	Number of employees	13,10	
ID2A	Sex of the manager	8,45	
DC1_2	Taxes and fees	5,32	
RF7	Jugement of the quality of tax collection services	2,21	
ID2B	Age of manager	2,62	
CRITÈRE4	No formal accounting	0,00	
DC1_1	Wage bill	0,00	
CI3	Future for the enterprise	0,00	
FIE6	Difficulty repaying loans	0,00	
CRITÈRE6	Not registered with a social security service	1,62	
CRITÈRE5	No bank loan obtained	0,00	
CFC4B	Share of exports	0,00	
ID2C	Marital status of the manager	0,00	
ID3B	Highest grade level completed by manager	0,00	
IG5	Change in activity of the entreprise since its creation	0,00	
IG8	Number of enterprises owned	0,00	
CRITÈRE3	Not registered	0,00	
RF12	Opinion on the good management of taxes	0,00	
RF14	Opinion on the fiscal harassment by the tax authorities	0,00	
CRITÈRE1	Less than five employees	0,00	

SECTEUR	Sector of activity	0,00	
BRANCHE	Branche of activity	0,00	

In Bamako, the variables explaining firm productivity are: professional premises, capital intensity, taxation, firm size, manager's gender, and fiscal variables such as the number of taxes and the quality of tax collection (Table 5-3-52).

Table 5-3-52: Estimates of productivity for Mopti by Random Forest

<table>
<tr><td>Variable</td><td>Label</td><td>Score</td><td></td></tr>
<tr><td>DC1_2</td><td>Taxes and fees</td><td>100,00</td><td>||||||||||||||||||||||||||||||
||||||||||||||||||</td></tr>
<tr><td>CRITÈRE7</td><td>Not taxed under the actual regime</td><td>19,26</td><td>|||||||||</td></tr>
<tr><td>CRITÈRE3</td><td>Not registered</td><td>15,62</td><td>|||||||</td></tr>
<tr><td>ID3B</td><td>Highest grade level completed by manager</td><td>14,10</td><td>||||||</td></tr>
<tr><td>DC1_1</td><td>Wage bill</td><td>4,31</td><td>||</td></tr>
<tr><td>RF12</td><td>Opinion on the good management of taxes</td><td>4,06</td><td>|</td></tr>
<tr><td>BRANCHE</td><td>Branche of activity</td><td>2,67</td><td>|</td></tr>
<tr><td>CRITÈRE5</td><td>No bank loan obtained</td><td>0,00</td><td></td></tr>
<tr><td>CRITÈRE6</td><td>Not registered with a social security service</td><td>0,00</td><td></td></tr>
<tr><td>CRITÈRE4</td><td>No proper accounting</td><td>0,00</td><td></td></tr>
<tr><td>CFC4B</td><td>Share of exports</td><td>0,00</td><td></td></tr>
<tr><td>CRITÈRE2</td><td>Without business premises</td><td>0,00</td><td></td></tr>
<tr><td>FIE6</td><td>Difficulty of repaying debts</td><td>0,01</td><td></td></tr>
<tr><td>ID2A</td><td>Sex of the manager</td><td>0,00</td><td></td></tr>
<tr><td>ID2B</td><td>Age of the manager</td><td>0,00</td><td></td></tr>
<tr><td>ID2C</td><td>Marital status of the manager</td><td>0,00</td><td></td></tr>
<tr><td>CRITÈRE1</td><td>Less than five employees</td><td>0,00</td><td></td></tr>
<tr><td>IG5</td><td>Change in activity of the entreprise since its creation</td><td>0,00</td><td></td></tr>
<tr><td>IG8</td><td>Number of entreprises owned</td><td>0,00</td><td></td></tr>
<tr><td>LOGINTENSI-TÉ_CAP</td><td>Log of capital intensity</td><td>0,00</td><td></td></tr>
<tr><td>CI3</td><td>Future for the enterprise</td><td>0,00</td><td></td></tr>
</table>

RF14	Opinion on fiscal harassment by the tax authorities	0,87	
RF7	Jugement on the quality of tax collection services	0,72	
SECTEUR	Sector of activity	0,00	
TOT_GLOBAL	Number of employees	0,00	

In Mopti, the variables influencing firm productivity are: taxation, manager's education level, wage bill, registration status, and sector of activity.

Table 5-3-53 : Estimates of productivity merging the data of the two cities

Linear régression			Number of	obs	=	700	
			F (8 , 692)		=	3143,64	
			Prob > F		=	0,00	
			R-squa-red		=	0,97	
			Root MSE		=	2,54	
		Robust HC3					
LogPRODUC-TIVITÉ	Coef.	Std. Err.	T	P>t	[95% Conf.	Inter-val]	
CRITÈRE7							
Not taxed under the actual regime	1,58	0,25	6,23	0,00	1,08	2,08	
LogINTEN-SITE_CAP	1,00	0,02	53,68	0,00	0,97	1,04	
CRITÈRE2							
Without business premises	-1,09	0,29	-3,81	0,00	-1,65	-0,53	
Sex of the manager							
Female	0,05	0,24	0,20	0,85	-0,43	0,52	
CRITÈRE6							
Not registered with a social security service	0,43	0,26	1,64	0,10	-0,08	0,93	
Confidence in the future							
No	0,10	0,27	0,35	0,73	-0,44	0,63	
Fiscal harassment							
No	1,02	0,24	4,18	0,00	0,54	1,49	
Size	0,03	0,01	3,50	0,00	0,01	0,04	

In the full sample, not being taxed under the real regime, capital intensity, absence of fiscal harassment, and firm size have a significant and positive impact on productivity, while lack of professional premises has a significant negative impact. Confidence in the future and manager's gender do not have a significant effect on productivity (see Table 5-3-54).

Table 5-3-54: Estimates of productivity of firms in Bamako

Linear régression			Number of	obs	=	400
			F(9, 391)		=	2053,55
			Prob > F		=	0,00
			R-squared		=	0,98
			Root MSE		=	2,28
		Robust HC3				
Log PRODUC-TIVITÉ	Coef.	Std. Err.	t	P>t	[9 5 % Conf.	Interval]
CRITÈRE2						
Without business premises	-1,69	0,36	-4,73	0,00	-2,40	-0,99
Log Intensité Ca-pitalistique	0,97	0,03	28,56	0,00	0,90	1,04
CRITÈRE7						
Not taxed under the actual regime	2,48	0,35	7,14	0,00	1,80	3,16
Size	0,02	0,01	2,88	0,00	0,00	0,03
Sex of the manager						
Female	-0,49	0,30	-1,59	0,11	-1,08	0,11
Age of the manager	0,02	0,01	3,80	0,00	0,01	0,04
Assessmenst of the quality of tax collection services						
Efficient	0,70	0,36	1,93	0,06	-0,01	1,42
Not efficient	0,71	0,51	1,38	0,17	-0,30	1,71
CRITÈRE6						
Not registered with a social security service	-0,09	0,32	-0,29	0,77	-0,73	0,54

Results in Table 5-3-55 show that in Bamako, capital intensity, firm size, non-taxation under the real regime, an effective tax collection system, and manager's age have a positive and significant impact on productivity, while lack of professional premises negatively affects productivity.

By contrast, results in Table 5-3-56 show that in Mopti, capital intensity, firm size, non-taxation under the real regime, an effective tax collection system, manager's age, trade, non-market services, and the quality of tax services have a positive and significant impact on firm productivity.

Table 5-3-55: Estimates of productivity of firms in Mopti

Linear regression				Number of obs	=	300
				F (16, 284)	=	1174,52
				Prob > F	=	0,00
				R-squared	=	0,98
				Root MSE	=	1,97
		Robust HC3				
Log PRODUCTIVITY	Coef.	Std. Err.	t	P>t	[9 5 % Conf.	Interval]
Log CAPITAL INTENSITY	0,39	0,07	5,29	0,00	0,25	0,54
Size	0,02	0,03	0,47	0,64	-0,05	0,08
CRITERION 3						
Not registered	-1,21	0,35	-3,44	0,00	-1,91	-0,52
CRITERION 7						
Not taxed under the actual regime	1,18	0,44	2,68	0,01	0,31	2,04
Age of the manager	0,08	0,04	2,08	0,04	0,00	0,15
SECTOR						
Trade	1,54	0,35	4,35	0,00	0,84	2,23
Construction	0,17	0,68	0,25	0,80	-1,17	1,51
Non-financial market services	0,17	0,39	0,44	0,66	-0,59	0,94
Financial and insurance services	1,55	10,02	0,15	0,88	-18,17	21,27
Non-market services	0,84	0,44	1,93	0,06	-0,02	1,70
Other (to be specified)	0,81	0,46	1,78	0,08	-0,08	1,71
Assessment of the quality of the tax collection service						
Effective	6,79	1,32	5,13	0,00	4,19	9,40
Not effective	5,89	1,42	4,15	0,00	3,10	8,68
Number of enterprises owned	0,33	0,22	1,52	0,13	-0,10	0,76
Opinion on sound tax management						
No	0,65	0,28	2,32	0,02	0,10	1,20

CRITERION 2						
Without business premises	0,51	0,37	1,38	0,17	-0,22	1,25
Sex of the manager						
Female	-0,32	0,27	-0,12	0,9	-0,55	0,49

Table 5-3-55: Estimates of productivity of firms in Mopti

Linear régression				Number of obs	=	300
				F (16, 284)	=	1174,52
				Prob > F	=	0,00
				R-squared	=	0,98
				Root MSE	=	1,97
		Robust HC3				
Log PRO-DUCTIVI-TÉ	Coef.	Std. Err.	t	P>t	[9 5 % Conf.	Interval]
Log INTEN-SITÉ_ CAP	0,39	0,07	5,29	0,00	0,25	0,54
Size	0,02	0,03	0,47	0,64	-0,05	0,08
CRITÈRE3						
Not registered	-1,21	0,35	-3,44	0,00	-1,91	-0,52
CRITÈRE7						
Not taxed under the actual regime	1,18	0,44	2,68	0,01	0,31	2,04
Age of manager	0,08	0,04	2,08	0,04	0,00	0,15
SECTEUR						
Commerce	1,54	0,35	4,35	0,00	0,84	2,23
Construction	0,17	0,68	0,25	0,80	-1,17	1,51
Non-financial market services	0,17	0,39	0,44	0,66	-0,59	0,94
Financial and insurance services	1,55	10,02	0,15	0,88	-18,17	21,27
Non-market services	0,84	0,44	1,93	0,06	-0,02	1,70
Other	0,81	0,46	1,78	0,08	-0,08	1,71
Assessment on quality of tax services						

Efficient	6,79	1,32	5,13	0,00	4,19	9,40
Not efficient	5,89	1,42	4,15	0,00	3,10	8,68
Number of entreprises owned	0,33	0,22	1,52	0,13	-0,10	0,76
Opinion on sound tax management						
Non	0,65	0,28	2,32	0,02	0,10	1,20
CRITÈRE2						
Without business premises	0,51	0,37	1,38	0,17	-0,22	1,25
Sexe of the manager						
Female	-0,32	0,27	-0,12	0,9	-0,55	0,49

CHAPTER VI

BUSINESS ENVIRONMENT AND THE INFORMAL SECTOR

Constraints related to the investment climate are generally perceived as fostering informality. In African countries, constraints linked to the business environment appear unfavorable to both formal and informal enterprises, but with greater severity for the latter. Constraints affecting the business environment have many dimensions, some of which are analyzed in this section.

In Mali, as in most African countries, the poor quality of the business environment is one of the explanations for the expansion of the informal sector, to the detriment of the formal sector. This low quality manifests itself at several levels: limited access to finance; the high cost and low quality of infrastructure services (roads, electricity, water, telecommunications, etc.); difficulties in connecting to these services; inconsistencies in the tax system; and so forth. A multiplicity of state and non-state institutions has been established to improve the business climate and the regulatory framework, but their effectiveness remains very limited, judging by the perceptions of both formal and informal business leaders regarding the quality of the business climate, which remains highly negative.

This chapter is divided into two main sections. In the first, we review the framework supporting the national private sector, with particular emphasis on aspects that more directly address the informal sector. In the second section, we present our results on the perceptions that formal and informal actors continue to hold regarding the investment climate.

VI.1. The Framework for Improving the Business Climate in Mali

The quality of services (infrastructure, justice, finance) affects firms' choices insofar as one of the advantages of formal status lies in greater access to these services. When these services are of poor quality, there is, less incentive for a firm to become formal. At the same time, if formal enterprises must bear the full burden of tax collection without any corresponding benefits, informal status becomes attractive. Among the obstacles cited by firms, taxation, administrative red tape, and rampant corruption figure prominently (Mbaye et al. 2015).

In recent years, the Malian state has sought to strengthen the framework for improving the business climate by reinforcing public institutions responsible for enterprise support, taxation, and access to finance. This strengthening has mainly concerned institutions such as the Investment Promotion Agency (API-Mali), the Export Promotion Agency (APEX), the Chamber of Commerce and Industry of Mali (CCIM), and the National Employers' Council of Mali (CNPM). In Mali, as in other West African countries, these support institutions are underfunded, inadequately staffed with qualified human resources, and characterized by overlapping mandates, all of which lead to relative inefficiency (Benjamin and Mbaye 2012).

VI.1.1. The Investment Promotion Agency (API-Mali)

Created in 2005 by Decree No. 05-019/P-RM of September 26, 2005, but operational since 2009, API-Mali is a public administrative institution. Placed under the supervision of the Ministry for Investment Promotion and the Private Sector, API-Mali has financial autonomy. Its main missions are to:

- encourage and support the development of foreign and domestic direct investment;
- contribute to the improvement of the business climate;
- contribute to the development and regulation of industrial zones and economic activities.

More specifically, API-Mali is responsible for:

- targeting, attracting, and stimulating the interest of potential investors by promoting Mali as an investment destination;
- welcoming, informing, accompanying, and assisting national and foreign investors in the implementation of their projects;
- facilitating administrative procedures and processes, notably through the One-Stop Shop, and issuing or ensuring the issuance of operating authorizations to investors in accordance with prevailing regulations;
- promoting the creation and development of small and medium-sized enterprises and assisting in the development of concrete partnerships between Malian firms and those of other countries;
- contributing to the planning, coordination, implementation, and regulation of industrial zones and economic activity areas, in order to provide investors with competitive and attractive physical infrastructure;
- monitoring investment promotion activities, identifying obstacles and constraints, and proposing the necessary organizational and regulatory measures to the competent authorities in order to address them.

API's mission is to encourage and support the development of foreign and domestic direct investment, to contribute, on the one hand, to improving the business climate and, on the other, to the development and regulation of industrial zones and economic activity areas. The One-Stop Shop issues operating authorizations for new enterprises and approves Investment Code accreditation for those opting for this formality, specifying the chosen regime.

VI.1.2. The Export Promotion Agency (APEX)

APEX is a public administrative institution (EPA) created in 1977, primarily to ensure the economic and commercial promotion of Malian enterprises. Its main missions are to:

- organize promotional activities for Malian goods and services;
- implement programs for value-chain development and sectoral export promotion strategies formulated by public authorities;

- implement export incentive mechanisms;
- encourage the establishment of technical, banking, and insurance facilities for export goods and services;
- contribute to capacity building for company executives, enterprises, and public administration staff through technical and vocational training in foreign trade;
- provide producers and exporters with information on quality standards and market access conditions for goods and services;
- support, advise, and accompany exporters;
- assist enterprises in increasing and diversifying the supply of export goods and services;
- conduct research and studies on export promotion and disseminate the results;
- issue certificates of origin for goods destined for export;
- contribute to the collection, processing, and dissemination of foreign trade statistics;
- encourage and develop strategic partnerships to increase exports and promote the "Made in Mali" origin.

VI.1.3. The Chamber of Commerce and Industry of Mali (CCIM)

The CCIM is one of the oldest business support institutions in Mali. It was established in 1906 in French Sudan, present-day Mali. It is responsible for organizing and representing individuals and legal entities operating in the various branches of commercial, industrial, and service activities.

As part of its mandate, the CCIM may:

- participate in initial and continuing training in the fields of commerce, industry, and services;
- provide technical assistance to enterprises in order to facilitate the completion of various administrative formalities and to promote their activities;
- disseminate any useful information or the results of studies.

In addition, the CCIM also ensures:

- the publication of various materials, including economic information bulletins and the journal *Private Sector*, among others;
- the issuance to exporters of forms that must be completed and validated by certain administrative services, such as import intentions, customs declarations, etc.

VI.1.4. The National Employers' Council of Mali (CNPM)

Created on January 25, 1980 under the name *National Federation of Employers of Mali (FNEM)*, the CNPM represents a grouping of employers' associations in Mali. It serves as the sole interlocutor of the private sector vis-à-vis the Malian government. Its main objective is to organize and safeguard the Malian private sector.

The CNPM is composed of national professional organizations and regional employers' councils. It includes more than 40 professional groupings and 7 regional employers' councils located in Koulikoro, Sikasso, Ségou, Mopti, Gao, Timbuktu, and Kayes. The CNPM is structured around a general assembly bringing together delegates representing regional employers' councils and professional groupings, as well as an executive bureau of 20 members.

The CNPM encompasses several professional groupings across multiple sectors of activity.

In order to better support Malian enterprises, the CNPM has established the Mali Subcontracting and Partnership Exchange (BSTP-Mali). This entity is responsible for the following activities :

- promoting relationships between small and large enterprises in the areas of subcontracting and partnership, both nationally and internationally;
- promoting national production in all areas of intervention of BSTP-Mali by encouraging the maximum use of installed or expected productive capacities and available human resources;
- integrating Malian enterprises into the subregional and global economy;
- supporting the expansion and enhancement of capacities of existing enterprises or the creation of new capacities;
- conducting surveys on opportunities for subcontracting and strategic, technical, and commercial partnerships at national and international levels;
- organizing forums, meetings, and seminars to promote exchanges on best practices in subcontracting and partnerships;
- supporting capacity building for subcontracting enterprises in production management and quality improvement of their services;
- providing assistance and support to beneficiary enterprises for participation in national, regional, and international forums, fairs, and exhibitions;
- providing subcontracting enterprises with relevant information to support better investment decision-making or technical and commercial alliances;
- collaborating with any organization whose objectives contribute to the promotion of subcontracting and partnerships of enterprises in Mali or abroad.

The sectors covered by BSTP-Mali include: industry, mining, crafts, construction and public works (BTP), services, agriculture, livestock, and fisheries.

VI.1.5. The Guarantee Fund for the Private Sector (FGSP)

The Guarantee Fund for the Private Sector is a financial institution created with the favorable opinion of the community monetary authorities and approved by the Ministry of Economy and Finance. It has a share capital of four billion eight hundred eighty-two million five hundred thousand (4,882,500,000) CFA francs, distributed among the following shareholders : the National Social Security Institute (INPS), the Malian Solidarity Bank (BMS-SA), the Urban Pari-Mutuel of Mali (PMU-Mali), the National Employment Agency (ANPE), the

National Agricultural Development Bank (BNDA-SA), the National Employers' Council of Mali (CNPM), the Commercial Bank of the Sahel (BCS-SA), the Sahelo-Saharan Bank for Investment and Trade (BSIC Mali-SA), and the International Bank for Commerce and Industry in Mali (BICIM).

The purpose of FGSP-SA is to provide banks with a partial counter-guarantee of up to 50% for short-, medium-, and long-term loans granted to small and medium-sized enterprises (SMEs) in the private sector and to microfinance institutions, in accordance with the provisions of Law No. 2014-049 of September 19, 2014, authorizing state participation in the capital of the Guarantee Fund for the Private Sector. This decision, indicating that the State will participate in its capital, will contribute significantly to improving financing conditions for the national economy, expanding access to financial services for enterprises and populations, strengthening the country's industrial fabric, creating jobs, and significantly reducing poverty. The fund covers all productive activities in the primary, secondary, and tertiary sectors, excluding commercial activities.

The mission of the FGSP is "to provide banks with greater solutions in terms of partial risk coverage related to the granting of credit to SMEs/SMIs, and to offer greater opportunities to the latter in financing their establishment, development, and modernization." The FGSP aims to be a tool for the development of small and medium-sized enterprises, as well as for banks, by securing their risks and enabling them to expand their portfolios through the conquest of new SME/SMI markets.

The fund offers enterprises bank credit guarantees, follow-up support in the appraisal and structuring of bankable files, and management of guarantee lines entrusted by the State or partners. It operates in the primary, secondary, and tertiary sectors. The FGSP is open to enterprises with financing needs for investment projects (creation, expansion, diversification, and development of existing enterprises), as well as those with short-term financing needs (working capital, seasonal loans, bid bonds) or refinancing needs from decentralized financial institutions.

The nature of the guarantee evolves according to the guarantee granted to the partner bank, up to a maximum of fifty percent (50%) of the amount of financing granted to promoters. Eligible financing may reach up to 500 million CFA francs. However, the cost of the guarantee is set at one percent (1%) per year, payable by the bank and calculated on the outstanding amount of the guaranteed claim (risk commission), and two percent (2%) flat, payable by the promoter on the amount of financing granted by the bank (guarantee subscription fee or guarantee commission).

To ensure that the cost of credit remains affordable and competitive for enterprises, the Guarantee Fund for the Private Sector has concluded a framework partnership agreement with five local banks, namely BMS-SA, BIM-SA, BSIC-Mali, BCS-SA, and Bank of Africa Mali. This ongoing partnership expedites the appraisal of applications and appropriately caps interest rates. "The conditions of intervention of FGSP-SA and those of partner banks are set so as to enable enterprises to benefit from sustainable credit costs."

VI.1.6. The Technical Unit for Business Climate Reform

This unit was created by Decree No. 2015-0117/PM-RM of February 25, 2015. It operates under the authority of the Minister in charge of Investment Promotion and the Private Sector. Its mission is to serve as the secretariat of the Joint State/Private Sector Reform Monitoring Committee, and to ensure technical coordination and monitoring and evaluation of business climate reforms in Mali. The unit is responsible for:

- serving as the secretariat of the Joint Committee and the Interministerial Committee;
- preparing the draft action plan for improving the business climate in Mali and monitoring its implementation;
- monitoring the implementation of recommendations issued by the Joint Committee and the Interministerial Committee;
- preparing draft agendas and files to be submitted to the Joint Committee and the Interministerial Committee;
- coordinating the work of Restricted Technical Committees;
- preparing the budget for implementing the business climate reform action plan;
- taking any initiative aimed at improving the business environment and business practices.

VI.1.7. Specific Support Provided to Informal Enterprises in Mali

In addition to tax and customs services, many other administrations intervene in the management of the informal sector, particularly in registration (Ministry of Trade), financing, support, training, and other areas. Approved management centers represent a form of assistance granted by subregional states to SMEs, particularly those in the informal sector, in terms of financial and accounting management. Notable examples include the Retail Traders Support Project and the Technical Unit for Business Climate Reform.

The Retail Traders Support Project (PACD) was launched in 2005 at the initiative and with the financing of the Malian State. It was implemented in four phases over the period 2005–2022. The implementation of this project made it possible, among other outcomes, to create several approved management centers and to train thousands of retail traders in simplified accounting, business management, food hygiene, and sanitary safety. It also enabled the construction of market infrastructure, the distribution of biodegradable packaging as part of environmental protection efforts, and the establishment of a credit line of more than 1.8 billion CFA francs to support the activities of over 3,000 retail traders.

The Retail Traders Support Project is a large-scale program designed exclusively to support retail traders. Its main objective is to assist retail traders in becoming wholesalers or import–export traders. The project also aims to combat poverty and to raise awareness among informal sector retail traders about transitioning to the formal sector. It seeks to sensitize traders nationwide to good practices in food hygiene and sales environments, distribute biodegradable bags and baskets in markets and households, install market stalls in inland markets, and provide training to traders.

To be eligible for this project, a retail trader must:

- have a fixed and legal location;
- be subject to the synthetic tax;
- be registered in the Trade and Personal Property Credit Register (CCRM);
- and be a member of an approved management center.

The project aims to provide support to 25,000 retail traders nationwide, at least sixty percent (60%) of whom are women, and will contribute to strengthening existing achievements.

VI.2. Assessment of the Quality of the Business Environment Based on Our Survey Data

In this section, we use our survey data to assess the quality of the business environment through the perceptions expressed by managers of formal and informal enterprises. Various aspects of the business environment are considered.

VI.2.1. Access to Basic Social Services

Our surveys confirm that the weakness of the business environment is costly for formal enterprises and even more so for those in the informal sector. Access to water services in West African cities, particularly in Mali, is strikingly limited. Approximately 87% of formal enterprises have access to water in Bamako, compared to 36% in Mopti. Among the large informal sector, access to water services is around 25% in Bamako, while it is below 10% in Mopti. By contrast, very few small informal enterprises have access to water services in either Bamako or Mopti. Access to water services among small informal enterprises is below 10% (Table 6-2-58).

In the cities of Mopti and Bamako, more than 75% of formal enterprises have access to electricity. For the large informal sector, approximately 75% in Bamako and 60% in Mopti have access to electricity (Table 6-2-58). By contrast, access to electricity among small informal enterprises is fairly limited, at around 40% in both cities. Access to telephone services is at a nearly similar level, with formal enterprises enjoying greater access than informal ones, though with notable service shortcomings in both sectors (Table 6-2-58).

Few informal enterprises own a generator to cope with electricity load shedding. In Mopti, on average, 5% of small informal enterprises have a generator, compared to less than 1% in Bamako (Table 6-2-58).

Table 6-2-56: Proportion of firms having access to public infrastructure

Ville	Informalité	Eau	Électricité	Téléphone	Générateur
Bamako	Formel	87,56	96,35	89,01	53,13
	Gros informel	25	76,47	43,75	11,11
	Petit informel	8	45,8	29,84	0,66
	Total	54,79	75,88	64,65	29,09
Mopti	Formel	36,17	78,72	59,57	22,34
	Gros informel	8,7	60,87	78,26	13,04
	Petit informel	4,92	36,07	34,43	5,46
	Total	15	51,33	45,67	11,33

Waiting times for connection to water services are relatively long, ranging from 8 to 30 days for between 25% and 60% of enterprises. Moreover, small firms appear to be more exposed to long connection delays than larger ones. The proportion of firms across all categories experiencing the longest delays is significantly higher in Mopti than in Bamako (Table 6-2-59).

When considering delays in connection to electricity, the same observation applies. A relatively high proportion of firms experience long connection delays, with firms in Mopti accounting for a larger share than their counterparts in Bamako (Table 6-2-59). By contrast, when examining connection delays for telephone services, these are shorter than for water and electricity. This finding is consistent with observations made in other cities covered by our previous surveys. It is clear that telephone provision is a more profitable activity than water and electricity and therefore attracts more foreign private investors than the other sectors. The rapid expansion of mobile telephony in most African cities also plays an important role.

Table 6-2-57: Average delay to gain access (in days) of different services (water, electricity, telephone)

Ville	Informalité	Délai Eau	Délai Électricité	Délai Téléphone
Bamako	Formel	34,7	37,5	11,1
	Gros informel	9,8	15,8	2,5
	Petit informel	5,4	5,2	1,3
	Total	26	23,4	7,8
Mopti	Formel	37	48	10
	Gros informel	58	55	1
	Petit informel	21	44	9
	Total	35	47	8

When we now consider the duration of service interruptions for water, electricity, and telephone services, similar trends emerge. Firms in Mopti appear to face greater difficulties than those in Bamako (Table 6-2-60).

Table 6-2-58: Average number of days of interruption in water services per year

Ville	Informalité	Interruption eau	Interruption électricité	Interruption téléphone
Bamako	Formel	3,2	4,4	2
	Gros informel	10	10	1
	Petit informel	3	4,3	1,9
	Total	3,6	4,6	1,8
Mopti	Formel	17	27	3
	Gros informel	10	32	15
	Petit informel	17	23	6
	Total	17	26	5

VI.2.2. Access to Finance

A commonly held view is that informal enterprises have limited access to bank credit; however, this is also largely true for firms in the formal sector (Figure 6-2-43). Based on our data, this view is clearly confirmed: a relatively small proportion of informal firms in both Bamako and Mopti have access to bank credit. For example, in Bamako, fewer than 1% of small informal enterprises have access to credit, compared with less than 0.5% in Mopti. For formal firms in Bamako, approximately 9% have access to bank credit, compared with 8% in Mopti.

As a result, firms rely on alternative sources of financing such as personal savings, retained earnings, family loans, gifts, and inheritance to finance their investments (Figures 6-2-44; 6-2-45; and 6-2-46). Approximately 80% of large informal enterprises and 70% of small informal enterprises in Mopti report personal savings as their primary source of financing (Figure 6-2-45).

In Mali, most of the firms surveyed acknowledged experiencing significant difficulties in repaying their loans. While firms in Bamako appear to face fewer problems in this regard 34% report such difficulties 77% of formal enterprises and 80% of informal enterprises in Mopti admitted to facing repayment challenges (Table 6-2-61).

Figure 6-2-43: Proportion of firms having access to bank credit (%)

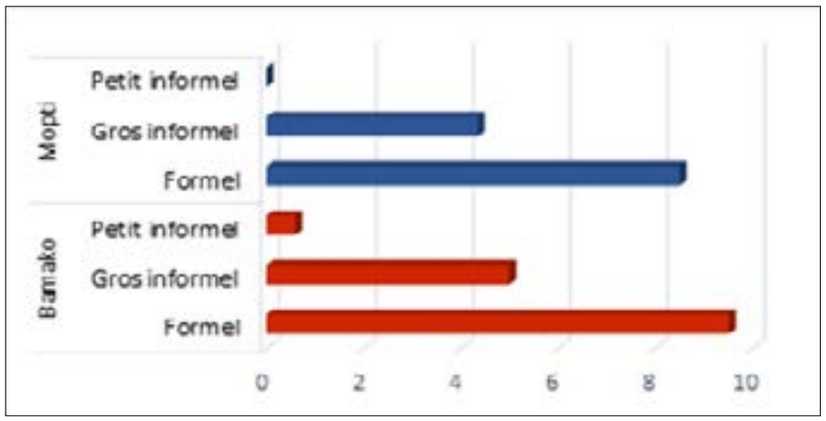
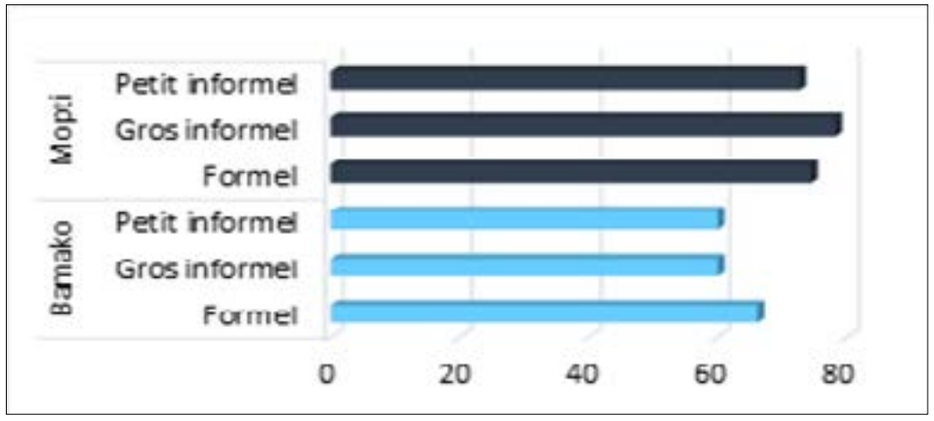


Table 6-2-59: Proportion of firms having difficulty repaying loans (%)

Informalité	Bamako	Mopti
Formel	38,46	77,78
Gros informel	0	0
Petit informel	0	80
Total	34,48	78,5

Figure 6-2-44: Proportion of firms financed by personal savings (%)



VI.2.3. Access to ICTs

New information and communication technologies (ICTs) are of considerable importance to policies aimed at developing the national private sector. They are expected to modernize business activities while improving efficiency and reducing costs. Their level of use depends on the quality of internet connectivity and the cost of services at the national level, as well as on the education and training levels of economic actors and the availability of support programs within society.

The level of ICT usage is closely correlated with the attributes of informality. Unsurprisingly, the highest levels of ICT use are found in the formal sector, followed by the large informal sector, while the small informal sector lags far behind. Thus, the proportion of small informal enterprises with an email address barely exceeds 5% in the cities of Mopti and Bamako (Table 6-2-62). When considering the share of firms using web-based services, this reaches 32% and 22% in the formal sector in Bamako and Mopti, respectively, compared with less than 12% in the informal sector in both cities.

However, when considering mobile phone usage, the situation changes somewhat: 14% of small informal operators in Bamako and 54% in Mopti, as well as 22% and 86% of large informal operators in Bamako and Mopti, respectively, use mobile phones (Table 6-2-62). This result is particularly important from a policy perspective, as most ICT-related services are increasingly available via mobile platforms. Consequently, major innovations related to banking services and access to information are becoming more accessible through mobile technology.

Table 6-2-60: Acceess to ICT by status of firm (%)

Ville	Informalité	E-mail	Site web	Service mobile
Bamako	Formel	72,5	32,5	72,08
	Gros informel	22,22	11,11	22,22
	Petit informel	1,84	0,61	14,2
	Total	39,9	17,85	44,83
Mopti	Formel	41,49	22,34	71,28
	Gros informel	4,35	0	86,96
	Petit informel	2,19	1,09	54,1
	Total	14,67	7,67	62

VI.2.4. Other Aspects of the Business Environment

In this section, we analyze other aspects of the business environment in Mali, such as membership in professional associations, confidence in the future, and the quality of relations with government agents and trade unions.

In both Bamako and Mopti, enterprise membership in professional organizations is relatively low. More than 70% of firms in Bamako, across all statuses, do not belong to any

professional organization (Figure 6-2-47). In Mopti, 75% of formal firms, 62% of large informal firms, and 80% of small informal firms do not belong to any professional organization. Regarding confidence in the future, more than 60% of firms in both Bamako and Mopti believe they will continue their activities in the future (Figure 6-2-48).

Firm dynamics are also reflected in our results. In Bamako, 5% of formal firms expect to change their status, compared with 9% in the large informal sector and 19% in the small informal sector. In Mopti, 20% of formal firms expect to change status, compared with 10% in the large informal sector and 33% in the small informal sector (Figure 6-2-49).

Our survey results also provide insights into relations with the state, as well as social relations within firms. Problems encountered in relations with government agents are more frequent in Bamako than in Mopti. Thus, 17% of large informal firms in Bamako reported having problems with government agents, compared with 11% of large informal firms in Mopti. For formal and small informal firms in Bamako, the corresponding figures are 5% and 2%, respectively. In Mopti, these proportions rise to 13% and 11%, respectively (Figure 6-2-50).

In both cities in Mali, social conflicts within firms do not appear to be severe: only about 3% of formal firms in Bamako reported having problems with trade unions (Figure 6-2-51).

Figure 6-2-45: Proportion of firms not belonging to a professional association (%)

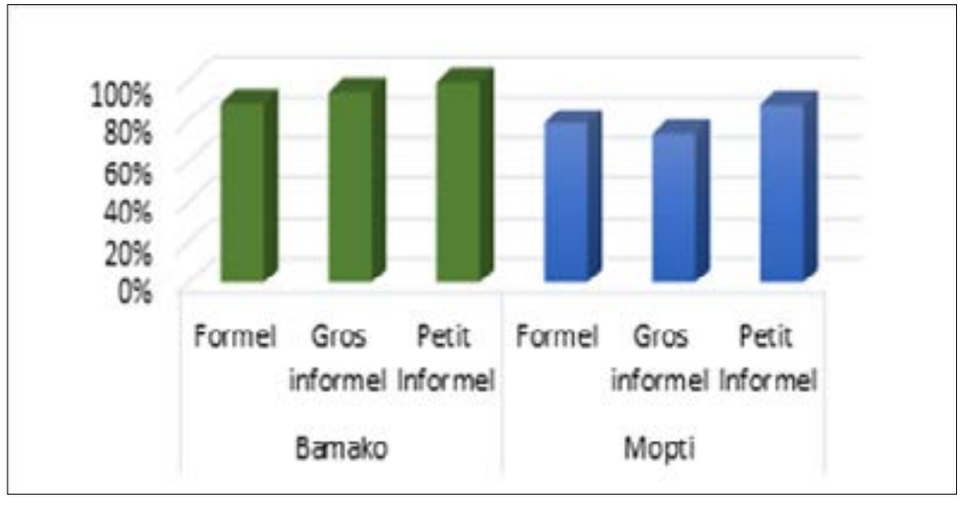


Figure 6-2-46: Proportion of firms expressing confidence in the future (%)

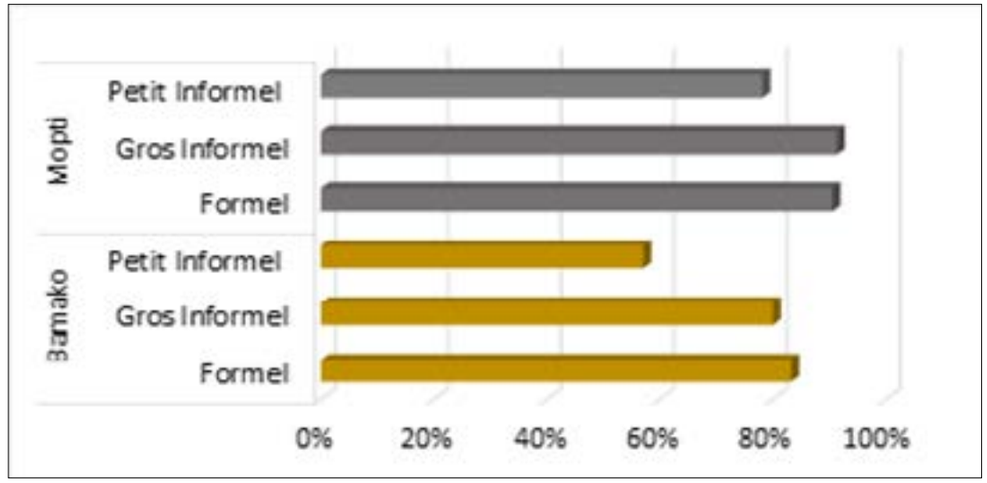


Figure 6-2-47 : Proportion of firms deciding to change status (%)

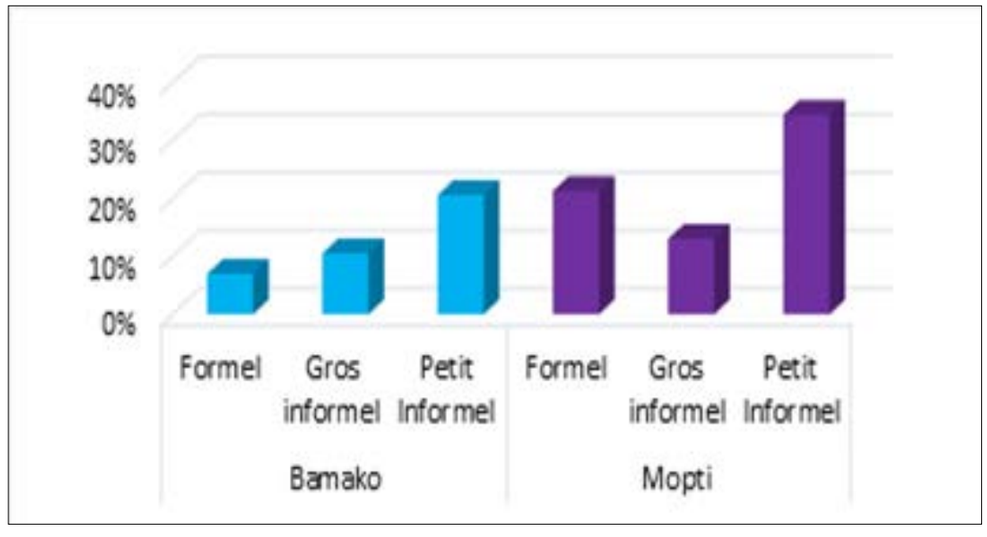


Figure 6-2-48 : Proportion of firms experiencing problems with government officials (%)

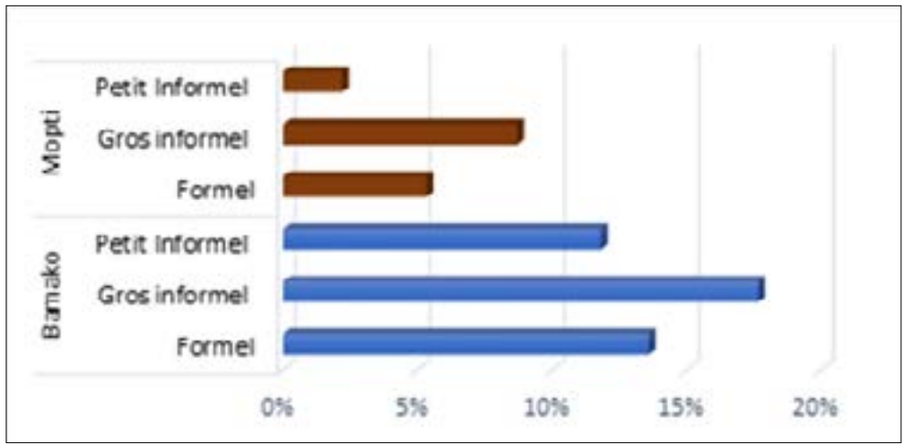
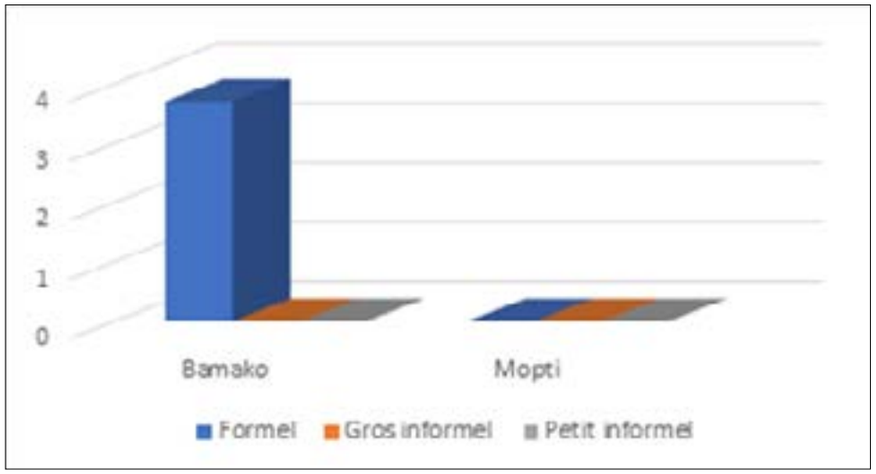


Figure 6-2-49 : Proportion of firms experiencing problems with trade unions (%)



CHAPTER VII
THE INFORMAL SECTOR AND CORPORATE TAXATION IN MALI

Mali is a member of the Economic Community of West African States (ECOWAS) and the West African Economic and Monetary Union (WAEMU). These two regional institutions work toward the creation of a unified regional economic space. Moreover, since 1998, the Malian Commercial Code has been governed by the OHADA system, which is based on a single accounting framework known as SYSCOA.

VII.1. Tax Regime Applicable to Malian Enterprises

With the aim of harmonizing legislation in line with WAEMU rules, Malian authorities undertook a review of the General Tax Code starting in 2005. This tax reform introduced several major innovations, including:

- the introduction of withholding tax on income paid to foreign and domestic service providers that are not fiscally registered;
- the introduction of a simplified tax regime applicable to enterprises with turnover between 30 and 100 million CFA francs;
- exemptions for computer equipment, among others.

In Mali, two tax regimes are distinguished:

a) **The presumptive tax regime (impôt synthétique)** applies to enterprises with annual turnover (excluding tax) of less than CFAF 50,000,000 (the so-called flat-rate regime);

b) **The actual profit regime (régime du réel)** applies to enterprises that meet one of the following conditions :

- annual turnover (excluding tax) equal to or greater than CFAF 50,000,000;
- tax advisors, certified accountants, chartered accountants, and enterprises approved under the Investment Code;
- enterprises normally subject to the presumptive tax that have opted for the actual profit regime.

The Presumptive Tax Regime (Impôt Synthétique)

The presumptive tax rate is set based on the declaration of the enterprise's annual turnover excluding tax and is paid annually. Liability to the presumptive tax (ISY) allows small taxpayers with turnover below CFAF 50 million to benefit from a simplified regime. As its name suggests, the ISY is a composite tax. By paying the presumptive tax, the taxpayer discharges not only the business profits tax (BIC) but also almost all direct and indirect taxes provided for in Titles I and II of the General Tax Code (GTC), with the exception of registration and stamp duties and the tax on property income.

The ISY applies to individual operators. It excludes enterprises with turnover exceeding CFAF 50 million, accountants and chartered accountants, tax advisors, and enterprises

approved under the Investment Code. Table 7-1-63 indicates the percentage distribution of taxes included in the ISY, suggesting that revenues are allocated proportionally : local governments should receive 11% (business license and road taxes), the central government 83.9%, the Chamber of Commerce 1.1%, and the Housing Fund 0.35%.

The amount of tax varies depending on the activity, the taxpayer's profession, and the conditions under which it is exercised. The amount due is set by Article 74 of the GTC, with tariffs ranging from CFAF 14,700 to CFAF 2,400,000. The tax must be paid no later than March 31 of each year. The increase in the ISY threshold from CFAF 30 million to CFAF 50 million was introduced in 2014 and is now harmonized with the VAT registration threshold.

The Actual Profit Regime

The actual profit regime comprises two methods of taxation:

a) **Simplified actual regime**

This applies to operators whose main activity is the sale of goods, merchandise, supplies, and foodstuffs when their annual turnover excluding tax is between CFAF 50,000,000 and CFAF 250,000,000.

b) **Normal actual regime**

This applies to taxpayers who do not meet the conditions for either the presumptive tax regime or the simplified actual regime; in other words, taxpayers whose annual turnover excluding tax exceeds CFAF 250,000,000.

Taxpayers subject to the normal actual regime pay direct and indirect taxes monthly, while profit tax is paid annually. The tax rate is set at 30% of realized profit or 1% of annual turnover excluding tax in the event of a loss. From CFAF 50 million in annual turnover excluding tax, the minimum profit tax cannot be less than CFAF 763,500.

In the event of disputes between enterprises and administrative authorities, appeal procedures exist to resolve such conflicts.

VII.1.1. Tax Collection and Fiscal Potential

In Mali, the issue of tax collection has long been central to strategies for financing the economy. To improve public resource mobilization, several reform measures have been undertaken, notably the modernization of tax assessment services through interconnection and computerization to increase revenues. Despite these measures, several constraints continue to hinder the achievement of resource mobilization objectives. Mali, like several WAEMU countries, struggles to reach the community benchmark for the tax burden ratio of 20% (Table 7-66).

Table 7-1-61: Evolution of Mali's Tax Burden Ratio (%)

Criteria	Standard	2012	2013	2014	2015	2016
Tax burden ratio	≥20	11.9	12.3	12.5	14.0	14.9

Obstacles to collection efforts include tax expenditures. According to an IMF diagnostic report on taxation in Mali, in 2013 tax expenditures related solely to the Investment Code amounted to more than 54% of GDP, while those related to the General Directorate of Customs and the General Directorate of Taxes amounted to 2.5% and 5.9% of GDP, respectively. VAT exemptions also disrupt the functioning of the tax system.

VII.2. The Informal Sector and Corporate Taxation: A Perception Analysis Based on Survey Results

The role of corporate taxation in competitiveness and growth is widely recognized and documented. In Mali, however, taxation appears more as a constraint than as a factor supporting firm development. According to many authors, the expansion of the informal sector is essentially the result of an incoherent tax policy focused on maximizing revenue collection rather than supporting and accompanying the national private sector.

In Mali, the share of enterprises identified by the tax administration and taxed under the actual regime varies by city: 68% in Bamako compared to 31.3% in Mopti. Table 7-2-64 classifies enterprises listed in the tax register according to the types of documents they are required to submit. Under the actual regime, firms are required to provide full accounting and financial documentation, allowing tax authorities to determine tax liabilities in a more objective and reliable manner (Table 7-2-65). For other taxpayers not subject to the actual regime, tax authorities lack sufficient visibility to accurately assess taxable income. As a result, in countries such as Mali, the bulk of direct tax collection comes from the minority of enterprises subject to the actual regime, particularly those classified as large enterprises. This creates a clear phenomenon of fiscal inequity, whereby the burden of tax collection falls on a small number of firms.

Overall, business leaders' perception of the tax system is quite negative across all categories of enterprises, both formal and informal. Long queues for tax payment are widely considered excessive. In Bamako, 22% of large formal firms and 13% of large informal firms consider queue lengths inefficient (Table 7-2-66). In general, however, payment procedures and the quality of tax collection services are perceived as relatively effective. Thus, 63% of formal firms in Bamako believe tax payment modalities are effective, compared to 47% of large informal firms and 12% of small informal firms (Table 7-2-67). Tax rates are widely considered high (Table 7-2-68). A majority of respondents find tax declaration procedures easy and report few obstacles in the registration process. More than 75% of firms in Mopti, regardless of status, judge tax collection services effective (Table 7-2-69). Similarly, most firms in both Bamako and Mopti express favorable views regarding the ease of tax declaration (Table 7-2-70).

Our results also indicate a very low level of trust among private actors in the way the State manages public funds and uses tax revenues (Figure 7-2-52 and Table 7-2-71). Many respondents believe that paying taxes exposes them to fiscal harassment (Figure 7-2-53). Finally, low collection levels may be explained by the limited capacity of the State to enforce its own rules (Figures 7-2-54 and 7-2-55). The widespread perception of weak enforcement is sufficient to explain the prevalence of tax evasion in these countries.

Table 7-2-62: Mode of taxation of firms by city (%)

Mode de taxation	**Bamako**	**Mopti**
Au réel	68,30	31,33
Au réel simplifié	9,80	10,33
Au régime de base	0,33	3,67
Impôt libératoire (forfait)	10,78	35,67
Autre à préciser	10,78	19
Total	100	100

Table 7-2-63: Adoption of accounting by firms by city (%)

Types de documents	**Bamako**	**Mopti**
État financier certifié	57,31	15,67
État financier non certifié	11,15	11,33
TAFIRE	1,15	0,67
Numéro de contribuable	13,46	11,33
Registre de commerce	2,31	8,33
Autre à préciser	14,62	52,67
Total	100	100

Table 7-2-64: Perception of the length of queues for tax payments by firm status (%)

Ville	**Informalité**	**Très efficace**	**Efficace**	**Pas efficace**	**Non applicable**
Bamako	Formel	5,35	69,52	24,06	1,07
	Gros Informel	0,00	77,78	22,22	0,00
	Petit Informel	3,70	74,07	22,22	0,00
Mopti	Formel	2,13	81,91	9,57	6,38
	Gros Informel	0,00	78,26	4,35	17,39
	Petit Informel	0,55	57,38	11,48	30,60

Table 7-2-65: Perceptions of the modality of tax payment by firm status (%)

Ville	Informalité	Très efficace	Efficace	Pas efficace	NSP	Total
Bamako	Formel	4,78	62,68	22,97	9,57	100
	Gros Informel	4,35	47,83	13,04	34,78	100
	Petit Informel	0,56	12,99	5,65	80,79	100
Mopti	Formel	0,00	88,42	10,53	1,05	100
	Gros Informel	4,35	91,30	4,35	0,00	100
	Petit Informel	3,27	94,77	1,96	0,00	100

Table 7-2-66: Perception of the level of taxation by firm status (%)

Ville	**Informalité**	Élevé	**Raisonnable**	**Faible**	**NSP**	**Total**
Bamako	Formel	31,10	42,11	0,96	25,84	100
	Gros Informel	23,81	23,81	4,76	47,62	100
	Petit Informel	4,12	8,24	0,59	87,06	100
Mopti	Formel	48,96	47,92	2,08	1,04	100
	Gros Informel	43,48	56,52	0,00	0,00	100
	Petit Informel	45,86	54,14	0,00	0,00	100

Table 7-2-67: Perception of the quality of tax collection services by firm status (%)

Ville	Informalité	Très efficace	Efficace	Pas efficace	NSP	Total
Bamako	Formel	4,78	63,16	21,53	10,53	100
	Gros Informel	0,00	50,00	0,00	50,00	100
	Petit Informel	1,18	10,59	2,35	85,88	100
Mopti	Formel	0,00	85,26	13,68	1,05	100
	Gros Informel	0,00	95,65	4,35	0,00	100
	Petit Informel	3,83	75,96	20,22	0,00	100

Table 7-2-68: Perception of the ease of tax declaration by status of the firm (%)

Ville	Informalité	Très efficace	Efficace	Pas efficace	NSP	Total
Bamako	Formel	5,26	66,03	15,79	12,92	100
	Gros Informel	0,00	40,00	5,00	55,00	100
	Petit Informel	1,18	10,59	1,76	86,47	100
Mopti	Formel	0,00	93,68	5,26	1,05	100
	Gros Informel	0,00	86,96	13,04	0,00	100
	Petit Informel	2,19	80,87	16,94	0,00	100

Figure 7-2-50 : Distribution of firms having a positive perception of the state's use of tax revenues by firm status (%)

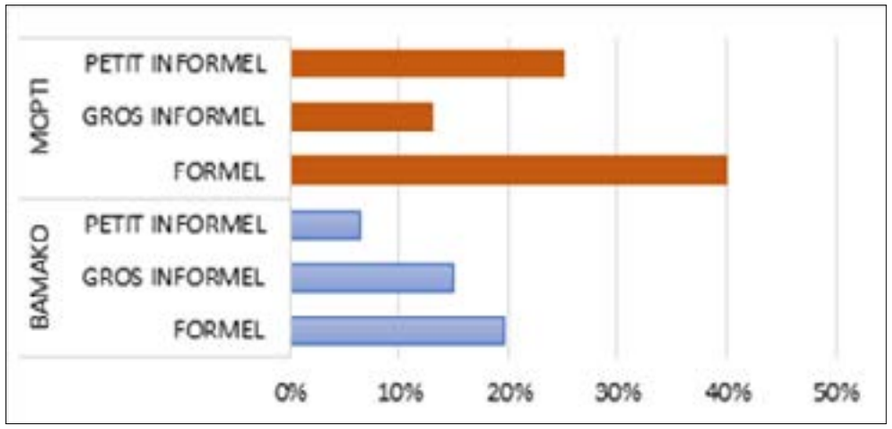


Table 7-2-69: Proportion of firms having confidence in the management of public funds (%)

Ville	Informalité	Très bien	Bien	Passablement	Médiocre	NSP
Bamako	Formel	1,63	16,85	29,35	40,76	11,41
	Gros Informel	0,00	7,14	21,43	28,57	42,86
	Petit Informel	0,60	7,78	8,98	12,57	70,06
Mopti	Formel	3,16	29,47	43,16	24,21	0,00
	Gros Informel	0,00	8,70	60,87	30,43	0,00
	Petit Informel	0,55	21,31	48,63	29,51	0,00

Figure 7-2-51: Firms' perception that paying taxes increases exposure to tax harassment (%)

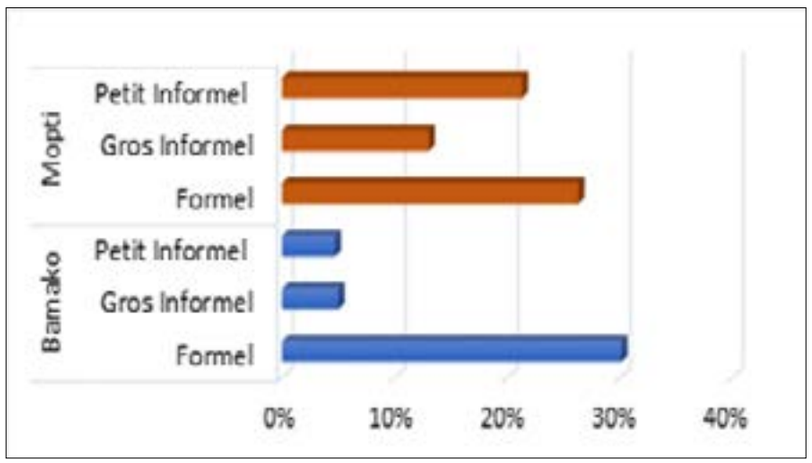


Figure 7-2-52 : Firms' perception of the effective enforcement of social protection rules by public authorities (%)

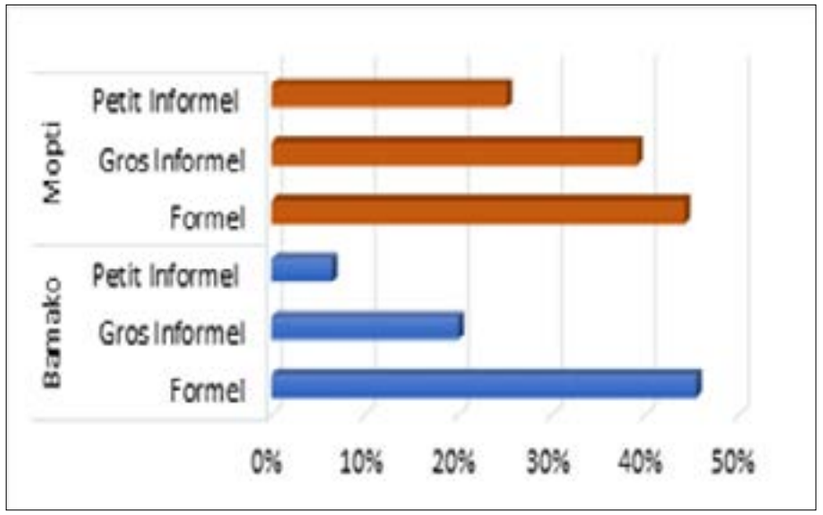
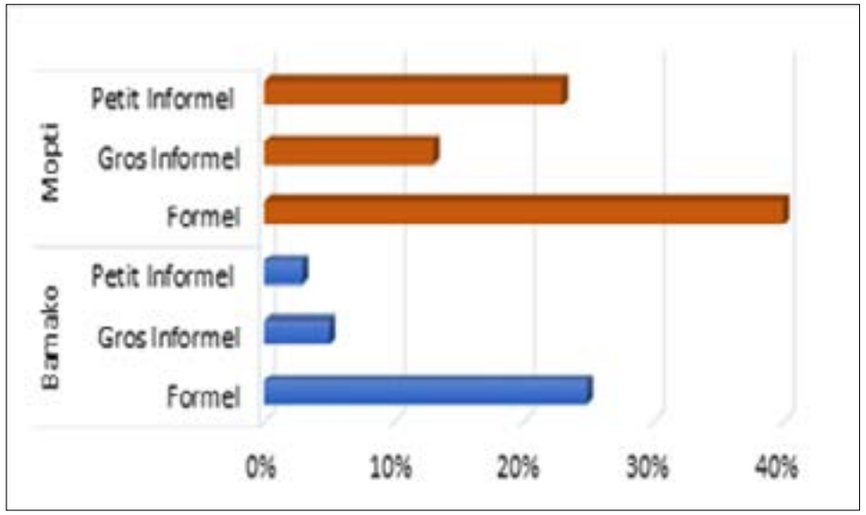


Figure 7-2-53 : Firms' perception of the effective enforcement by public authorities of rules concerning honest declaration of generated income (%)



CHAPTER VIII

INFORMAL VALUE CHAINS IN MALI

In this section, we provide an analysis of several informal value chains in Mali. This approach allows for a detailed description of how the informal sector operates and helps contextualize the data obtained from our surveys. These monographic studies are based on our interviews, focus groups, and documentary analyses. The activities covered in this report are: textile dyeing, agro-food processing, artisanal gold mining, and agriculture.

VIII.1. Artisanal Textile Dyeing

Textile dyeing is an ancient tradition whose earliest traces are mentioned prior to the tenth century. Its poorly documented beginnings date back to the era of the Ghana Empire. Over the past three decades, its development has responded to the clothing needs of Malian populations and beyond. By the early 1960s, however, this expanding sector had become a major economic factor, as it constituted a source of income for a large share of the population, primarily woSSmen. From 1972 onward, owing to the quality and beauty of Malian dyed fabrics, numerous traders from Côte d'Ivoire, Senegal, and elsewhere came to purchase this artisanal product. In addition to neighboring countries, many Malians residing in Europe, the Americas, or elsewhere import large quantities of fabrics dyed in Mali often after having them tailored in order to sell them within migrant communities or in French and American cities.

According to our interviews, most Malian women are involved in dyeing activities, either directly by practicing it irregularly or indirectly by wearing dyed *bazin* fabrics. In Mali, the art of dyeing can be passed down from mother to daughter, and women participate in fabric coloring from a very young age. This highlights the heterogeneity of dyeing activities in Mali, particularly in Bamako. Practiced along the banks of the Niger River, near streams, and within residential compounds, dyeing is a predominantly female activity (80 percent women) and involves two main groups of actors:

- the first group consists of poorer dyers who have only the riverbanks as their place of work;
- the second group consists of dyers who work from their homes. This group includes the more affluent actors, who make larger investments and often have access to foreign mArkets. Men are also present in this second group.

Within each of these groups, three main categories can be identified :

- **masters (patrons)**, who regard their subordinates primarily as brothers or sisters, children, or relatives. They provide guidance and reprimand them when necessary, but dismissal before the completion of an apprenticeship is almost unthinkable unless the harm caused is particularly serious;
- **assistants**, who are responsible for tying the parts of the fabric that are not to be dyed and for applying decorative patterns. These tasks are generally carried out

by men, who also handle the bleaching of the fabric. The other stages immersing the fabric in dyes, spreading it out in the sun, and untangling it after drying are performed by women;

- **apprentices or helpers**, who are relatives of the master or acquaintances. Apprentices are responsible for filling jars, cleaning the workshop, and tying fabrics to be dyed. At the same time, some helpers untie fabrics after a first soaking, while others rinse garments before a final immersion.

VIII.2. Agro-Food Processing

Agro-food processing constitutes one of the key links in Mali's industrial sector, given the importance of the value added created, the turnover generated, and the workforce employed by firms operating in this sector. It includes a large number of informal enterprises. In agro-food processing, women are particularly prominent and are generally engaged in activities such as juice production, fonio processing, peanut paste production, and other food products that require limited investment. These activities do not require a high level of education.

VIII.2.1. Representativeness and Production

At the most recent industrial census, 519 agro-food manufacturing enterprises were recorded. According to national accounts data, the value added generated by agro-food industries over the past five years increased from CFAF 191 billion in 2011 to CFAF 302 billion in 2015, of which 81 percent is attributable to informal production (Table 8-2-72).

Table 8-2-70: Evolution of production of agro-food industries from 2011 to 2015 in billions of CFA Francs

	2011	2012	2013	2014	2015
Valeur ajoutée globale	191,3	178,4	194,0	315,4	302,0
Formel 19%	36,4	33,9	36,9	59,9	57,4
Informel 81%	154,9	144,5	157,1	255,5	244,6

Source : INSTAT, juin 2018

Turnover

Overall, turnover generated by Malian enterprises amounted to CFAF 3,159.98 billion in 2010; CFAF 1,130.91 billion in 2011; CFAF 1,644.02 billion in 2012; CFAF 1,004.80 billion in 2013; and CFAF 2,860.36 billion in 2014. The share of the agro-food industry is highly erratic, moving from 59.7 percent in 2010 to 9 percent in 2011, 32.1 percent in 2012, 13.7 percent in 2013, and 32.2 percent in 2014.

Contribution to the State Budget

Taxes and duties paid by the industrial sector in Mali amounted to CFAF 29.127 billion in 2010, CFAF 41.436 billion in 2011, CFAF 69.609 billion in 2012, CFAF 53.913 billion in 2013, and CFAF 29.398 billion in 2014.

Among industrial branches, agro-food processing is a relatively minor contributor to tax revenues, with an average fiscal contribution of 13.3 percent over the 2010–2014 period, compared with 50.8 percent and 15 percent, respectively, for the "metallic ore extraction" and "metallurgy" branches (Table 8-75). This low level of contribution is explained by the informal nature of the sector.

Table 8-2-71: Evolution of taxes paid by agro-food processing firms from 2010 to 2014

Branche d'activité	Impôts et taxes (en million de F CFA)											
	2010		2011		2012		2013		2014		Moyenne	
	Valeur	%	Valeur	%	Valeur	%	Valeur	%	Valeur	%	Valeur	%
Fabrication de produits alimentaires	5 54,40	18,00	945	2,30	13 921,60	20,00	6 035,30	11,20	1 289,30	4,40	5 489	12,30
Fabrication de boissons	4 61,20	14,60	4 539	11,00	4 704,30	6,80	5 199,00	9,60	690,2	2,30	3879	8,70
Fabrication de produits à base de tabac	333,5	1,10	557	1,30	282,2	0,40	318,5	0,60	490,1	1,70	396	0,90
Proportion	33,81	33,70	14,58	14,60	27,16	27,20	21,43	21,40	8,40	8,40	21,84	21,90

Source : Direction Nationale de l'Industrie, Novembre 2017

Educational Level of Employees

An analysis of data from the Permanent Assembly of the Chamber of Trades indicates that 80 percent of agro-food manufacturing enterprises are individual businesses with at least one employee. The maximum number of employees is two.

Personnel costs borne by the industrial sector were estimated at CFAF 48.833 billion in 2010, CFAF 82.241 billion in 2011, CFAF 125.436 billion in 2012, CFAF 70.753 billion in 2013, and CFAF 66.045 billion in 2014. These costs increased by 0.68 percent in 2011 and 0.52 percent in 2012, followed by decreases of –0.44 percent in 2013 and –0.06 percent in 2014.

Between 2010 and 2014, the average share of personnel costs borne by the "Food Products Manufacturing" branch was 24 percent, compared with 17 percent and 15.6 percent, respectively, for the "Metallurgy" branch.

The activities carried out such as artisanal production of food paste, fonio processing, and similar products generally do not require a high level of education. The highest level of education is typically secondary education. However, alongside these enterprises, there are also a few large formal agro-food companies employing hundreds of workers with higher qualification levels. These firms are well organized within the Employers' Organization of Industrialists, pay taxes regularly, and make very substantial investments.

VIII.3. Artisanal Gold Mining

Gold is Mali's second largest export product after cotton. Following the cotton crisis of 1999, gold became the country's leading export. With the expansion of mining potential following the discovery of new gold deposits, the Malian government undertook major reforms of the mining sector with the support of Technical and Financial Partners. Two major reforms were implemented: the rewriting of the Mining Code in 1991 and its revision in 1999. The objective of these reforms was to make the sector significantly more attractive to Foreign Direct Investment.

In Mali, the mining sector takes two forms of exploitation: the traditional form and the industrial form. In the present study, we focus exclusively on the traditional form, known as artisanal gold mining. Artisanal gold mining is an informal and spontaneous mining activity that does not comply with the regulations in force. Gold miners who move from site to site without regard for existing regulations or the recommendations set out in the Mining Code often create significant difficulties for the State.

Artisanal gold mining is an ancestral activity that is normally carried out during the agricultural off-season. It is practiced mainly in the regions of Kayes, Koulikoro, and Sikasso. Extraction techniques are rudimentary, and mining sites change from year to year. The technology used has evolved slowly with the introduction of ore crushers, motor pumps, motorcycle carts, and washing stations.

There are several artisanal gold mining sites in Mali. At these sites, multiple upstream and downstream activities develop, as those engaged in artisanal gold mining generally do so to meet subsistence needs. All of them pursue their primary economic activities in other sectors.

Artisanal gold mining generates significant migratory movements, particularly during the rainy season, when neighboring countries close mining sites for security reasons. It also represents an important avenue for combating youth unemployment and poverty. However, artisanal mining areas are considered potentially conducive to the spread of sexually transmitted diseases, particularly HIV.

The National Directorate of Geology estimates gold production using the traditional method (artisanal mining) at approximately 4 tons per year. Production estimates are based on

the artisanal mining season, which generally begins at the end of the rainy season of the previous year (around October/November) and ends at the beginning of the rainy season of the current year (around June/July).

VIII.3.1. Organization of Artisanal Gold Miners at Mining Sites

To improve strategies for the production and sale of extracted gold, artisanal miners have developed various organizational approaches along the value chain at mining sites. These include :

- **Gold collectors/buyers**: A collector is an individual who does not have their own capital to engage in gold trading but purchases gold on behalf of a trader and/or a buying office using funds deposited with them for this purpose.
- **Semi-wholesalers**: These are traders with greater financial resources than small-scale buyers. They collect gold purchased by several small buyers in order to resell it to wholesalers. They are considered level-2 collectors.
- **Landowners** (locally known as *Dougoucolo tigui* or *Daman tigui*): These are individuals who hold customary authority over the land. Authorization from them is required to exploit a mining pit, obtained in exchange for payment in cash or in kind. Land is often allocated based on its presumed gold potential. A *placer* refers to a tract of land with gold potential, ranging from a few hectares to several square kilometers, identified based on certain soil characteristics. It may or may not be under exploitation at the time of the survey. A *site* refers to a placer that is actively exploited at the time of the survey.
- **Extractors**: These are individuals who directly extract gold-bearing ore from the bottom of the mine. Extractors are also referred to as *Simbo* or *Chifrou* in certain areas. They also carry out the initial washing of the earth (*banco*) inside the pit. Once the gold is recovered, the extractor brings up the residue, now referred to as ore. Ore is the material extracted from the artisanal mining pit for its presumed gold content, implying that not all material extracted is necessarily ore. Ore is generally found at a certain depth. An artisanal mining pit is the hole dug by the extractor/operator to reach the ore and is typically exploited by a group of individuals. A *Tourkéla* is an extractor who does not belong to any group and temporarily participates in extraction based on a production-sharing agreement with the pit owner. They may remain with the group for varying lengths of time and specialize in underground galleries.
- **Wholesalers**: Wholesalers generally reside in Bamako, another major city in the country, or abroad. They provide funds to semi-wholesalers to collect gold from small buyers. They are level-3 collectors and often export gold or sell it to licensed exporters.
- **Washers**: A washer is the person who washes the ore extracted from the pit in order to separate gold dust from other components. They are generally paid in ore (one-third for the washer, two-thirds for the extractor).

- **Pit owners**: A pit owner is an individual or group that has acquired the right, in exchange for payment, to exploit an artisanal mining pit. Payment may be made in cash, ore, or gold.
- **Pit workers or haulers**: A pit worker is responsible for hauling ore out of the pit. This activity is generally carried out by women.

The activities along the value chain are highly diverse and involve numerous actors with varying levels of skill. At first glance, artisanal mining sites may appear disorganized. However, there is an informal policing system exercised by locally recognized individuals who maintain order and enforce safety rules. These individuals are known as *Tombolomas*. In addition to enforcing rules, they may have other interests at the site, such as acting as operators or service providers.

VIII.3.2. Demographic and Spatial Distribution

The largest share of the active population is found in the 16–35 age group, confirming the youthfulness of the population engaged in artisanal gold mining. Conversely, the smallest share is observed among those aged 15 and under. The number of men in the 16–35 age group, totaling 12,018 individuals, far exceeds that of women, who number only 1,922 (Table 8-3-74).

The Sikasso region records the highest number in the 16–35 age group, with 7,789 men compared to 887 women. The lowest number of men is found in the Koulikoro region (1,774), while the lowest number of women is recorded in the Kayes region (450).

For those aged 15 and under, the Kayes region records the lowest figures, with 35 males and 13 females.

Table 8-3-72: Spatial and age distribution of artisanal mining

Région	**Masculin**				**Féminin**				**Total**
	15 ans et moins	16-35 ans	36 ans et plus	ND	15 ans et moins	16-35 ans	36 ans et plus	ND	
Kayes	35	2 455	1 689	106	13	450	138	8	4 893
Koulikoro	40	1 774	1 551	102	40	584	360	51	4 502
Sikasso	233	7 789	4 651	31	82	887	342	3	14 017
Total	308	12 018	7 890	239	134	1 922	840	61	23 412

Source : Étude orpaillage, ODHD 2011

Regional distribution shows that 100 placers have been identified in Kayes, of which 54 are active; 77 placers in Koulikoro, of which 43 are active; and 153 placers in Sikasso, of which 53 are active (Table 8-3-75).

Table 8-3-73: Regional distribution of placers

Régions	**Actifs**	**Non actifs**	**Total**
Kayes	54	46	100
Koulikoro	43	34	77
Sikasso	53	100	153
Total	*150*	*180*	*330*

VIII.3.3. Employment in Artisanal Gold Mining

The workforce is primarily employed as extractors (*Simbo*), numbering 1,634 individuals, compared with 1,079 washers and 976 pit workers (see Table 8-3-76). The number of extractors is highest in the Sikasso region (699) and lowest in Kayes (395). Conversely, the Koulikoro region records the highest number of pit workers (479), while the lowest number is recorded in Kayes (247). Koulikoro also records 688 washers, compared to 385 in Sikasso.

Table 8-3-74: Employment in artisanal mining

Régions	**Puisatier**	**Extracteur (simbo)**	**Laveuse (eur)**	**Autre**	**Total**
Kayes	247	395	6	42	690
Koulikoro	479	540	385	86	1490
Sikasso	250	699	688	69	1707
Total	976	1634	1079	197	3887

Source : Étude orpaillage, ODHD 2011

VIII.3.4. Activities Associated with Artisanal Gold Mining

On average, 82.7% of artisanal miners responsible for a pit engage in agriculture as their primary activity. This percentage is higher in Sikasso and Koulikoro, where it reaches 87%. Commercial activities are also observed alongside artisanal mining, accounting for 8.6% of employment in the areas concerned, as well as other activities such as livestock farming and forestry (Table 8-3-77).

Table 8-3-75: Number of artisanal miners responsible for a pit with outside activities

Région	Agricul-ture	Élevage	Commerce	Exploitation forêt	Autres	Total
Kayes	1 047	14	79	8	55	1 203
Kouli-koro	1 053	31	18		106	1 208
Sikasso	3 131	58	445	21	257	3 913
Total	*5 230*	*103*	*542*	*29*	*419*	*6 324*

Source : Étude orpaillage, ODHD 2011

VIII.3.5. Perceptions of Taxation in Artisanal Gold Mining

According to the results of a survey conducted by the Gold Mining Observatory in 2011, fiscal levies on artisanal mining activities are effectively applied at only 34% of sites. The situation varies widely by locality: 26.8% for sites in Kangaba, 26.7% in Bougouni, 40% in Kolondièba and Yanfolila, 31.5% in Kéniéba, and 85.7% in Kadiolo (Table 8-3-78).

Table 8-3-76: Distribution of sites with fiscal levies effectively applied

		Dispositions prises		**Aucune dis-position**		**Total**	
Région	Cercle	Effectif	%	Effec-tif	%	Effec-tif	%
Kayes	Kéniéba	17	31,5	37	68,5	54	100
Kouli-ko-ro	Kangaba	11	26,8	30	73,2	41	100
Sikasso	Bougouni	4	26,7	11	73,3	15	100
	Kadiolo	6	85,7	1	14,3	7	100
	Kolondiéba	2	40	3	60	5	100
	Yanfolila	10	40	15	60	25	100
Total		50	34	97	66	147	100

Source : Étude orpaillage, ODHD 2011

Despite the non-payment of taxes at many sites, municipalities collect certain fees from economic operators engaged in activities other than artisanal gold mining. In this regard, 17.3% of sites include operators who pay fees to municipal authorities. At the district level, fee collection is more regular in Kolondièba (80%), Kadiolo (57.1%), and Bougouni (53.3%). Conversely, fee collection is low in Kéniéba, Kangaba, and Yanfolila, at 13%, 4.7%, and 3.8%, respectively.

CHAPTER IX
PUBLIC POLICY RECOMMENDATIONS

The purpose of this study was to analyze the informal sector in the cities of Bamako and Mopti. A survey of 700 firms was conducted in these two cities. According to the survey results presented in this document, the characteristics of informality in Mali do not fundamentally differ from those observed in other West African countries. This document also sought to understand the impact of the crisis on production, sales, and employment in both formal and informal firms.

The economic policy recommendations formulated in this chapter are consistent with those made in previous studies. They are inspired by lessons drawn from our research on the informal sector across several regions of Africa, in particular from our findings in Mali and Niger. Mali's status as a conflict-affected country will undoubtedly make some recommendations more difficult to implement. Others will be more relevant and feasible only once a return to normal security conditions has been achieved.

Turning the Demographic Challenge into an Opportunity: Toward Better Targeting of Specialized Sectors and the Creation of a Dedicated Business Environment

The expansion of the informal sector reflects both the lack of employment opportunities in the urban formal sector capable of absorbing the growth in labor supply resulting from demographic growth and rural urban migration. These demographic trends exert very strong pressure on living standards. Poverty incidence is higher in sub-Saharan Africa than anywhere else, with up to 80 percent of the population living on less than two dollars a day. Many developing countries have used their abundant labor force as the basis for an export strategy built on unskilled labor. Africa could and should follow a similar path.

The weakness of labor demand in Africa's formal sector can be explained by the combined effect of low productivity and a higher cost of labor measured as the ratio of wages in dollars to productivity than in most developing countries, a situation exacerbated by overvalued exchange rates. This high relative unit labor cost undermines the competitiveness of African countries, particularly in manufacturing.

Africa may have a comparative advantage in certain manufacturing sectors and in agriculture more broadly, including products such as groundnuts, cotton, agribusiness, horticulture and fisheries, light industries (leather and hides, garments, etc.), and services (formal tourism, transport, and trade) (see Mbaye et al. 2019 for an assessment of the growth potential of some of these sectors). Indeed, these sectors employ a much higher share of unskilled labor than many others.

Donors, governments, private investors, and local entrepreneurs should work closely together to identify the barriers that hinder competitiveness. Successful examples, such as coffee exports in Ethiopia and footwear manufacturing in Ethiopia and Rwanda, clearly illustrate what such partnerships can achieve.

Strengthening Governance and Public–Private Partnerships to Implement Mutually Beneficial Reforms

The dualistic nature of most African economies characterized by a large informal sector that largely escapes taxation can be an obstacle to sustainable growth. The formal sector, reduced to its simplest expression and largely composed of foreign private investment, bears a completely disproportionate tax burden, which undermines its competitiveness. Conversely, the contribution of the informal sector to tax collection contrasts sharply with its share of total value added.

This formal informal duality leads to a vicious cycle in which taxes and regulatory burdens accumulate on the formal sector, causing it to shrink as firms close or migrate into informality, and as foreign investment declines.

It would therefore be appropriate to initiate negotiations between the public and private sectors to improve both the state's performance in delivering public services and the level of tax contribution by various economic actors. Such a dialogue, which should be beneficial to both sides, should include informal sector actors and be fully inclusive.

In a conflict-affected country such as Mali, such dialogue makes more sense in the southern regions, which have been relatively spared by the conflict. The northern regions, more severely affected by civil war, where public infrastructure has been heavily damaged and state authority significantly weakened, are likely to continue experiencing a contraction of the formal sector until public security is restored.

Improving Conditions Across the Entire Spectrum of Informality

Many informal firms are microenterprises, while others are part of larger national or international networks. Some firms operate simultaneously in the formal and informal sectors, and the distinction between formal and informal status should be viewed as a continuum rather than a dichotomy. Informality encompasses very diverse characteristics, and firms should be classified along a continuum based on the number of informal attributes they exhibit.

Economic policy should reflect this heterogeneity. Large firms that could easily formalize but choose not to should be sanctioned, whereas very small firms should instead receive assistance to improve their productivity. Moreover, more targeted measures should be considered for firms located in the intermediate stages of the informality spectrum.

Segmenting formal and informal actors into different clusters corresponding to varying levels of informality would allow for better targeting of public policies aimed at the informal sector. A clearer understanding of the operating modes specific to each category would be a major asset in determining the appropriate levers for effective regulation of the informal sector in all its diversity.

Strengthening Workers' Skills and Improving Business Services

Research indicates a strong correlation between basic professional skills and labor performance. Better-trained workers generally achieve higher levels of productivity and income.

This correlation also holds in the informal sector, despite the low productivity levels typically observed there. Nevertheless, there are significant disparities between the formal and informal sectors in access to education and other basic social services, leading to substantial gaps in skill levels, productivity, and income.

In this context, increasing the productivity of small informal enterprises becomes a high priority. Accordingly, upgrading programs and capacity-building initiatives targeting informal entrepreneurs and workers appear to be effective means of enhancing the informal sector's contribution to inclusive growth.

Indeed, structural transformation of an economy implies a reallocation of productive resources particularly labor from low-productivity activities toward activities with higher productivity. In the context of Africa's informal sector, this transition can occur by strengthening informal activities so as to make them more productive and enable faster growth. This implies several possible actions by the State: establishing business incubators and accelerators to help small informal operators adopt more modern management practices particularly in bookkeeping, tax management, and the modernization of their organizational structures more broadly (see, for further details, Mbaye and Zogning 2020).

Strengthening the professional skills of informal-sector actors, particularly the self-employed, is also essential. This capacity building should concern not only "hard skills" but, above all, "soft skills" (see Mbaye et al. 2021).

Developing an effective strategy to support small and micro-enterprises

The agenda of such a program would include: entrepreneurship support, vocational training, and the introduction of incentive measures for small enterprises, including the adoption of legal statuses such as that of the self-employed worker (Canada) or the auto-entrepreneur (France, Turkey, Morocco).

Beyond training aimed at developing technical qualifications, the types of training to be implemented should also focus on strengthening managerial skills. Learning methods should be diversified to adapt effectively to participants' profiles, combining classroom instruction, practical workshops, individualized support and counseling (coaching), hands-on work on business projects, and personalized follow-up.

The establishment of business incubators should also be an integral part of the support strategy. An incubator supports the growth of new and emerging enterprises by providing physical facilities, advisory resources, and appropriate development tools, thereby helping them survive and grow during the start-up phase, when they are most vulnerable.

Establishing appropriate financing and social protection systems

In Africa, as in many developing countries, most public policies targeting informal actors tend to aim at "formalizing the informal sector," with the stated objective of registering firms in order to tax them more effectively. One of the arguments developed in this research is that measuring informality solely through the criterion of registration is not a relevant approach, since many firms in our sample are registered yet remain informal according to

several other standards. Consequently, providing financing to small informal actors solely for the purpose of formalization has never been an effective policy. The example of the World Bank pilot program implemented in Benin is a perfect illustration. The conclusion drawn by one of its architects is unequivocal :

> *"I worked, over a certain period, on various attempts to register informal firms and make them formal. We tried giving them information and paying them to formalize, reducing the cost of registration to zero, providing accountants, and applying private-sector rules to them. After all this, in total contradiction to the view developed by De Soto—according to which the informal sector is full of firms that would like to become formal if only burdensome regulations did not prevent them our studies showed that most informal firms will remain informal unless they are strongly compelled or paid a great deal of money to formalize."*
> David McKenzie (2017)

A more effective approach to encouraging informal actors to trust and take ownership of public policies is to help them become self-reliant. Two levers appear particularly important in this regard :

- the implementation of a generalized and adapted social protection program for all informal-sector actors. Ndiaye et al. (2024) identify two alternative means of financing such programs: through payroll taxes or indirect taxation. In any case, implementing such a system would make it possible to establish a direct framework of interaction with all concerned actors, thereby facilitating their supervision and support in the process of modernization;
- adequate financing that allows informal activities particularly in conflict-affected areas to develop. Experiences conducted in such contexts show that grants are more effective in improving the incomes of informal actors than training and credit (Blattman and Ralston 2015). These grants may take the form of cash transfers or in-kind capital grants (such as livestock).

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