United Nations
Economic Commission for Africa

WOMEN'S ECONOMIC EMPOWERMENT

Boosting Female Entrepreneurship in Africa

First Draft

July 2017

Contents

List of Figures and Tables

Acknowledgements

The publication *Women's Economic Empowerment: Boosting Female Enterpreneurship in Africa* was prepared under the dedicated support, leadership and guidance of Ms. Thokozile Ruzvidzo, the Director, Social Development Policy Division (SDPD) and the Coordinator of the African Centre for Gender (ACG) of the United Nations Economic Commission for Africa (UNECA). Invaluable feedback was solicited during the internal review held by the African Center of Gender in November 2017 which set the key parameters of this Report. Participants include Thokozile Ruzvidzo, Ngone Diop, Gonzague Rosalie, Keiso Matashane-Marite, Maharouf Oyolola, Deborah Abebe, Maria Dombaxi and Helen Asfaw. The main author of this report is Selahattin Selsah Pasali, Associate Economic Affairs Officer. Literature review was conducted by Elizabeth Abebe and Tewodros Alemayehu. The preliminary results of this Report was shared with ECA staff in March 2017 during the Brown Bag Lunch Seminar of SDPD where participants have provided important insights, particularly on narrowing down the focus of the Report. Special thanks to substantive comments provided by Saurabh Sinha, Deniz Kellecigolu and Sandra Zawedde.

ECA is grateful for the comments and advice received from the participants who participated in an expert group meeting which was held on August 24-25 2017 in Addis Ababa to review the first draft version of the report. They include: …

ECA is also gratetful for provision of up-to-date and yet publically unavailable data from Global Enterprenenurship Monitor and the support provided by the Enterprise Surveys team of the World Bank.

The report team gratefully appreciates the support of the documents control team including … and … who handled the lay out, design and printing of the report. The final report was ably edited by ….

The following ECA staff provided useful assistance to the report team: Tigist Eshetu, Abraham Kassa, Hannan Mohamed and Berhanu Tesfaye.

Foreword

To be written by Executive Secretary or Chief Economist of the ECA.

Executive Summary

Women's economic empowerment is a process through which women's capital –human, financial and physical- endowments increase along with their access to and benefits from economic opportunities leading to improved agency and voice. Boosting female entrepreneurship, currently an untapped policy area among member States, bears the largest impact potential on women's economic empowerment simply because only a minority of African women are currently in formal wage employment while there are no expectations for transitioning women from vulnerable self-employment to formal wage employment anytime soon. The aim of this report is therefore to set the context for identifying country-specific pathways toward optimizing women's entrepreneurial potential, to tackle challenges faced by female entrepreneurs or to-be entrepreneurs and to share policy lessons from policy interventions.

In an effort to support the goal of moving women into more productive work, this Report follows a data-driven empirical approach and relies exclusively on quantitative methods using data from Angola, Cameroon, Democratic Republic of Congo, Egypt and Mali to (i) profile women entrepreneurs at each stage and showcase characteristics of their firms/activities in formal and informal sector, (ii) catalog the constraints women entrepreneurs face in each sector along with gender gaps and finally (iii) evaluate their firm performance and provide a linkage to women's increased agency and voice. A key limitation of this report is data availability forces the analysis to take place in urban non-agricultural economy. The following key results can be highlighted:

- Labor markets across Africa are not conducive to women's economic empowerment, as women are stuck in vulnerable self-employment with large wage and income gaps, sectoral and occupational segregation and face legal barriers against economic opportunities.
- Legal barriers, insufficient incentives and time poverty forces women to self-select into necessity-driven entrepreneurship in the Services sector.
- Prevalence of female-owned enterprises vary across Africa but remains below 30 per cent. In both formal and informal sector, female owned enterprises are widely present in the services sector with the exception of Egypt where only 4 per cent of formal enterprises are owned by women. Majority of female-owned enterprises are micro or small, operate in Wholesale and Retail trade and Hotels and Restaurants sub-sectors. Female enterprises are younger, less likely to be formalized and export and more likely to operate from within household premises.
- In the business world, female-owned enterprises face similar challenges to men, especially when female and male enterprises from the same sector, formality and location are compared. Access to finance is among top listed constraints women report among formal, informal and microenterprises. While only a minority of firms report having loans, among those who do not, the main response is that they do not need any loans. Majority of asset

purchases and working capital is financed with retained earnings which holds for male-owned enterprises as well.

- Majority of informal enterprises across selected countries identify non-structural barriers to formalization since only a few report taxes as their main reason for not formalizing. Streamlining formalization process should help most of these firms transition into formal firms as they report several expected advantages ranging from access to finance to markets.

- Female-owned enterprises on average are less productive than their male counterparts. They are also less likely to innovate new products and processes of production. Yet, controlling for sector, size and location of enterprises narrows down these gaps and closes in Angola, Cameroon and Mali. In DR Congo, total annual sales per worker is USD 90,000 less in female-owned enterprises while in Egypt this figure drops down to USD 17,000.

- Female-owned enterprises, particularly informal and microenterprises are much more likely to hire female employees than male-owned enterprises. In most of the selected countries, the differential is as much as 1 additional female employee among female-owned firms relative to male-owned firms.

The Report focuses on three critical policy areas that bears large potential to improve women's economic empowerment through boosting female entrepreneurship, including active labor market policies, financial inclusion and laws and regulation.

The most direct and short-term policy tool for member States is to experiment with active labor market policies ALPMs such as skills training and entrepreneurship promotion programs:

- Bundling skills training, e.g. adult literacy and numeracy, financial literacy, business and entrepreneurial skills with capital transfers, e.g. start-up capital, cash grants, micro-loans or in-kind transfers, can help women transition into more productive and lucrative income-generating activities.

- Unlike men, women face several constraints that can limit the potential impact of ALMPs, including social norms against women's role in business and expectation that women must prioritize their household, harmful practices such as early marriages and adolescent pregnancy, informal taxes on women's access to credit through other household members and severe time poverty.

- The networking possibilities for women's entrepreneurs must be supported. Evidence suggests that organized female entrepreneurs have higher collective and individual bargaining power, better access to basic services and inputs, collaborate among each other to address skill and credit constraints.

While access to finance is often reported as the biggest constraint, it is not clear what women could do with such financing, and whether they had financial and business skills to use it for productive purposes and remain solvent. There is no evidence yet on how women use loans to transition from unproductive to productive sectors. The following policy recommendations emerge:

- Financial inclusion is not only access to credit. In the absence of insurance markets, it is paramount that women entrepreneurs have access to formal savings accounts for their businesses separate from their personal accounts. Women entrepreneurs remain much more vulnerable to negative income shocks than male entrepreneurs.

- Women are better clients among microfinance institutions, as their repayment rates are higher. The credit history of women must therefore be captured to help women graduate from MFIs to commercial banks. Widening the interpretation of assets to include movable assets could also help ease stringent collateral requirements.

- Loan conditions among MFIs must improve, particularly at early stage of entrepreneurship where women need a breathing space till they break even.

- Targeting is critical. The poorest of the poor or the most marginalized women are the most credit-constrained and bear the maximum gains in case provided capital.

- Mobile banking has played a critical role in Africa to helping women's access to financial services. It is also a great instrument to ensure women's secure control over assets, loans and savings.

Last but not least, African legal frameworks require gender mainstreaming. While many countries recognize statutory laws the valid legal instrument, implementation and enforcement problems often emanate from social norms and local traditions.

- The giant rights gap between married and unmarried women must immediately be resolved. This Report finds that majority of female business owners are married but they are not provided the rights as well as incentives to engage in income-generating activities.

- Women's access to legal advice must be encouraged and organizations that focus on this objective must be supported. This Report shows that commendable progress has taken place in Africa in 1960-2010 and 2010-2016 periods. To what extent women are aware of their rights is not clear, yet low levels of literacy and access to media would suggest that especially in rural areas, women are unaware of their rights.

- Customary law is very powerful in Africa as it has penetrated deeply and widely across the society. Positive values on gender equality must be identified in local traditions and publicized. The enforcement problem can also be eased by strengthening the role of women at all levels of judiciary, especially in rural areas where customary law is more likely to apply.

Introduction

Women's economic empowerment is a process through which women's capital –human, financial and physical- endowments increase along with their access to and benefits from economic opportunities leading to improved agency and voice. Endowing women with human capital particularly with labor market skills and raising their financial and physical asset portfolio not only empower women directly but also lower the boundaries set against their access to decent employment with higher wages, career prospects and better business performance. The expected consequence of this process is stronger agency by women both in private sphere, i.e. increased participation in intra-household decision making process regarding consumption, distribution and production decisions, and the public sphere, i.e. women's quantity and quality of participation in public sector institutions as well as civil society. Policymakers must recognize two critical issues. First, given the multidimensional nature of women's economic empowerment progress may not follow in each constituent factor equally and simultaneously. For instance, supporting women with skills training or entrepreneurship promotion programs can encourage women to participate in the labor force and raise their income but may not protect them from various forms of violence at least in the short-term. Second, the process of economic empowerment is dynamic across the life-cycle. Policies therefore need to harness the inherent empowering episodes of women's life-cycle.

Women's entrepreneurship is an untapped policy area that bears utmost potential for inclusive and sustainable economic growth as well as structural transformation in Africa. Most countries are reaching the limits of economic growth driven by consumption, external financing, natural resources or various bubbles. There is a pronounced need for productivity growth in priority sectors. Growing evidence[1] points toward a negative relationship between gender inequality and productivity growth and the future will not be bright, unless half of the population engages in productive work with decent conditions. Given the labor market conditions in Africa, boosting female entrepreneurship is the main short-term policy tool to improve women's economic opportunities thereby accelerating their economic empowerment. However, they still represent a minority of all entrepreneurs, especially among formal and larger firms in lucrative sectors in Africa and unlike men, face severe constraints such as time poverty and unsupportive social norms.

Given lack of recent research from Africa and keeping in mind the premises mentioned above, *Women's Economic Empowerment in Africa: Boosting Female Entrepreneurship* Report focuses on female entrepreneurship as the key entry point to improve women's economic empowerment across the continent. The aim of this report is to set the context for identifying country-specific pathways toward optimizing women's entrepreneurial potential, to tackle challenges faced by female entrepreneurs or to-be entrepreneurs and to share policy lessons from policy interventions.

[1] Kazandijan, R., Lisa Kolovich, Kalpana Kochnar and Monique Newiak (2016). Gender Equality and Economic Diversification. IMF Working Paper: WP/16/140. International Monetary Fund: Washington, D.C.

Background

African member States have shown commitment and are taking critical steps to advance gender equality and women's empowerment by acceding to key global and regional instruments[2], and integrating gender into national policy, planning, program and legislative frameworks, thus acknowledging the centrality of gender equality in the achievement of socio-economic and political development. The Agenda 2030 on Sustainable Development Goals and the Agenda 2063 put immense pressure on member States to improve gender equality on its own right but also due to the positive externalities that emanate from women's empowerment toward achievement of other developmental goals. Member States in Africa are therefore highly willing to experiment policy interventions to accelerate the process of women's economic empowerment.

There a myriad of challenges against women's economic empowerment through entrepreneurship. Africa is home to countries with very different levels of female labor force participation rates with North Africa representing the lower end of the distribution where ever widening gender gaps in participation rates leading up to 25-30 per cent of GDP being lost in Algeria, Egypt and Tunisia[3]. Beyond North Africa, most women in the labor force, are self-employed and vulnerable to shocks. They work for their own accounts in small scale enterprises with weak growth performance at dismal productivity levels, often earning much less than men. In urban centers, women constitute the backbone of own-account workers in the informal sector. In rural areas, women are overrepresented among contributing family workers in the agriculture sector where they work on land they do not own for minimal, if any, economic benefits. The International Labor Organization in estimates that around 80 per cent of employed women will be in vulnerable employment in Africa by 2020, while the World is on average experiencing a decrease in female vulnerable employment. Strong policy action is therefore deeply needed for African countries to catch up with this trend.

While challenges abound, opportunities are also within sight. According to the Global Entrepreneurship Monitor, which surveys individuals' self-perceptions toward entrepreneurship as well as their entrepreneurial activities, women are not far behind men in Africa, unlike in other regions, with respect to the belief in their capacity to undertake entrepreneurial activity, identify profitable ventures, fear of failure and the number of people in their close vicinity who are engaged in entrepreneurial activities. Relative to Asia and the Pacific as well as Latin America and the Caribbean, African women stand much closer to men but still parity is not observed. What

[2] The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), the Millennium Development Goals (MDGs), International Conference on Population and Development (ICPD), the New Partnership for Africa's Development (NEPAD) and its gender component, the Solemn Declaration on Gender Equality and the Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa, Southern Africa Development Community Protocol on Gender and Development and finally Agenda 2030 and 2063.

[3] Cuberes, D. and M. Teignier (2016). "Aggregate Effects of Gender Gaps in the Labor Market: A Quantitative Estimate". *Journal of Human Capital,* 10 (1), pp. 1-32.

differentiates African women's entrepreneurial attitude/activities from other regions is that the former is more likely to engage in self-employment out of necessity rather than opportunity, hence the poverty trap most self-employed women in Africa experience despite longer hours of work, be it market, non-market or domestic activities.

The main objective of this report therefore is to understand what type of activates women undertake across Africa, what kind of constraints they face in their income generating activities and to what extent women benefit from economic opportunities and increase their agency. The policy challenge at hand is to increase the quality of women's labor force participation which includes understanding and tackling a variety of constraints women face including social norms, legal barriers, time poverty and operational business constraints, among others.

Methodology

In an effort to support the goal of moving women into more productive work, this Report follows a data-driven empirical approach and relies exclusively on quantitative methods to (i) profile women entrepreneurs at each stage and showcase characteristics of their firms/activities in formal and informal sector, (ii) catalog the constraints women entrepreneurs face in each sector along with gender gaps and finally (iii) evaluate their firm performance and provide a linkage to women's increased agency and voice.

While the Report makes an effort to bring evidence from majority of African countries, due to space brevity, five countries are selected from each subregion for in-depth analysis using individual as well as firm-level data. These countries include Egypt (North Africa), Democratic Republic of Congo (Eastern Africa), Mali (West Africa), Cameroon (Central Africa) and Angola (Southern Africa) and represent a wide range of economic structures at different levels of development.

There are two main data sources employed by this Report. First, firm-level data is obtained from World Bank's Enterprises Surveys (ES). Given the nature of female entrepreneurship in Africa, the empirical analysis is centered around informal and micro enterprises but also includes formal enterprises. The ES for formal, informal and micro enterprises contains a wealth of information regarding firm characteristics, owners' background, constraints faced by owners and managers and a multitude of performance indicators. Second, individual level data on entrepreneurial attitudes, motivation and expectations are obtained from the Global Entrepreneurship Monitor which identifies male and female entrepreneurs at difference stages of business activities. While descriptive statistics forms the backbone of this Report, simple statistical and econometric methods are used to test various hypotheses to reduce dimensions of large data reduction and to control a host of variables that are relevant for a meaningful comparison.

The Report is structured in the following way. Chapter II provides a detailed overview of female employment and entrepreneurship patterns across Africa. In doing so, it focusses on incumbent entrepreneurs as well as new entrants and showcase individual and firm level characteristics including distribution by sector and size, export orientation and growth expectations. Chapter III catalogs constraints firm owners report against their operations by gender of the owner and the sector and type of the enterprise. Chapter IV focuses on indicators that proxy women's economic empowerment including firm performance indicators as well as variable that measure women's participation in decision-making process in the household, particularly by using individual-level data. Section V draws policy lessons based on an extensive literature review of experimentation with active labor market policies as well as country-level analysis of financial inclusion and laws and regulations that matter for women's access to economic opportunities.

The primary limitation of this Report is that it is purely data driven Report, hence availability of data guides emphasis on certain constraints and sectors. The main data source of this report pertains to entrepreneurial activities in urban non-agricultural economy. In addition, social constraints are largely missing from the analysis due to lack of data. For instance, recent lab experiments[4] found that women face up to 8 per cent of "kin tax" in Africa whereby they expect that they would have to share a sizable portion of their capital, while there is no such evidence for men. Also, women spend considerable amount of resources on household expenditure and time on domestic chores. The Report fails to link such social constraints to entrepreneurial activities and success and relies on rigorous academic literature to fill the gap.

Key Results

Among the several findings of this Report, the following can be highlighted upfront:

- Labor markets across Africa are in no way conducive to women's economic empowerment, as women are stuck in vulnerable employment and suffer from large wage and income gaps, sectoral and occupational segregation and face legal barriers against economic opportunities.

- Majority of employed women are in vulnerable self-employment as own-account workers and contributing family workers. As such, majority of women entrepreneurs in Africa, both early stage entrepreneurs and established business owners, are in self-employed motivated by necessity rather than opportunity. Legal constraints, insufficient incentives and time poverty contributes to women's choice of necessity entrepreneurship in wholesale and retail trade or hotel and restaurant sectors.

- Prevalence of female-owned enterprises vary across Africa. Among formal enterprises across selected countries, female ownership ranges from 4 per cent in Egypt and 31 per cent in Cameroon. Among informal enterprises, prevalence rates are higher with 15 per cent in Egypt and 34 per cent in Cameroon. In both formal and informal sector, female owned enterprises are widely present in the services sector with the exception of Egypt. Finally, among micro-enterprises across selected countries, Cabo Verde is closest to gender

[4] Jakiela, Pamerla and Owen Ozier. (2012). Does Africa Need a Rotten Kin Theorem? Experimental Evidence from Village Economies. Policy Research Working Paper 6085. Washington, DC: World Bank

parity while DR Congo and Zimbabwe report 25 per cent of all formal microenterprises owned by women. In Burkina Faso, Kenya and Cameroon, prevalence rates ranges between 12 per cent and 17 per cent.

- Regarding key characteristics of formal female-owned enterprises, the first result is that majority are small reaching 94 per cent in Egypt. Less than 10 per cent exports and majority are in the Services sector, particularly in wholesale and retail trade and hotels and restaurants. This sectoral segregation applies among microenterprises but interestingly female-owned enterprises are much more likely to be in manufacturing albeit at lower nodes of the value chain. They are also much younger firms and mostly operate from home.

- In the business world, female-owned enterprises face similar challenges to men, especially when female and male enterprises from the same sector, formality and location are compared. Access to finance is among top listed constraints women report among formal, informal and microenterprises. While only a minority of firms report having loans, among those who do not, the main response is that they do not need any loans. Majority of asset purchases and working capital is financed with retained earnings which holds for male-owned enterprises as well. Note that profile of constraints varies substantially across countries, sectors, formality and size.

- Majority of informal enterprises across selected countries identify non-structural barriers to formalization since only a few report taxes as their main reason for not formalizing. Streamlining formalization process should help most of these firms transition into formal firms as they report several expected advantages ranging from access to finance to markets.

- Female-owned enterprises on average are less productive than their male counterparts. They are also less likely to innovate new products and processes of production. Yet, controlling for sector, size and location of enterprises narrows down these gaps and closes in Angola, Cameroon and Mali. In DR Congo, total annual sales per worker is USD 90,000 less in female-owned enterprises while in Egypt this figure drops down to USD 17,000.

- Female-owned enterprises, particularly informal and microenterprises are much more likely to hire female employees than male-owned enterprises. In most of the selected countries, the differential is as much as 1 additional female employee among female-owned firms relative to male-owned firms.

Policy Recommendations

The Report focuses on three critical policy areas that bears large potential to improve women's economic empowerment through boosting female entrepreneurship, including active labor market policies, financial inclusion and laws and regulation.

The most direct and short-term policy tool for member States is to experiment with active labor market policies ALPMs such as skills training and entrepreneurship promotion programs:

- Bundling skills training, e.g. adult literacy and numeracy, financial literacy, business and entrepreneurial skills with capital transfers, e.g. start-up capital, cash grants, micro-loans or in-kind transfers, can help women transition into more productive and lucrative income-generating activities.

- Unlike men, women face several constraints that can limit the potential impact of ALMPs, including social norms against women's role in business and expectation that women must prioritize their household, harmful practices such as early marriages and adolescent pregnancy, informal taxes on women's access to credit through other household members and severe time poverty. ALMPs must have design features that internalize such constraints.

- A holistic approach to the household is necessary. The support of partners and husbands are critical in not only securing women's time in training but also women's access to secure capital. In addition, the unpaid work women undertake for their partners, husbands or families could also be addressed if ALMPs have a holistic approach.

- The networking possibilities for women's entrepreneurs must be supported. Evidence suggests that organized female entrepreneurs have higher collective bargaining power, better access to basic services and inputs, collaborate among each other to address skill and credit constraints. Beyond collective power, women entrepreneurs can also improve their own individual bargaining power in their households.

Evidence from formal, informal and microenterprises shows that only a minority of firms have access to loans while majority report that the reason why they do not apply for loans because they do not need any. While access to finance is often reported as the biggest constraint, it is not clear what women could do with such financing, whether they had sufficient financial and business skills to use loans for productive purposes and remain solvent, particularly given the profile of female-owned enterprises and the sector they work. There is no evidence yet on how women use loans to transition from unproductive to productive sectors. The following policy recommendations emerge:

- Financial inclusion is not only access to credit. In the absence of insurance markets, it is paramount that women entrepreneurs have access to formal savings accounts for their businesses separate from their personal accounts. Women entrepreneurs are much more vulnerable to negative income shocks than male entrepreneurs and savings account can help women partially mitigate risks associated with their activities.

- Women are better clients among microfinance institutions as their repayment rates are higher. The credit history of women must therefore be captured to help women graduate from MFIs to commercial banks. Widening the interpretation of assets such as movable property could also help with collateral requirements.

- MFIs are much better equipped doing business with women clients. Yet, loan size as well as maturity is still unfavorable. Positive results were found from MFI experiences which provided additional time for repayment to business start-ups.

- Targeting is critical. The poorest of the poor or the most marginalized women are the most credit-constrained and bear the maximum gains in case provided capital. Yet, for this group grants or in-kind transfers might be more appropriate initially rather than loans.

- Mobile banking has played a critical role in Africa to helping women's access to financial services. It is also a great instrument to ensure women's secure control over assets, loans and savings.

Last but not least, African legal frameworks require gender mainstreaming. There are inconsistencies between statutory and customary laws. While many countries recognize statutory laws the valid legal instrument, implementation and enforcement problems often emanate from social norms and local traditions.

- The giant rights gap between married and unmarried women must immediately be resolved. This Report finds that majority of female business owners are married but they are not provided the rights as well as incentives to engage in income-generating activities.

- Women's access to legal advice must be encouraged and organizations that focus on this objective must be supported. This Report shows that commendable progress has taken place in Africa in 1960-2010 and 2010-2016 periods. To what extent women are aware of their rights is not clear yet low levels of literacy and access to media would suggest that especially in rural areas, women are unaware of their rights.

- Customary law is very powerful in Africa as it has penetrated deeply and widely across the society. Positive values on gender equality must be identified in local traditions and publicized. The tension between customary and statutory law can also be eased by strengthening the role of women at all levels of judiciary monitoring the role of judiciary and especially in rural areas where customary law is more likely to apply.

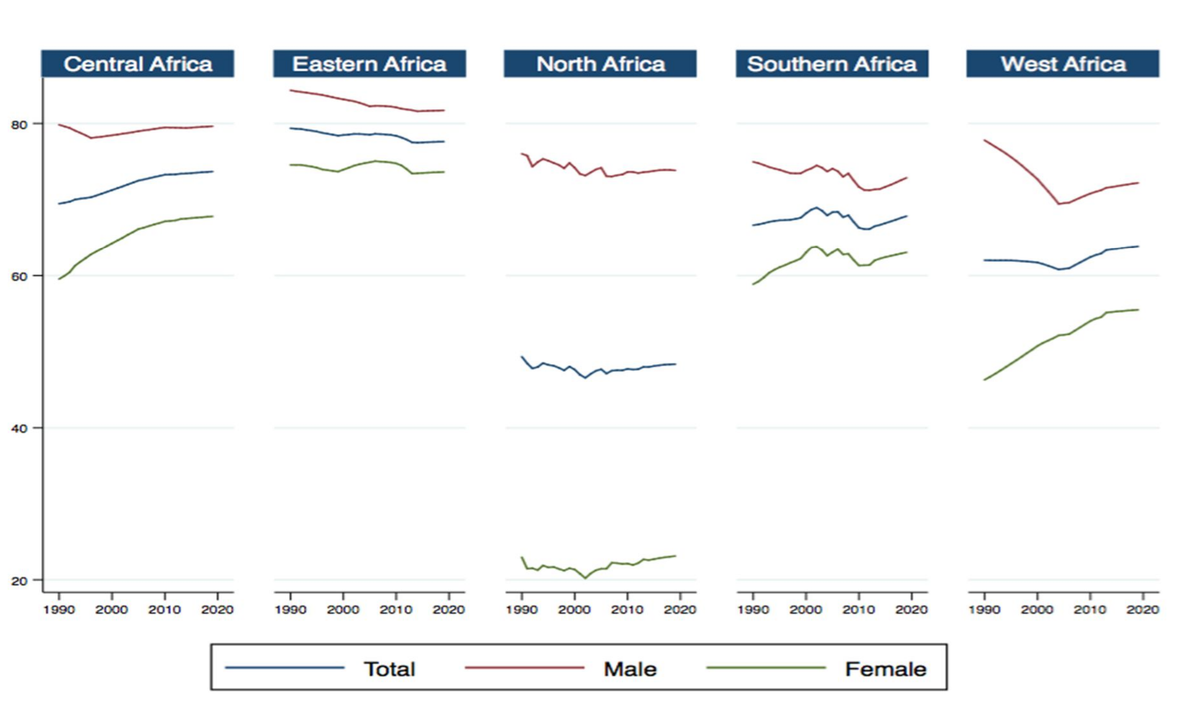
Where are Women Entrepreneurs in Africa?

This chapter describes African labor markets from a gender perspective. Based on country-level, data, trends in quantity and quality of female employment is analyzed to set the context for women in self-employment. Using individual-level data from Global Entrepreneurship Monitor, the chapter continues with a description of women entrepreneurs by stage of entrepreneurial activity, sector as well as motivation. Finally, firm-level data from World Bank Enterprise Surveys are used to understand the features of enterprises that are owned by women in comparison to male-owned enterprises.

African Women in Labor Markets

Women in Africa participate in labor force at higher rates than anywhere in the world with on average two-thirds of women in the labor force, albeit with large subregional variation. As shown in Figure 1 below, while 20 per cent of women participate in North Africa, close to 80 per cent of women do so in Eastern Africa. While participation rates are high for women, they include both unemployed and employed women. It is important note that female unemployment rates, particularly for the youth, are high in Africa and those who are employed are often underemployed with less than 30-35 hours of labor supply per week.

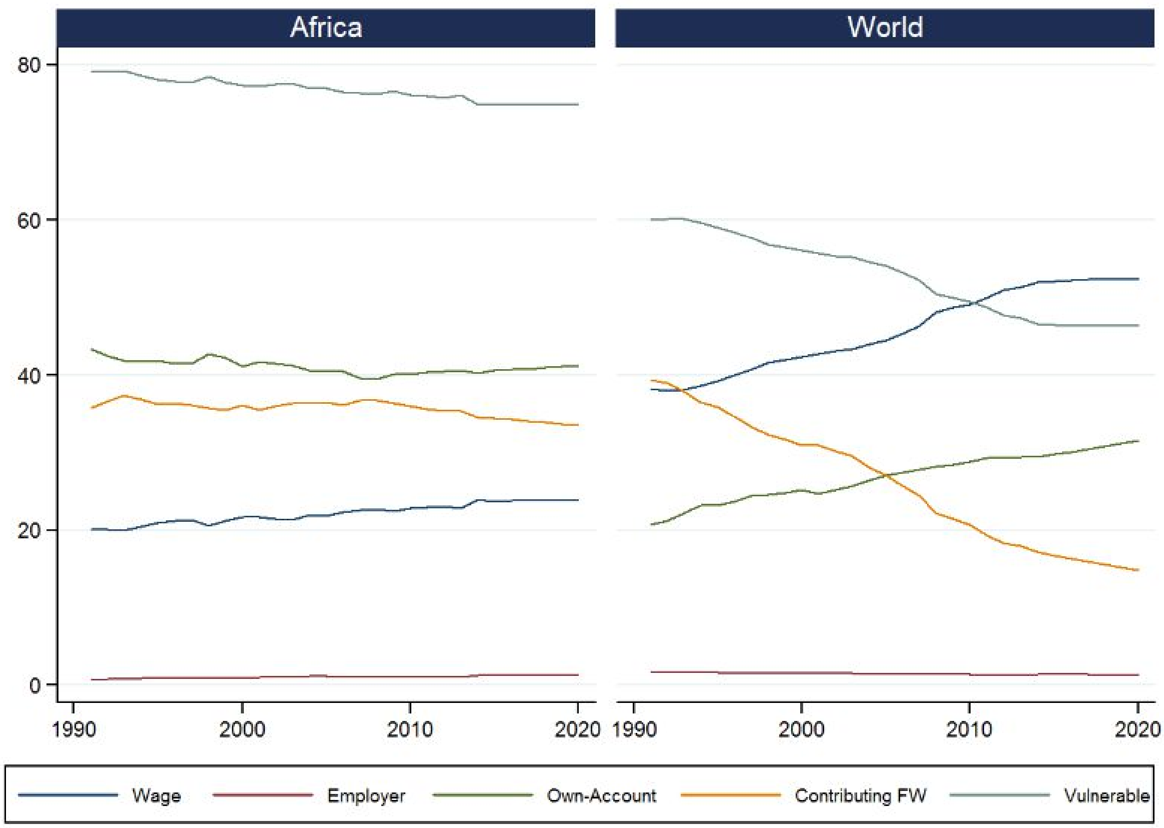
Figure 1. Female labor force participation rate by subregions (%)



Data Source: ILO-KILM (1990-2020).

While participation rates are encouragingly high, member States face difficult challenges in moving women into productive and good quality employment. Figures II and III below provide trends in status and sector of employment over time. The major cause of concern is the proportion of women in vulnerable employment, i.e. own-account workers and contributing family workers, is extremely high and projected to be 75 per cent by 2020.

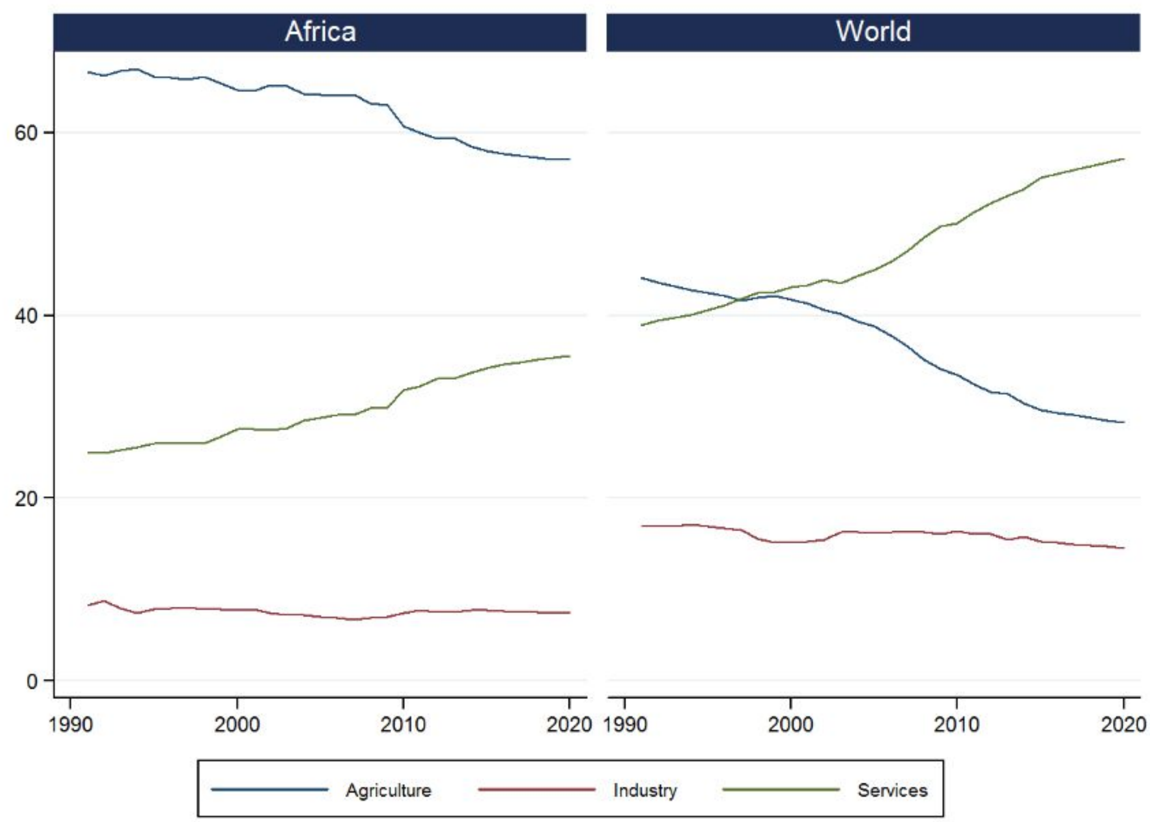
Figure 2. Status of female employment (%)



Data Source: ILO-KILM (1990-2020).

According to the ILO, self-employment includes employers, own-account workers, members of producers' cooperatives and contributing family workers. Figure 2 compares Africa with the rest of the World and shows striking differences. While status of female employment has been mostly stable in Africa with a slight positive trend in wage employment, major shifts have occurred in the rest of the World, where the share of employed women in contributing family workers, i.e. women in rural areas working on farms they often do not own and earn minimal income, more than halved. A common trend between the two regions is that share of employers among employed women has been only marginal. Figure II therefore foreshadows that women entrepreneurs that this Report will profile later on will mostly constitute the vulnerably employed.

Figure 3. Sector of female employment (%)

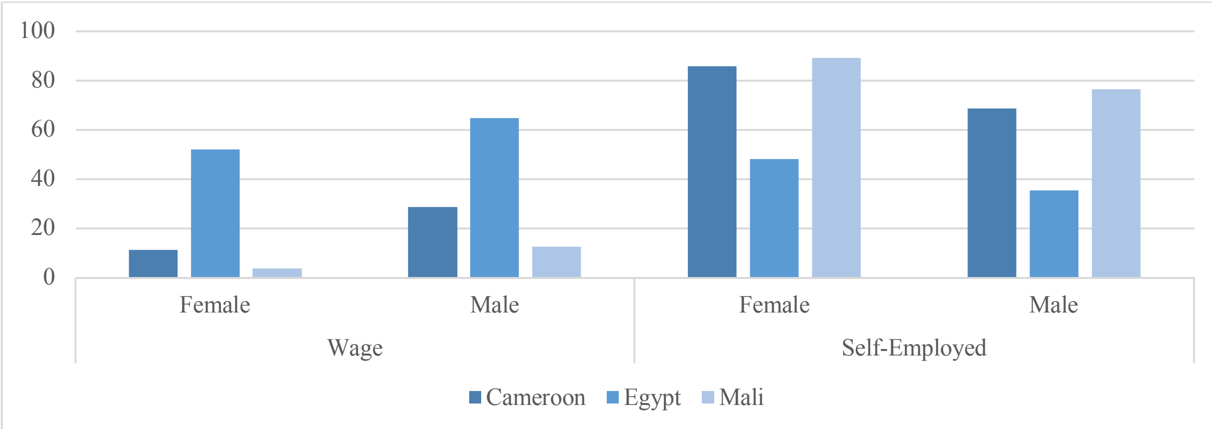


Data Source: ILO-KILM (1990-2020).

The sectoral disaggregation of female employment shown above poses doubts on the attainability of deeply needed structural transformation across the continent. Female employment in industry has been low and stable, while the shift from agriculture to services is in the making, albeit at slower pace relative to the World. While urbanization is an ongoing full-fledge process across Africa, Figure 3 suggests that most self-employed women will be operating in agriculture sector in rural areas in the near future. The major concern here is that data on rural self-employed women is extremely scarce. A drawback of this Report is that the key data sources pertain to non-agricultural economy around urban centers. Given the share of employed women in rural areas, it becomes paramount that data collection efforts do not leave the majority of women behind.

Moving away from regional aggregates to country-level data, it is worth noting that gender gaps in labor force participation in Angola, Cameroon, Democratic Republic of Congo, Egypt and Mali closely reflect the subregional variation. The gender gap is almost nonexistent in DR Congo, while Egypt exhibits the largest gaps followed by Mali, Angola and Cameroon.

Figure 4. Status of employment, selected countries (%)

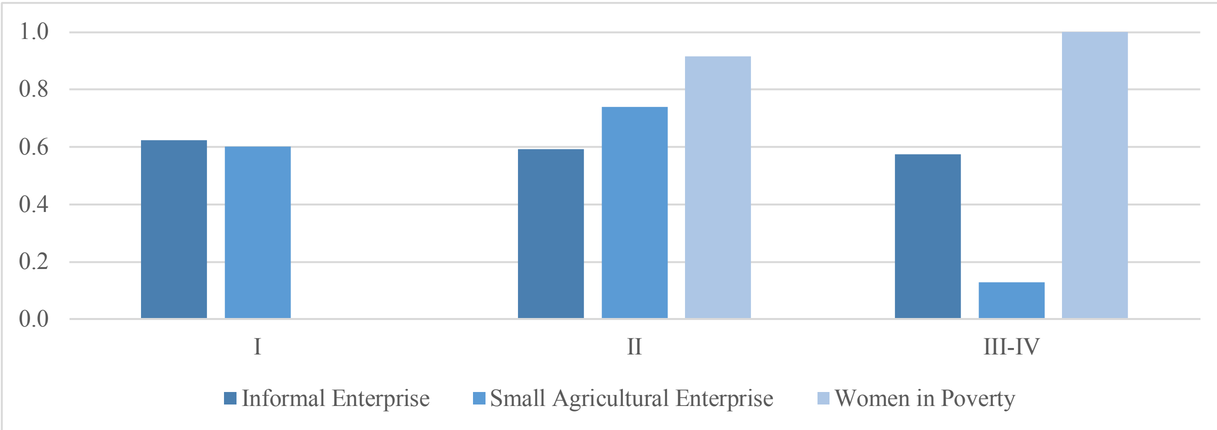


Data Source: ILO-KILM (2007-2010)

Data on sector and status of female employment are available for Cameroon, Egypt and Mali as shown in Figure 4 above. Regarding status of employment, an interesting development in both Cameroon and Mali is that the share of own-account workers among employed women has decreased substantially, while the share of contributing family workers increased concomitantly thereby leaving no significant changes in the share of vulnerably employed. Nevertheless, own-account workers are still the major group within self-employed in both countries. While participation rates are slightly above 20 per cent in Egypt, over 50 per cent of employed women are in wage employment. Egypt also has the highest share in female employers with 3.1 per cent of employed women in this category. Cameroon follows suit with 1.6 per cent. Contributing family workers are the second biggest category with almost twice as many employed women in this category than among own-account workers. Data at sub-sector level indicates a major change in agriculture where the share of women increased by more than fivefold from 5 per cent in 1996 to 29 per cent in 2008.

Moving to the quality of employment, pervasive wage gaps exists across all sectors. The United Nations Economic Commission for Africa (ECA) collects data from member States in support of the African Gender and Development Index. As of 2017, data have been collected from 42 member States within 4 rounds. Figure 5 below shows gender income gaps based on earnings from informal enterprises and small agricultural enterprises. Note that gender parity implies a score of 1, while scores less than 1 imply gender disparity against women. Regarding income from informal enterprises, a consistent picture emerges from all 4 rounds with women earning slightly more than half of what men earn from such enterprises. Regarding the small agricultural enterprises, gender gaps are equally pervasive in Round I countries. Among Round II countries, less income gaps are observed in this category relative to the informal enterprises. Among Round III-IV countries, data are available only for Guinea where women earn less than 15 per cent of what men earn from small agricultural enterprises. Overall, women are more likely to be under the poverty line, even though Round III-IV countries on average exhibit parity in terms of equivalent shares of female and male headed households under poverty.

Figure 5. Gender income gaps in Africa



Data Source: UNECA (2009-2017)

Consequently, women's access to economic opportunities are highly limited across Africa. Women are often contributing family workers in rural areas working in agriculture with some level of diversification into informal income-generating activities, while in urban areas women dominate the own-account workers in informal sector. There is no indication of trends for pulling women into formal wage employment. Thus boosting female entrepreneurship with productivity enhancements is the only tangible policy tool in the short-term.

Women Entrepreneurs in Africa

Entrepreneurship is not a one-dimensional phenomenon that can easily be defined. This Report refrains from introducing a new definition and relies on the definition put forward by the Global Entrepreneurship Monitor (GEM), a consortium of research institutions that collect data from across the world on many indicators that help catalog various types of entrepreneurs. According to GEM[5], entrepreneurship is defined as "any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals, or an established business". There are several advantages that follow from this definition. First, entrepreneurship is not reserved to formal registered businesses. Second, the entire process of entrepreneurship from initial planning stage is internalized. Finally, any type of business activity is accepted thereby ensuring that women who may not be involved in traditional sectors/occupations are not missed out.

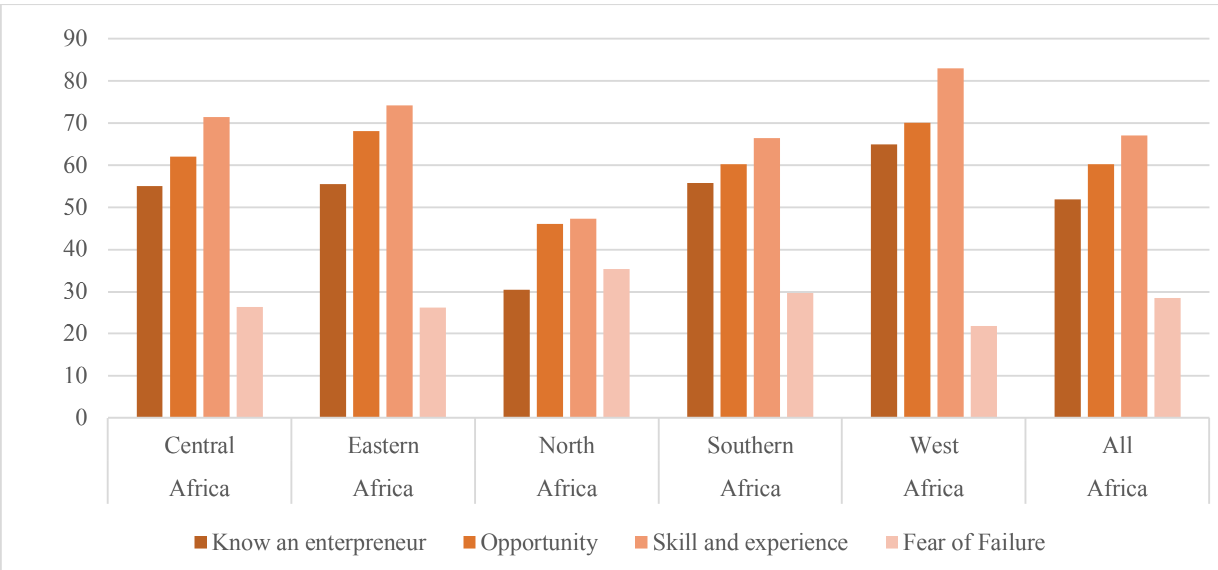
Before reporting prevalence of various types of female entrepreneurs in Africa, Figure 6 provides an inspiring and positive message in that women in Africa deeply embrace entrepreneurial attitudes[6]. More than 60 per cent of women surveyed across Africa believe that they have capacity, i.e. the knowledge, skill and experience required to start a new business. More than 50 percent expect good opportunities to start a business in the next sixth months. Only less than 30 per cent

[5] http://www.gemconsortium.org/wiki/1149

[6] The national averages are computed using adult population weights from 17 countries between 2013 and 2016 containing over 45,000 individuals.

suggest that fear failure would prevent them from starting a business and more than 50 per cent can identify someone at a personal level who started a business in the past 2 years. Compared to Latin America and the Caribbean and Asia and the Pacific, these figures are quite high. In addition, gender gaps in all four attitudes are much narrower in Africa than in the other two regions. As found earlier in labor market characteristics, subregional variation exist, particularly with North Africa exhibiting lower attachment to all four attitudes.

Figure 6 Entrepreneurial attitudes in Africa by subregions (%)

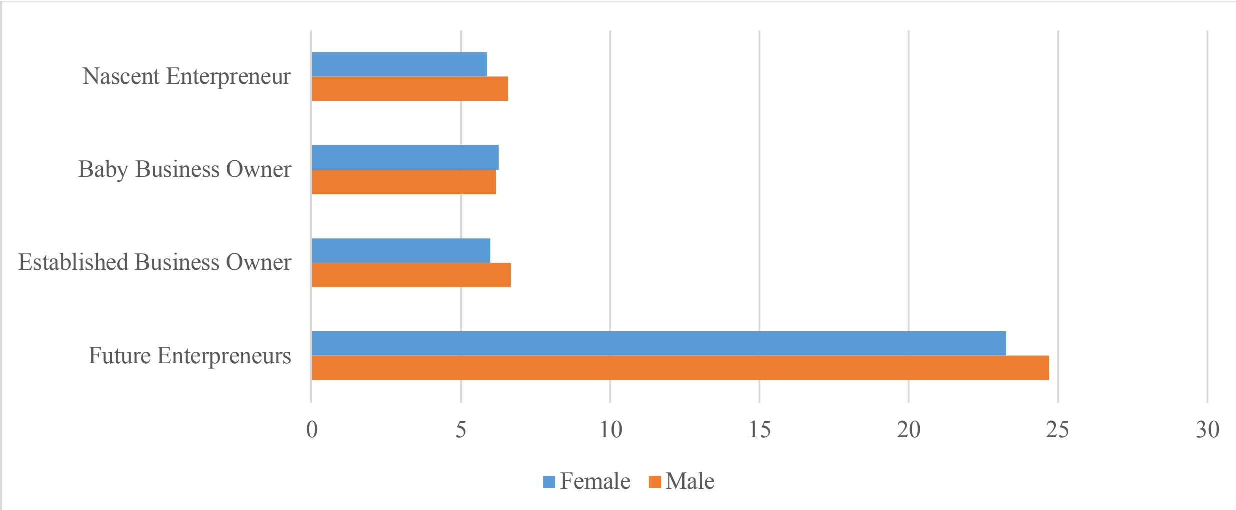


Data Source: Adult Population Surveys – GEM (2012-2016).

Having collected data on business activities, GEM data permits one to catalogue different types of entrepreneurs such as nascent entrepreneurs, baby business owners, established business owners and potential entrepreneurs. Nascent entrepreneurs are defined as individual(s) who are actively involved in setting up a business and have not yet paid their employees for more than 3 months. Baby business owners are owners/managers of new business that are more than 3 months old but less than 42 months old. Established business owners include owners/managers of businesses that are more than 42 months old. Finally, potential entrepreneurs are those that expect to set up a business within the next 3 years.

Using Adult Population Surveys of GEM from 17 countries (2013-2016), it is possible to compute prevalence rates for different types of entrepreneurs and investigate gender gaps at the country and subregional level. Across 17 countries, approximately 6 per cent of all respondents report to be either female nascent entrepreneurs or baby business owners or established business owners, while more than 20 per cent of all respondents surveyed can be categorized as female future entrepreneurs, as shown below in Table 7. Large variations exist, however. For instance, among nascent entrepreneurs, prevalence rate is as low as under 1 per cent in Egypt and around 11 per cent in Zambia and Senegal followed by Burkina Faso, Namibia and Nigeria level at around 10 percent. Among baby business owners, prevalence rate is as high as 16.3 per cent in Uganda followed by Ghana, Nigeria and Zambia at around 10 per cent while in North African countries such as Egypt, Algeria and Tunisia, the prevalence rate is less than 1 per cent.

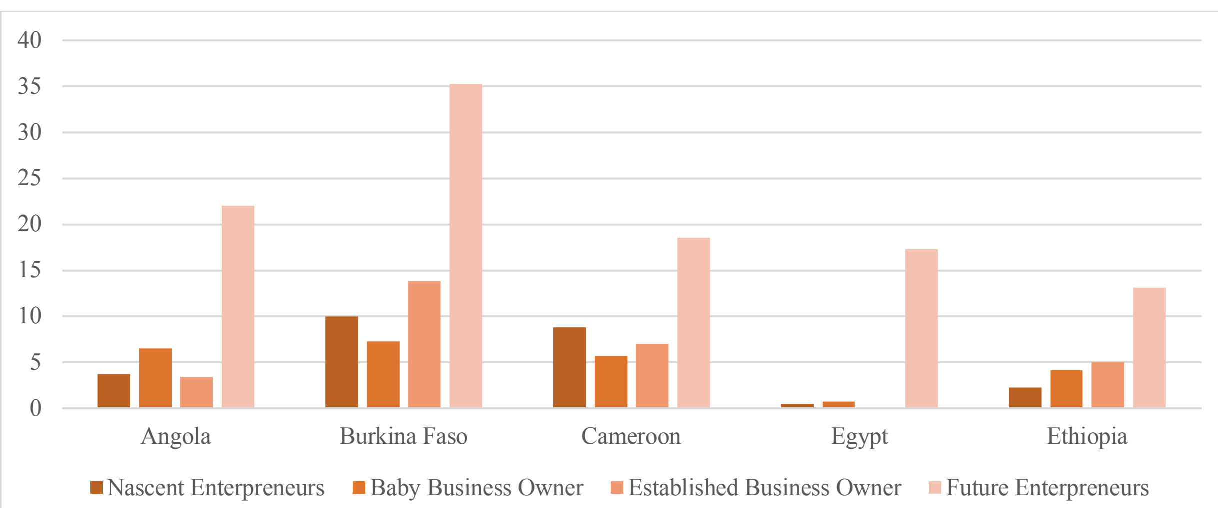
Figure 7 Prevalence by Type, 17 African countries (%)



Data Source: Adult Population Surveys – GEM (2012-2016).

Among established business owners, Uganda again leads the way with approximately 18 per cent of all respondents being female established business owners followed by Ghana and Burkina Faso at around 14 per cent. Finally, among future entrepreneurs, prevalence is as high as 37 per cent in Senegal and as low as 12 per cent in South Africa. Finally, it is worth noting that gender gaps are not as wide as one would expect with the only exception of Central Africa and to some extent in Eastern Africa. There is almost no gender gap in Southern and West African in terms of baby business owners. Central Africa as a subregion exhibits the widest gender gap in established business owners.

Figure 8 Prevalence of entrepreneurship by type, selected countries (%)

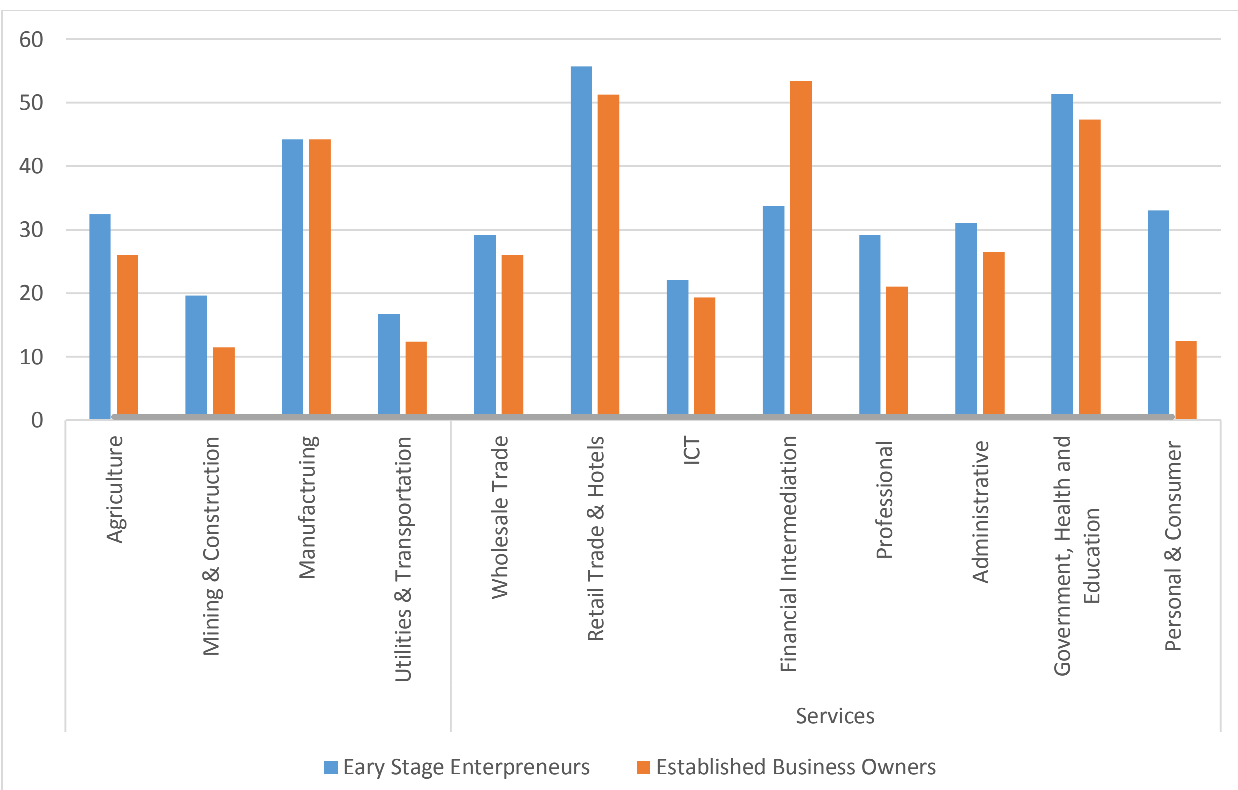


Data Source: Adult Population Surveys – GEM (2012-2016).

Unfortunately, data are not available for Mali and Democratic Republic of Congo. In order to be representative however, available data from Burkina Faso and Ethiopia are incorporated to ensure subregional variation. Figure 8 above shows country-level estimates from selected countries. Given the labor market characteristics described earlier across Africa, it is not surprising that a large share of women aged 18-64 can be considered as future entrepreneurs. Should the business opportunities continue to exist and that they can tackle individual-level or country-level constraints, Figure 8 points toward the hidden potential of Africa. The key policy concern here is indeed to ensure that such future entrepreneurs can transition into higher productivity sectors, innovate and contribute to their national economies at a higher level. Income loss due to women's absence from labor market is very high particularly in Africa but it must be noted that research has shown that income loss becomes higher when women who are absent from the market are also the potential innovators.

GEM data also permit the analysis of sectoral distribution of entrepreneurs as in Figure 9 below, particularly for early-stage entrepreneurs, i.e. nascent entrepreneurs and baby business owners, and established business owners Among early-stage entrepreneurs, parity has been achieved only among services sectors with retail trade and hotels sector registering more female early stage entrepreneurs than their male counterparts. Utilities and transportation sector has received the minimum number of entrepreneurs, on average.

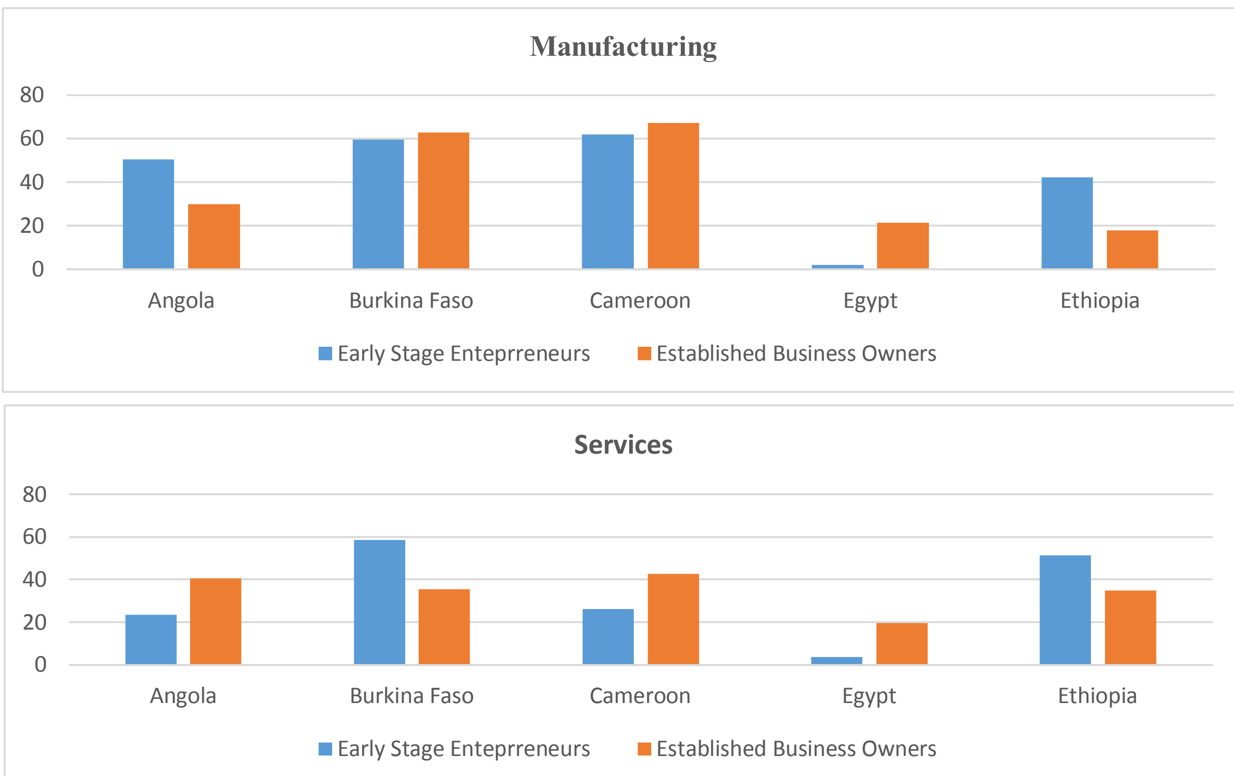
Figure 9 Entrepreneurial activity by sector and stage of entrepreneurship (%)



Data Source: Adult Population Surveys – GEM (2012-2016).

Among established business owners, parity on average has been reached in financial in retail trade and hotels and even surpassed in financial intermediation. Once again, women entrepreneurs are much less likely to be present among the utilities and transportation sector as well as mining and construction. Focusing on selected countries from each subregion, Figure 10 below disaggregates sectoral choice of entrepreneurs into Manufacturing and Services sectors alone. In Manufacturing, Angola and Ethiopia exhibit nascent entrepreneurs entering the manufacturing sector at a much higher rate than established business owners in the same country. Yet, the share of each type of entrepreneurs in manufacturing is still lower in these two countries relative to Burkina Faso and Cameroon where similar shares of early stage entrepreneurs and established business owners chose the Manufacturing sector. In Ethiopia, early stage entrepreneurs are also more likely to be present in the Services sector. Burkina Faso follows a similar trend.

Figure 10 Sectoral distribution, selected countries (%)

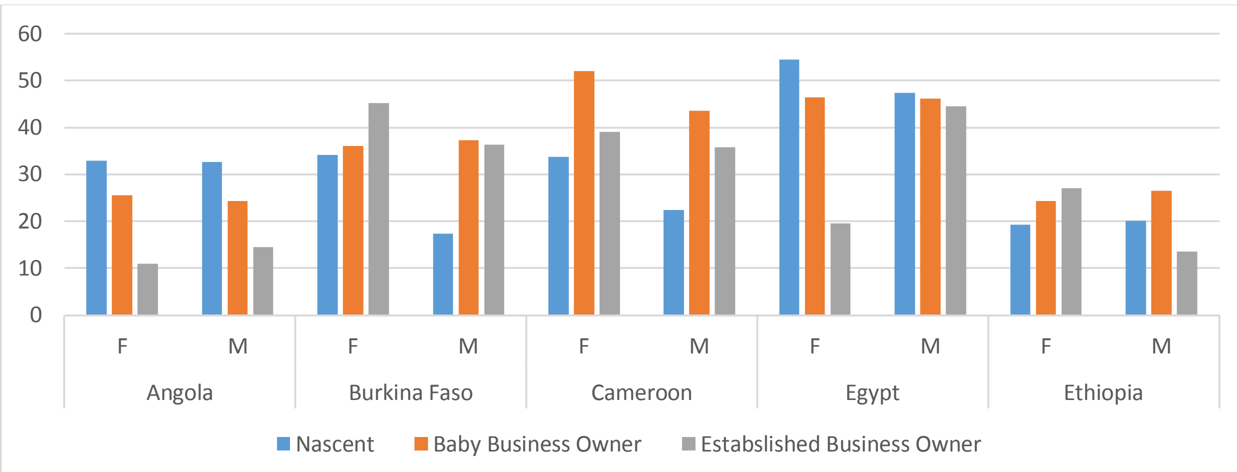


Data Source: Adult Population Surveys – GEM (2012-2016).

Finally, the motivation behind self-selecting into entrepreneurship must be addressed. This is because the sectoral distribution as well as various outcomes such as employment growth and survival likelihood are closely linked to why men and women choose self-employment. While Figure 6 earlier gave a positive message with respect to positive entrepreneurial attitudes in Africa vis-à-vis other developing regions, Figure 11 below provides a different story with relatively high rates of necessity-driven entrepreneurship when compared with opportunity driven entrepreneurship. Note that Africa leads the way with respect to necessity driven entrepreneurship especially among nascent entrepreneurs where women are twice as likely as men to pursue necessity driven entrepreneurship.

More than 50 per cent of female nascent entrepreneurs in Egypt and baby business owners in Cameroon note that the main motivation behind their entry is driven by necessity. Focusing on male nascent entrepreneurs, it is evident that large gender gaps exists especially among nascent entrepreneurs. In other words, female entrepreneurs who are at the earliest stage of entrepreneurial activity are much more likely than their male counterparts to enter into entrepreneurship based on needs rather than opportunities.

Figure 11 Motivation behind entrepreneurship (%)



Data Source: Adult Population Surveys – GEM (2012-2016).

The aggregate labor market characteristics analyzed earlier are consistent with the GEM data, whereby women are much less likely to find a stable job in wage employment and therefore self-select into various types of self-employment activities. A host of constraints that are discussed further in detail in the next chapter such as access to resources including time, compel women to find income generating activities often in services sector in the short-term. As such, it is much more difficult for women to pursue the opportunities they identify on par with men but rather respond to pressing needs they face daily.

Female-owned Enterprises in Africa

As African women enter the labor force through self-employment, the ultimate destination becomes firm ownership. While some women may choose to register their firms, others simply cannot due to several reasons. Given the objective of boosting female entrepreneurship with particular emphasis on productivity enhancement, it becomes inevitable that the crux of the Report depends on analyzing firm-level data. The World Bank Enterprise Surveys (ES) provide firm-level data in Africa exclusively for non-agricultural economy spanning over formal, informal and micro—enterprises from mid-2000s till 2016. Regarding formal enterprises, ES provides data for

48 countries two-thirds of which have more than one year of data and one-sixth have three years of data. More relevant for the scope of this Report, data in informal and micro-enterprises are available for 16 and 21 countries, respectively.

One of the criteria behind selecting the five countries analyzed in-depth in this Report is data availability across formal, informal and micro-enterprises. While all five selected countries have data on formal and informal enterprises, Egypt and Mali do not have micro-enterprise surveys and Angola has data from 2006. Therefore, this Report brought in Cabo Verde (2009) and Burkina Faso (2009) from West Africa, Kenya (2013) from Eastern Africa and Zimbabwe (2016) from Southern Africa. Unfortunately, ES provides data for only Mauritania (2006) from North Africa which for the period scope of this Report is too outdated. Based on this representative and up-to-date data, this section will describe firm characteristics as well as the characteristics of the owners of the firms through the gender lenses. Specifically, differences between female-owned[7] and male-owned enterprises will be investigated across formal, informal and micro-enterprises.

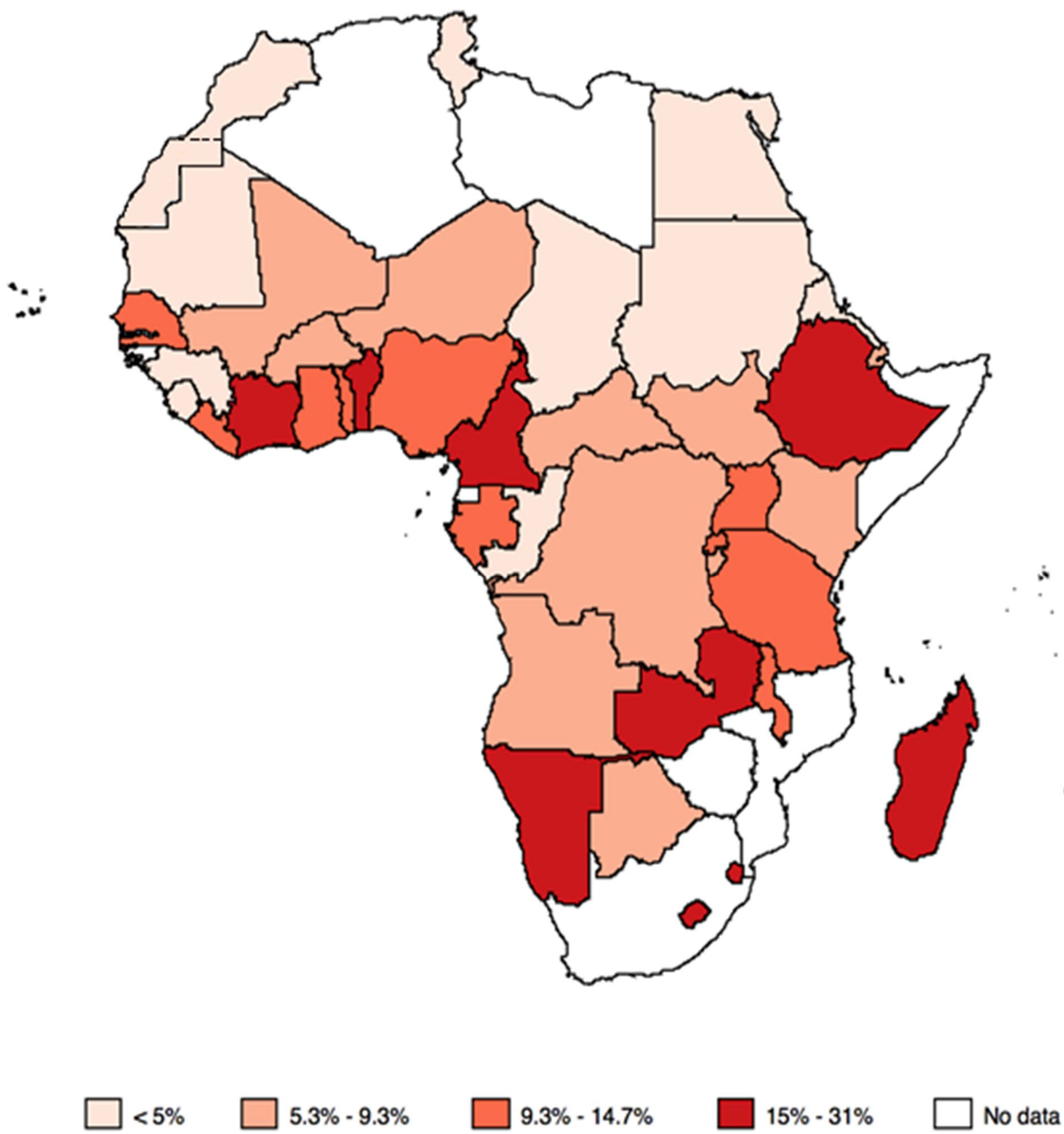
Women Entrepreneurs among Formal Enterprises

Figure 12 below provides estimates from WBES across Africa regarding female ownership among formal enterprises in non-agricultural sectors. More than a quarter of firms in Cameroon, Namibia and Lesotho are owned by women, while less than 5 per cent are owned in Chad, Sierra Leone, Mauritania, Sudan, Tunisia, Eritrea, Morocco, Egypt, Republic of Congo and Mauritius. Clearly, female ownership is much less prevalent in North Africa with on average 3 per cent of firms owned by women. In Central Africa, Cameroon is certainly an outlier with 31 per cent of the firms owned by women since other countries in this subregion have less than 10 per cent of firms with female majority ownership. In Eastern Africa, Madagascar and Ethiopia lead the way with around 20 per cent of firms owned by women. The Southern Africa has the highest unweighted subregional average among all sub-regions. Mauritius is the only country here with less than 10 per cent female ownership. Finally, West Africa on average is slightly ahead of Central and Eastern Africa. Benin and Cote d'Ivoire reports more than 20 per cent of firms with female 0wnership. Burkina Faso, Guinea, Mali, Niger and Sierra Leone report less than 10 per cent female ownership of formal enterprises.

Available data for multiple years provide a dynamic picture of female ownership over time in Africa. On the positive side, Cameroon has experienced a substantial growth at 207 per cent between 2009 and 2016 followed by Ethiopia (2011-2015) and Madagascar (2009-2013) with 129 per cent and 97 per cent growth episodes respectively in female ownership. On the negative side, Mali has experienced 40 per cent decrease in female-ownership between 2010 and 2016 as well as DR Congo with 22 per cent decrease. Further investigation is needed to understand to what extent public policy and other factors contributed to such dramatic changes.

[7] The WBES often includes a variable that measures the share of the firm owned by women. Therefore, the female-owned enterprises are defined as firms where woman or women earn more than 50 per cent of the firm. Variation in ownership of shares between 50 and 100 per cent is not high therefore often firms that have more than 50 per cent shares owned by women are fully owned by women.

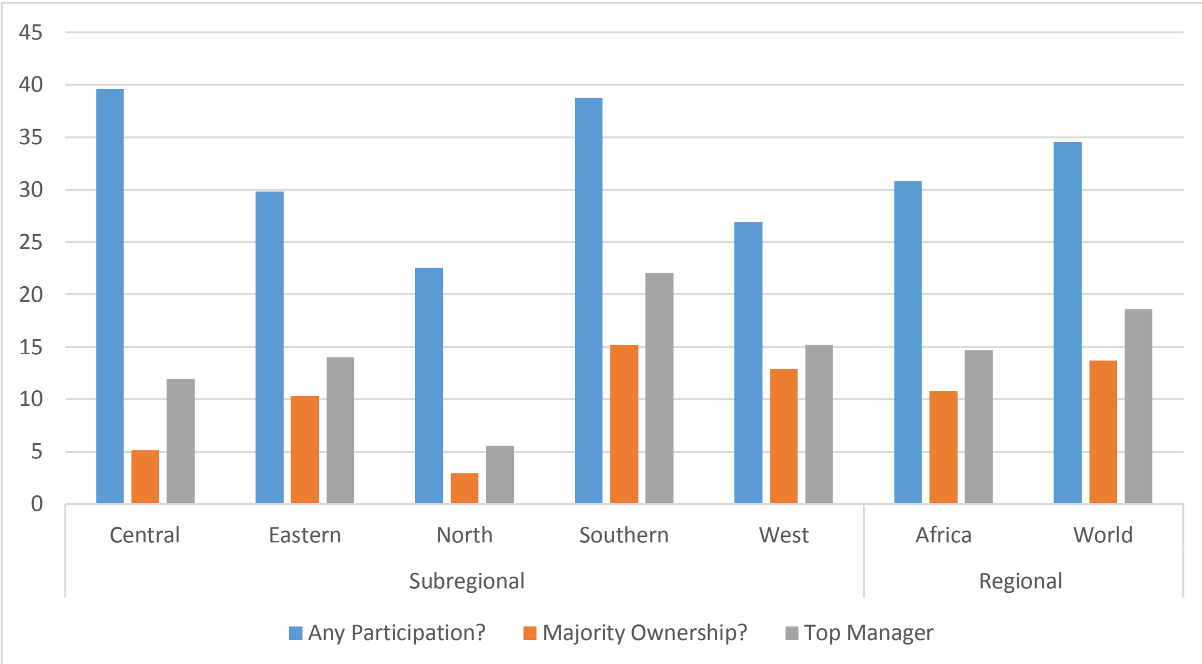
Figure 12 Share of Firms with Female Majority Ownership



Data Source: World Bank Enterprise Surveys (2009-2016).

Moving beyond ownership, Figure 13 adds two other variables below. The blue bar shows whether any women participate in ownership of the firm notwithstanding the shares of ownership. The orange bar on the other hand shows the share of firms where a woman is the top manager. Both variables fare better than female majority ownership but when compared with the World, Africa's prevalence rates are below the world average. Focusing on subregions, North Africa exhibits lower participation, ownerships and management relative to other subregions. Southern Africa is at the other extreme with particularly large difference in top management.

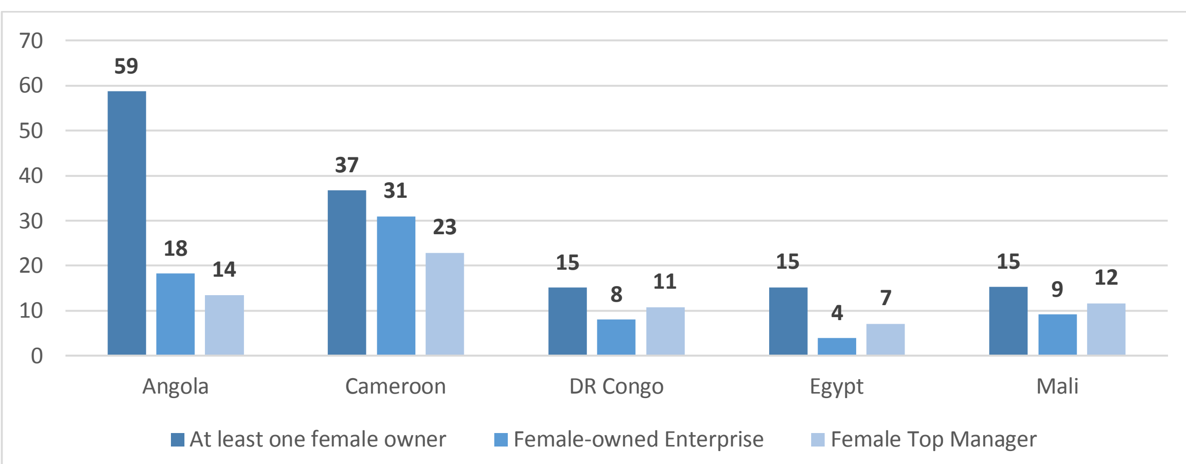
Figure 13 Firm Ownership and Management by Gender in Africa (%)



Data Source: World Bank Enterprise Surveys (2006-2016).

Focusing on selected countries of this Report, the prevalence of female ownership of formal enterprises varies widely across the subregions[8]. Figure 14 below displays three measures of women's involvement in formal enterprises: at least one female owner among owners, female owners having majority shares and female top manager. Note that prevalence of the first indicator is always higher than the second indicator with large gaps in Angola and Egypt.

Figure 14. Prevalence of female-owned enterprises, selected countries (%)



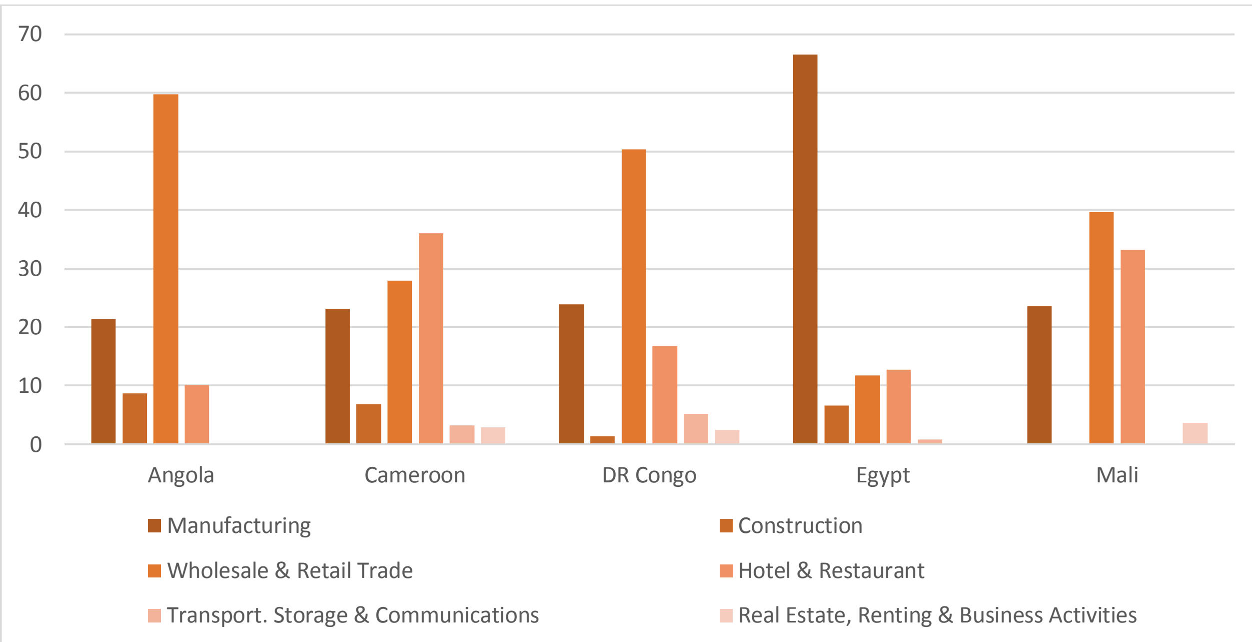
Data Source: World Bank Enterprise Surveys (2010-2016)

[8] There are more than 4,000 firms across five countries. Prevalence rates are computed using sample weights to reach consistent inference on population moments. Year coverage by country is as follows: Angola (2010), Cameroon (2016), DR Congo (2013), Egypt (2013) and Mali (2016).

Still, it is very promising to observe that 60 per cent of formal enterprises have at least one female owner in Angola. While it is often the case that firms owned by women have female top managers, the gaps between these two indicators suggest that in Angola and Cameroon, women's penetration into male-owned enterprises is much more limited than in other three countries. Similarly, in DR Congo, Egypt and Mali, women may find it easier to become the top manager vis-à-vis firm owner.

Focusing on female-owned enterprises, Cameroon leads the way with 31 per cent of all firms in the sample owned by women, while in Egypt only 4 per cent of the firms are owned by women. Firm characteristics including sector, size, market orientation and others are all analyzed based on the dichotomy presented in Figure 13.

Figure 15 Sectoral distribution of female enterprises (%)



Data Source: World Bank Enterprise Surveys (2010-2016)

Figure 15 above displays sectoral distribution of female enterprises. Three sectors emerge as the most populous sectors with female enterprises, including Manufacturing, Wholesale and Retail Trade and Hotel and Restaurant. Wholesale and Retail Trade comes first as the most populous sector with the exception of Egypt where two-thirds of the female enterprises report operating in Manufacturing sector. Excluding Egypt, slightly less than one-quarter of female enterprises report operating in the Manufacturing sector. Hotel and Restaurant sector is the third biggest sector with Cameroon and Mali recording around one-third of enterprises. Gender gaps[9] are widest in Hotel and Restaurant sector where female enterprises are on average four times more likely to operate. Interestingly, the second largest gap is observed in Construction again in favor of women with the only exception of Mali where no female enterprises exist in this sector.

[9] Gender gap is computed based on two ratios: the share female enterprises in manufacturing within all female enterprises divided by the share of male enterprises in manufacturing within all male enterprises. Constructed this way, gender gaps do not relate to which gender dominates a given sector.

Table 1 below provides national averages for female enterprises in each five selected countries. Female enterprises on average age between 10 and 20 years with Cameroon and Mali leading the way. Only in the case of Mali is there an overlap between firm age and manager's years of experience in the same formal sector. The implication is that female entrepreneurs in other countries come from different backgrounds and may even have informal sector experience. On average, it takes less than a year to formalize female enterprises with Angola and DR Congo having passed the one-year average time to formalize. Among these three indicators, gender gaps are minimal for firm age and manager's year of experience. Yet, on average it takes longer for female enterprises to register relative to male enterprises.

Table 1 Key Characteristics of female formal enterprises

	Angola	**Cameroon**	**DR Congo**	**Egypt**	**Mali**
Firm Age	10.3	23.2	8.7	10.7	21.4
Manager Experience	9.5	15.0	11.3	11.5	22.4
Years to Formalize	1.8	0.6	1.3	0.0	0.5
Small	64.7%	75.7%	87.8%	94.0%	80.0%
Medium	24.7%	15.6%	10.7%	5.0%	13.0%
Large	10.6%	3.3%	1.5%	1.0%	7.0%
Ownership- Private	72.0%	87.2%	82.5%	99.9%	79.7%
Ownership- Foreign	7.0%	9.0%	5.2%	0.1%	16.7%
Ownership - Government	0.0%	0.0%	0.0%	0.0%	0.0%
Ownership - Other	21.0%	11.9%	12.3%	0.0%	3.6%
Sales- National	100.0%	90.5%	99.8%	97.3%	97.0%
Sales- Direct Export	0.0%	8.2%	0.2%	1.0%	1.6%
Sales - Indirect Exports	0.0%	1.3%	0.0%	1.7%	1.4%
Inputs- Domestic	85.9%	68.0%	81.0%	83.8%	66.8%
Inputs - Foreign	14.1%	32.0%	18.4%	16.2%	33.2%
Training Programs for Employees	18.6%	43.7%	7.7%	2.2%	23.4%

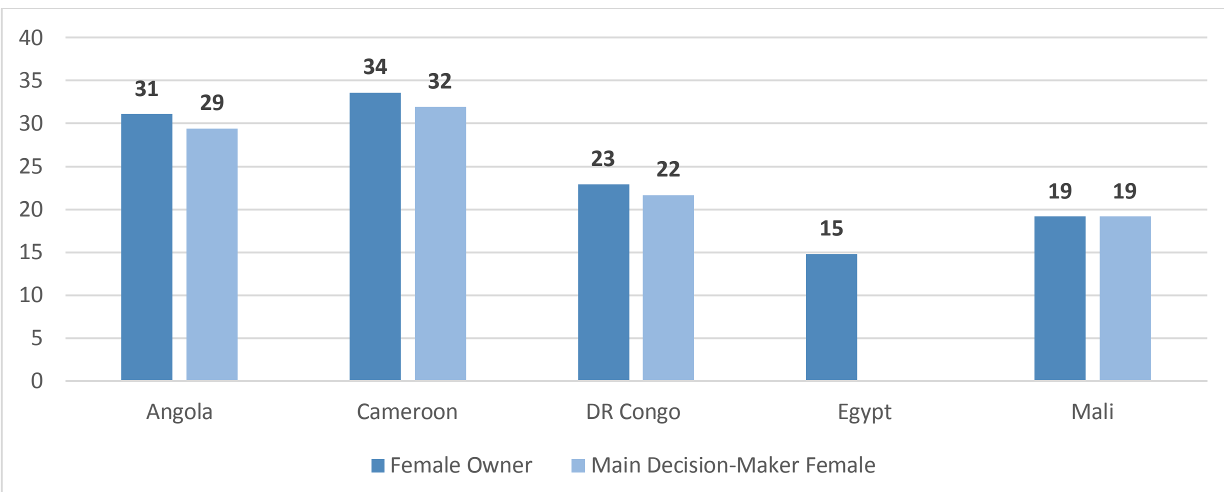
Notes: Probability weights used in computing the national averages.

Majority of female-owned enterprises are small with less than 20 employees. Gender gaps are positively correlated with enterprises size. Male-owned enterprises are at least twice as likely as female-owned enterprises to be large. Ownership patterns are similar across male and female-owned enterprises with majority of enterprises owned by private individuals. However, note that in the case of Cameroon and Mali, female-owned enterprises are only slightly more likely to have shares owned by foreign individuals or companies. Regarding market orientation, female-owned enterprises are almost exclusively focusing on national and local market. Regarding direct exports, there are virtually no firms in Angola and DR Congo that direct exports to foreign markets while around 1-2% of female firms in Egypt and Mali do export directly. Note that in these two countries, gender gaps exist with male enterprises more likely to directly export. Cameroon on the other hand is the only country with gender gaps in favor of female enterprises whereby female enterprises are twice as likely as male-enterprise to export. In terms of inputs, more than two-thirds of female enterprises repot that they use only domestic inputs. Again, it is only in Cameroon that gender parity is attained in terms of origins of input whereby female and male enterprises on average follow a similar pattern of input use. Finally, female-owned enterprises vary widely in terms of offering training programs offered to their employees with Cameroon reporting over 40 per cent of female-owned enterprises training their employees while the same figure stands at 33 per cent for male-enterprises. Mali reports almost a quarter of female enterprises training their employees with the largest gender gap in favor of women, as the same figure stands at 16%.

Women Entrepreneurs among Informal Enterprises

Across many countries in Africa, formal non-agricultural economy represents the minority of enterprises. While including formal enterprises in this Report is deemed necessary, the motivating idea is to describe where women entrepreneurs are headed towards and document their characteristics along with constraints they face to take necessary policy actions. Since women are often employed as own-account workers in non-agricultural economy, it is paramount that the analysis extends to informal enterprises[10]. A large amount of data is available from such enterprises including demographic variables pertaining to the owners.

Figure 16. Prevalence of Female-owned Enterprises in informal Sector (%)



Data Source: World Bank Informal Enterprise Surveys (2008-2013)

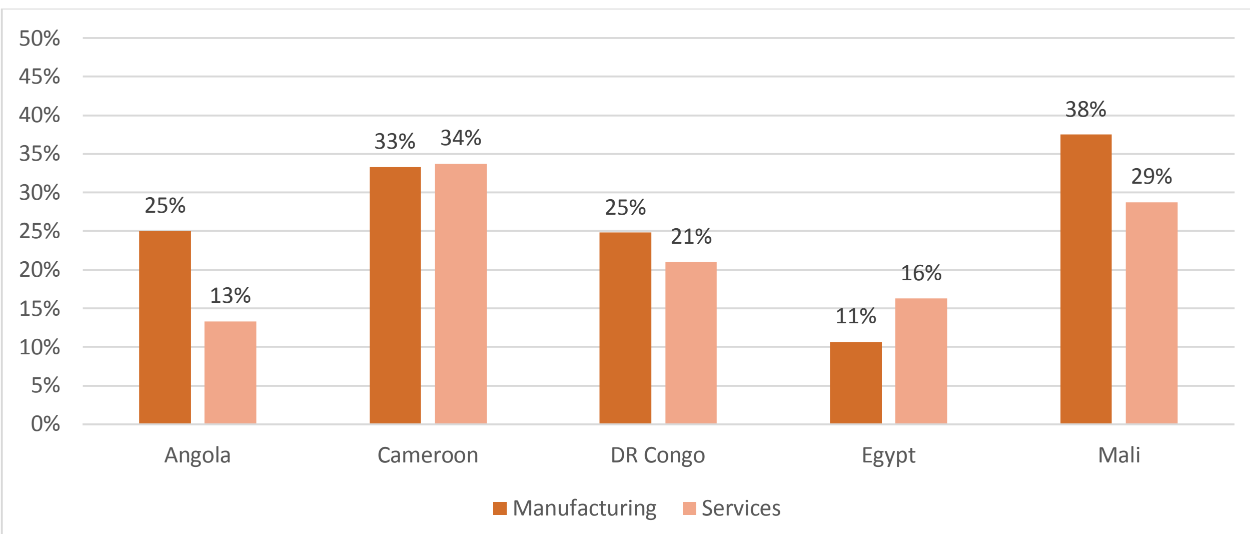
Figure 16 above shows that prevalence rates are much higher than in the formal sector as shown earlier. Across five countries, on average, there are two and a half times more female enterprises in informal sector than formal sector. Only in Cameroon, one can observe similar rates of female ownership across the two sectors. The largest difference is found in Egypt. An additional variable in the surveys is whether the largest owners is also the main decision-maker. With few exceptions, across all countries, there is almost one-to-one overlap between the largest owner and the main

[10] Data in this sub-section comes from Informal Enterprise Surveys with following country-year pairs: Angola (2010), Cameroon (2009), DR Congo (2013), Egypt (2008) and Mali (2010). Informal Enterprises Surveys are much less common than Enterprise Surveys but Africa is the leading region with the most informal enterprise surveys per region across the world.

decision-maker. Substantial regional variation exists within all countries. It is worth noting that only in the city of Benguela in Angola does the share of female enterprises exceed that of male-owned enterprises.

Unlike formal enterprises, informal enterprises predominantly operate in the Manufacturing sector. Figure 17 shows the share of female enterprises in each sector at the most aggregate level. Female-owned enterprises at best represent close to 40 per cent of manufacturing firms in Mali while Cameroon follows suit with slightly more than 30 per cent of the Manufacturing sector occupied by female-owned enterprises. Further disaggregating these two sectors however indicate that women tend to focus on the following sectors: manufacturing of clothing, coffee and sugar and baked food in manufacturing sector and sale of food and clothing in wholesale and retail trade sector and finally clearing and washing services as well as hairdressers in other services sector. Nevertheless, it is important to note that when gender gaps are computed in terms of relating the share of female enterprises in manufacturing among all female enterprises to the share of male enterprises in manufacturing among all male enterprises, (i) gender parity is attained in Cameroon, (ii) gender disparity against women is observed in Egypt and (iii) gender disparity against men are observed in Angola, DR Congo and Mali. The implication here is that female-owned enterprises are much more prevalent in informal manufacturing sector than in formal manufacturing sector except for Egypt.

Figure 17. Sectoral Distribution of female-owned enterprises, informal sector



Data Source: World Bank Informal Enterprise Surveys (2008-2013)

Table 2 below provides an overview of key characteristics of informal enterprises owned by women. Note that descriptive statistics on Egypt are missing since Egypt's year of data collection was from a different survey instrument sand most variables do not coincide with the more recent survey instruments. On average, firms are much younger than as earlier observed informal enterprises. In Egypt, however, the average informal firm has been in operation for 20 years which is higher than the average for male-enterprises. Similar gender gap in favor of women is also observed in Angola.

Table 2 Key Characteristics of female informal enterprises (%)

	Mali	DR Congo	Angola	Cameroon
Panel A. Firm				
Firm Age	7.5	4.8	6.4	6.8
Full-Time Employees at the Start	4.7	2.3	6.3	2.9
More than one business activity?	30.4	50.5	21.6	24.4
Business located within household premises	30.4	27.3	45.9	80.5
Assets Purchased	22.7	30.0	43.2	34.1
Have a Loan?	9.5	6.4	5.4	24.4
Source of Loan - Bank	0.0	0.9	5.4	2.4
Source of Loan - MFI	9.5	0.9	0.0	2.4
Source of Loan - Supplier/Customer	0.0	1.8	0.0	4.9
Applied for a Loan?	13.0	11.1	29.7	19.5
Bank Account?	52.2	33.3	77.8	39.0
Separate bank account	30.4	19.8	10.7	30.6
Own Land	30.4	23.8	47.2	77.5
Panel B. Owner				
Age	33.3	39.1	36.7	35.2
Years of Experience	8.8	6.7	7.8	7.5
Married	73.9	73.4	75.7	65.9
Migrated	26.1	42.8	27.0	58.5
Household Size	14.3	7.1	7.5	6.0
Employment of HH member's w Contract	3.4	0.5	1.7	0.5
No Education	21.7	1.4		2.4
Primary School	21.7	8.7	5.6	12.2
Secondary School	13.0	47.3	19.4	56.1
Vocational School	26.1	17.9	47.2	19.5
University	17.4	24.7	27.8	9.8
Vocational Training or Adult Education	87.0	63.0	74.3	68.3
Previous Occupation Same as Now	26.1	31.8	62.9	49.4
Unemployed prior to starting up a business	30.4	26.4	0.0	28.4
Currently have a job in a formal business?	39.1	10.0	43.2	6.2
Any businesses started in the past 3Y?	26.1	61.8	32.3	67.9
Panel C. Parental Education of Owner				
No Education	34.8	14.4	0.0	19.7
Primary School	13.0	18.6	14.8	42.1
Secondary School	17.4	28.9	70.4	23.7
Vocational School	13.0	11.3	3.7	9.2
University	17.4	26.8	11.1	5.3

Notes: All variables are in percentages except firm age, full time employees at the start, owner's age and owner's years of experience.

The number of employees at start-up is similar across male and female-owned enterprises which would locate these informal enterprises on average within micro-to-small size enterprises. In DR Congo, around 50 per cent of the female-owned informal enterprises have more than one business activity. Location of business is crucial for informal enterprises for convenience and cost purposes and bears a gender perspective due to women's limited mobility as well as time poverty. In Angola, Cameroon and Mali statistically significant differences[11] arise regarding the higher likelihood of female enterprises operating from within their households. Majority of these enterprises cite cost reasons as main motivation behind such decision.[12] The second panel in Table 2 focuses on assets and financing. It appears that considerable share of enterprises purchase assets but only a small portion of such enterprises finance such asset purchases through bank or MFI financing. Angola leads the way in terms of enterprises that apply for a loan and have a bank account for their enterprises. Yet, it is Cameroon and Mali where female entrepreneurs have personal bank accounts separate from their business accounts. Directly linked to financing problems, land ownership is surprisingly high among informal enterprises. At least one-quarter of enterprises report that they own the land they operate from.

Focusing on the third panel of Table 2 where female owner's characteristics are described, the average age emerges as more than 30. The average in Egypt is quite similar with majority of women entrepreneurs aged 30 and above. Years of experience is below 10 years across the board including Egypt. There is no statistically significant difference by gender of the firm owners on average. Yet, there is evidence for some difference in the Services sector in Mali with women registering lower years of experience[13]. Given the higher average age, it is not surprising that around three-quarters of female owners are married. On average, female owners come from larger households relative to male owners and that there are more household members in their households who hold contract based employment in the formal sector. Educational background of female owners suggests that on average they have higher educational attainment than one would expect, especially when it comes to tertiary education. This is because there are almost no gender gaps in the share of male and female enterprise owners who hold university degree.

Women Entrepreneurs in Microenterprises

Micro firms are defined as those with less than 5 employees. They can be owned, managed and operated by a single employee or the owner. Since a significant share of employed women are classified as own-account workers often not employing anyone but themselves, profiling women entrepreneurs in microenterprises becomes more pressing than the previous two types of enterprises. While 22 out of 54 African countries have available and recent data, none are from North Africa with the exception of Mauritania where data were collected more than a decade ago.

---

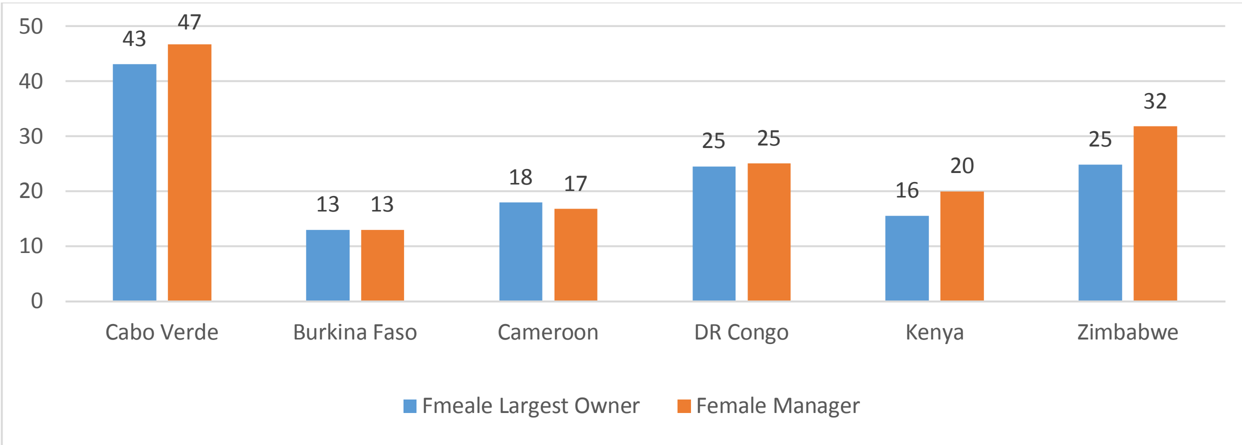
[11] Ordinary least square regressions are estimated for a number of firm characteristics which are taken as the dependent variables and regressed on gender of the owner of the enterprise, dummy variables for sectors at the disaggregated level and location of the enterprises with robust standard errors.

[12] A similar result is obtained by Amin (2010) who find greater likelihood of female entrepreneurs working from home than outside home in a sample if informal firms in Burkina Faso, Cameroon. Cape Verde, Cote d'Ivoire, Madagascar and Mauritius.

[13] According to Kushnir and Amin (2013), there is a significant gap between female and male managers across informal firms in Rwanda whereby female managers' years of experience in the industry comes close to 88 per cent of male manager.

Hence, in this section, countries without no microenterprise surveys are replaced by those with recent data with subregional representation kept in mind, as in Figure 18 below.

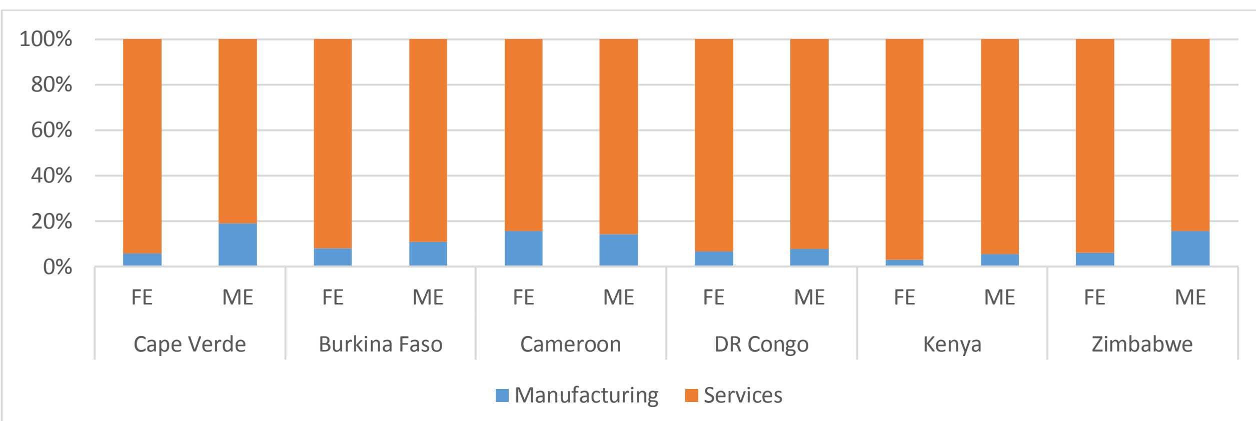
Figure 18 Prevalence of female-owned microenterprises (%)



Data Source: World Bank Micro Enterprise Surveys (2009-2016)

Prevalence rates[14] are highest in Cabo Verde where 43 per cent of the microenterprises are owned by women. DR Congo and Zimbabwe follow suit with one-quarter of microenterprises owned by women. Burkina Faso has the lowest share with 13 per cent. Note that the relationship between firm owners and managers are as close as observed earlier. For instance, in the case of Burkina Faso and DR Congo, all firms owned by women are also managed by women.

Figure 19. Sectoral Distribution of Microenterprises



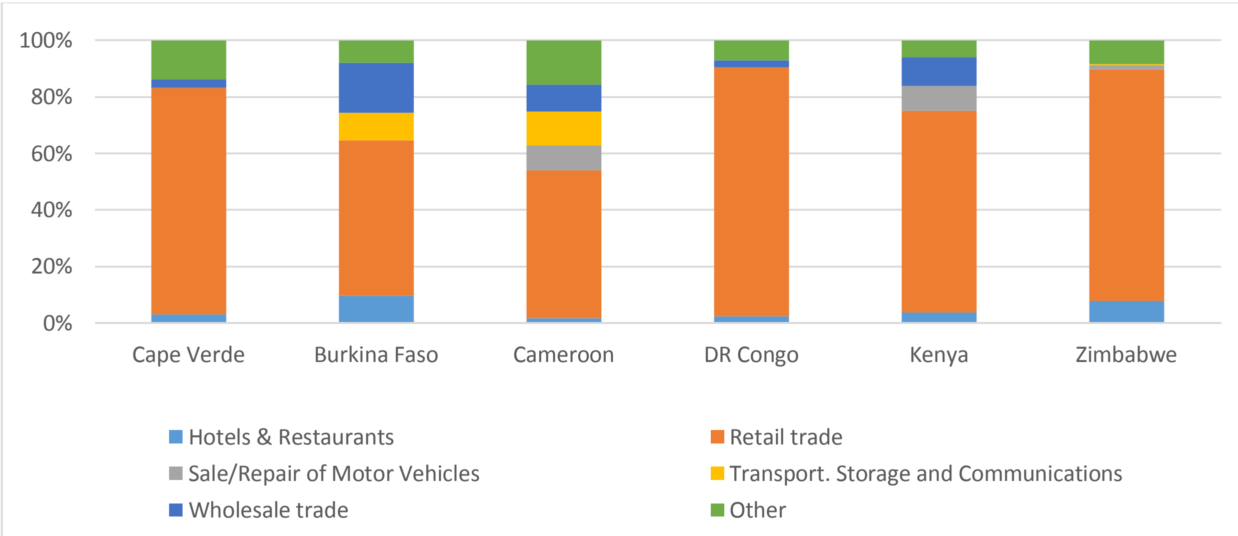
Data Source: World Bank Micro Enterprise Surveys (2009-2016)

According to Figure 19, more than 90 per cent of female-owned microenterprises operate in the Services sector. The gender gaps are widest in Cape Verde followed by Zimbabwe where male-enterprises are two to three times more prevalent in manufacturing than female enterprises.

[14] The following country-year pairs are included from the pool of African microenterprise surveys: Burkina Faso (2009), Cabo Verde (2009), Cameroon (2009), DR Congo (2013), Kenya (2013) and Zimbabwe (2016).

Cameroon once again emerges as the leading country in terms of not only highest share of female enterprises in manufacturing but also with a gender gap in favor of women.

Figure 20. Female microenterprises by disaggregated sectors



Data Source: World Bank Micro Enterprise Surveys (2009-2016)

Among the sub-sectors displayed in Figure 20 above, the share of female-owned microenterprises in retail trade among all female-owned microenterprises stand at above 50 per cent across the board reaching 80 per cent in Cape Verde and Zimbabwe and almost 90 per cent in DR Congo. Hotel and Restaurant and Wholesale Trade are the second and third most populated sectors by female-owned microenterprises. Looking at gender gaps in retail trade, female-owned microenterprises are twice as prevalent as male-owned enterprises. Cameroon and Zimbabwe exhibit wide gender gaps as well with on average female-owned microenterprises at least 55 per cent more prevalent than male-owned microenterprises.

Table 3 below presents selected indicators for female-owned microenterprises across six countries. Firm age is once again less than 10 years with Cameroon consistently recording older firms. Compared to formal enterprises for whom it took on average 1 year to formalize, micro-enterprises exhibit a similar pattern. On average, employees at start-up is consistent with firm size at the time of the survey. Around one-third of female microenterprises purchase assets in Cameroon, DR Congo and Kenya. Zimbabwe records the lowest share of firms that purchased assets. Loans on the other hand are much less prevalent with the exception of Kenya where close to 40 per cent of the micro-enterprises report having a loan. Rest of the firms exclusively rely on retained earnings to finance purchases of assets as well as working capital. However, note that since most firms are in Retail Trade, the value of assets purchased are expected to be much lower than those purchased in manufacturing. Among the reasons why firms do not apply for loans, discussed further in detail in the next Chapter, firms that need a loan often cite size and maturity features of the loans as main reason why they do not apply for a loan. Less than a quarter of firms at maximum report that they own the land where the firm operates from. The average for male-owned microenterprises are equivalent to female average. The penetration of banking sector into micro-enterprises is a positive finding with Burkina Faso and Kenya reporting more than 90 per cent of the female firms having bank accounts

Table 3. Key characteristics of female-owned microenterprises

	Cape Verde	**Burkina Faso**	**Cameroon**	**DR Congo**	**Kenya**	**Zimbabwe**
Panel A. Firm						
Firm Age	8.8	9.6	12.4	6.8	9.5	7.7
Years to Register	0	1.1	0.4	0.8	1.1	0.2
Number of Employees at Start	1.9	2.6	2.8	2.9	2.4	4.0
Purchase Assets	13.3	23.1	33.3	32.2	30.6	10.5
Owns 100% of Land				24.8	16.7	6.1
Bank Account	56.7	92.3	85.7	33.3	90.2	72
Have Loan	16.7	15.4	14.3	4.7	39.6	2.7
Interest Rate	11.8	12.0	11.0			
Panel B. Top Manager						
No Education	6.7	30.8	5.0			
Primary School	60.0	23.1	0.0			
Secondary School	23.3	0.0	25.0			
Vocational Training	10.0	38.5	25.0			
Graduate Degree	0.0	7.7	40.0			
Years of Experience	13.3	13.3	12.4	10.9	12.0	9.7

Notes: Since sample sizes are quite small in these surveys, only sample characteristics are described above without any inference to population level statistics. An outlier is detected and eliminated in Cameroon's number of employees at start.

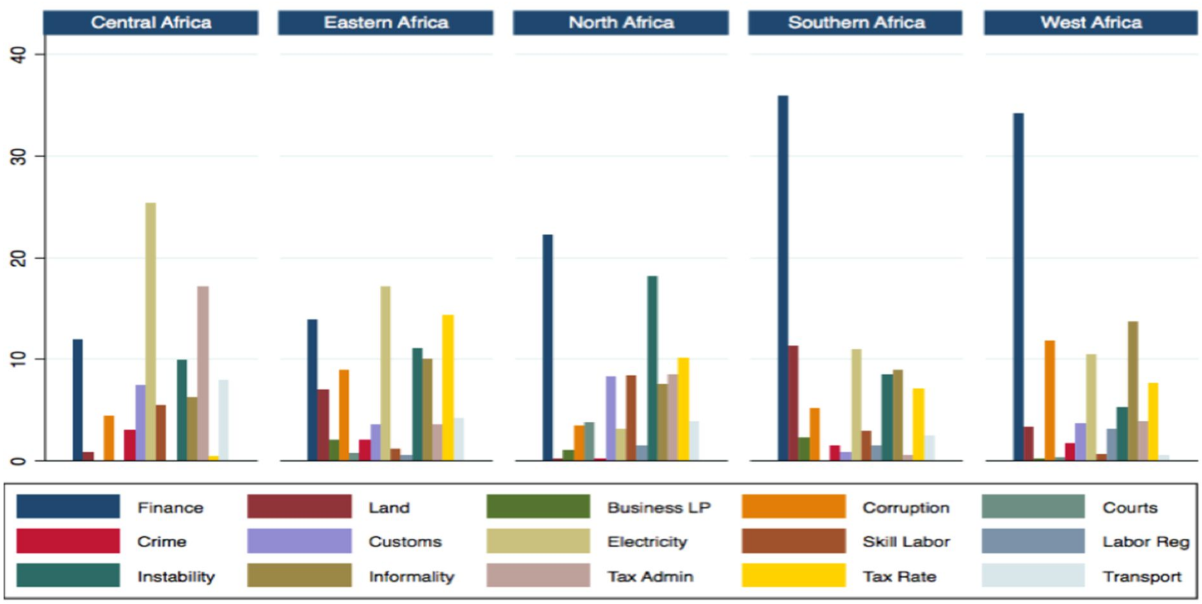
Panel B focuses on top manager's education level and years of experience. This variable unfortunately is not available in the newer rounds of microenterprise surveys. One striking finding is the prevalence of tertiary graduates in microenterprises in Cameroon, especially among managers in female micro-enterprises. Years of experience is above 10 years for many firms across the six countries with no gender disparities in years of experience in the sector.

Consequently, majority of female-owned enterprises in Africa are small and operate in less profitable sectors relative to male-owned enterprises such as wholesale and retail trade and hotels and restaurants. While informal firms are unexpectedly more active in manufacturing sector, they occupy the lowest node of the value chain. While financial inclusion is positive in terms of prevalence of bank accounts, efforts are still needed to separate business accounts from personal accounts. Access to loans is minimal and majority of firms, both male and female-owned, finance their assets and working capital through retained earnings. While majority of women in Africa are self-employed, the evidence from firm-level exhibits gender bias against women in ownership patterns in each type of firm analyzed above.

What Constraints do Enterprises Face?

The aim of this chapter is to catalogue the biggest obstacles[15] female-owned enterprises face in their operations within formal and informal sector as well as among microenterprises. Based on WBES exclusively, this Chapter first reports the share of female enterprises that identify one of 15 constraints as the biggest obstacle to their operations by sector and type of enterprise. Second gender gaps are investigated formally to establish what constraints female-owned enterprises report relative to male-owned enterprises. Finally, this Chapter exploits any additional data that can shed further light into the constraints. For instance, informal enterprise surveys ask the main reason why enterprises are not registered and what they would expect to gain if they were to register. All firms are also asked about the main reason why they did not apply for loans and how they finance asset purchases and working capital.

Figure 21 Constraints Faced by Female Managers across Africa (%)



Data Source: World Bank Enterprise Surveys (2009-2016).

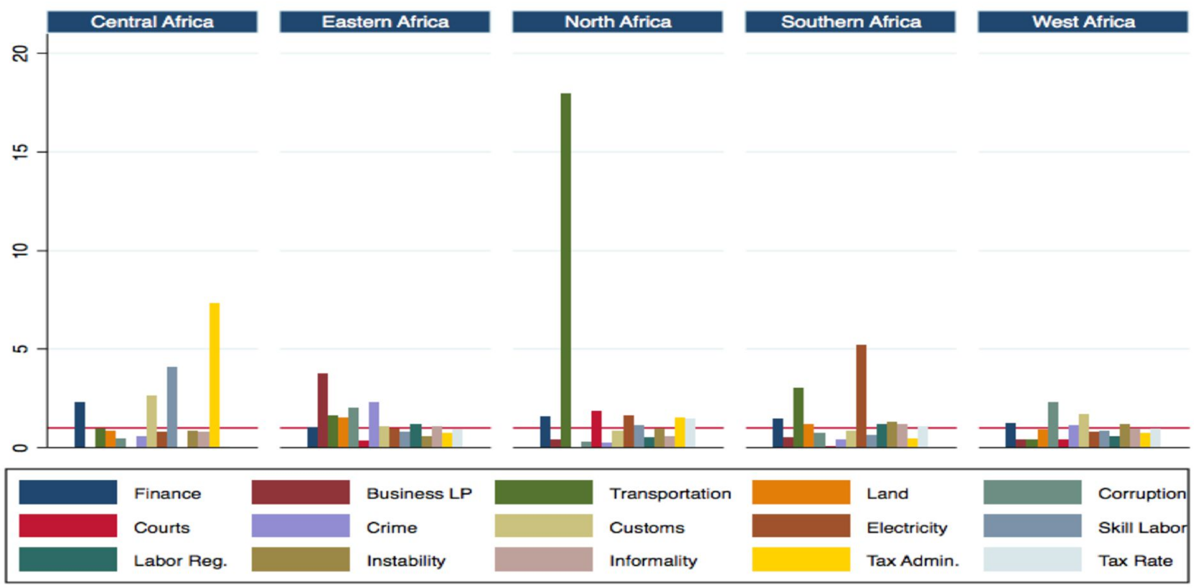
Prior to country-level analysis Figure 21 above provides an overall picture by subregional aggregates for formal enterprises. First, the most frequently reported biggest constraint by female top managers is access to finance, particularly in Southern and West Africa. Notwithstanding large share of female-owned firms not applying for loans, access to finance remains the biggest obstacle for firms' operations. This finding can easily be corroborated by the fact that majority of female firms in Africa finance their working capital and asset purchases through retained earnings. Since most firms are in the Services sector with low profit

[15] All three types of firms are asked the extent to which various constraints identified as critical for doing business affect their daily operations including access to finance, access to land, business licensing and permits, corruption, courts, crime theft and disorder, customs and trade regulations, electricity, inadequately educated workforce, labor regulations, political instability, practices in the informal sector, tax administration, tax rates and transportation.

margins and high competition, it is unlikely that retained earnings can accumulate to an extent that would allow either sectoral shifts and significant growth within sector of operation.

Electricity is the second most frequently reported biggest obstacle, particularly in Central Africa and Eastern Africa. For instance, over 40 per cent of female managers in Central African Republic and Djibouti complain about electricity as the biggest obstacle to their operations. Political Instability is the third most prevalent constraint, particularly in North Africa due to the recent turmoil. However, different parts of Africa voice similar concerns. For instance, in Madagascar (2013), 54 per cent of the firms identified political instability as the biggest constraint. In West Africa, Guinea and Mali have over 40 per cent of top female managers complain about political instability as the biggest constraint to their operations. At the other end of the spectrum, business licensing and permits, courts, and labor regulations are the least frequently noted constraints.

Figure 22 Gender Gaps in Biggest Obstacle to Operations



Data Source: World Bank Enterprise Surveys (2009-2016).

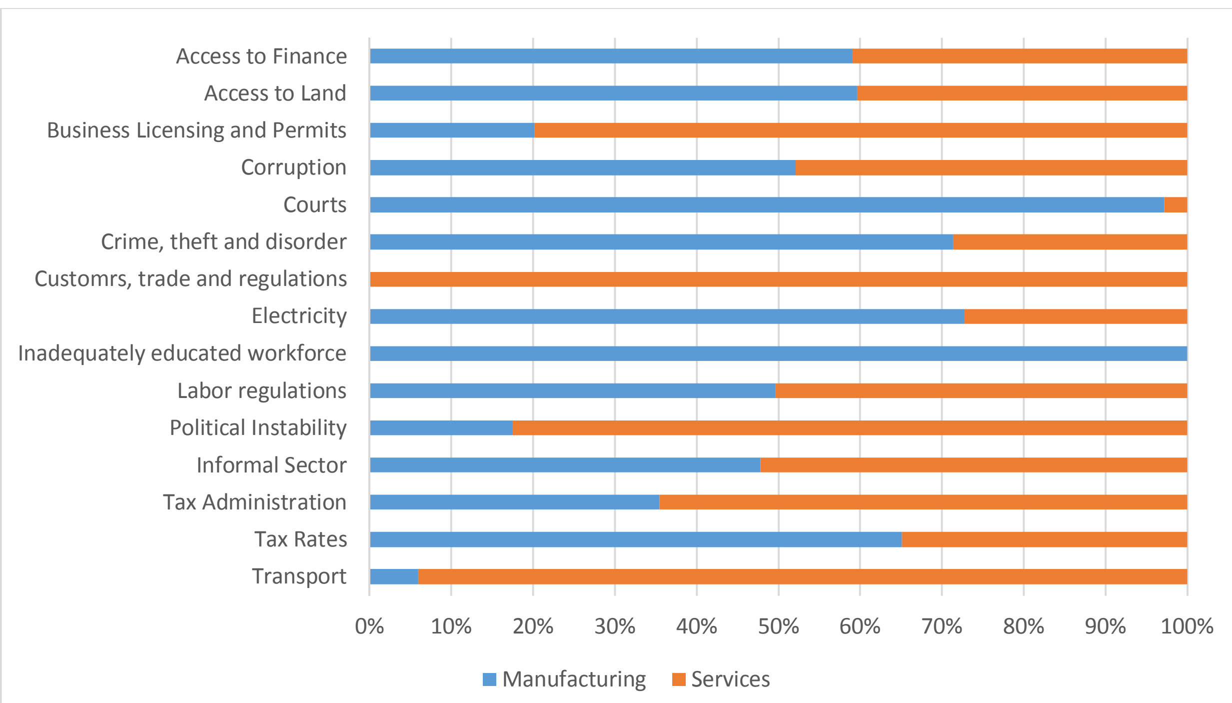
Female and male managers identify different constraints. Figure 22 above provides for gender gaps in biggest obstacles identified by top managers, again by subregional averages. The red line represents gender parity with bars surpassing this benchmark suggesting that more female managers report a given constraint. For instance, in North Africa, female top managers are almost 20 times more likely to report transportation as the biggest obstacle relative to top male managers. Note that this result is in fact exclusively driven by Tunisia (2013). In Central Africa, several disparities emerge where much more female top managers report access to finance, customs and trade regulations, inadequately educated workforce and tax administration as biggest constraints. Note that no female top manager in this subregion identify tax rates and business licensing and permits as biggest constraints. In Eastern Africa, gender disparity is widest in business licensing and permits followed by crime, theft and disorder. In Southern Africa, female top managers are five times more likely to report electricity as the biggest obstacle to their operations followed by transportation. West Africa does not exhibit wide gender gaps like other subregions yet, corruption and customs and trade regulations are more frequently reported by female top managers relative to male managers.

Therefore, women and men may face different challenges in their respective type of firms and sectors of operation. Evidence based policy making requires more-detailed investigation on gender differentials in constraint perceptions at the country and sector level and perform statistical tests beyond summary statistics presented as above. Recognizing the heterogeneity in constraint perception is crucial not only for female-owned enterprises but also for the health of the economy, particularly through job creation. Evidence from 5 selected countries for instance suggest that female-owned firms are much more likely to hire women employees than male-owned firms. This revolving door hypothesis holds particularly in informal and micro-enterprises in the Services sector. In addition, ignoring gender differentials in constraint perceptions could lead to inefficiencies at the aggregate level whereby female-owned or managed firms continue to underperform. Figure 46 below shows that firms managed by men outperform firms managed by women in real annual sales growth in every subregion except in Southern Africa. Eastern Africa on average experienced negative growth 2009-2016 period with firms managed by women experiencing larger setback.

Formal Enterprises and Profile of Constraints

Formal enterprises face a myriad of constraints in a simultaneous way. Note that constraints profiled here refer to the biggest constraint affecting the operation of establishments. Figure 23 below aggregates female-owned enterprises' responses to constraints for Angola, Cameroon, DR Congo, Egypt and Mali by manufacturing and services sectors. It is important to note at this point that these are all perceptions of the main decision-maker in each enterprise. As such, they are subjective measures and open to transient circumstances, i.e. recent experiences of a firm's owner.

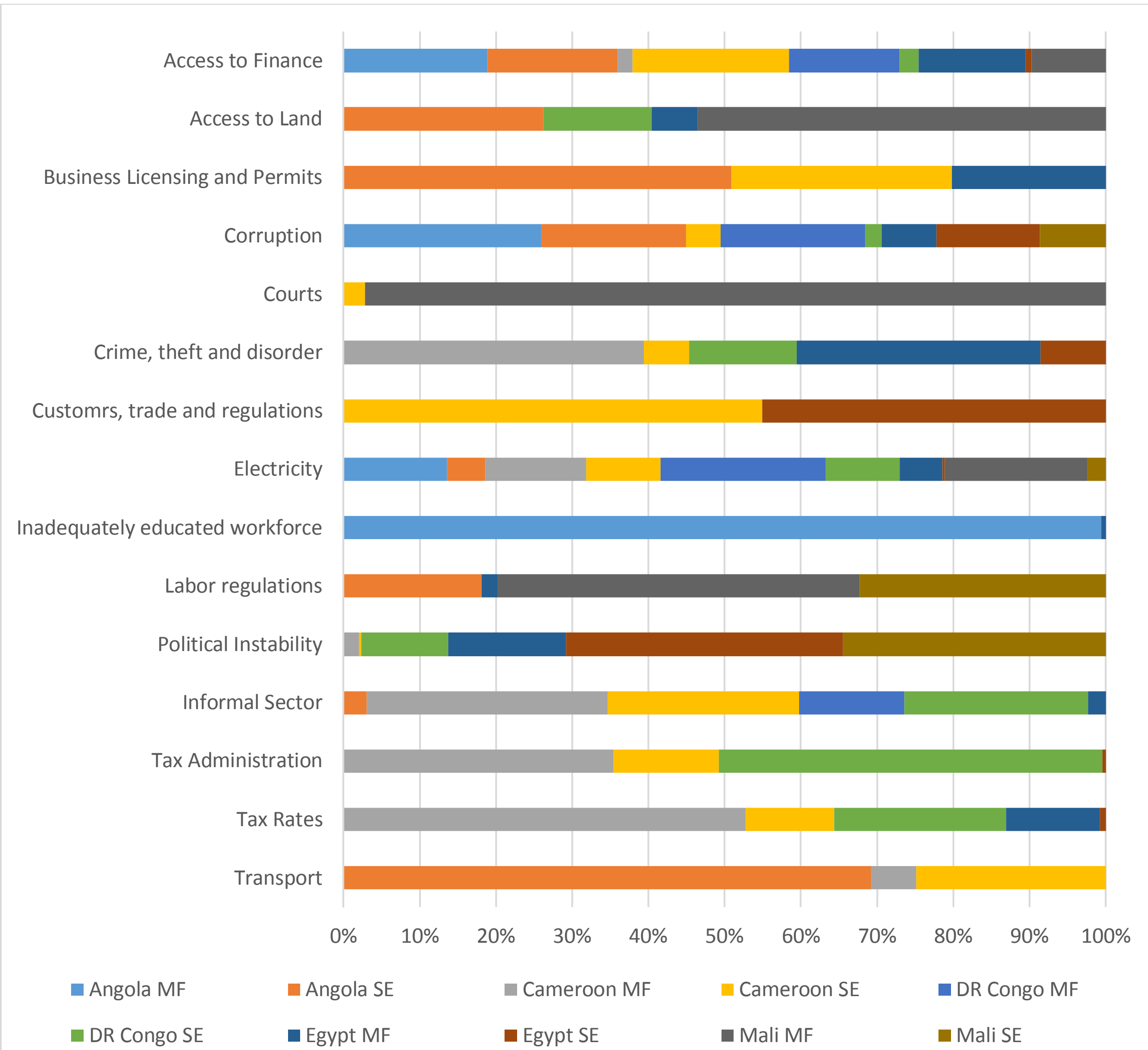
Figure 23. Constraints Faced by Female-owned Formal Enterprises by Sector



Data Source: World Bank Enterprise Surveys (2010-2016)

Clearly, a firm's sectoral choice influences types of constraints faced. For instance, firms in manufacturing sector predominantly complain about inadequately educated workforce, courts and electricity while firms in services complain about customs, trade and regulations, political instability, business licensing and permits and transportation. While manufacturing firms are more likely to complain about access to finance and land, the gap between firms in two sectors is much less than the constraints mentioned earlier. Finally, there are some constraints that affect firms in each sector equally. Corruption, labor regulations and practices of the informal sector and the competition that follows from informal enterprises are among the top constraints that receive equal attention from both sectors.

Figure 24. Constraints by Sector and Country



Data Source: World Bank Enterprise Surveys (2010-2016)

Figure 23 provides an average picture but in doing so masks cross-country variation. It is therefore necessary to disaggregate Figure 23 by countries in the sample. Figure 24 above addresses this concern. First, manufacturing firms are more likely to report access to finance as the biggest constraint with the exception of Cameroon where firms in the Services sector disproportionately refer to this constraint relative to the firms in manufacturing sector. While access to land is more relevant for Services sector, the manufacturing firms in Mali complain about it much more. Access to Courts is a predominantly Malian problem in the manufacturing sector so is Transportation for Angola's Services sector. The constraint of inadequately educated workforce is exclusively driven by manufacturing firms in Angola. In Cameroon, firms in the services sector predominantly complain about customs and trade regulations while labor regulations receive the utmost attention from all Malian female-owned enterprises. Finally, it is worth noting that electricity has been mentioned primarily by manufacturing firms across all countries. Among the 15 constraints listed in Figure 24, electricity and access to finance emerge as the most cross-cutting constraint in sample of countries.

What about gender gaps in perceptions of the major constraints? Figures 19 and 20 only focused on female firms by sectoral cross 5 selected countries. In Manufacturing, the largest gender disparities in terms of disproportionately higher share of female-owned enterprises reporting a constraint relative to male-owned enterprises appears in access to land -particularly in Egypt and Mali-, electricity (Angola and Cameroon), courts (Mali) and access to finance. While Angola, DR Congo and Egypt have more female-owned enterprises cite access to finance as the biggest obstacle, in Cameroon and Mali male-owned enterprises are much more likely than female-owned enterprises to cite access to finance as the biggest obstacle to their operations. Across the five countries, gender gaps are widest in Mali followed by Angola. In Mali, there are twelve-times more female-owned enterprises citing access to land as the biggest constraint than male-owned enterprises. In Angola, two pressing constraints from formal female-owned enterprises emerges as inadequately educated workforce and electricity. Finally, for DR Congo, the largest gender gap is observed in corruption where female-owned enterprises are three times more likely to report his constraint as the biggest obstacle relative to male-owned enterprises.

Gender gaps are much less pronounced in the Services sector when an average for all countries are computed. Focusing on each country yields more variation. In Angola, female-owned enterprises are more than three times as likely as male-owned enterprises to report access to finance as the biggest obstacle to their operations. In Mali and Cameroon, political instability is perceived as the biggest obstacle primarily by female-owned enterprises. The gender gap is 3.8 to 4.6 fold, respectively. In DR Congo, practices of the informal sectors appear to affect female-enterprises much more than male-enterprises since the largest gap across 15 constraints is registered for informality. Finally, female-owned enterprises in Egypt's Services sector are affected by corruption disproportionality when compared with perceptions of male-owned enterprises in the same sector. In fact, female-owned enterprises are more than three times as likely as male-owned enterprises to report corruption as the biggest constraint.

Table 4 below formally tests for gender differentials between the biggest obstacles perceived by firm owners. The motivation behind this formal test is to ensure that gender differentials are not driven by various key firm characteristics such as firm age, size, industry and location of the enterprise. The results largely suggest that gender differentials are in minimal as only 13 out of 75 coefficients are significant at 5 per cent significant level and below. In addition, only three of the 13 coefficients are positive suggesting female-owned formal enterprises are more likely to report these constraints. Specifically, in Angola female-owned enterprises are 23.4 percentage points more likely to report access to finance as the biggest obstacle while in Cameroon female-owned enterprises are around 7.8 and 3.5 percentage point more likely to report electricity and political instability as the biggest constraint.

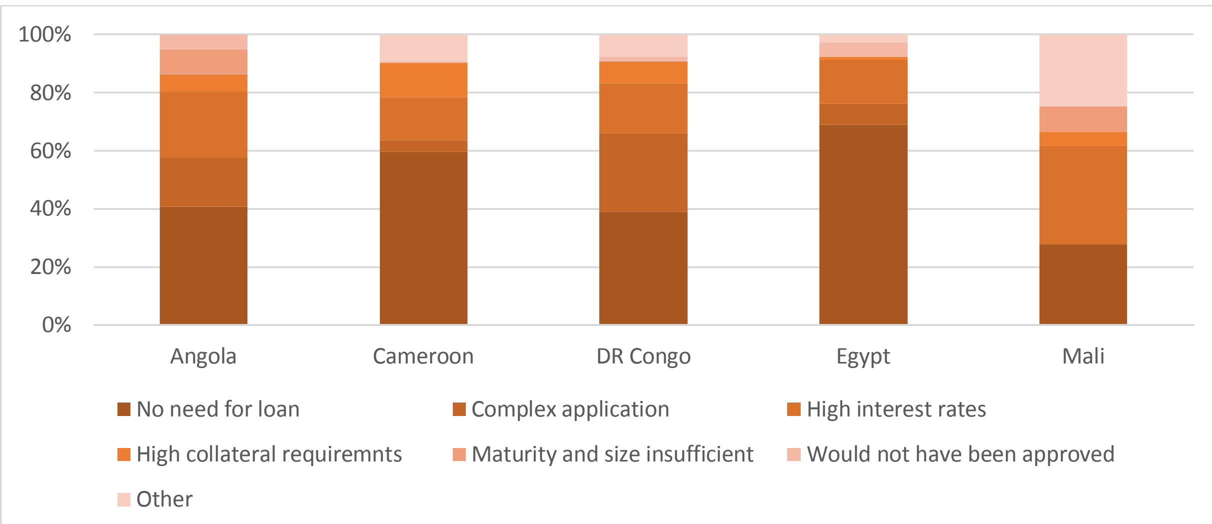
Table 4 Gender Differentials in Perception of Constraints on Doing Business

	Angola	Cameroon	DR Congo	Egypt	Mali
Access to Finance	0.234***	0.016	0.049	-0.004	-0.081
Access to Land	-0.141**	-0.020**	-0.022	-0.003	0.070
Business Licensing and Permits	-0.015	0.025	-0.001	-0.034***	-0.007
Corruption	-0.023	-0.068**	0.039	0.01	-0.091
Courts	0.004	-0.016	-0.008	-0.006***	0.064
Crime, Theft and Disorder	0.001	-0.004	0.004	0.049*	-0.015
Customs, Trade and Regulations	-0.089***	-0.011	-0.054***	-0.002	-0.030
Electricity	0.055	0.078*	0.075	0.025	0.132
Inadequately Educated Workforce	0.008	-0.018*	-0.043***	-0.016	-0.003
Labor Regulations	0.037	-0.0154	-0.017**	-0.012	0.139
Political Instability	-0.094***	0.035*	-0.022	-0.029	0.023
Informal Sector	0.007	0.006	0.041	0.023	-0.139***
Tax Administration	-0.016	0.016	-0.026	-0.001	-0.039*
Tax Rates	-0.002	-0.015	-0.012	0.011	-0.014
Transport	0.035	-0.008	-0.003	-0.011***	-0.009
N	154	324	501	2,701	172

Notes: The coefficients above are obtained from OLS regressions for each constraint list on the first column on female enterprise ownership, firm age, firm size, industry and region of establishment dummy variables. Due to space constraints, only the key variable of interest, i.e. a dummy variable for female enterprise ownership. Robust standard errors are available upon request. *** p<0.01, ** p<0.05, * p<0.1

All these constraints are subjective perceptions of firm owners which may easily be influenced by specific experiences around the time of survey. In access to finance, there are additional objective measures that can help construct objective measures of financial constraints. For instance, across five countries slightly less than 40 per cent of the firms report having purchased an asset. When asked about how they finance such asset purchases, majority of both male- and female-owned enterprises report retained earnings. The share is as high as 98.4 per cent in Egypt, 91.1 per cent in DR Congo and 89.2 per cent in Angola. Across these three countries, the share of firms who used financing from banks is less than 5 per cent. It is only in Mali that less than 60 per cent of the firms use retained earnings and almost 30 per cent of the female-owned enterprises use bank financing. Looking at the financing sources for working capital does not change this overall picture. Close to 90 per cent of the female enterprises report retained earnings as the main source for working capital. While male-owned enterprises report slightly lower shares, the gender differential is not wide. Moving from retained earnings to banks, however, male-owned enterprises appear to fare better than female-owned enterprises, particularly when it comes to purchasing an asset. When asked whether the enterprises have any lines of credit or loans, male-owned enterprises on average report twice as high prevalence as female-owned enterprises. Specifically, while only 6.8 per cent of female-owned enterprises across five countries report having loans, 13.9 per cent of the male-owned enterprises report having lines of credit or loans. One reason behind this result is the reluctance of female-owned enterprises to apply for loans. For instance, while 13.2 per cent of all female-owned enterprises across five countries report they have applied for a loan, this figure reaches 20 per cent for male-owned enterprises.

Figure 25 Main Reason for not applying for a loan?



Data Source: World Bank Enterprise Surveys (2010-2016)

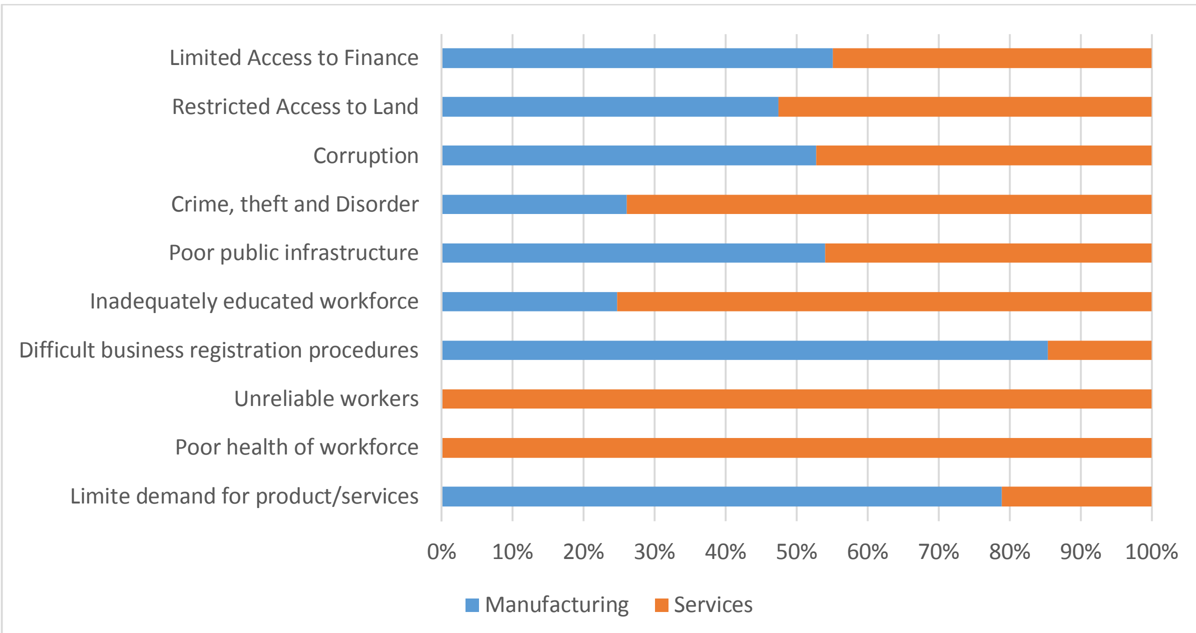
Figure 25 above provides some insights as to why female-owned enterprises do not apply for a loan. In the sample of firms that did not apply for a loan across five countries, for instance, at least 40 per cent of suggest that they do not need a loan. This figure reaches 70 per cent in Egypt and 60 per cent in Cameroon. In Mali, high interest rates are ranked as the number one reason why firms did not apply for a loan while in DR Congo, firms argue that the application procedure is too complex. In DR Congo, while 5 per cent of the female-owned enterprises report that the requirement to obtain partner's permission discouraged them from applying for a new loan, this figure drops down to 1 per cent for male-owned enterprises. Focusing on gender gaps, female-owned enterprises report high interest rates much more intensely than male-owned enterprises in explaining the reason behind not applying for a loan.

The most recent rounds of WBES also inquiries about the reasons why firms do not use financing from MFIs. In Cameroon, female-owned enterprises report more often than male-owned enterprises that they do not qualify for MFI financing and they also appear less knowledgeable about MFIs. In Mali, female-owned enterprises again appear less knowledgeable about MFIs while majority of female owned enterprise suggest that MFIs do not fit the firm's needs.

Informal Enterprises and Profile of Constraints

This sub-section focuses on the constraints faced by informal enterprises. Similarly, all constraints are asked in a subjective way but regarding access to finance and registration, there are additional questions that should be used to further shed light on constraints in a relatively objective way. One difference from formal enterprise surveys is that year of survey, even though not widely apart from each other, may contain different list of constraints, especially for Egypt which will be analyzed individually.

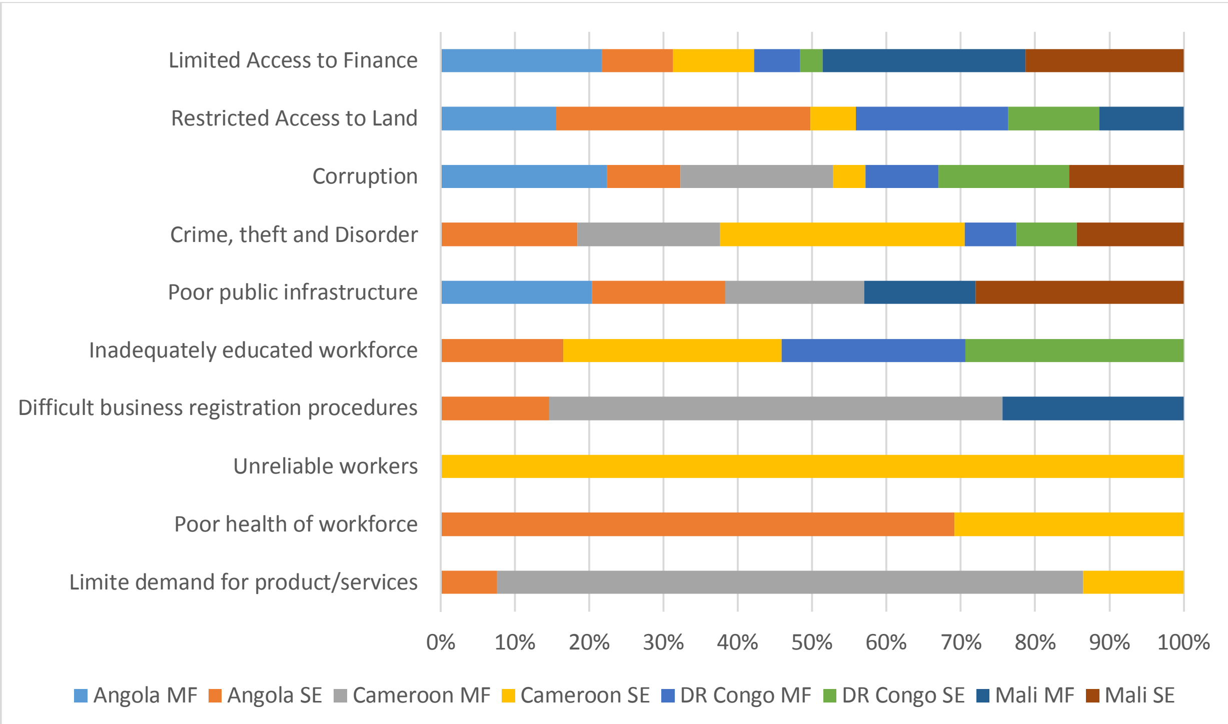
Figure 26 Constraints faced by female informal enterprises by sector



Data Source: World Bank Enterprise Surveys (2008-2013)

Figure 26 focuses on female-owned informal enterprises and compares constraints across manufacturing and services sectors. Some obstacles again cut across two sectors. Firms in manufacturing and services sectors equally identify corruption and poor public infrastructure as the biggest obstacle to their operations. Sectoral gaps are not wide in terms of limited access to finance and restricted access to land. In Services sector, quality of workers emerges as a bigger constraint relative to manufacturing sector. For instance, only firms in the Services sector identified unreliable workers and poor health of workforce as biggest constraints and majority report inadequately educated workforce as the biggest constraint. In Manufacturing sector, on the other hand, business registration procedures and limited demand for products/services are reported as the biggest obstacles against the operations of the enterprises. Figure 27 below unpacks cross-country variation. The Cameroonian female informal enterprises in manufacturing sector drive the results in Figure 26 for business registration and limited demand for products/services while firms in the services sector in the same country exclusively drive the early found result on unreliable workers. Manufacturing firms in Mali report access to finance most intensely while they join the frustrations observed by the Cameroonian manufacturing firms in business registration. In Angola, the informal enterprises operating in the services sector predominantly report poor health of workforce as the biggest constraint against their operations. Consequently, sectoral and cross-country variation in constraints provide the first hint into the policy alternatives member States need to evaluate in an effort to unleash the potential of the private sector.

Figure 27. Constraints faced by female-owned informal enterprises by sector and country



Data Source: World Bank Enterprise Surveys (2008-2013)

As noted earlier, Egypt's list of constraints is much different from the four countries listed above. Interestingly, two constraints emerge in both manufacturing and services sector, namely illegal competition and macroeconomic uncertainty. Just as formal enterprises complained about informality, in Egypt informal enterprises also suffer from practices emanating from informal economy.

Formal tests on gender differentials between the perceived constraints are reported in Table 5 below. When only a few firm characteristics are taken into account, most gender differentials disappear. In fact, similar to the formal enterprises, female-owned enterprises are less likely to perceive listed constraints relative to male-owned enterprises. The only exception is from DR Congo where women are 11.6 percentage points more likely to report electricity as the biggest obstacle. Comparing with the results from Table 4 on formal enterprises, electricity appears to be a problem for informal enterprises and not formal enterprises. The results from Egypt point to a similar pattern in that only a handful of constraints appear to be significantly different between female and male-owned enterprises albeit at small magnitudes. In addition, there is no evidence for female -owned informal enterprises reporting any of the constraints at higher intensity than male-owned enterprises.

Table 5 Gender Differentials in Perceived Constraints across Informal enterprises

	Angola	Cameroon	DRC	Mali
Limited Access to Finance	-0.061	0.016	-0.089*	0.063
Restricted Access to Land	0.018	0.035	0.023	-0.172***
Corruption	-0.044	-0.132**	0.015	0.083
Crime, theft and Disorder	-0.017	0.140	-0.017	0.115
Poor public infrastructure	0.058	-0.006		0.101
Inadequately educated workforce	0.027	0.057	-0.020	-0.016
Difficult business registration procedures	-0.018	-0.061*		-0.043
Unreliable workers	-0.015	0.130*		-0.018
Poor health of workforce	0.053	-0.010		-0.019
Limited demand for product/services	0.027	-0.169**		-0.094**
Political Instability	-0.029			
Problems with the electricity supply			0.116*	
Problems with the water supply			0.025	
Limited Access to Technology			-0.054	
N	118	120	466	119

Notes: Since informal enterprise surveys are from different years, not all constraints are asked in each country. The coefficients above are obtained from OLS regression of each constraint on female ownership controlling for sector and region of the establishment. Robust standard errors are available upon request. *** p<0.01, ** p<0.05, * p<0.1.

A critical question that requires utmost attention is why firms do not choose to formalize. As the next chapter will discuss further in detail, informal enterprises are not necessarily small and register low annual sales. In addition, there are a variety of benefits associated with registering one's business such as access to finance, larger markets, government services, raw materials, etc. and certainly some risks associated with not registering such as lack of any legal foundation and exposure to penalties of informality or bribes.

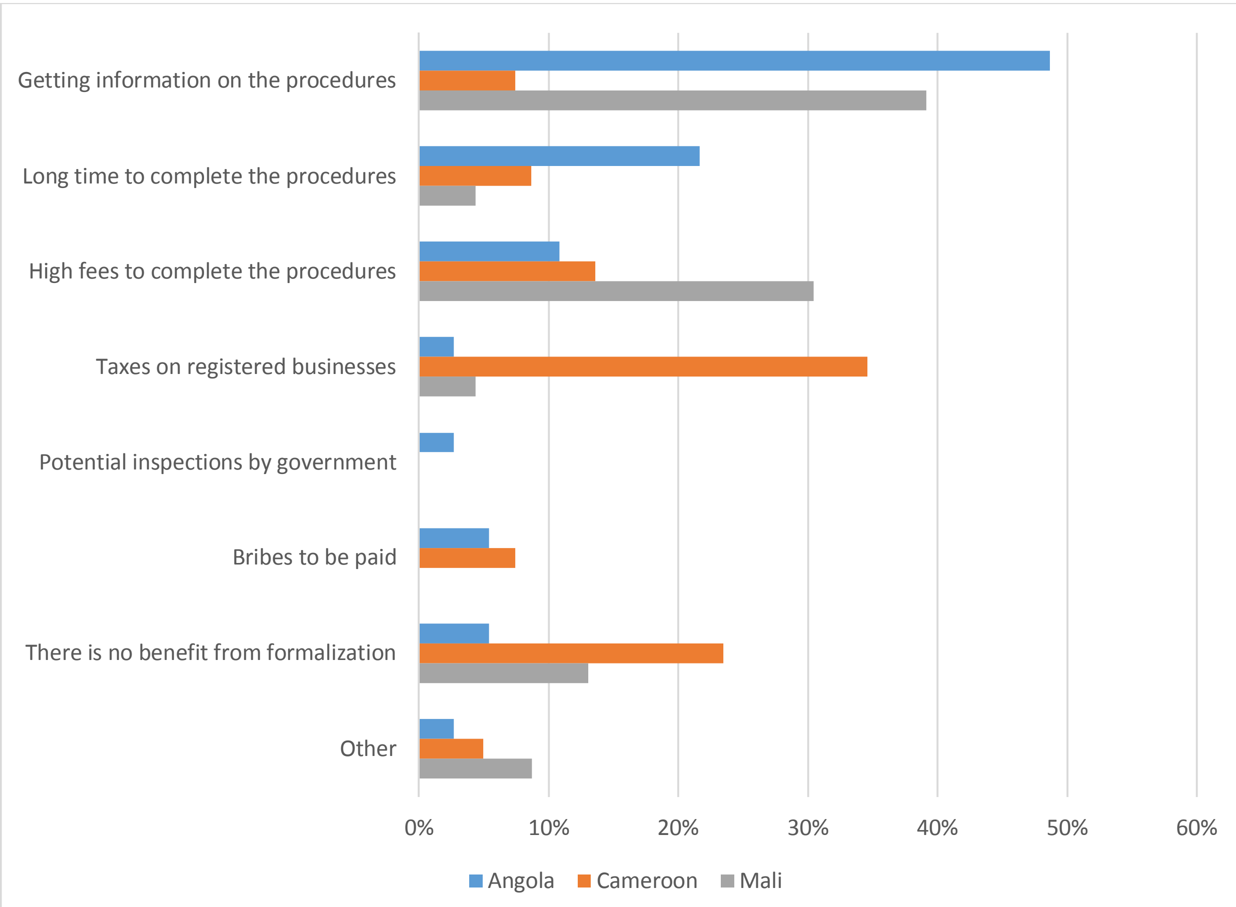
Figure 28 below focuses on the responses of informal female-enterprises[16] and suggests that administrative reforms to streamline the formalization process should be sufficient to move firms to formal sector in Angola and Mali since the most frequent responses for not registering relates to the procedure itself. In addition, only 5 per cent of the firms state that there is no benefit from registering in Angola while this figure increases to 13 per cent for Mali. In Cameroon, the main reason behind remaining informal is more structural in the sense that majority of the female-owned enterprises are concerned about the taxes and close to one-quarter of the firms argue that there is no benefit from formalization.

In DR Congo, around 60 per cent of the informal female-owned enterprises argue that time to complete the registration procedure and the minimum capital requirements bar them from formalizing their businesses. Less than 25% of the firms suggest that financial and administrative burden of taxes influence their decision to formalize. However, close to 40 per cent of the firms

[16] The reason why only three out of five countries appear in Figure 24 is because in DR Congo and Egypt slightly different surveys and methodology is used. Specifically, in DR Congo, firms are allowed to choose more than one reason for not registering which makes it impossible to juxtapose with the countries in Figure 24 where firms were asked to identify one main reason. In Egypt, on the other hand, wording and categories of reasons were slightly different. Results from these countries are incorporated into the text directly without any graphs.

suggest that there is no benefit from registering their businesses. Note that there is no evidence for gender gaps in the responses of male-owned and female-owned enterprises. In Egypt, access to information on the process of formalization is the least frequent response. Expectation of administrative and financial burdens of taxes along with the financial cost of completing the procedure rank among the top three reasons why firms do not register. Similar to DR Congo, there is no evidence for gender gaps in these responses.

Figure 28. Main Reason why informal enterprises are not registered?



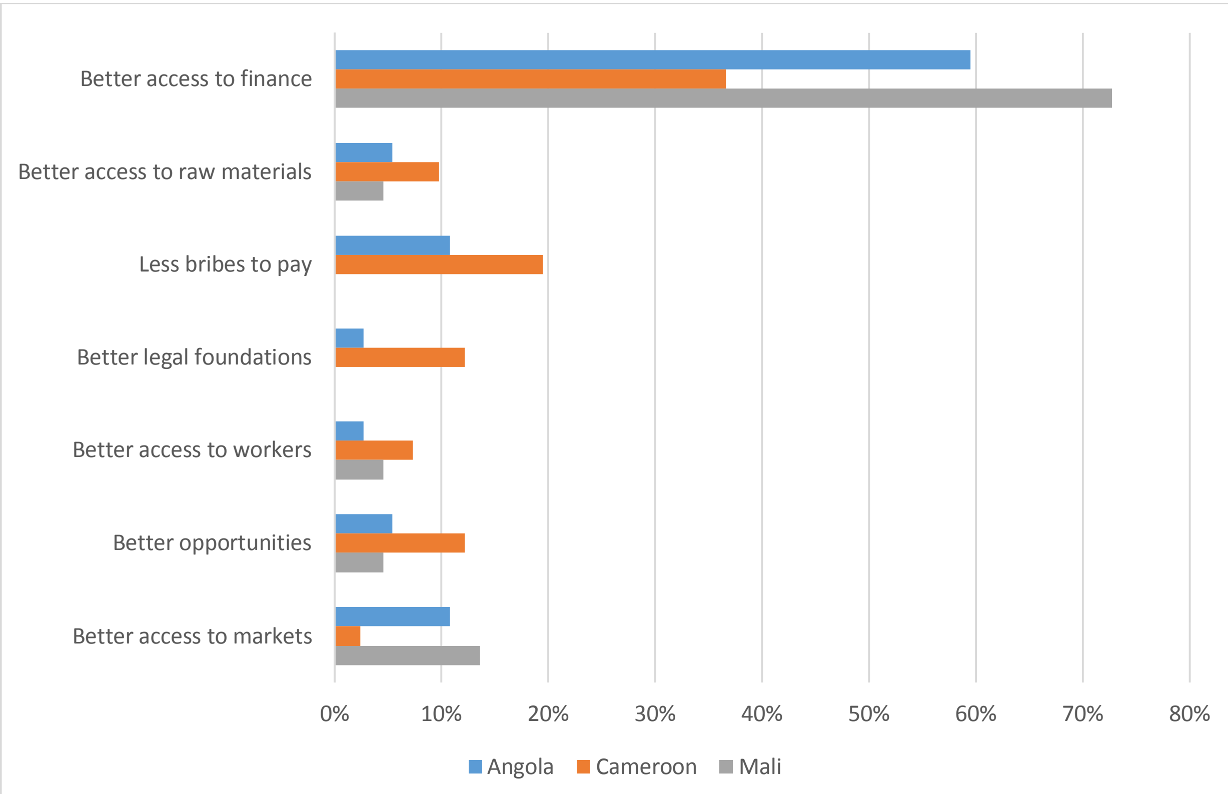
Data Source: Informal Enterprise Surveys (2008-2013). The World Bank.

Among the expected benefits[17] from formalization as listed in Figure 29, better access to finance dominates the responses of female-owned informal enterprises. In DR Congo, the rate at which female-owned enterprises agree with finance as the main benefit is equivalent to the rate in Cameroon. Female-owned enterprises are not necessarily reporting access to finance any more than male-owned enterprises. While in Angola and DR Congo, female-owned enterprises report “less bribes to pay” as the main benefit from formalization much intensely than male-enterprises.

[17] Informal Enterprise Surveys ask firms to identify the main expected benefit from registering their businesses. However, recent versions allow firms to choose more than one benefit. This is why results from DR Congo cannot be juxtaposed with responses from Angola, Cameroon and Mali. Since the survey from Egypt is from 2008 and thus from an earlier version of the questionnaire, no results are available from Egypt.

The SIMPLES program in Brazil evaluated by Fajnzylber (2011) offers crucial insights for replication in Africa. The program lowered registration costs, eased the number of transactions needed to register and decreased taxation on labor. As a result, microenterprises born under SIMPLES programs were more likely to register and report higher revenues, employment and profits. The mechanism however was not as African informal enterprises expect, namely access to finance and markets but a transformation in production techniques after formalization.

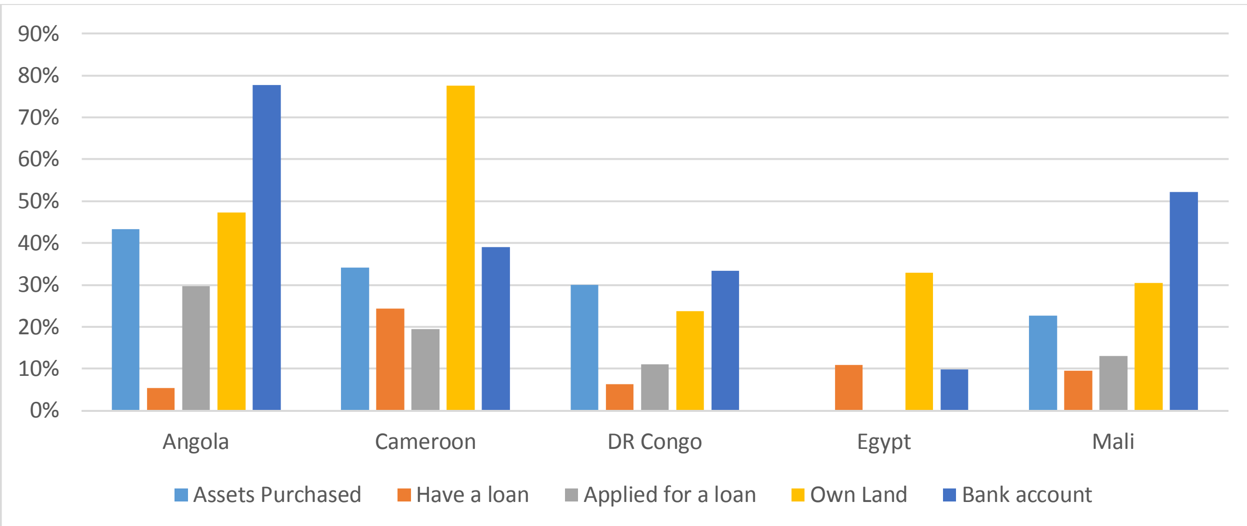
Figure 29. Main Benefit expected from registering enterprises



Data Source: Informal Enterprise Surveys (2008-2013). The World Bank.

Given this predominant expectation on access to finance, it is critical to analyze how informal enterprises finance purchasing assets and their working capital. Figure 30 below shows cross-country variation in a number of indicators relevant for understanding the financial constraints enterprises face. No gender gaps emerge at the aggregate level. However, in Angola, female-owned enterprises are 5.4 percentage point less likely than male-owned enterprises to purchase assets. Looking at how firms finance such purchases, the main source is universally the same: internal funds. While 97 per cent of female-owned enterprises in DR Congo use internal funds fully or partially to purchase assets, this figure drops down to 54 per cent in Egypt. The second most used source of financing is relying on friends and family. In Angola and DR Congo, 33 per cent of the firms rely on family and friends to fully or partially purchase assets. Banks and MFIS are much less often used in asset purchasing. Figure 30 provides a consistent picture with a small share of firms having loans currently. Also note that the share of female-owned firms applying for a loan is at best 30 per cent in Angola. When asked about why firms do not apply for a loan, predominantly the most common answer is that firms in fact do not need loans with the exception of Mali where complex application procedures emerge as the main reason for not applying for a loan. High interest rates are often ranked as the second most important reason for not applying for a loan.[18] While firms may distance themselves from loan applications, financial inclusion is still an ongoing process across the continent with almost 80 per cent of the informal enterprises having a bank account in Angola. Indeed, there is a large room for improvement in Egypt where only 10 per cent of the female enterprises have bank accounts. Note that only 8 percent of the male-owned informal enterprises have bank accounts in Egypt.

Figure 30 Informal Enterprises and Financial Outlook



Data Source: Informal Enterprise Surveys (2008-2013). The World Bank.

The key message does not change when financing working capital is investigated. The most common source of financing is once again internal funds/retained earnings, credit from suppliers or customer advances. Family and friends rank among top three sources of financing. The only exception in Cameroon where 28 per cent of the enterprises suggest they used financing from banks for their operations with no gender gaps.

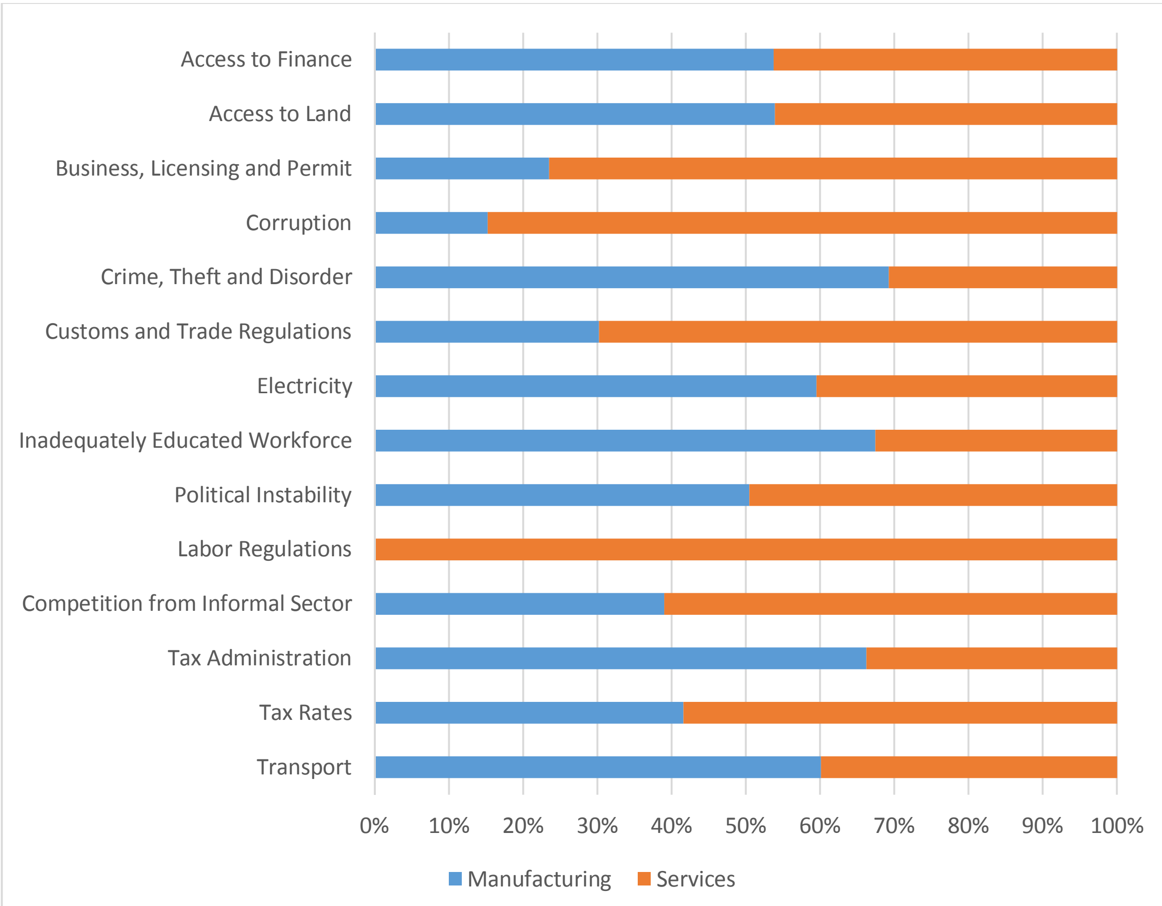
Microenterprises and Profile of Constraints

Microenterprises are the most prevalent type of enterprises across Africa. As described earlier, majority of such firms operate in the Services sector, particularly retail trade including sale of food, clothing and various other products/services. The defining feature of these firms is that they have less than 5 employees while majority manages to formalize within the first year of staring up their business. Similar to previous types of enterprises, while some constraints apply to all firms notwithstanding their choice of sector, there are some constraints that are sector-specific. Figure 31 below shows that access to finance, access to land and political stability are to a large extent equivalently faced by female-owned enterprises in both sectors. It appears also that firms in the

[18] Amin (2010) found similar results with "no need for loans" as the main reason for not applying for loans more often used by female entrepreneurs in a sample of informal firms in Burkina Faso, Cameroon. Cape Verde, Cote d'Ivoire, Madagascar and Mauritius.

Services sectors are facing more diverse set of constraints including business licensing and permits, corruption, labor as well as customs and trade regulations. In the Manufacturing sector on the other hand, inadequately educated workforce and crime, theft and disorder are intensely faced constraints such that firms in this sector identify these two constraints as the biggest obstacles against their operations.

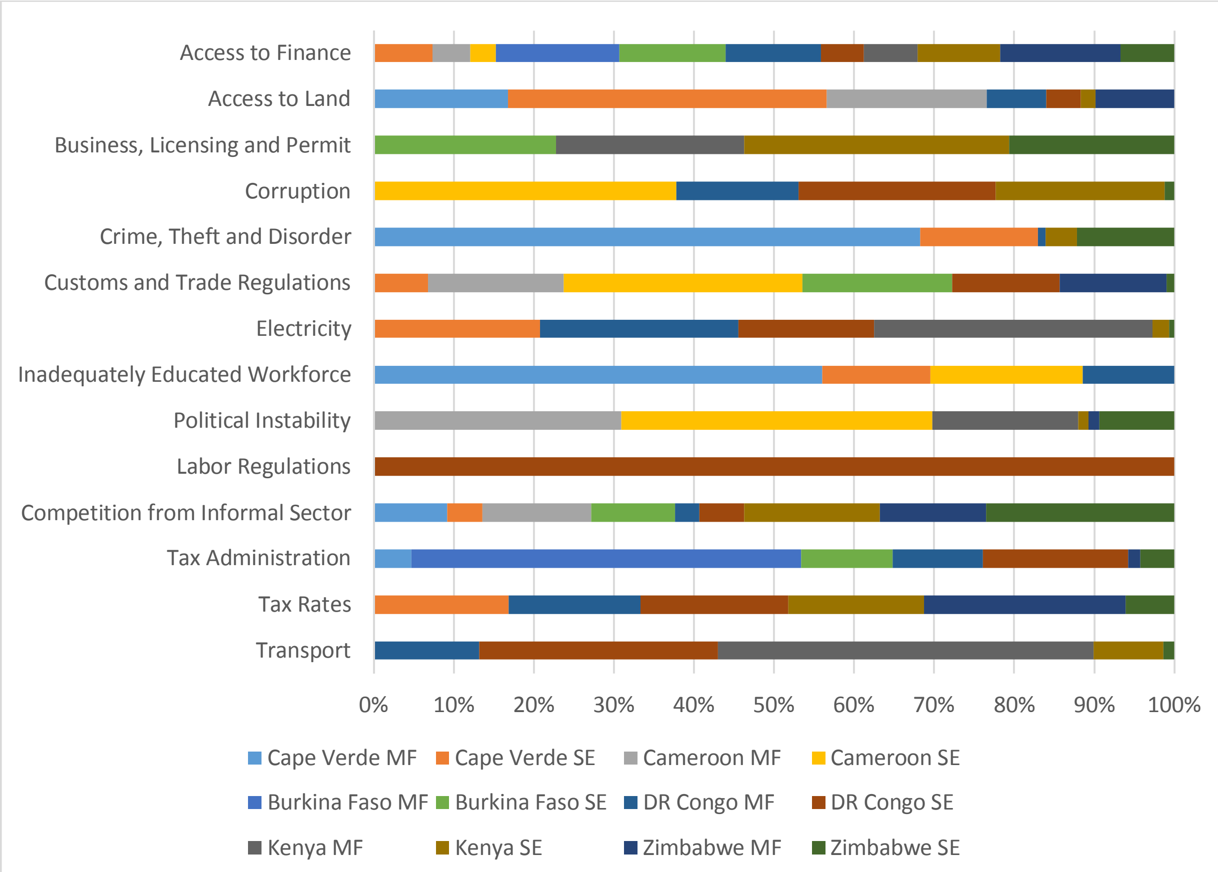
Figure 31 Constraints on Doing Business by Sector



Data Source: Microenterprise Surveys (2008-2013). The World Bank.

In Manufacturing Sector, by far the largest obstacle reported is access to finance with around 30 per cent of the firms across 5 countries that report financial constraint. Tax administration and political instability follow suit. In the Services sector, while 25 per cent of the firms report access to finance as the biggest obstacle, practices of the informal sector emerge as the second most cited biggest obstacle. Focusing on gender gaps by comparing average female-owned microenterprise in each sector to the average male-owned enterprise, a striking result emerges in manufacturing sector with female-owned enterprises on average reporting crime, theft and disorder thirty fold more than male-owned enterprises. Investigating the source of this large gender gap, it appears that manufacturing sector in Cape Verde singlehandedly drives this result as around 57 per cent of female-owned enterprises report crime as the biggest obstacle while none of the male-owned microenterprises identify crime as the biggest constraint.

Figure 32 Profiling Country-Specific Constraints on Doing Business, female microenterprises



Data Source: Microenterprise Surveys (2008-2013). The World Bank.

Figure 32 above provides a country-specific constraint profile. The higher the number of colors in a bar, the more prevalent that constraint becomes as firms from manufacturing and services sector must have reported that specific constraints more intensely. Access to finance, thus emerges as the most relevant constraint for all female-owned enterprises across 5 countries and two sectors. The competitive pressures from the informal sector comes next with most countries reporting this as the biggest obstacle. Access to land and electricity closely follows the top two most frequently cited obstacles. At the other extreme, labor regulations are only identified in the Services sector of DR Congo as the biggest obstacle. Business licensing and permits are mostly reported by the microenterprises in the services sector reflecting only three countries including Burkina Faso, Kenya and Zimbabwe.

There are also some countries that almost singlehandedly drive the results. For instance, more than half of the enterprises that cite transportation as the biggest obstacle are from Kenya, particularly in the manufacturing sector. Firms in the Services Sector in DR Congo are the only firms that cite labor regulations as the biggest obstacle. Note that male-owned enterprises in both manufacturing and services sector are much more likely than female-owned enterprises in DRC to cite labor regulations as the biggest obstacle. Finally, firms in Cape Verde lead other firms in terms of citing inadequately educated workforce as the biggest obstacle, particularly I the manufacturing sector.

There is genuinely a gender gap as there are no male-owned microenterprises in the manufacturing sector of Cape Verde that identifies quality of workforce as the biggest obstacle to their operations.

Table 6 Formal Tests for Gender Differentials across constraints

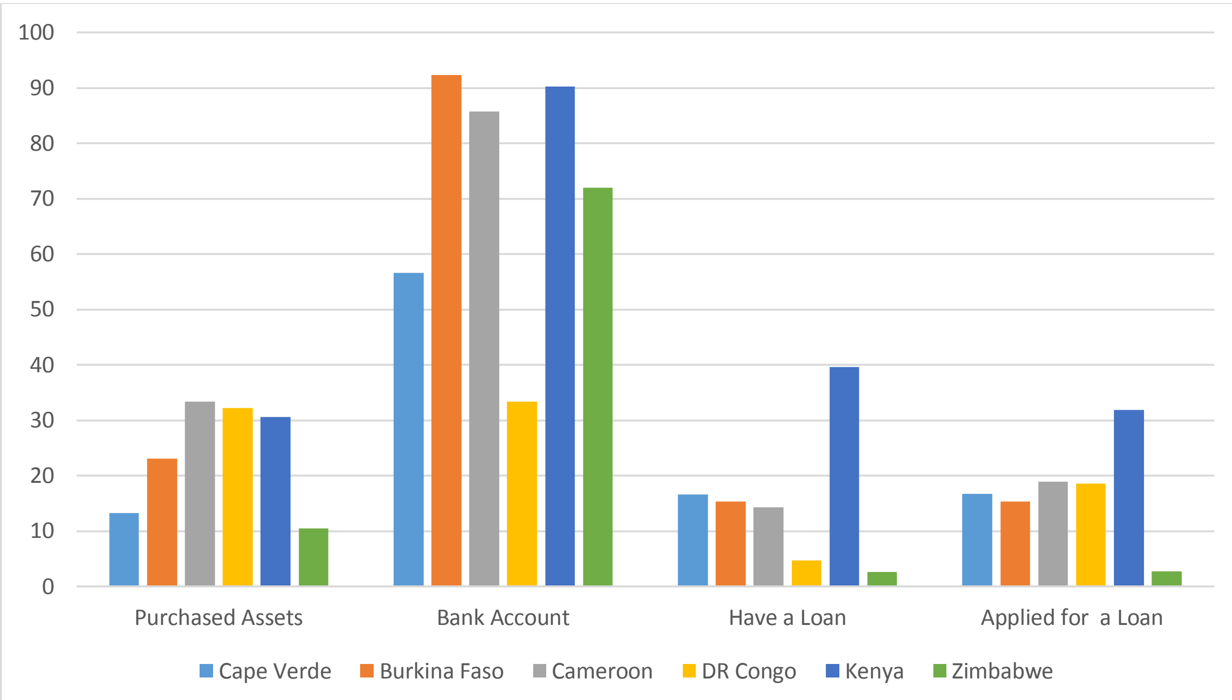
	Burkina Faso	Cabo Verde	Cameroon	DR Congo	Kenya	Zimbabwe
Access to Finance	0.22	0.08	0.00	-0.01	0.07	0.03
Access to Land	-0.03	0.04	-0.00	-0.01	-0.03	-0.01
Business, Licensing and Permit	0.08			0.00	0.12**	0.00
Corruption	-0.05*	-0.08	-0.00	0.01	-0.00	-0.04
Crime, Theft and Disorder	-0.01	-0.00	-0.03	-0.06***	0.01	0.00
Customs and Trade Regulations	0.04	0.05		0.08		-0.02
Electricity	-0.08**	0.11	0.19	-0.01	0.02	-0.00
Inadequately Educated Workforce		-0.02	-0.02	-0.02*		
Labor Regulations	-0.01			0.02		-0.00
Political Instability		0	0.06		-0.06*	-0.06*
Competition from Informal Sector	0.04	-0.23**	0.07	-0.04	-0.01	0.12*
Tax Administration	-0.04	-0.02	-0.23***	0.09		-0.05
Tax Rates	-0.08***	0.06	-0.05	-0.07*	-0.05	0.02
Transport	-0.08***	0.02		0.02	-0.01	0.02
N	120	97	116	405	345	346

Notes: Since informal enterprise surveys are from different years, not all constraints are asked in each country. The coefficients above are obtained from OLS regression of each constraint on female ownership controlling for sector and region of the establishment. Robust standard errors are available upon request. *** p<0.01, ** p<0.05, * p<0.1.

Table 6 above reports the results from formal tests of differences between male-owned and female-owned enterprises regarding the constraints firms identify as biggest obstacles against their operations. In Burkina Faso, female-owned microenterprises report corruption, electricity, tax rates and transport less frequently than male-owned enterprises. Yet, these results are driven particularly by firms in the services sector with no statistically significantly gender differentials in manufacturing. In Cabo Verde, only one difference is detected in terms of the practices of the informal sector. Similar to Burkina Faso, this result is mostly driven by firms in the Services sector. In fact, female-owned manufacturing microenterprises are more likely than male-owned enterprises to report this constraint as the biggest obstacle. In Kenya, female-owned enterprises overall report business licensing and permits as the biggest constraint more frequently than male-owned microenterprises. In Zimbabwe, female-owned enterprises less frequently report political stability but only in the Services sector where female firms are 6.4 percentage point less likely to report this constraint. In terms of competition from informal sector, manufacturing sector appears to be less affected by such competition while female firms in Services sector suffer from practices of the informal sector more.

Since microenterprises have few employees, they have the most potential for growth. Even small increments would translate into large changes in employment growth. Looking at the financial outlook of these enterprises can help understand if on average this potential can be harnessed. Figure 33 suggests that less than one-third of microenterprises purchase assets. Unfortunately, there is not sufficient and complete data on type and value of assets purchased yet the sector where most enterprises operate could be indicative of lower value assets especially when most such assets are financed by internal funds. Looking at asset purchases by sector of the enterprises, it appears that on average two-thirds of assets across five countries[19] were purchased by enterprises in the services sector. This finding holds for both female- and male-owned enterprises.

Figure 33 Financial Outlook for Female Microenterprises (%)



Data Source: Microenterprise Surveys (2008-2013). The World Bank.

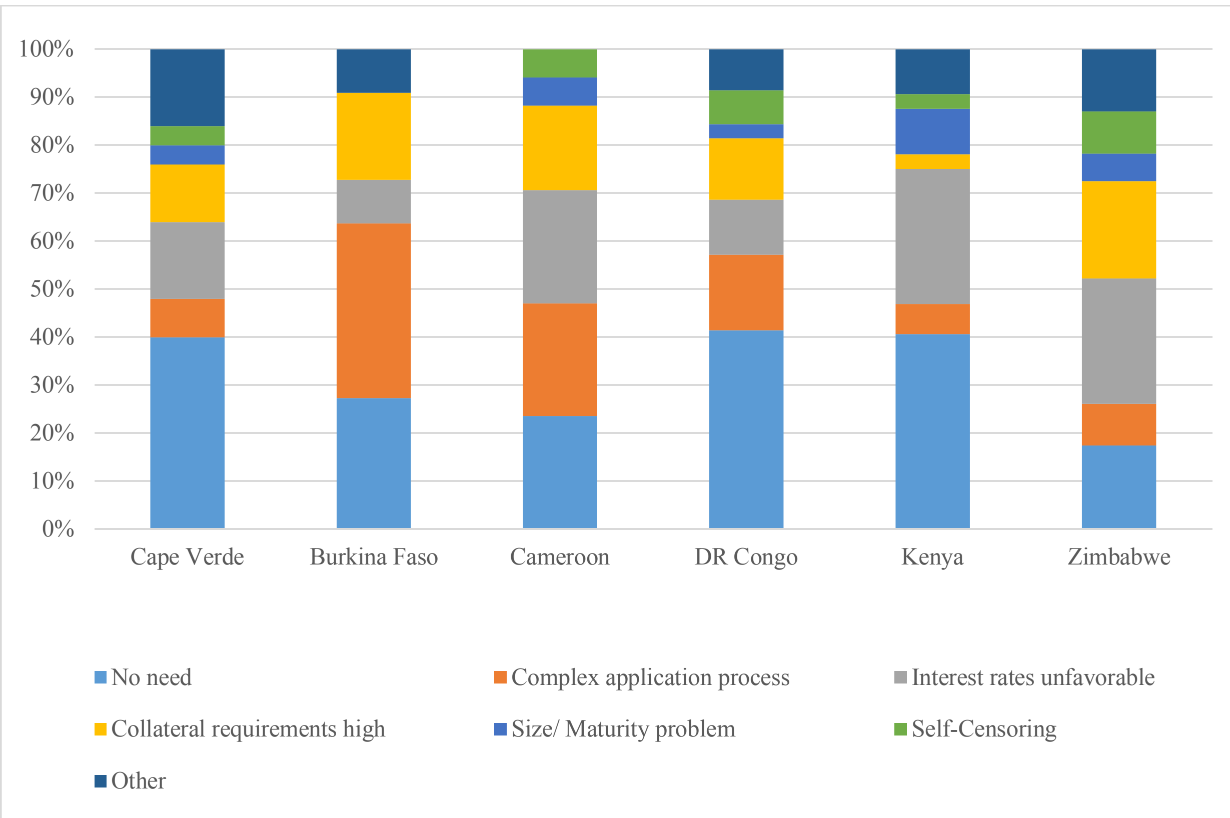
The most promising indicator is bank account holdership. On average, the gender gap less than 5 percentage points with 72 per cent of female-owned microenterprises reporting having a bank account while 76 per cent of male-owned microenterprises have bank accounts. An interesting correlation to note is that microenterprises are as likely as formal enterprises to have bank accounts while informal enterprises are much less likely thank both form and microenterprises to have bank accounts. The functionality of holding a bank account is more in the line of savings and transactions, however. As evident in Figure 29, only a minority of firms have loans and applied for loans with the exception of Kenya where close to 40 per cent of female-microenterprises report having loans.

Why then microenterprises do not apply for loans? Figure 34 below shows that around 40 per cent of female-owned microenterprises in Cape Verde, DR Congo and Kenya suggest that there is no need for a loan. In Burkina Faso, more than one-third of the female microenterprises suggest complex application procedures drive their reason for not applying for a loan. Interest rates are

[19] DR Congo is the only exception to this finding. The majority of assets are purchased by enterprises in the Manufacturing sector. Disaggregating by gender, while 75 per cent of the assets purchasing female-owned enterprises are in Manufacturing sector, this figure decreases top 59 per cent for the asset purchasing male-owned enterprises.

another key reason why firms od not choose to apply for a loan, particularly in Kenya, Zimbabwe and Cameroon. Finally, high collateral requirements stop firms from applying for a loan particularly, in Burkina Faso, Zimbabwe and Cameroon. Figure 30 below only focused on female-enterprises. Looking at gender gaps, male-owned microenterprises on average report no need for a loan less frequently than female-owned enterprises with Burkina Faso exhibiting the largest gender gap. In Cameroon and Kenya, on the other hand, female-owned enterprises are much less frequently reporting that there is no need for a loan. This is consistent with the earlier finding that firms in these two countries lead the way in terms of prevalence of applying for a loan. In Burkina Faso, female-firms are twice as likely as male microenterprises to report complex application procedures as a constraint against applying or a loan.

Figure 34 Why not apply for a loan?

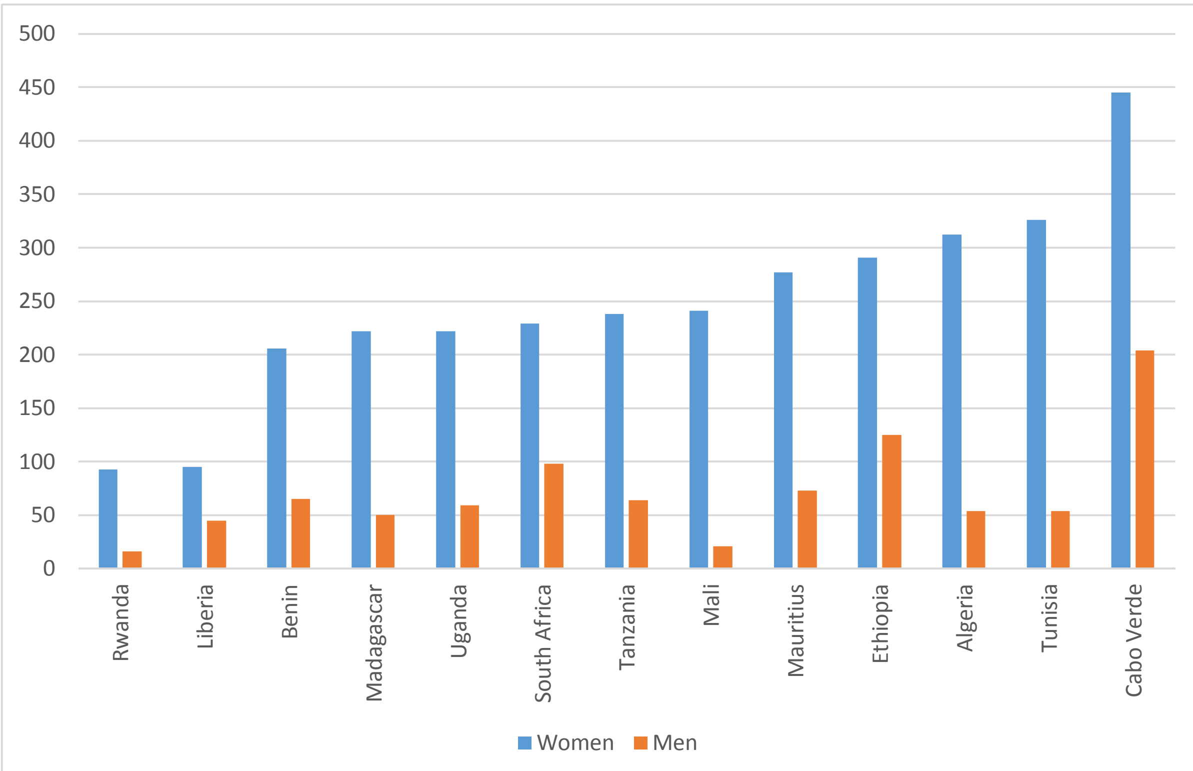


Data Source: Microenterprise Surveys (2008-2013). The World Bank.

Despite higher prevalence of loan applications in Kenya and Cameroon, female-owned microenterprises are around twice as likely as male-owned microenterprises to report high interest rates. High collateral requirements emerge with large gender gaps in Cape Verde, Cameron and DR Congo.

As noted earlier, one drawback in constraint analysis is that data are not available on social constraints women face. Community attitudes toward women's work, occupation and sector of business and women's risk aversion to business are among some of important social constraints likely to affect women's access to economic opportunities. Figure 35 below provides some descriptive insights from women's time poverty which is one of key drivers of women's self-selection into self-employment, particularly in the Services sector with flexible hours and operations from within household premises or the neighborhood.

Figure 35 Time spent in unpaid work by country and gender



Data Source: AUC Gender Scorecard (2016).

On average across Africa, women spend 4 hours every day on unpaid work, while men spend a little over one hour. Focusing on men, Cabo Verde ranks first in terms of time spent on unpaid work with more than 3 hours every day followed by Ethiopia where men spent on average 2 hours on unpaid work. On average, men in Rwanda and Mali on the other hand do not even spend 30 minutes a day on unpaid work. Women's valuable time is constantly being spent on child and elderly care and household chores without any recognition. The flexibility female entrepreneurs seek is inevitable link to such time poverty they face on a daily basis without sufficient support from their partners/husbands or governments. Technological improvements and increased female labor demand, particularly in textiles export sector are often listed among top factors that reversed women's time poverty as the opportunity cost of women's time spent on non-marked activities increased in many developing countries over the course of globalization (Chinhui et al., 2014).

Linking Entrepreneurship to Empowerment?

Women's economic empowerment is often understood as access to and secure control over resources which mostly include labor income, non-labor income and financial or physical assets. The impact of access to and secure control over a specific resource on women's economic empowerment is not straightforward and highly context specific. For instance, labor income in the form of wages imply wage employment which is a risk factor for domestic violence in developing countries. Even though working outside home for wage is the most empowering type of employment, it is also highly threatening for men who cannot move beyond gender norms. Similarly, non-labor income may not empower women to similar extents in different contexts. The extent to which inheritance rights and default marital property regimes are gender sensitive, exit in national legal framework and are implemented as well as enforced and finally are known by women determine how empowered women can get based on such sources.

Access to and secure control over resources is not only a production issue in the sense that participating in the labor force is a necessary but insufficient condition because ultimately all that is produced must be distributed. A large theoretical and empirical literature in household economics therefore focuses on bargaining between men and women and try to relate factors that improve bargaining power to outcomes that proxy empowerment. Therefore, the extent to which women participate in decision-making process within households become crucial in understanding women's bargaining power and ultimately economic empowerment. After all, to participate in the labor force is not only an individual decision but a household decision and so is the decision to consume or save one's earnings.

Against this background, this Chapter first focuses on the production side using the same firm-level data but this time investigates gender differentials in key firm outcomes including sales per worker, sales growth and employment growth. Moving beyond the production side and using individual and household-level data from demographic and health surveys, this Chapter secondly focuses on decision-making process and offers descriptive insights on linkages between self-employment and decision-making power of women on a variety of issues.

Female Entrepreneurs and Firm Outcomes

Following the same approach in Chapter 2, this section will consider firm outcomes by type of enterprises. Enterprise Surveys ask respondents about employment and sales data in the last fiscal year and three years earlier. Using these two points in time, it is possible to construct sales and employment growth in enterprises with the assumption that all firms have these data readily available. It should be flagged at this point that the best quality data on sales and employment come from formal enterprises. It is much less prevalent across informal and micro-enterprises to report on these questions. All nominal variables are converted into USD considering the year and month of the survey. Across five selected countries, employment growth between the last fiscal year and three years earlier among female-owned enterprises ranges between 10.3 per cent at minimum in Mali to 46.3 per cent in Cameroon.

Table 7 Gender Differentials in Outcomes of Formal Enterprises

Country	Indicator	Gender Differential	N	R^2
Angola	Sales Per Worker ('000s)	401.8	132	0.116
	Sales Growth	4191.4	122	0.28
	Employment Growth	-24.8*	103	0.162
Cameroon	Sales Per Worker ('000s)	0.983	328	0.044
	Sales Growth	10	301	0.049
	Employment Growth	18.1*	310	0.082
	Product Innovation	0.05	331	0.055
	Process Innovation	0.05	323	0.041
	R&D Expenditures	-0.04	325	0.094
DR Congo	Sales Per Worker ('000s)	-87.2***	465	0.169
	Sales Growth	-26.2	370	0.009
	Employment Growth	-1.4	454	0.031
	Product Innovation	-0.06	499	0.036
	Process Innovation	-0.13**	500	0.085
	R&D Expenditures	-0.16***	497	0.050
Egypt	Sales Per Worker ('000s)	-17.1***	2,328	0.058
	Sales Growth	7.4	2,038	0.007
	Employment Growth	2.6	2,291	0.012
	Product Innovation	0.03	2,714	0.024
	Process Innovation	0.01	2,714	0.019
	R&D Expenditures	0.03	2,711	0.033
Mali	Sales Per Worker ('000s)	-30.9	146	0.262
	Sales Growth	57.6	133	0.121
	Employment Growth	6.6	163	0.034
	Product Innovation	-0.25**	171	0.236
	Process Innovation	-0.18*	171	0.155
	R&D Expenditures	0.11	170	0.083

Notes: Gender differentials are estimated with standard OLS regressions that control for firm age, size, location and industry. Indicators on innovation were not in the survey questionnaire for Angola (2010). Note that data come from 2016 for Cameroon and Mali, 2013 for DR Congo and Egypt but these indicators are asked for the last fiscal year. Robust standard errors are available upon request. *** p<0.01, ** p<0.05, * p<0.1.

While gender gaps favor women in all countries, particularly in Egypt where employment growth is three times faster in female-owned enterprises relative to male-owned enterprises, Angola stands as the only country where male-owned enterprises grow twice as much as female-owned enterprises. This finding can be explained by the fact that female-owned enterprises are more likely to small enterprises (i.e. 5-19 employees) and often employ few workers at start-up. Regarding total sales in the last fiscal year, the range is wide with USD 64,000 on average[20] in DR Congo and USD 13,300,000 on average in Angola where on average female-owned enterprises record higher total sales than male-owned enterprises unlike anywhere else. The gap is widest in DR Congo where male-owned formal enterprises on average record total sales in the order of USD10,300,000. On average, all enterprises report positive sales growth but when median of the distribution is considered, Egypt emerges the only country with male-owned and female-owned enterprises reporting equivalent negative sales growth in the order of 20 per cent between the last fiscal year and three years before the survey.

Moving beyond sample characteristics, Table 7 above formally tests for firm outcome differentials between male-owned and female-owned enterprises. In addition to three key firm outcomes, innovation related variables are also incorporated to understand the innovative practices and capacity of formal enterprises in selected countries. Sales per worker measures labor productivity and often is considered as the simplest firm productivity measure. Among statistically significant gender differentials, i.e. those with stars and the more the stars, the higher the statistical significance, there is evidence for lower productivity in female-owned firms in DR Congo and Egypt. The gap is approximately USD 87,200 in Egypt and USD 17,100 on average. There are no statistically significant gender differentials in the remaining countries. This is in line with the results from Hallward-Driemeier and Rasteletti (2010) who find that gender differentials in productivity of firms across 37 Sub-Sharan countries disappear when firms with similar size, sector and capital intensity are compared.

Whiles sales growth is often higher among female-owned enterprises, the simple estimated model does not yield any significant results between two firms on sales growth. Consistent with earlier discussion, there is some weak evidence for lower employment growth in female-owned enterprises in Angola, specifically employment growth is 25 percentage point lower among female-owned enterprises. In Cameroon, on the other hand, there is evidence for positive differential favoring women, albeit at lower statistical significance as in Angola. Finally, the results are not inspiring in terms of innovative practices and capacity among female-owned enterprises. It appears that in Mali female-owned enterprises are 25 percentage point less likely to innovate a new product and 18 percentage point less likely to develop a new process in their production chain. Productivity growth in competitive markets require firms to spend more and more resources on product and process innovation. Recent evidence (Maggioni et al. 2016) suggests also that firms' output volatility and therefore survival probability is related to how complex products firms can produce.

Table 8 below focuses on sample characteristics for various firm outcomes from informal enterprises. Since Egypt's survey year is pre-dating 2010, its survey instrument is different than the other four countries. In Angola, while sample characteristics point toward some large differences, particularly in sales revenue, focusing on firms in the same sector and location leads such differences to disappear. Note however, that informal enterprises, both male-owned and

[20] Averages are often misleading as a few large companies with extremely high sales revenues dominate the distribution. Focusing on median total sales does not change the finding above, however. The widest gap, although much narrowed down, still exists in DR Congo and in Angola median female-owned enterprises report sales almost three times more than median male-owned enterprise.

female-owned, hire on average three times more employees than other countries and sales revenues are beyond comparison. In Cameroon, the only significant difference appears in sales revenue and labor productivity. Specifically, when firms from the same sector and region are compared with one another, a gender gap of USD484 appears in total sales revenue and USD153 gap in labor productivity in favor of male-owned enterprises. In DR Congo, the most noteworthy result is that female-owned enterprises in Services sector hire 1 more female worker on average than male-owned enterprises. While Table 8 points toward a large gender gap in sales per worker in the last month, comparing firms in the same region and sector narrows this gap by almost 50 per cent down to USD 62. Mali is the only country in Table 8 that reports higher sales revenue and labor productivity for female-owned enterprises relative to male-owned enterprises. Yet, comparing firms in the same region and sector does not yield any significant differences. Following the same approach, an interesting result is that female-owned enterprises in the services sector on average work 30 hours more than male-owned enterprises in the same sector while no differences are observed in the manufacturing sector.

Table 8 Outcomes in informal enterprises by gender

	Angola	**Cameroon**	**DR Congo**	**Mali**
	Female-owned Enterprises			
Paid Employees	7.3	1.9	1.9	2.6
Unpaid Employees	0.6	0.8	0.7	0.6
All Workers	7.8	2.6	2.6	3.2
Female Workers - Paid	4.4	1.3	1.2	2.0
Female Workers - Unpaid	0.4	0.7	0.4	0.4
Sales Last Month (USD)	75,063	367	443	1,173
Sales Per Worker Last Moth (USD)	3,772	206	17	286
Hours Worked	55.2	62.2	57.0	69.0
	Male-owned Enterprises			
Paid Employees	9.1	2.7	2.6	3.9
Unpaid Employees	0.7	0.5	0.7	0.6
All Workers	9.8	3.2	3.3	4.4
Female Workers - Paid	3.1	0.5	0.2	0.8
Female Workers - Unpaid	0.2	0.3	0.1	0.0
Sales Last Month (USD)	110,094	894	668	712
Sales Per Worker Last Moth (USD)	11,011	333	212	178
Hours Worked	45.0	66.8	57.0	63.3

The Informal Enterprises from Egypt dates to 2008 and as such comes with a slightly different questionnaire. An important benefit is that informal enterprises are asked to recall their total annual sales revenues from three years before. On average, Table 9 shows that both female and male-owned enterprises experience negative growth and with no difference when sectors and region of the firm is taken into account. Yet, some differentially higher sales growth in the services sectors is detected in 2004-2005 period. There are no statistically significant differences across two types of firms in the next three indicators which focus on capital accumulation and use. In Labor growth, there is evidence for higher growth in part-time employment among female-owned enterprises. Specifically, female-owned enterprises experience 12 percentage point higher growth in part-time labor between 2005 and 2007. Female-owned enterprises also experience 23.7 percentage point higher growth in female-employment, again only in the Services sector. In Manufacturing, however female employment has declined. Looking at all employees by gender, sectoral differences emerge. While male employment is lower across female-owned enterprises, particularly in the Services sector, it is higher among male-owned enterprises in the Manufacturing sector. Regarding female employment, it appears that both female-owned and male-owned enterprises employ significantly lower number of female workers while female-owned enterprises in the Services sector is the refuge of female workers.

Table 9 Outcomes in informal enterprises in Egypt by gender

	Female-owned Enterprises	**Male-owned Enterprises**
Sales Growth (%)		
(2006-2007)	-13.5	-15.5
(2005-2006)	-9.1	-11.3
(2004-2005)	-3.4	-5.9
Capacity Utilization (%)	63.8	65.7
Investment	223.7	138.4
Debit/Asset Ratio	8.4	11.6
Labor Growth (%)		
Full-Time	68.4	48.3
Part-Time	9.7	2.0
Family and Relatives	18.1	20.2
Female Workers	29.2	4.1
Under 18 workers	12.0	22.0
All Male Workers	3.5	3.6
All Female Workers	0.7	0.2

Finally, consider various firm-level outcomes for microenterprises presented in Table 10. The gender gap in labor productivity between the average female-owned enterprises and male-owned enterprise is a staggering USD 26,309. When firms from similar sector and region are compared with one another, this gender differential in Services sector raises up to USD33,457. Controlling for sub-sectors on the other hand reduces the gender gap by over 30 per cent which should be taken as a robust empirical evidence that links sectoral segregation to earning potential.

While there is no significant difference in terms the number of full-time employees, there is evidence that female-owned enterprises on average employ 1.5 female employees more than male-owned enterprises. In Cameroon, no gender differential is formally detected while female-owned enterprises on average hire one more female employee than male-owned enterprises in the Services sector. In Cabo Verde, labor productivity is almost equivalent between two types of firms. While unconditional gender differential suggests almost 1 more female employees in female-owned enterprises, comparing firms from similar sector and location reduces this gap to 0.6 female employees on average. Similar pattern emerges in DR Congo where female-owned enterprises employ 1.2 female employees on average more than male-owned enterprises. In addition to previous countries which have surveys predating 2010, data from DR Congo adds more insights into this overall pattern. Specifically, this gender differential is driven by female-owned enterprises in the Services sector employing almost 2.5 additional production workers.

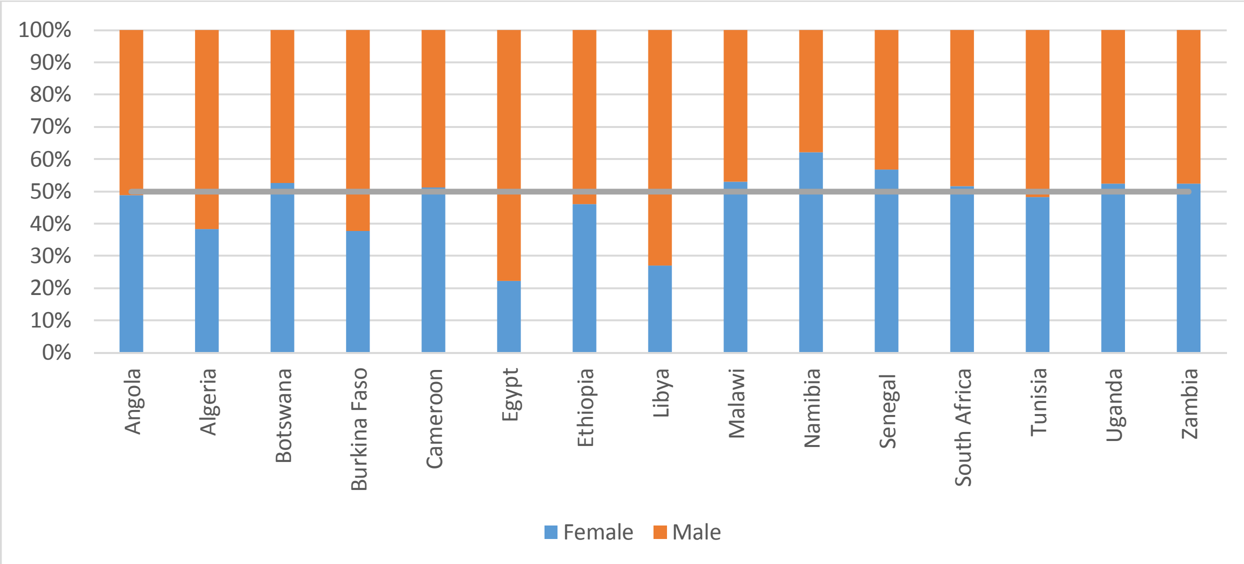
Table 10 Women and Outcomes of Microenterprises

	Burkina Faso	Cameroon	Cape Verde	DR Congo	Kenya	Zimbabwe
			Female-owned Enterprises			
Total Annual Sales	$38,743	$59,869	$61,985	$345,330	$58,070	$171,251
Sales per worker	$10,081	$15,929	$38,613	$105,625	$16,105	$47,212
Full-time employees (FTE)	3.8	3.3	2.3	3.1	2.8	3.3
Female FTE	2.5	2.2	1.6	1.7	1.7	1.7
			Male-owned Enterprises			
Total Annual Sales	$188,695	$168,144	$151,452	$5,859,157	$194,056	$123,297
Sales per worker	$36,390	$43,000	$36,901	$1,890,364	$49,717	$36,669
Full-time employees (FTE)	5.1	3.5	2.7	3.1	3.2	3.3
Female FTE	1.0	1.1	0.7	0.5	1.2	1.1

Moving on to Kenya, a similar result to Burkina Faso is obtained with large unconditional gender differentials in labor productivity such that comparing firms in the same sector and location narrows down the productivity gap by 43 per cent from USD 33,611 to USD 19,116. In addition, female-owned enterprises on average report 15 per cent less employees than male-owned enterprises. Similar to all other countries, female-owned enterprises in Kenya substantially contribute to female employment. The only significant difference in Zimbabwe is again female-owned enterprises employing significant more female employees in the Services sector.

Another critical firm outcome is firm survival. Since complete and detailed history of each enterprise owner's other business activities is not available in Enterprise Surveys, this Report benefits from the Global Entrepreneurship Monitor which asks responses if they have sold, shut down, discontinued or quit a business that they once owned, managed or held any form of self-employment. Figure 36 suggests almost gender parity across half the countries with available data. Large gaps are observed in Egypt and Libya where male entrepreneurs are more likely to discontinue their operations while in Senegal and Namibia female entrepreneurs are slightly more likely to discontinue. The overall message from the Figure below therefore is a positive especially when combined with earlier finding that women entrepreneurs in Africa are much less likely to stop themselves from becoming an entrepreneur because of the fear to fail.

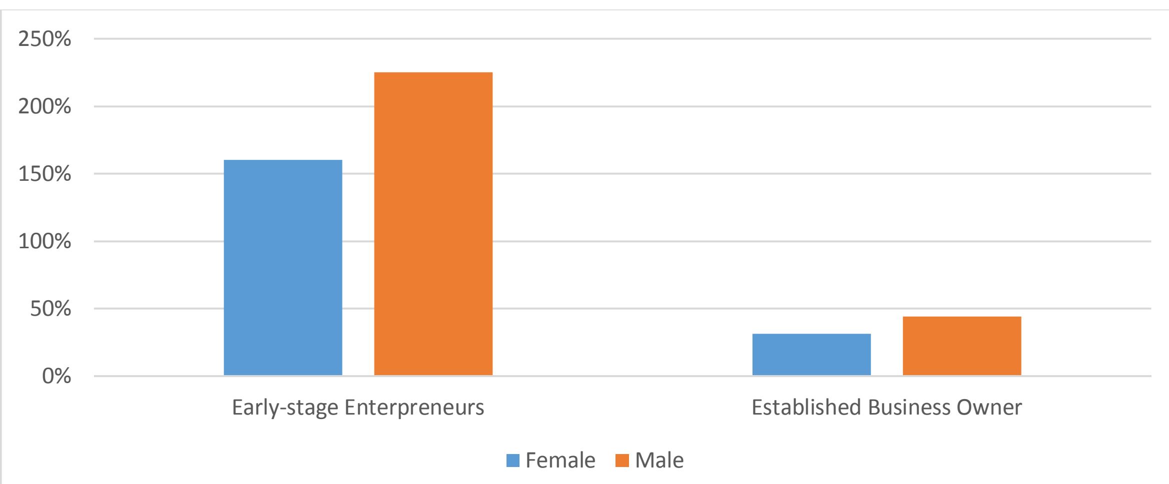
Figure 36 Discontinuity and Entrepreneurship by gender



Data Source: Adult Population Surveys (2012-2016). GEM Consortium.

The GEM also provides data on expected job growth in the next 5 years by type of entrepreneurs. Recall the key categories of entrepreneurs: early-state entrepreneurs (nascent entrepreneurs and baby business owners) and established business owners. Figure 37 below breaks down median job growth in the next 5 years by gender and type of entrepreneurs. First, early stage entrepreneurs have much higher job growth expectations than established entrepreneurs. This is quite natural from the perspective of statistical convergence such that early-stage entrepreneurs start with lower number of employees and even an additional employee would make a large percentage change while in the case of established business owners who may have stabilized in firm size may find it in their interest to expect relatively lower job growth.

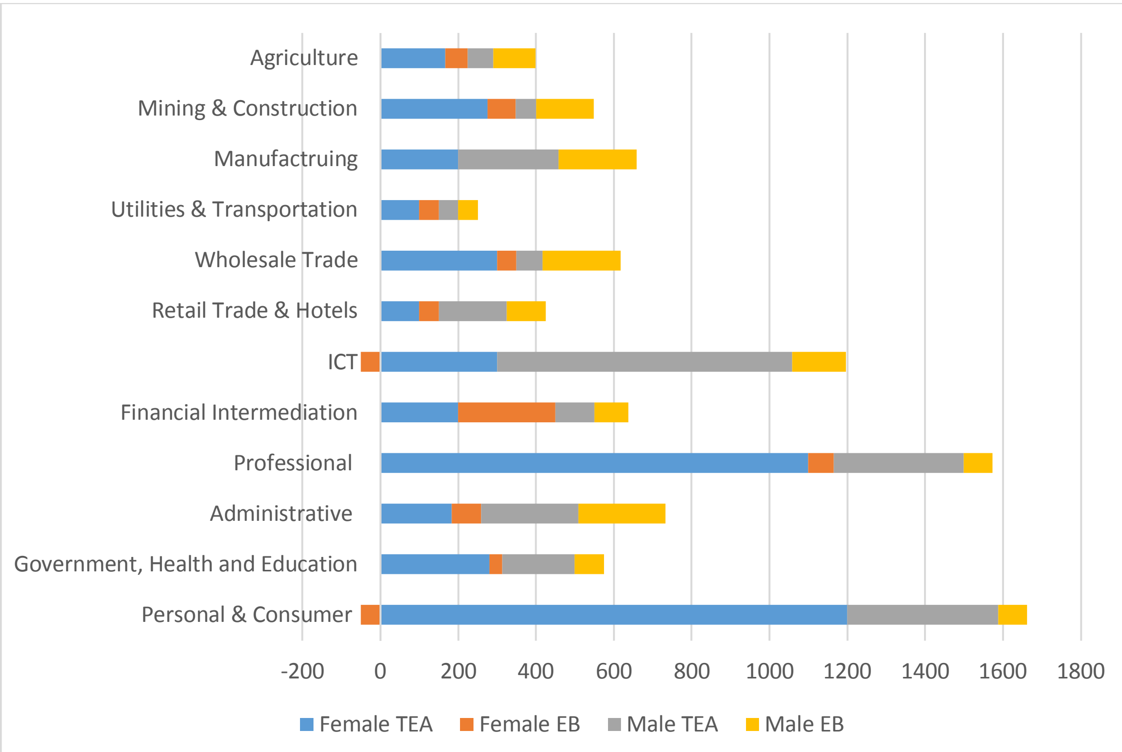
Figure 37 Expected Median Job Growth in the Next 5 Years



Data Source: Adult Population Surveys (2012-2016). GEM Consortium.

There appears to be a gender gap on average however based on data from 15 countries with available data. More importantly, gender gap is much wider in the case of early-stage entrepreneurs than established business owners. Substantial variation across countries exists. For instance, both type of female entrepreneurs expects no growth in employment in the next five years in Angola, Cameroon, Ethiopia and Ghana. Note that with the exception of Angola, median male entrepreneurs in the remaining three countries expect at least to double their workforce. On the other hand, median female early-stage entrepreneurs in Botswana, Burkina Faso, Egypt, Libya, Nigeria, Senegal and Tunisia expect to triple its workforce. Malawi emerges as the only country where median entrepreneurs, female and male, expect to halve their workforce.

Figure 38 Expected Median Job Growth by Sector (%)



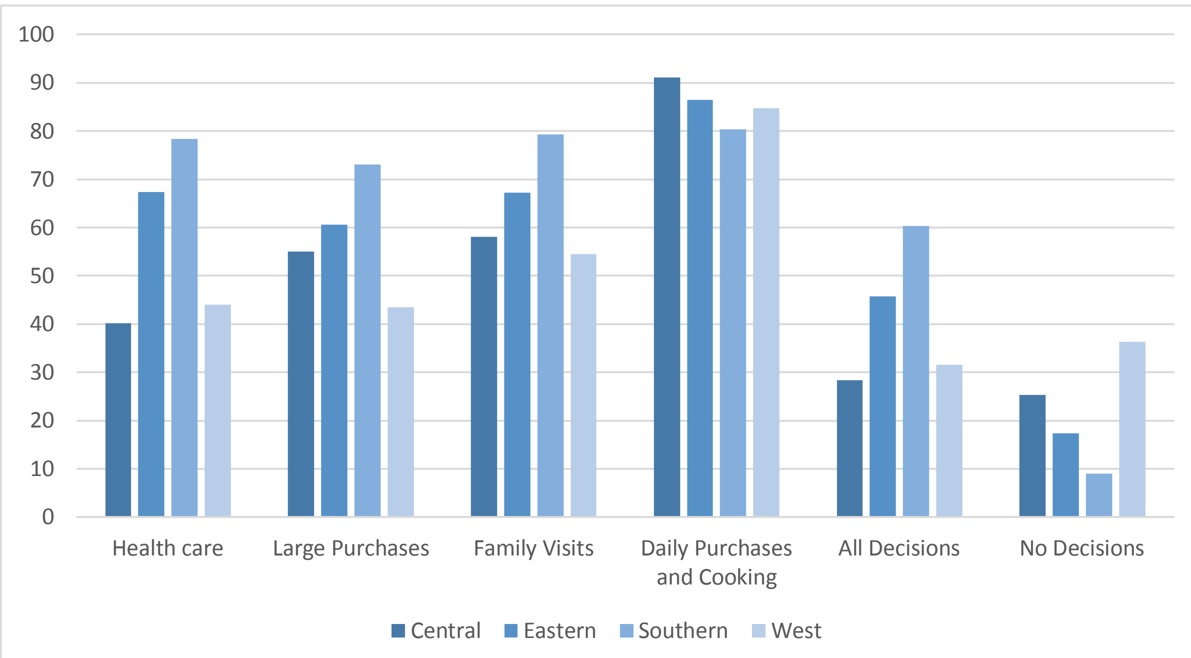
Data Source: Adult Population Surveys (2012-2016). GEM Consortium.

Figure 38 investigates which sectors expect more employment growth by gender and type of entrepreneurs operating within it. Information and Communication Services, Professional Services and Personal and Consumer Goods expect the largest employment growth. Female early stage entrepreneurs drive the expectations in the latter two sectors. Retail Trade & Hotels on the other hand records the lowers expectations particularly for women entrepreneurs. This Report has well established that most female enterprises in Africa operate in this sector. Another interesting result is that female early stage entrepreneurs appear to expect much larger growth in mining and construction than male entrepreneurs which brings up the policy concerns associated with artisanal and small-scale mining. The fact that establishes business owners expect much less growth than early-stage entrepreneurs is seen across all sectors with the exception of financial intermediation among female entrepreneurs and wholesale trade for male entrepreneurs.

Self-Employment and Decision-Making Power

Women's economic empowerment ultimately is related to the ability of woman to take matters into her own hands in economic choices and decisions. The decision to participate in the labor force for instance is an extremely important one with a host of factors influencing how women make her final decision. Other decisions include consuming one's earnings over durable and non-durable products and services, saving or investing one's earnings and borrowing or loaning in the face of rising opportunities. Since close to two-thirds of women[21] are either married or living together with partner, these decisions are rarely an exclusively individual decision.

Figure 39 Women's Decision-Making (joint or alone) in Households (%)



Source: UNECA computations based on DHS (2010-2016).

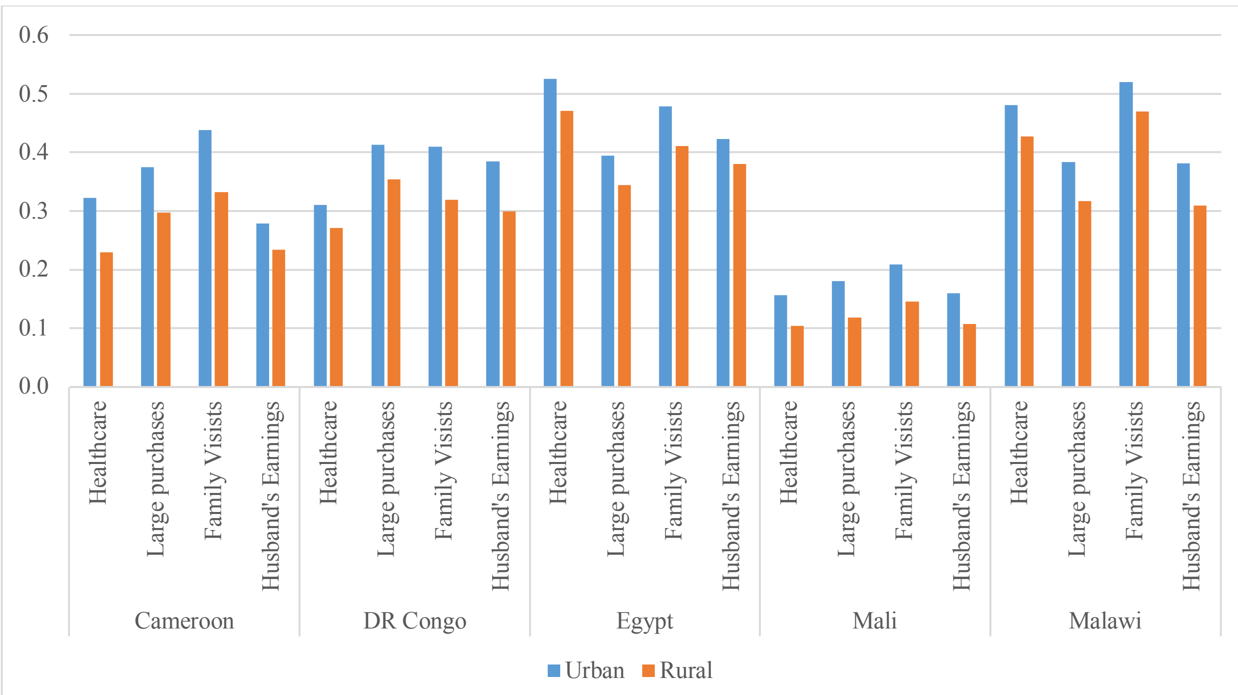
Figure 39 above provides subregional breakdown on percentage of women who jointly or alone have the final say on decisions regarding their own health care, large household purchases and family visits. The percentage of women who jointly or alone have the final say in all three decision or none of the decisions is also included. First, across 32 countries with available data, daily purchases and cooking emerges as the decision with maximum female participation. Note that relative to other decisions, there is minimal variation across four sub-regions with available data on daily purchases and cooking. Ultimately, Figure 39 also proxies for women's time poverty. The entire process of cooking relies on women's agency and takes a long time each day from planning to shopping and does not end with cooking as clearing the table and washing the dishes predominantly is reserved for women. Figure 39 also shows major subregional variation. Across all decisions, women in Southern African countries are more likely to have final say jointly or alone in each decision. They also report the lowest shares in final say in no decision. West African

[21] Data on current marital status of women are available for 32 African countries between 2010 and 2005. The average stands approximately at 64.2 per cent. Around 27.2 per cent of women report never have been married.

on the other hand stands at the other end of the distribution with lower shares in all decision except for daily purchases and cooking relative to other subregions.

A large literature in economics have studied intra-household resource allocation since early 1980s and found a number of factors that boost women's bargaining power and thereby elevate her participation in decision-making process. While entrepreneurship per se is not a factor that can increase women's bargaining power, it certainly does help increase women's exit options through labor and non-labor income as well as asset ownership. Furthermore, policies that help female entrepreneurs survive in the market could also increase their bargaining power through their ability to work without husbands' permission, open bank account and register businesses, inherit assets, own property and share matrimonial assets in case of divorce.

Figure 40 Woman's decision-making power in the household



Data Source: Demographic and Health Surveys (2011-2016)

Figure 40 above focuses on selected countries of this Report and describes the results from a decision-making index ranging between 0 and 1 where 0 represents decision being taken by others and 1 represents exclusively women. For each decision portrayed in Figure 40, married women currently living with husband may respond that they make decisions either exclusively on their own, jointly with partner or that they are not involved in the decision-making process. Since data are missing for Angola, another country from Southern Africa, i.e. Malawi is picked based on most recent available data. Unfortunately, only a few decisions are investigated by the DHS and decisions on husbands' earnings clearly pertain only to women whose husbands have earnings. While data are available on decisions on women's earnings, it is only a sub-sample of the married women in each country that have earnings.

The first observation is that women in Mali are much less involved in decision-making process than women in other countries, particularly in Malawi and Egypt. Across four decisions, women are more likely to be involved in family visits with healthcare and large household purchases following in second and third place, respectively. Women's participation in how to spend husband's earnings is limited across all countries, particularly in Mali. Nevertheless, on average in each decision a substantial 40 per cent of women report joint decision-making which is the ideal outcome from the perspective of women's empowerment and gender equality. Yet, often such subjective measures lead women report joint decision-making as default and thus may mask the realities experienced in respective countries. While women also take the lead in deciding how to spend their earnings, it is important to note that across all countries on average men are twice as likely as women to decide how to spent spousal earnings. While in no countries does the share of women alone deciding how to spend husband's earnings does not surpass 10 per cent, the share of men deciding how to spend wives' earnings reaches 30 per cent in DR Congo. Based on the same data, Egypt appears as the most consistent country in terms of limited intervention in spouse's earnings.

Table 11 Status of Employment

Country	Indicator	Rural	Urban
Cameroon	Employed	69.6	56.1
	Self-Employed	81.43	67.5
DR Congo	Employed	74.9	55.3
	Self-Employed	83.8	79.9
Egypt	Employed	14	18.4
	Self-Employed	21.6	10.5
Mali	Employed	42.2	43.9
	Self-Employed	77.1	87.7
Malawi	Employed	64.6	53.5
	Self-Employed	65.2	54.4

Notes: Employment is measured by reporting to have worked in the past week. Since it excludes unemployed, these do not reflect labor force participation rates. DHS from Cameroon (2011), DR Congo (2014), Egypt (2014), Malawi (2015/16) and Mali (2012).

Earlier sections have reported prevalence rates in terms of labor force participation and self-employment yet they almost exclusively relied on urban data. An advantage with DHS is that representative samples are drawn from each country in an effort to keep rural women in the analysis. Table 11 above employment rates along with self-employment for rural and urban areas in an effort to provide perspective to the results on women's earnings. As noted earlier, women who report nonzero earnings are a sub-sample of all women in the country. In rural areas, more than 60 per cent of all women aged 15-49 work with DR Congo reporting the highest share at 75 per cent. At the other extreme, only 14 per cent of all rural women aged 15-49 work in Egypt. Interestingly, Egypt and Mali are the only two countries that report higher employment rates in urban areas relative to rural areas. Table 11 clearly shows that with the exception of Egypt, majority of women employed in urban as well as rural areas are self-employed.

Table 12 Self-employment and Decision-Making

	Health Care	**Major Household Purchases**	**Family Visits**	**Husband's Earnings**
		Cameroon		
Women Self-Employed	0.059***	0.063***	0.039***	0.037***
	(0.009)	(0.009)	(0.010)	(0.008)
		DR Congo		
Women Self-Employed	0.027*	0.018	0.012	0.024*
	(0.014)	(0.014)	(0.017)	(0.013)
		Egypt		
Women Self-Employed	0.042***	0.078***	0.060***	0.063***
	(0.014)	(0.014)	(0.015)	(0.013)
		Malawi		
Women Self-Employed	0.022***	0.026***	0.027***	0.032***
	(0.007)	(0.006)	(0.006)	(0.006)
		Mali		
Women Self-Employed	0.061***	0.081***	0.068***	0.037***
	(0.009)	(0.009)	(0.010)	(0.011)

Notes: The results follow from ordinary lease square regressions with dependent variables ranging between 0 and 1 where a full score of 1 represents women's exclusive control over the specific decision. Due to space brevity the following variables are included but not reported: women's age and age squared, women's educational attainment, partner's educational attainment, a dummy variable for urban households, a dummy variable for women, number of children below 6 and regional dummies. Clustered standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. DHS from Cameroon (2011), DR Congo (2014), Egypt (2014), Malawi (2015/16) and Mali (2012).

What about the linkages between entrepreneurship and decision-making power in the household? Table 12 reports correlations between these two variables while only comparing women with similar characteristics, i.e. age, education, type of residence, number of children below 6 and region of residence. With the exception of DR Congo, strong positive correlations are found between female self-employment and participation in decision-making process. However, what matters more than self-employment in all countries is the level of female educational attainment (not shown). Particularly, women with beyond secondary schooling are much more likely to make decisions on their own or at least jointly. This partly reflects the selection process in the marriage markets whereby educated women tend to self-select with men from similar socioeconomic background. One reason why the results may show weak correlations, if at all, in DR Congo could be explained by Table 11. As shown earlier, employment rates are much higher in rural areas where

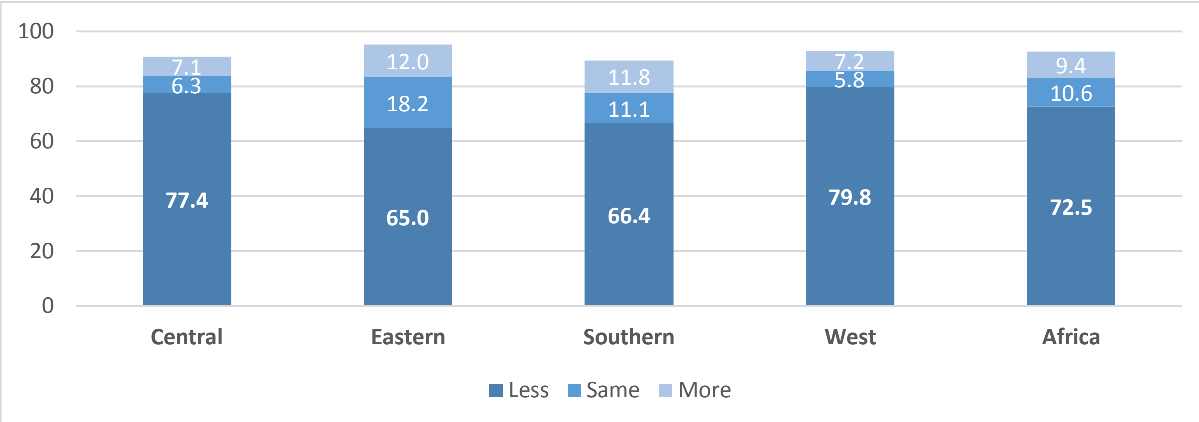
84 per cent of employed rural women are in self-employment. It may be the case that women in rural DR Congo are much more likely than women elsewhere to work in agriculture as contributing family workers rather than wage workers, contribute relatively less to the household total income and therefore may have limited decision-making power. Given that less than 10 per cent of women earn more than their spouses in rural DR Congo could be one factor among many.

Table 12 also reports economically meaningful results beyond statistical significance. For instance, in Mali self-employed women have 0.081unit higher score in decision-making index for large household purchases. Given the average decision-making score in Mali for women is 0.149, the gap between self-employed women and all other women represents almost half of the score obtained by women in Mali. These results however should be taken with extreme caution as there is no causal relationship between them. For instance, it could be the case that women who are more likely to participate in decision-making tend to be self-employed participants in the labor force. As noted earlier, the decision to work is already a giant decision and women are currently working should be taken as those who are empowered enough to make such a decision and follow up. A host of other factors such as husbands' participation, the number of unemployed in the house, quality of participation etc. matter as well. An interesting study by Rani et al. (2004) for instance found that the higher the number of household decisions that women do not take part, the higher the justification of marital violence across a sample of sub-Saharan African countries.

Recent evidence from academic literature points toward a similar pattern. The Vinya Wa Aka group model, a community-based micro-credit group, in Eastern Kenya helped women achieve economic stability and social security while at the same time increased their personal confidence along with their social capital within their communities (Kulb et al., 2016). Similarly, Bulte et al. (2016) evaluate the Gender and Entrepreneurship Together (GET) Ahead for Women in Enterprise Training Package and Resource Kit designed by the ILO and implemented in northern rural Vietnam. Training was provided by the largest microfinance institution in northern Vietnam and lasted 45-60 minutes in monthly center meetings. Husbands were encouraged to attend the training. Proxying spousal bargaining power with experimental games, authors find that this external intervention improved women's bargaining power significantly and led to the finding that joint decisions of the household were more aligned with female preferences. The critical lesson here is that vulnerable self-employment is unlikely to empower women. Policies are required to relax the skills and credit constraints women face and minimize financial exclusion of women and the legal barriers particularly married female entrepreneurs face in the market.

Against this background, it is not surprising, as corroborated by Figure 41 that women have limited decision-making power in the face of lower relative earnings potential. Figure 41 below shows percentage of women –currently married or in union- employed in the past 12 months with cash earnings less than, equal to or more than her husband's/partner's cash earnings. Bars do not add up to 100 per cent since two categories, i.e. husband has no earnings and woman does not know relative earnings, are omitted. The period this data covers are between 2006 and 2015 but only 3 out of 35 countries have data before 2010.

Figure 41 Women's relative cash earnings (%)



Source: UNECA computations based on DHS (2006-2015).

Across Africa, around 73 per cent of women earn less cash earnings than their husbands, as shown in Figure 6 below. This indicator reaches to a maximum of 80 per cent in West Africa and a minimum of 65 per cent in Eastern Africa. Earning similar amounts of cash is not uncommon but does not pass beyond 20 per cent of women in Eastern Africa. Finally, it is rare that women earn more cash earrings than men. Inevitable, relative cash earnings play a crucial role in women's bargaining power in the household and their role in decision-making. While gender gaps are large in cash earnings, a large chunk of women's activities, such as childcare and other domestic chores, are not valued and limit women's time endowment to engage in productive work outside home.

Across 35 countries with available data, a maximum of 87.7 per cent of women earn less than their husbands in Senegal while Madagascar records the lowest share of women earning less than their husband at 47.6 per cent. In Madagascar, again almost 40 per cent of women have earnings like their husbands while this figure drops to 1.8 per cent in Senegal. Lesotho and Liberia record the highest shares for women earning more than their husbands at 15.3 and 13.5 per cent, respectively. On average, only 10 per cent of women in Africa earn as much as their husbands. In North Africa, data are available only for Egypt where 23 per cent of women earn as high as their husbands while 62 per cent earns less than their husbands.

Some countries also have longitudinal data. Egypt and Liberia, for instance, have experienced substantial increases in the share of women whose cash earnings are more than their husbands. Senegal, Namibia and Malawi have experienced the opposite trend with substantial declines. Zambia and Rwanda on the other hand record largest positive change in the share of women reporting similar earnings to their husbands. Lesotho, Malawi Rwanda, Tanzania, Uganda and Zambia report minor declines in the share of women reporting less earnings relative their partners. On average, African countries with available data record 3 per cent growth in the share of women reporting less earnings than their husbands and 7 per cent decline in the share of women reporting similar earnings relative to their husbands. There is also evidence for a 15 per cent increase in the share of women reporting that their husbands have no cash earnings. Inevitably, such developments increase the pressure on women to look for jobs while at the same time spending time on unpaid care work. The good news is that the share of women reporting that they do not know relative earnings declined by 15 per cent also which is a good step toward women's empowerment as access to such information constitutes the first step in spousal bargaining and intra-household resource allocation.

Policy Lessons

This Chapter focuses on lessons that emerged from years of policy implementation and evaluation. Reviewing the literature where the efforts of member States are rigorously evaluated with respect to female entrepreneurship and thereby women's economic empowerment, three key policy themes emerge that require significant policy action and commitment from member States, including the intensive use of and experimentation with active labor market policies, boosting women's financial inclusion and strengthening the legal framework to support women's access to economic opportunities. Lessons from the first theme relies on the key results from rigorous impact evaluations of active labor market policies in Africa as well as across the globe. The key message is policy experimentation with entrepreneurship promotion programs bundled with skills training programs must be encouraged among member States, as meaningful impacts are possible when targeting is done well. The second theme relies on data from the Global Financial Inclusion database and argues that while women are not as financial excluded as one would expect, they are more likely than men to use and rely on informal sources of finance limiting the transformational power of financial services on firm performance. Finally, the third theme relies on data from Women, Business and the Law database and shows wide gaps between married and unmarried women regarding rights that matter for accessing economic opportunities. The key message here is that since majority of entrepreneurs and firm-owners are already married, it is paramount that member States narrow this gap down and improve their policy implementation and enforcement performance.

Active Labor Market Policies[22]

Boosting entrepreneurship first and foremost requires the intensive use of and experimentation with active labor market policies (ALMPs). Since the challenge is often on the supply side[23], two types of ALMPs have been rigorously implemented and evaluated in Africa: entrepreneurship promotion (EP) and skills training (ST) programs. EPs often combine capital transfer along with business and entrepreneurial skill training, while STs often focus on technical and life skills training, mostly for wage employment in the formal private sector. Given the informalities across African labor markets, however STs in Africa integrate business skills training or apprenticeship opportunities for self-employment to help unemployed and underemployed access decent jobs.

[22] This policy lessons in this section draws largely from the background work conducted for Kluve et al. (2016).

[23] On the demand side, ALMPs often target information asymmetries for wage employment. For instance, subsidized employment programs aim to reduce information asymmetry between employers and employees through compensating the risk employers take in hiring employees, particularly the youth. Employment Services programs, i.e. job counselling, job search assistance, job placement and financial assistance for job search) help job market candidates access to vacancies in the formal wage employment.

The economic rationale for EP derives from two constraints entrepreneurs and own-account workers face to enter the market, survive in the face of competition and, if possible, register positive growth, namely credit and business/entrepreneurial skills constraints. While some entrepreneurs may embody innate entrepreneurial ability, they may have difficulty accessing start-up capital. There may also be entrepreneurs who can get access to finance but lack business and entrepreneurial skills to improve their business performance and escape subsistence enterprises. In Africa, there is evidence for both of these constraints. Binding credit constraints are ubiquitous across the continent given the high marginal returns to capital[24]. Udry and Anagol (2006), Kremer, Lee and Robinson (2010) and Nguimkeu (2014) provide large returns to capital in Ghana, Kenya and Cameroon, respectively[25]. For instance, in Cameroon, a 10 per cent increase in capital injection leads to 5 per cent increase in income. The evidence on skills constraint is not readily observable yet given low primary completion and literacy rates, particularly for women in Africa, could be taken as a valid proxy to anticipate skills constraints, particularly in business and entrepreneurship.[26] In addition, as often stressed, schooling is not learning. The private sector is highly dynamic and demanding for both wage and self-employed workers requiring skills on finding new markets, client relations and technological updates.

EP programs include one or a combination of the following services (Kluve et al., 2016): (i) business advisory and mentoring such as writing business plans; (ii) business development skills such as accounting, financial literacy, demand analysis, promotional strategies, commercial planning, separating home and business finances, (iii) access to markets and value chains; support business networks and provide technology for value chain inclusion; (iv) credit or access to credit, (v) grants or start up seed capital and (vi) microfranchising. The magnitude and conditionality of cash transfers widely vary, yet when programs target the poorest of the poor and the most marginalized, as in the Women's Income Generation Support Program (WINGS) in Uganda, they take the form of unconditional cash transfers. As the education, experience and income level of participant's increase, the magnitude increases along with additional conditionality and finally capital injection takes the form of micro-loans as in Youth Opportunities Program (YOP) and Start and Improve Your Business (SIYB) programs in Uganda.

The evidence from EPs are largely positive but when only women are considered, there are mixed results. The WINGS program has yielded strong and positive results in the long-term among its target group the poorest of the poor and marginalized women. Unconditional cash transfer in the magnitude of $150 along with 3 days training helped these women diversify into retail trade in

---

[24] A crucial distinction is made by Banerjee and Duflo (2011) based on their sample covering Asia and Africa in that own-account workers or entrepreneurs in low-income countries often exhibit high marginal returns in their income-generating activities but average returns are so low that despite high marginal returns, it is unlikely entrepreneurs could transform their businesses, enter into growth spurs and escape the vicious cycle of poverty traps.

[25] Note that these are often average returns to capital. There is some evidence from Sri Lanka where large returns to capital, often above market interest rate, is only observed within male entrepreneurs.

[26] Ephraim (2006) finds that most female firm-owners in Malawi lack skills training experience.

their villages. The findings of Blattman et al. (2013) in YOP program in Uganda, which provided $382 to groups of unemployed and underemployed men and women to finance skills training and seed capital, suggest that it took women longer to benefit from the program. Finally, the SYIB program which offered various services, i.e. loans, loans and training, grants, grants and training, found that only loans and training yielded positive results but only for the male sample. This evaluation also found out that women who live in close proximity to their natal families diverted more resources away from business and raised spending on household expenditures. The male entrepreneurs experienced the complete opposite. In fact, they increased unpaid labor input from their own family and improved their profitability. Social norms justified men's prioritization of business over family while the opposite was observed for women.

The rationale for ST programs largely derive from skills constraints coupled with gaps in educational attainment both on quantity and quality side. STs can offer a second chance to those who dropped out from primary or secondary education and provide vocational training. They can also take more basic forms in the form of adult literacy interventions. A combination of the following skills is often integrated to ST interventions: technical skills training; job specific technical skills such as ICT skills; literacy and numeracy skills and behavioral and life skills, i.e. teamwork, planning and organization, reproductive health. Vocational training and apprenticeship programs not only help with skills accumulation but also provide opportunities for relevant job experience that women can build on. Finally, there is some evidence for STs helping women observe the returns to training in various subjects and make an informed sectoral choice. For instance, the TVET program in Kenya, evaluated by Hicks et al. (2013) helped women crossover to male-dominated activities just as auto mechanics and electrical work because the returns to female dominated activities were low, partly because of severe competition among hairdressers or tailors most of whom were women. Campos et al. (2013) find a similar result in Uganda from apprenticeship programs. An important policy implication here is that increasing the number of courses offered in STs along with information campaigns on returns to male and female-dominated activities can encourage women diversify into male-dominated and relatively more lucrative activities.

While STs across the world often focus on supporting men and women in accessing decent jobs in formal wage employment, the level of informality in African labor markets often imply that STs that focus on business and entrepreneurial skills and financial literacy for self-employed are more likely to yield positive results. Adoho et al. (2014) for instance find that the Economic Empowerment of Adolescent Girls (EPAG) program in Liberia only brought positive results for participants who followed the entrepreneurial skills track rather than technical skills track. The findings also suggest that training program did not improve women's labor productivity but at least encouraged them to participate in the labor force in Monrovia. de Mel et al. (2014) and Fafchamps et al. (2013) find similar results in that STs contribute to start-ups than to productivity of incumbent enterprises. In African context, a critical issue is that large shares of women are illiterate which requires STs to address literacy and numeracy skills first before moving into business and entrepreneurial skills. Overall, it is rare that STs alone transform women's performance in their entrepreneurial activities. The Empowerment and Livelihoods of Adolescents (ELA) program in Uganda however is certainly an exception among pure skills training programs. Young girls who received training over two years with specific emphasis on reproductive health and life skills protected themselves from early marriages, adolescent pregnancies, while at the same time improved their educational attainment and income-generating activities. The strong program effects could be replicated in African countries where early marriages and adolescent pregnancies are high[27].

The review the impact evaluation literature with regards to the links between active labor market policies and business performance of female entrepreneurs as well as women's economic empowerment, the following policy lessons can be highlighted:

- ***Bundle ALMPs with specific attention to target group and context.*** On one hand, conditional/unconditional cash or in-kind grant transfers on their own are unlikely to help entrepreneurs move up in the ladder of entrepreneurship. Unless the target group is the poorest of the poor and the marginalized groups as seen in Blattman et al. (2014), long-term positive results are rarely captured. Microfinance on the other hand has mostly benefited profitable and existing enterprises with limited impact on start-up, survival and growth of enterprises. On the other hand, pure skills training[28] also could not pass beyond improvement of perceptions of participants regarding their skill intake. Fiala (2014), Hicks et al. (2013) de Mel et al. (2014) and Cho et al. (2013), Valdiva (2015), Bruhn and Zia (2011), Karlan and Valdiva (2011) are among many impact evaluations that do not find tangible positive labor market impacts of pure skills training programs. Bundling capital injections with business skills and financial literacy training bears the utmost potential when targeting the poorest of the poor. While loans through microfinance works better with incumbent entrepreneurs, business skills training helps early-stage entrepreneurs more.

- ***Design gender-sensitive ALMPs.*** Unlike male entrepreneurs, there are a set of highly binding constraints that affect the potential impact of ALMPs.

[27] According to DHS, around 30 per cent and more of women in Chad, Liberia, Sierra Leone, Zambia, the Gambia and Nigeria report age at first birth as 18. Cho et al. (2013) find from Malawi that one reason why women dropped out of the program was due to social pressures on marriage.

[28] Often training programs take short period of time and does not provide the one-to-one mentoring and personal assistance to entrepreneurs. Their depth and breadth are disputable and the expertise as well as gender of trainers may affect the outcomes. Hence, it is possible that intense business and entrepreneurial skills training over longer periods of time along with monitoring and evaluation mechanisms in line with this long vision may still be the way forward for entrepreneurs for whom human capital constraints and not financial constraints bind the most.

- ***Social constraints:*** First, women entrepreneurs do not have the luxury to prioritize business over family. They neither have the innate willingness to do so nor would the societal norms allow women to pursue their career as liberally as men. As observed in many EPs, the implication is that women use a portion of the grants/loans they receive on household expenditures unlike men who, as in the case of YOP, may even allocate more of household resources to business. As Field et al. (2010) find in India, social constraints are not uniform across women and the effectiveness of ALMPs depend on which caste and religious background women come from. Finally, as Cho et al. (2013) show women face social pressures of marriage from earlier ages onward which limit their participation capacity to training programs. Consequently, ALMPs should be designed with such constraints in mind so as to maximize the benefit women entrepreneurs can internalize from ALMPs

- ***Informal tax:*** Second, women are informally taxed on their grants, either by their natal families or their husbands. The microfinance literature often finds that women do not have full control over the loans they receive and may even be harassed if they do not share their funds. Similarly, as observed in the YOP, women who live in close proximity to their natal families, diverted resources away from their businesses. Male entrepreneurs however benefited from proximity to their families as they could recruit unpaid labor and boost their profits. As Berge et al. (2015) argued in the case of Tanzania, one reason why female-owned enterprises did not benefit from business training and grants is that they did not seem to have incentives to expand their business, plausibly because of resource transfer toward husbands. ALMPs, therefore must have built-in safeguards against such informal taxes on women entrepreneurs. For instance, as Fafchamps et al (2013) found in Ghana, in-kind transfers rather than cash transfers are much less likely be tasked as well as conditional cash transfers that are received through mobile banking as shown by Aker et al. (2013) in Niger.

- ***Time Poverty:*** Women, from earlier ages onward, spend much more time on non-market and domestic activities than men in Africa, particularly in rural areas. The gender gap in time poverty can not only explain educational and skills gap between men and women but also the sectoral as well as occupation segregation both among self-employed and wage employed. As shown in Chapter 2, women are much more likely than men to work from their home. They also dominate a few sub-sectors with the Services which provide much more flexibility than profitable sectors in formal manufacturing sector. The effectiveness of ALMPs will be limited if women keep choosing to work in less profitable sectors with market outreach[29] problems due to lack of mobility and networking. Male entrepreneurs often have a wider network of clients than female entrepreneurs.

- *Marriage and Children:* ALMPs targeting women will run into compliance problems if childcare support is not integrated into the programs. The EPAG program is a great case in point where women's participation was maximal thanks to the childcare support they received. On the other hand, the apprenticeship program in Malawi exhibited large dropouts by women due to lack of subsidized transportation to and accommodation at training centers along with social pressures to choose marriage over continued training. Distance from home matters also because of safety concerns.

- ***Pay attention to dynamics of the household and communities.*** When designing ALMPs that target only women, it is important to bear in mind husband's support can make a big difference. The WINGS program for instance brought men onboard. This is an important design element since women may not always have control over grants and loans. Women also bear the risk of exposure to intimate partner violence as their income generation capacity expands along with their bargaining power[30]. At the community level, there can be positive spillovers from such interventions. Observing women become more active can inspire others. One drawback here is that it is paramount that women entrepreneurs are encouraged to engage in diverse activities. The general equilibrium effects are likely to be negative when all program participants choose to become tailors or hairdressers. As the size of the village/community increases along with its connectivity to other villages, this concern is likely to disappear.

- ***Strive for longer periods in ALMPs.*** Most ALMPs have short time frames both for implementation and evaluation. Yet, skills training programs that last a couple of days are unlikely to improve the required skill set for entrepreneurs. Critical insights are obtained from the results-based initiative[31] of the World Bank in that in the short-term the only tangible impact across the interventions was to increase women's self-perceptions of their

[29] According to Roland et al. (), market outreach of female micro and small enterprise owners in Ghana are highly limited relative to men's. Accessing markets within and outside their districts is low and women entrepreneurs are more likely to rely on middlemen in their sales.
[30] Note that women's bargaining power is not necessarily related to her income since income includes hours of work not just wage or revenues. What really matters therefore is women's productivity: how much one can produce/sell in a given day. This is not to dispute the benefits of income generation but to tone down the expectation of a one-to-one relationship between income and bargaining power.
[31] In Johannsen de Silva et al. (2014), there are three African countries among selected countries in this initiative including Egypt, Liberia and Kenya. The initiatives were promoting gender equity and productivity in private firms in Egypt, value added cassava enterprise for the Ganta concern women's group in Liberia and competitiveness of women bread workers in Kenya.

skills and expand women's networks while women's economic opportunities did not increase and no evidence on the linkage between human capital endowment and women's decision-making power in the household is detected. With regards to EP programs, the maturity of loans matters a great deal, if conditional transfers are made. Follow up is crucial for those who received only grants. Also gains are often recorded in the short-term yet profitability decreases in the long-run, particularly for women.

- ***Organize women entrepreneurs to widen their support network.*** Existing female business networks must be brought onboard for effective implementation and outreach of ALMPs. As Warnecke (2016) argue bargaining power of women entrepreneurs in reaching basic and support services would be higher if they can act in a collective and concerted fashion. Women entrepreneurs can widen their market outreach and benefit from cooperation among themselves in competitive markets dominated by men. Mulema et al. (2016) find similar evidence from Ethiopia where female farmers benefit from different types of social capital, raise their individual and collective bargaining power, at home and in the market which improves access to inputs and better sale prices. Guma et al. (2016) describe the important role women's associations play in supporting women entrepreneurs in urban informal economy through skills training along financial education. According to Bekele and Zeleke (2008), having parents with entrepreneurial background improves the business performance of entrepreneurs as various skills and attitudes may have passed from parents to children. Associations of women's entrepreneurs can fill this gap by streamlining informal transfer of skills into more formal setup and train female entrepreneurs.

Financial Inclusion

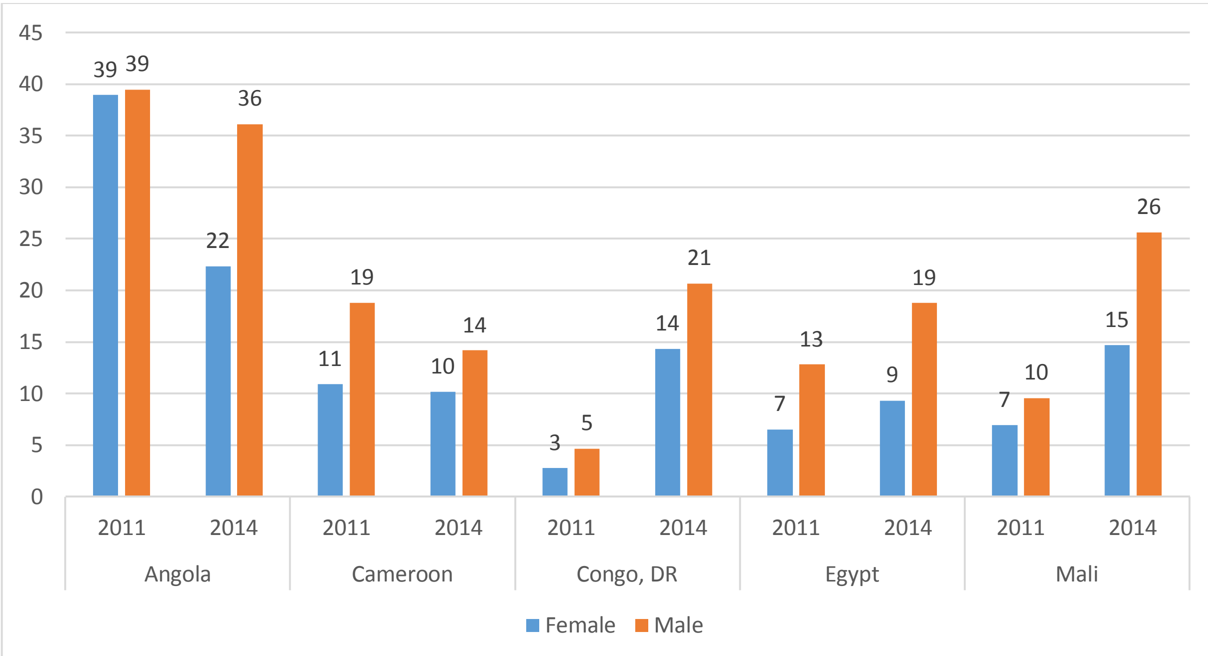
Globally, access to financial services is among the top constraints female entrepreneurs and firm-owners report against their daily operations as well as asset purchases to improve and expand their businesses. While access to credit receives most of the attention, it is important to highlight that access to finance is much more than simply borrowing. In fact, access to checking and savings account or insurance market is equally important. From the perspective of poverty traps, household inability to access insurance markets is arguably more pressing concern than their access to loans. This sub-section relies on Global Financial Inclusion database[32] to establish gender patterns in account use as well as saving and borrowing behavior in selected countries. Empirical evidence

---

[32] This database provides country-level aggregates as well as micro-data on a large number of indicators that matter for financial inclusion at the individual level. Therefore, the results can be different from firm-level analysis. For instance, Aterido et al. (2011) find no gender gaps in firms' use of financial services in Africa excluding North Africa. Note that their analysis is in regression framework controlling for various firm and owner characteristics. The analysis below relies on unconditional means.

from best practices in Africa and across the world will then be showcased to offer policy alternatives to member States.

Figure 42 Accounts at financial institutions by gender (%)



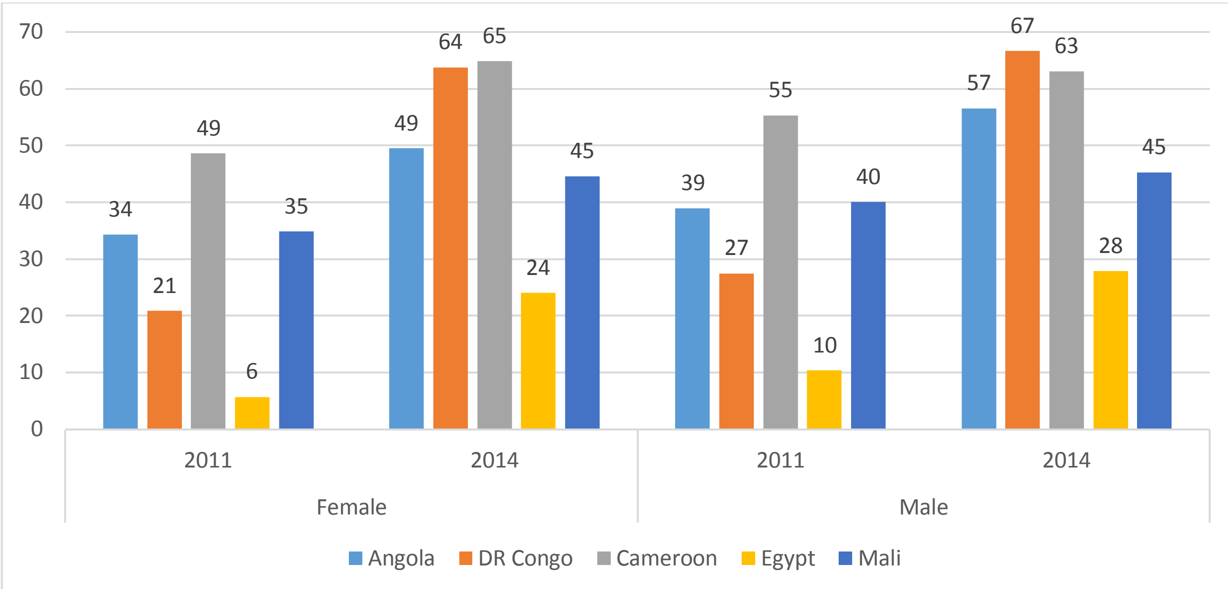
Data Source: Global Financial Inclusion Database (2011-2014). World Bank.

Among selected countries of this Report, Figure 42 above shows that the penetration of financial services is highly limited except in the case of Angola which registered a substantial decrease from 2011 to 2014 in its depth of financial system. Egypt records the lowest share of women with accounts at financial institutions as of 2014. While Cameroon experienced a decrease for both men and women, DR Congo has registered a substantial increase in the share of women with accounts in a rather short period of time and at a faster growth rate relative to men. Focusing on gender gaps, Angola and Mali have recorded the largest regressions from gender equality while Cameroon and DR Congo have recorded commendable progress.

In the digital age of financial services, advantages of having accounts at financial institutions certainly outweigh any potential disadvantages. There are efficiency gains from digitized payments which also contribute to the secure control over personal funds without leakage. Mobile money accounts for instance helped many African women make use of financial services. A policy implication for the selected countries in this Report is certainly to help women access mobile money accounts since prevalence rates in all five countries are dismal. DR Congo and Mali register the maximum with 7.4-9.0 per cent of women having mobile money accounts while Egypt and Cameroon represents the minimum with 0.1-2.1 per cent of women with mobile accounts. Across Africa, Kenya leads the way with 55 per cent of adult female population having mobile accounts followed by Somalia at 32 per cent and Tanzania at 26 per cent. Beyond Eastern Africa, notably

Botswana and Cote d'Ivoire record more than 20 per cent of adult female population with mobile money accounts.

Figure 43 Saved any money in the past year? (%)



Data Source: Global Financial Inclusion Database (2011-2014). World Bank.

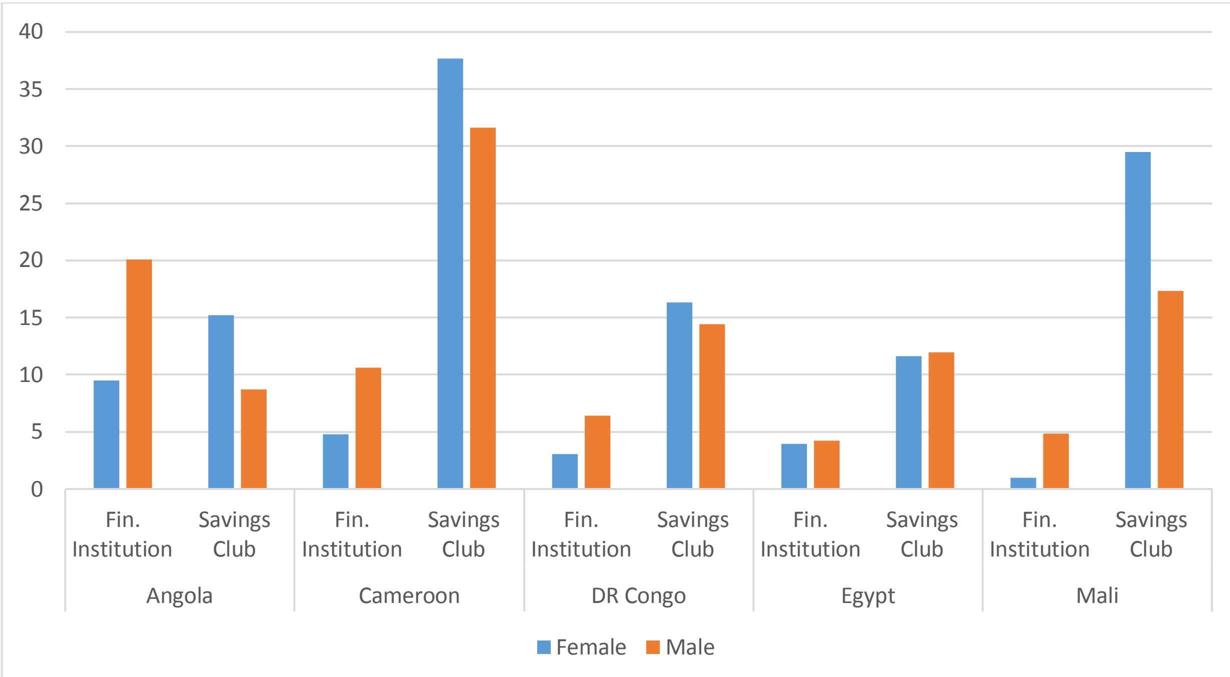
As discussed earlier, gender wage and income gaps are wide in Africa. Yet, prevalence of savings, notwithstanding their magnitude, is quite promising in selected countries for women, as shown in Figure 43 above. Not only the share of women with any savings in the past year not far away from the share of men on average, in comparative perspective, gender gaps have narrowed down markedly over a short period of time. For instance, in Egypt, the share of women who saved any money in the past year quadrupled from 2011 to 2014 and almost caught up with the share of men. DR Congo and Mali also exhibit substantial improvements whereby gender gap in prevalence of saving almost disappeared in 2014. Helping women access to bank accounts through mobile money accounts can further boost women's savings behavior. In the absence of insurance markets, such savings are among the few viable options to deal with shocks pertaining to business and life.

The gender gaps widen however when the location and purpose[33] of savings are analyzed. Figure 44 below shows that while men are more likely to save at financial institutions, women outnumber men in savings clubs or person outside their families. Angola represents the maximum share of women saving in financial institutions with a dismal 10 per cent, while men are twice as likely to

[33] Earlier results from enterprise surveys confirmed that retained earnings are critical for daily operations of enterprises which is consistent with the positive association between savings and business performance, as found the literature. Gamberoni, Heath, and Nix (2013) provide evidence from Ghana where having saving accounts helped particularly female subsistence enterprises and improved their business performance, Dupas and Robinson (2009, 2013) found long-term effects in Western Kenya where women with savings accounts had higher probability of undertaking investments and lower probability of liquidating assets in case of negative shocks.

use financial institutions for their savings. Savings clubs are the most common instruments for savings in Cameroon and Mali, particularly for women.

Figure 44 Where do women and men save? (%)

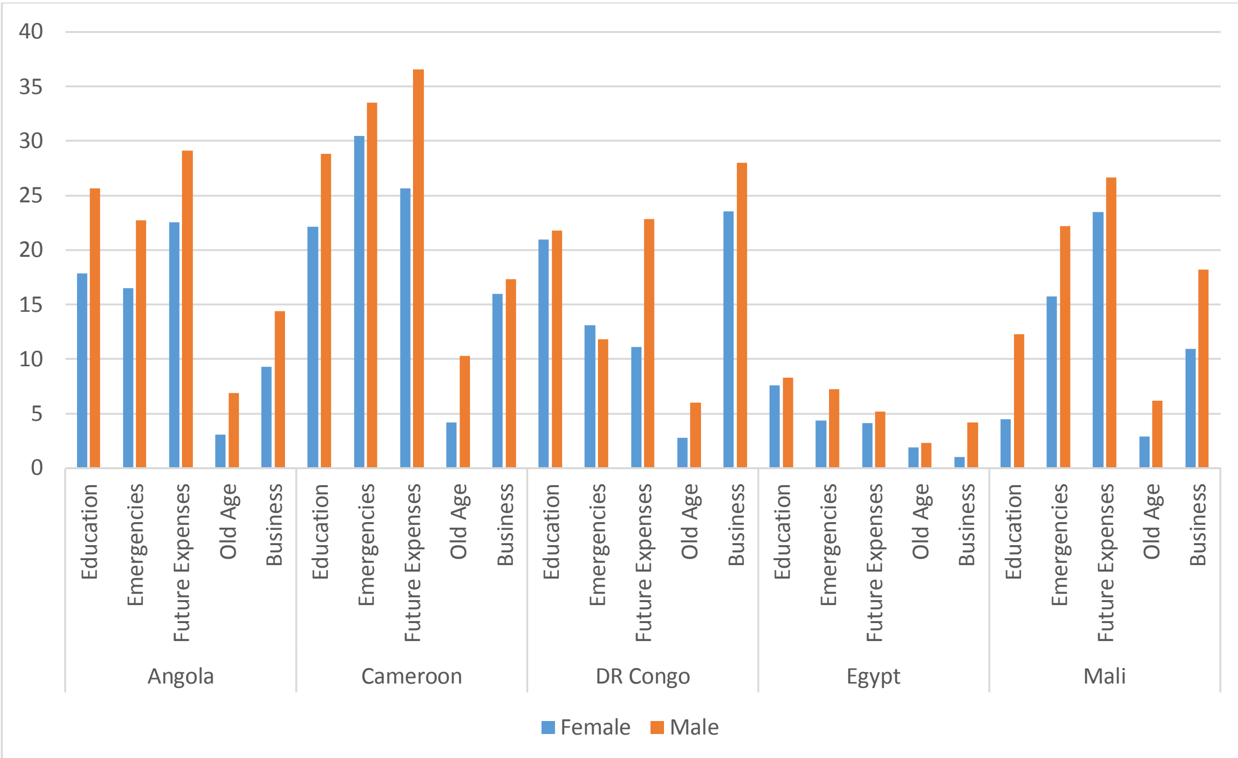


Data Source: Global Financial Inclusion Database (2014). World Bank.

Substantial differences are discovered when changes from 2011 in gender gaps are investigated. For instance, a large reversal happened in Angola where women became almost twice as likely as men to rely on savings club while men are more than twice as likely to save in formal institutions. The same trend is observed in Cameroon but the magnitude of the change is much subtler than in Angola. While DR Congo registered over 50 per cent improvement in the gender gap in savings at financial institutions, men are still more than twice as likely as women to save in financial institutions. Finally, Mali has recorded the largest decrease in gender gap in savings in financial institutions. Consequently, women are increasingly becoming vulnerable as their savings are located in relatively less secure instruments. Moving women to formal financial institutions can not only help deepen the financial system and improve its stability but also implies a more efficient economy as it would require women entering digital payment systems.

Finally, Figure 45 below profiles the function of savings by country and sex below. First, women are less likely to report any of the saving function than men in all countries, except in DR Congo for emergencies. Focusing on gender gaps on average also finds that women's responses are closest to men's in the case of emergencies followed by education and future expenses. Figure 45 also shows that women are much less likely to save for old age and to start, improve or expand a business or farm. Consequently, it is clear that the purpose of savings relates to wishes and concerns that matter in the short-term, while men seem to have relative to more breathing space to consider relatively longer term commitments. Figure 45 is also consistent with the earlier discussion on diverting available funds away from business and toward household expenditures.

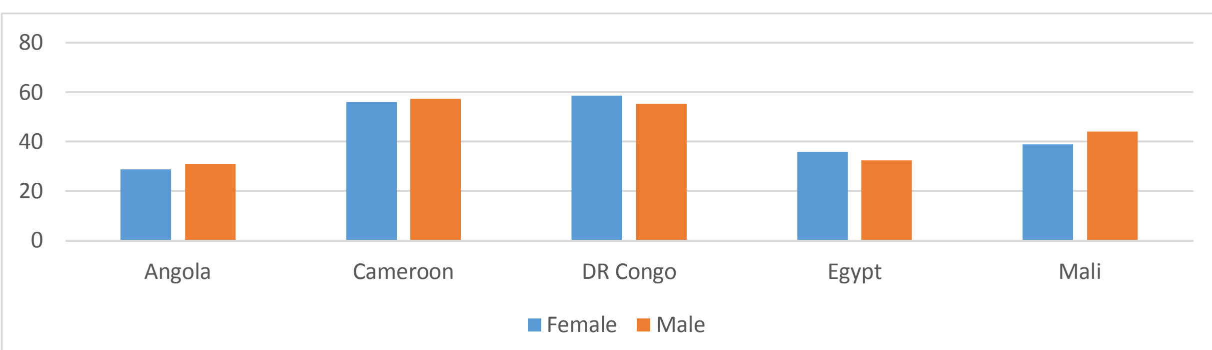
Figure 45 Why do men and women save? (%)



Data Source: Global Financial Inclusion Database (2011-2014). World Bank.

Figures 46-48 move to the demand side of the financial system and review borrowing patterns by gender. Figure 46 shows no wide gender gaps in the prevalence of borrowing with some countries exhibiting more borrowing by women and others by men with minor differences. This is indeed a positive news since at a first glance at the very aggregate level no indication of women's risk averseness emerges.

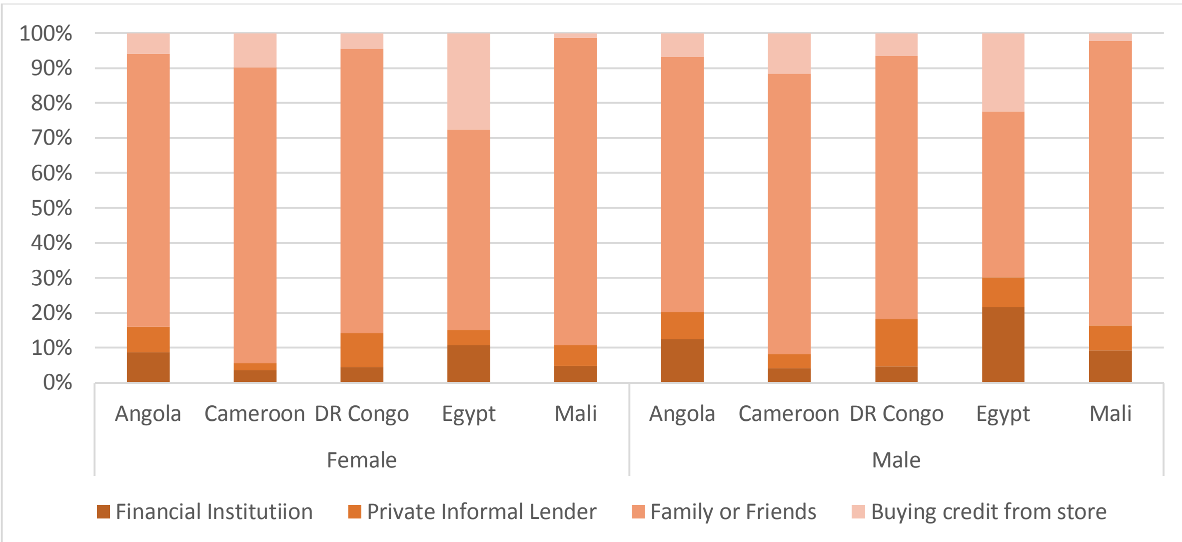
Figure 46 Borrowed any money in the past year?



Data Source: Global Financial Inclusion Database (2014). World Bank.

Figure 40 below disaggregates borrowing by its sources and gender. By far, the most prevalent source of borrowing is family or friends with minimal gender except in Egypt where female prevalence is 10 percentage points ahead of male prevalence. In Cameroon and Egypt, the second most prevalent source is buying credit from stores.

Figure 47 Borrowing by Source



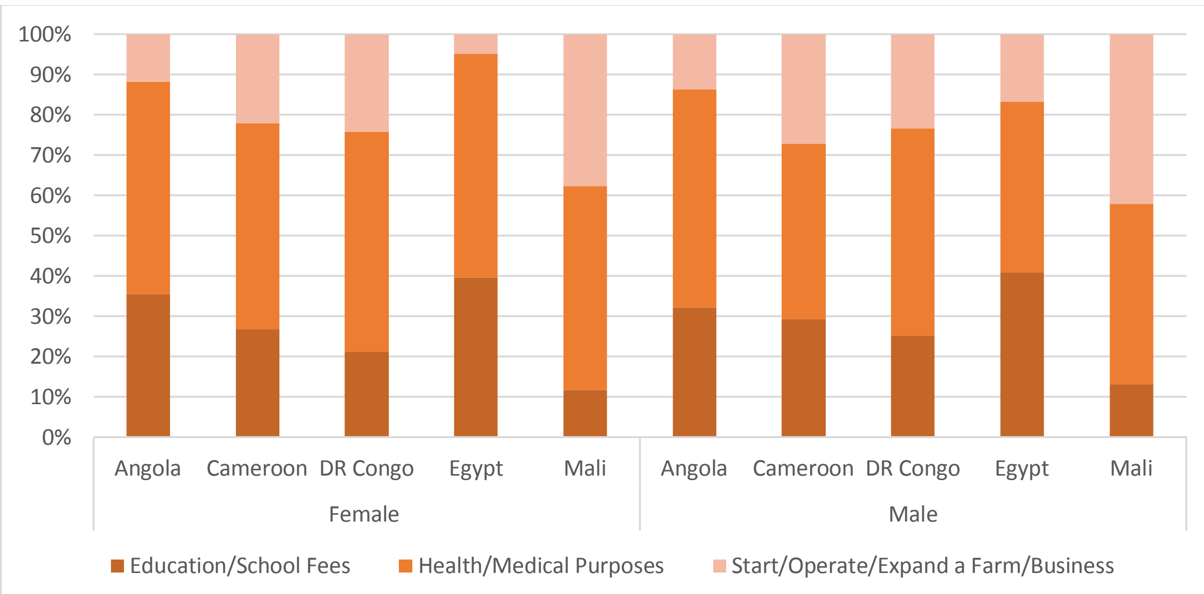
Data Source: Global Financial Inclusion Database (2014). World Bank.

As of 2014, there is no country where women are more likely to borrow from financial institutions than men. On average, largest gender gaps are observed in this category led by Mali where men are twice as likely as women to borrow from financial institutions. Another interesting finding is that largest variation is observed in borrowing in terms of buying credit from stores. While women in Egypt are 60 per cent more likely than men in this source of borrowing, gender gaps vary largely across other countries. Similar to the care of savings, however, women are more likely to borrow from relatively more volatile and insecure sources with smaller loan size than men.

In comparative perspective across time, substantial changes are observed in borrowing from financial institutions for both women and men from 2011 to 2014. For instance, while Angola and Cameroon recorded negative growth over 50 per cent in prevalence of this type of borrowing, DR Congo and Egypt experienced positive growth in the same magnitude. In Egypt, men's prevalence of borrowing from private informal lenders more than doubled while no change is observed for women. In Angola, Cameroon and DR Congo, on the other hand, substantial decreases are observed for women's access to finance through private lenders. For instance, in Cameroon women's prevalence of informal borrowing decreased by 88 per cent. Changes are much less pronounced in access to finance through family or friends. Negative growth for both men and women is observed only in Angola. Finally, buying credit from store has recorded the largest changes: while Angola and Mali has experienced negative growth in the order of 75 per cent on average for both men and women, Egypt has experienced over 200 per cent increase with women registering higher growth rates in this category.

Figure 48 below disaggregates borrowing by function and gender for each country. Across all countries for both men and women, the main reason for borrowing is health and medical purposes. While this function of borrowing is more prevalent for women in Egypt and DR Congo, the opposite holds in Angola and Mali with Cameroon exhibiting gender parity. Education and school fees come second in terms of prevalence of borrowing by function, except for women in DR Congo and men in Mali. Focusing on gender gaps, Egypt emerges as the only country with more women borrowing for education than men, while disparities against women abound in Angola, Cameroon and Mali.

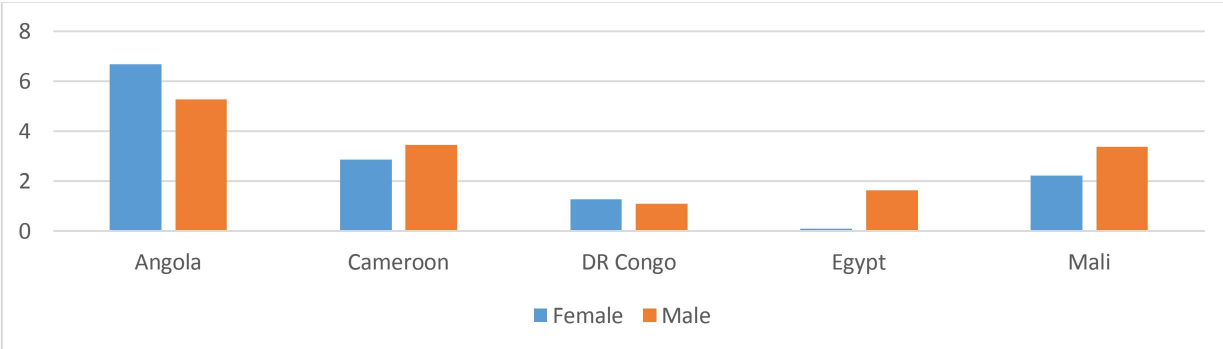
Figure 48 Borrowing by Function



Data Source: Global Financial Inclusion Database (2014). World Bank.

Finally, the most relevant function of borrowing for this study, i.e. business purposes, records very low prevalence rates both in absolute and relative terms. Angola and Egypt report less than 5 per cent for both men and women. DR Congo leads the way with more than 10 per cent prevalence rate for men and women. Gender gaps are widest in Egypt and Angola against women. This is expected for Egypt since it records the lowest share of women using accounts at financial institutions for business purposes, as shown in Figure 49 below. However, it is unexpected for Angola since more women report to have used an account at a financial institution for business purposes as shown below in Figure 49. Previously, it was found that female-owned enterprises are much larger in Angola relative to other firms and loan applications and use is more prevalent as well. Nevertheless, Figure 49 below is consistent with subregional aggregates with Southern Africa recording the least gender disparity in account use for business purposes and North Africa with the most gender disparity.

Figure 49 Account use at financial institution for business purposes (%)



Data Source: Global Financial Inclusion Database (2014). World Bank.

The descriptive overview of financial services from account use to borrowing sets the context for policy alternatives available for member States. It is clear that women are less likely to benefit from financial services in selected countries while there is no evidence that women inherently distance themselves from financial services. Women appear more vulnerable than men in Africa when it comes to saving and borrowing behavior even though they are equally willing to take such actions. A brief literature review below picks up policy experiments from Africa as well as the World to offer cost-effective policy alternatives to improve women's access to financial services in Africa.

First, access to financial services is beyond access to credit. As shown in Chapter II, women enterprise owners are equally likely as men to finance their daily operations and asset purchases through retained earnings. At the same time, however, they are more likely to be unbanked. Prina (2015) evaluates the impact of a program in Nepal that provides savings accounts to entrepreneurs and finds that the financial well-being increases, as entrepreneurs better cope with negative shocks and protect primary expenditures to education and food for their households. The effect of negative shocks on the welfare of dependents is highly problematic in Africa with severe consequences for children and elderly. For instance, Bjorkman-Nyqvist (2013) finds that negative income shocks induced by rainfall variability in Uganda negatively affected female enrollment rate in grade 7 as well as female academic performance proxied by test scores. If insurance products are not available, then at least women's ability to save at secure locations must be supported to eliminate transmission of intergenerational and gendered poverty. Since majority of entrepreneurs have problems separating business and personal accounts, savings accounts primarily for personal or household purposes along with financial literacy training should help women better use their funds for emergencies.

Second, not all financial institutions can cater to women's needs both as potential entrepreneurs, early stage entrepreneurs or established business owners. Enterprise surveys in formal as well as informal sector showed that women often run micro or small businesses in wholesale and retail trade as well as hotels and restaurants within the Services sector. It is near to impossible or extremely costly for commercial banks to reach to women entrepreneurs given the mismatch between loan size women request along with the maturity terms they need and collateral requirements they lack. Microfinance Institutions (MFIs) therefore are much more relevant in supporting female-owned enterprises. In fact, MFIs prefer women. As Strom et al. (2014) find in a global sample of 329 MFIs, 44 per cent state explicit preference for lending to women. According to the State of the Campaign Report (2015), out of 211.1 million total borrowers of global MFIs, 75 per cent are women as of December 2013. As Armendariz and Morduch (2010) and d'Espailler, Guerin and Mersland (2009) argue, this preference is largely driven by women's higher repayment which is highly sought after in the sector for financial sustainability. Women also contribute to MFIs at the leadership level. Strom et al (2014) find that firm performance indicators across MFIs in their global sample increase as more female CEOs run these institutions.

Nevertheless, the results are quite mixed in the literature of impact evaluations of various MFIs with particular focus on women's economic empowerment. Van Rooyen et al. (2012) provide a systematic review of empirical evidence on the impact of microfinance in Africa. Regarding the link between women's empowerment and microfinance, they report mixed and inconclusive results from South Africa, Uganda and Zimbabwe where it is not clear if there is a causal relationship flowing from microfinance toward women's empowerment. While there are positive results with women benefiting from MFIs on various dimensions of business performance and household welfare (Ksoll et al. (2016), there are also cases where women become indebted and are harassed as a consequence of repayment problems (Ganle et al. (2015), Haile et al. 2012). There are also cases that women do not have exclusive control over received loans and cannot benefit from the luxury of even receiving loans. Kim et al. (2009) and Ferrari and Iyengar (2010) report results from South Africa and Burundi, respectively with no effect of microfinance intervention on reported domestic violence. There is even a risk of increasing violence as found by Koenig et al. (2003). The nature of transfers matters a great deal. While husbands may not be threatened by conditional cash transfers, as they are transient positive income shocks, access to credit or grants with their transformative agenda may be perceived as more threatening as they directly aim to empower women.

What can be done to improve the effectiveness of MFI not only in improving business outcomes of female entrepreneurs but also in enhancing their economic as well as overall empowerment?

First, as Beck et al. (2011) and Hallward-Driemeier (2013) argue member States need to consider widening the outreach of public or private credit registries to capture credit history of female entrepreneurs. The higher repayment rates of women entrepreneurs are often uncaptured in the financial system. Helping women move across the ladder of business activities requires such valuable and costly information not be wasted.

Second, women in Africa suffer from access to and secure control over immovable property. Yet, gender gaps are less wide in movable property, as found AGDI index with respect to livestock in some countries. As women transition from MFIs toward commercial banks, it would be highly beneficial to women entrepreneurs if their movable assets are recognized as collateral. Interestingly however, earlier results from formal, informal and microenterprises suggest that collateral requirements are more often cited by male entrepreneurs relative to female entrepreneurs who do not put collateral issue on top three problems associated with access to credit.

Third, targeting of MFIs need to be improved. It is likely that the poorest of the poor and the most marginalized are unreached due to various reasons including geographic proximity. Yet, these groups, men or women, bear the largest growth potential since at their level of poverty, marginal returns of capital are infinitely higher than those found at higher end of the income distribution. As Longborg et al. (2014) found in Malawi, even a pro-poor microfinance intervention missed the most marginalized and benefited those relatively better off.

Fourth, the loan conditions matter. Injection of small capital is unlikely to transform productivity of enterprises as well as sectoral segregation women entrepreneurs experience. Corsi et al (2016) do not find any gender gaps in loan size in their investigation over Wekembe, one of the first MFIs in Uganda. However, being married and literate are two factors that positively affect loan size among women entrepreneurs. The global review of Buvinic and Furst-Nichols (2014) argue that the size of the micro-loans cannot move women from subsistence-level firms. Ganle et al (2015) corroborate this finding and add that timing of loan disbursement, loan maturity and supervision of how loans are managed are critical factors that led to indebtedness among Ethiopian female entrepreneurship. Field et al. (2013) evaluated the impact of a women-targeting MFI India where a grace period of two-months was introduced to help entrepreneurs have a breathing space. While the probability of start-up increased twofold, investments increased by 6 per cent as well. Their policy implication in Indian context was to subsidize MFIs to draw contracts that are more attractive for women entrepreneurs. In Africa, particularly for female entrepreneurs in rural areas, seasonality could be accounted for, since most women in rural areas attempt to diversity into non-agricultural income generating activities but still consume a portion of their time at least as secondary activity in agriculture.

Fifth and related to earlier point, the social pressures women face particularly in Africa must be well noted by the MFIs to improve the repayment rates of their clients as well as women's success in business. Blattman, Fiala and Martinez (2013) and Fiala (2014) find in Uganda that women are more likely to divert funds (conditional or unconditional) for business use due to social pressures in the form of kin tax and allocation of loans and grants to household expenditures, while male entrepreneurs do not face any such pressures. Two policy experiments for instance can help improve program design to account for such pressures, Aker et al. (2011) found that cash transfer program implemented through mobile phones in Niger yielded more positive results while Fafchamps et al. (2014) argue that in-kind transfers as opposed to cash transfers are less likely to be diverted for immediate use beyond business purposes.

Laws, Institutions and Women's Entrepreneurship

The third main area that requires policy action and commitment to boost female entrepreneurship as well as female employment in general is the legal framework which includes not only local customary/personal law in conjunction with modern statutory law but also regional and international legal instruments that member States ratify. The link between economic growth and development on one hand and legal and institutional framework on the other is well established (Acemoglu, Johnson and Robinson, 2005). At a micro-level, the relationship between legal framework and firm performance is also well established (La Porta et al. 2000, 2002). Recent evidence from Demirguc-Kunt et al. (2013) found a negative association between legal frameworks that are inconsistent with gender equality and women's rights on one hand and key indicators of financial inclusion such as account holdership as well as saving and borrowing patterns. While this effect may emanate directly from laws that limit women's ability to work and engage in income-generating activities, i.e. registering business, singing contract and opening bank accounts, they may also be related to absence of -or weak implementation of- laws harmful practices against women such as early marriage or violence against women which negatively impact women's access to economic opportunities[34].

The Women, Business and the Law (WBL) database created and maintained by the World Bank offers crucial insights. Not only does it cover all African countries with the exception of Somalia, it provides both up-to-date and historical data on laws that matter for gender equality in social, political and economic dimensions. As of 2016, out of 53 African countries with available data, only 20 grant equal rights to women and men, irrespective of their marital status, over the following 11 categories of rights that matter directly or indirectly for women's economic empowerment: the right to (i) apply for a passport,(ii) obtain national ID card, ((iii) travel outside the country, (iv) travel outside home, (v) get a job or pursue a trade or profession, (vi) sign a contract, (vii) register a business, (viii) open a bank account, (ix) choose where to live, (x) confer citizenship on her children and (xi) be "head of household". Marital status of women emerges as the critical intervening factor in raising gender inequality in Africa because over 90 per cent of the countries in Africa[35] grant equal rights to unmarried men and women, contrary to only 38 per cent of countries that grant equal rights to married men and women. This is a crucial finding particularly in light of earlier results about age and marital status of majority of female entrepreneurs.

Figure 50 below maps the gap between rights granted to married and unmarried women in terms of the percentage change needed to bring married women on par with unmarried women. For instance, in Niger, Benin, Guinea, Cameron, Sudan, Guinea-Bissau and the Republic of Congo,

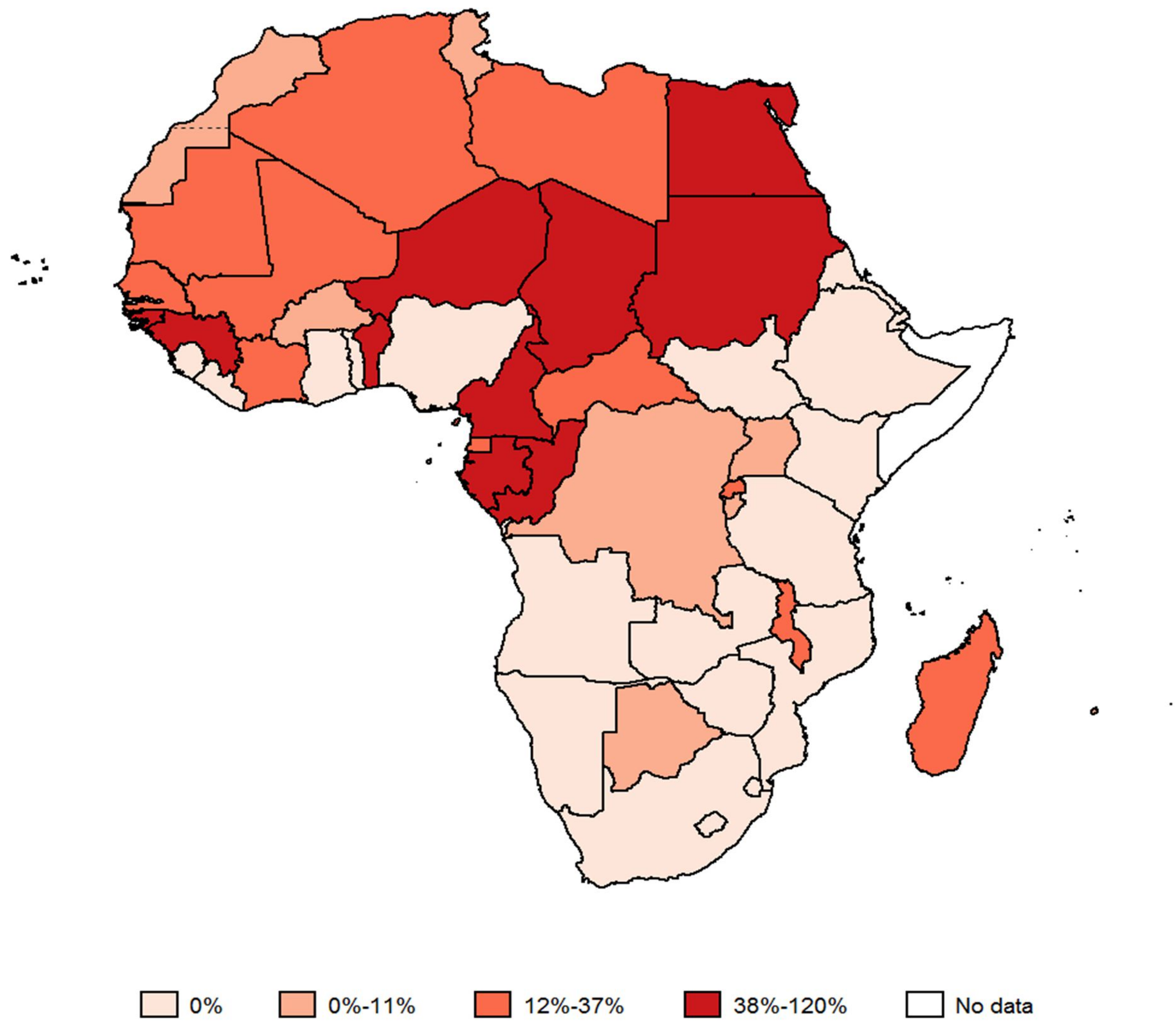
---

[34] Hallward-Driemeier and Gajigo (2011) for instance evaluate the impact of Ethiopia's Family Law of 2000 which raised legal age at marriage and provided support for women to participate in intrahousehold decision-making including labor supply outside home and administration of marital property. Authors find that women's mobility expanded following this reform providing access to work outside home from higher occupations with better pay.

[35] Libya, Mauritania, Sierra Leone, Sudan and Swaziland are the only countries in Africa, as of 2016, that does not grant all 11 categories of rights jointly to unmarried women.

married women's rights need to increase by at least 50 per cent and up to 120 per cent to become on par with unmarried women. Note that in Sudan, unmarried women have obtained less than three-quarters of the 11 categories of rights. Focusing on 5 selected countries in this Report, Angola is the only country among selected five where unmarried and married women have no gaps and have all 11 rights. The percentage change needed is 10 per cent in DR Congo, 38 per cent in Mali, 43 per cent in Egypt and 83 per cent in Cameroon. Given the age and marital status of majority of entrepreneurs, such gaps will only limit the untapped potential of female entrepreneurs and firm owners.

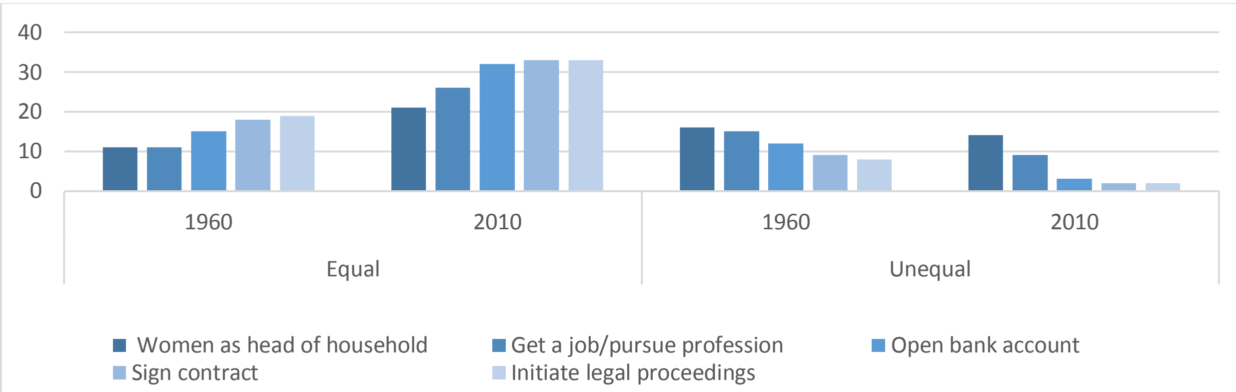
Figure 50 Marital Status and Women's Rights



Data Source: Women, Business and the Law (2016). World Bank.

The WBL also provides historical data on some of these rights. Figure 51 provides a comparison between 1960 and 2010 and shows that significant improvements have been achieved in the past 5 decades. The number of countries that granted equal rights to men and women have increased substantially. For instance, the number of countries that granted equal rights for opening bank accounts doubled from 1960 to 2010. Yet, there are still countries that did not have any law changes between 1960 and 2010. Cameroon is one such example but most recent data from 2016 suggests that Cameroon has done commendable work in improving its relative standing across African countries between 2010 and 2016.

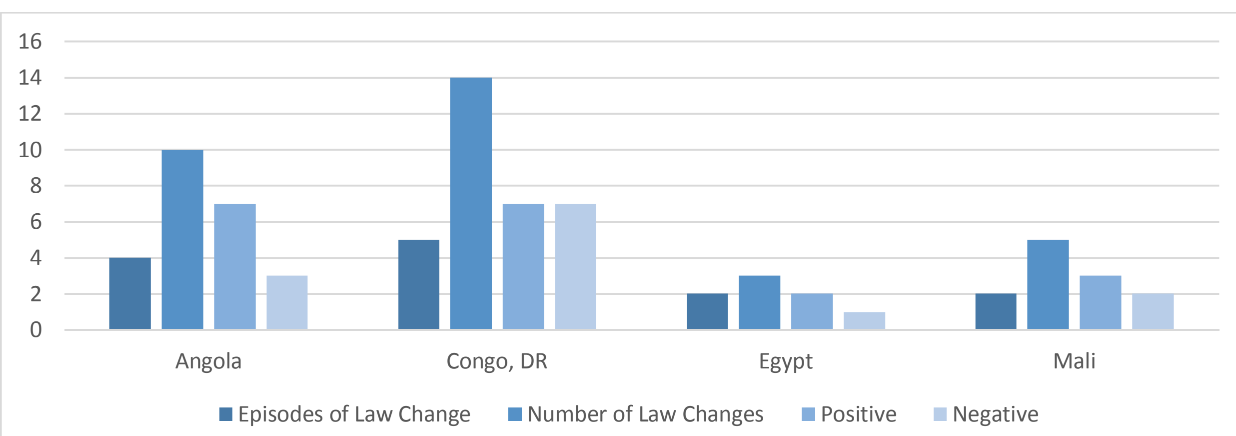
Figure 51 Women's rights in Africa over time



Data Source: Women, Business and the Law (1960-2010). World Bank.

Figure 52 below breaks down 5 decades in terms of the episodes of law change, number of law changes and their direction. First, across countries with available data, episodes of change are quite spread out without any single episode where countries have largely reformed their Constitutions. Cameron is missing in this graphs since no law change is detected between 1960 and 2010 that affected women positively or negatively. While DR Congo emerges as the country with most law changes, half of these changes were regressive in terms of gender equality. While Egypt and Mali register lower number of law changes, the share of positive changes are higher than negative changes. Finally, Angola emerges as the champion reformer across the five selected countries with 10 law changes with 70 per cent being progressive toward gender equality.

Figure 52 Dissecting changes in women's rights

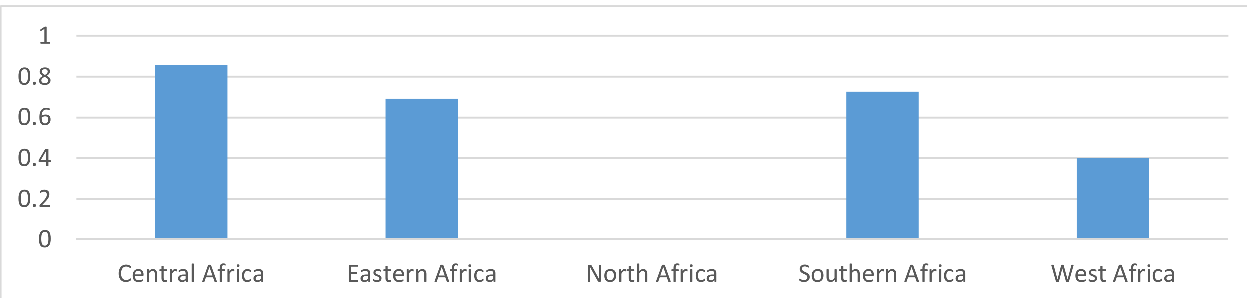


Data Source: Women, Business and the Law (1960-2010). World Bank.

Consequently, Angola and DR Congo are well positioned in terms of a legal framework that is conductive for women's economic empowerment while major improvements are needed in Mali, Egypt and Cameroon.

There are two more legal issues that particularly matter for female entrepreneurship. Figure 53 below focuses on the share of countries in each subregion where law provides valuation for nonmonetary contribution. In other words, default matrimonial property regimes partially or fully exhibit gender equality principle. Under partial community of property, couples share assets purchased from the date of marriage until the day of divorce. Under full community of property, couples share all assets including those that pre-date marriage. Consequently, a 50-50 sharing of matrimonial assets acknowledges women's nonmonetary contributions and partially compensates for time poverty.

Figure 53: Does the law provide valuation for nonmonetary contributions?



Data Source: Women, Business and the Law (2016). World Bank.

While all countries in Central Africa except Gabon legally acknowledge spouses' non-monetary contributions, none in North Africa do. West Africa is the second weakest performer with only 40 per cent of countries providing valuation for nonmonetary contributions. Women's economic empowerment is directly related to matrimonial property regimes since they directly affect women's bargaining power which is crucial for women's decision-making power in the household including labor supply and borrowing decisions and asset ownership. Not only does such regimes[36] empower women in terms of her access to economic activities but also increase women's probability of escaping domestic violence (Pande et al., 2005).

Second, women are much more time constrained in African than men which limits not only time devoted to market activities but also the nature of such activities. Tackling domestic chores as well as elderly and child care forces women to self-select into necessity based self-employment in the

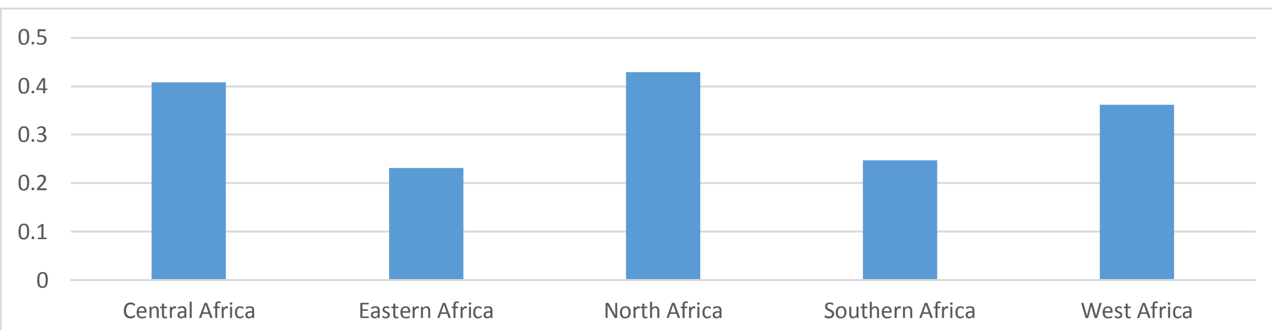
[36] Another legal instrument for women's economic empowerment as well as protection from violence is transition to unilateral divorce laws. Stevenson and Wolfers (2006) find that transition into unilateral divorce laws in United States contributed to a 30 per cent reduction in domestic violence and a 10 per cent decrease in women murdered by their intimate partners. Hassani-Nezhad and Sjögren (2014) bring similar evidence from the Middle East and North Africa region where such reforms contributed to younger women's labor force participation rates in the magnitude of on average

flexible Services sector. Figure 54 below focuses on incentives for women to work, particularly incentives that help women with childcare related time-poverty. The following indicators are used to make an average score for all countries and these scores are then aggregated to subregional level. All indicators are dummy variables equal to 1 if a positive response is given and 0 otherwise.

- Are childcare payments tax deductible?
- Are there tax deductions or credits specific to men?
- Are there tax deductions or credits specific to women?
- Does the government support or provide childcare services?
- Does the government provide free and compulsory primary education?
- Does the government provide a child allowance to parents?
- Must employers provide leave to care for sick relatives?

At the subregional level, the average score indicates that not even half of these indicators are integrated into respective legal codes. Interestingly, North Africa leads the way despite earlier finding on nonmonetary valuations. At the country level, Gabon, Libya, Morocco, Tunisia, Angola, Benin, Burkina Faso, Cabo Verde and Mali receive the full score from 4 out of 7 indicators listed above. Ethiopia, Guinea-Bissau, Swaziland and Botswana receive minimal score

Figure 54 Incentives for work in the presence of time poverty



Data Source: Women, Business and the Law (2016). The World Bank Group.

Country Reports from AGDI database indicate that early childhood education in Africa is often a luxury enjoyed exclusively by relatively richer households in urban areas. The impact of childcare services is likely to be highest in countries where female labor force participation is already low such as North Africa. Regional estimates suggest that each additional child under six years old decreases women's labor force participation probability by 6 per cent (de Jong et al., 2017).

The importance of investing in early childhood education in Africa cannot be overstated. Recent evidence from the United States suggest that early childhood education[37] is crucial for cognitive

[37] Berlinski et al. (2009) find positive empirical evidence between early childhood education and test scores as well as students' self-controlling behavior in Argentina. Heckman et a. (2016) find that investing in preschools helps improve student's cognitive and non-cognitive skills with positive impacts on earnings and schooling outcomes.

as well as non-cognitive development of children, particularly those coming from disadvantaged backgrounds (Elango, 2015). The fact that children who start earlier extend their schooling experience is crucial, particularly for African girls who are at grave disadvantage when it comes to the negative effect of early marriages and adolescent pregnancies on dropout rates from primary as well secondary education. The bottom line is that Africa's structural transformation agenda cannot be completed with such gender inequalities in educational outcomes[38]. Insights from China's structural transformation may be inspirational here. According to Lee and Malin (2013), the role of education in China's structural transformation between 1978 and 2004 is substantial, particularly on China's productivity growth. The share of workers who completed middle school almost doubled in this period and led to labor reallocation toward more productive sectors. In addition, Mu and van de Walle (2011) shows that labor reallocation through migration was positive associated with improved educational outcomes of the younger cohorts among which educated young women had the highest migration probability.

Against this background a few policy recommendations emerge:

First, the rights' gap between married and unmarried women must be resolved. The laws that matter for women accessing economic opportunities are largely absent for married women and yet majority of female as well as male entrepreneurs are married. Hence, legal reforms are needed to ensure that inconsistencies on gender equality in statutory laws and codes in national legal frameworks are settled. The laws reviewed above are directly related to women's asset ownership possibilities for access to finance as well as mobility for market outreach.

Second, women's access to legal advice and awareness of legal reforms must receive continued support. There are a number of NGOs and other organizations across African providing free legal advice some exclusively targeting women. Their outreach must expand toward rural areas where women may not be aware of the divorce laws or property regimes. Being unaware of such laws is almost equivalent to not having such laws, especially in countries where implementation and enforcement of such laws is highly problematic.

Third, implementation and enforcement problems often emanate from the inconsistencies between customary and statutory law. Unfortunately, customary and personal laws in Africa often are mentioned in negative connotations in terms of gender equality, yet they are extremely powerful instruments as they penetrate deeply all across societies. As Hallward-Driemeier and Tazeen (2012) argue, positive values on gender equality exists in local traditions across Africa and these values must be promoted to support particularly rural women's access to inheritance and therefore land[39].

[38] While gender gaps in enrollment rates in primary education may have largely disappeared in Africa, caution must be paid not to overstate this result. There are gaps in enrollment rates in primary education in rural areas and underdeveloped regions of some member States. Enrollment rates also just the starting point. Large gaps exist in primary completion rates as well as literacy rates even among youth aged 15-24, let alone adults. Hence, the war against gender gaps in education continues at every level.

[39] There is also a direct relationship between land ownership and household decision-making participation. For instance, evidence from Nepal (Mishra and Sam (2015), an economy dominated by agricultural sector, land ownership of women is positively associated with her bargaining power proxied by the extent to which women participate in

After all, just like statutory laws, customary laws and traditions are not static and subject to evolution.

decision-making at home. For instance, women who own land are up to 40 per cent more likely to have the final-say in their own healthcare decision than landless women

Conclusion

African governments are under heavy pressure to show progress in the implementation and achievement of Agenda 2030 and Agenda 2063. It is widely accepted that women's empowerment is critical for the attainment of all other developmental outcomes and that inclusive and sustainable development cannot coexist with severe gender gaps in economic and political areas.

This Report argued that boosting female entrepreneurship is the most direct policy tool for member States to achieve gender equality and achieve significant strides other developmental outcomes. The justification behind this argument is simple: majority of African women are in vulnerable self-employment and, neither markets nor governments have managed to transition women into productive, formal and well-remunerated jobs. This is not surprising given the economic growth patterns observed across member States which often left women behind.

The most realistic policy objective in this context is to help female entrepreneurs to improve their products, services and production procedures. This Report aimed to deliver on this objective by first showing where women entrepreneurs are. It showed that large variations exist across countries and type of firms, be it formal, informal or microenterprises. For instance, women entrepreneurs are less experienced that male entrepreneurs, are often found in Services sector, do operate micro and small sized enterprises. Firm performance outcomes can partly be explained by sectoral segregation, location and size of enterprises. The promising result from firm-level analysis is that in three out of five selected countries, female-owned enterprises did not perform worse than male-owned enterprises in the formal sector. This is an extremely positive result as it provides evidence on the perseverance of female entrepreneurs as they face a much diverse and binding set of constraints in business in vis-à-vis their male counterparts. In addition, the Report also found that it is in Africa that gaps in entrepreneurial attitudes are much lower than gender gaps in attitudes observed in other developing regions.

The empirical analysis based on individual-, firm- and country-level data has shown that the potential of women entrepreneurs are not yet tapped by member States. While North African countries lose substantial amount of income due to nonparticipation of women in the economy, other parts of Africa suffer from quality of women's engagement along with lack of policy measures against vulnerabilities in women's income-generating activities. Against this background, the Report has focused on three key policy areas for member States to take immediate action.

First, member States are encouraged to experiment with active labor market policies, particularly skills training and entrepreneurship promotion. Women entrepreneurs in Africa face severe credit and skill constraints. Addressing these constraints simultaneously bear the potential to transform women's entrepreneurial activities. However, there are a number of potential pitfalls that policymakers must bear in bind while designing such interventions such as social constraints women face in business, childcare support, safe transportation to training venues, potential backlash from women's relatives as well as partners and the severe time poverty women face in their daily lives.

Second, gender gaps exist in Africa in terms of access to financial products and services. While access to credit is often cited as the biggest constraint against women's operations in business, majority of female-owned enterprises do not even apply for loans and only a minority suggest that they self-censor due to the expectation of a failure. Women entrepreneurs largely operate in sectors that have low growth potential and that do not require large fixed costs. This is why most firm-owners who purchase assets, do so with retained earnings. This is not to argue that access to credit is not important but to widen the perspective on financial inclusion. For instance, women are as likely as men to save but in informal sources which increase their vulnerability in times of crisis. A holistic approach to finance is crucial to help women access a variety of financial products and services, not only to grow but also to survive especially when negative income shocks appear.

Third and despite commendable progress, there are still severe legal barriers in Africa against women's entrepreneurship. The biggest concern is about the rights gap between married and unmarried women. There are countries in Africa where the rights of married women need to increase by over 100 per cent to bring them on par with unmarried women. Consequences are large from women's mobility to women's access to and secure control over assets. This Report has found that among selected countries, women entrepreneurs running informal enterprises were mostly married and over 30 years old. It is crucial that legal reforms keep taking place to close this marital rights gap while at the same time women's awareness and capacity to act upon such rights are raised.

Africa is home to a very active female population that participate in the labor force, in one way or another, across their life-cycle. Unfortunately, they are far away from their possibilities frontier and member States must intervene to help women live up to their potential and recognize their contributions to the economy and the society. Neither Africa's structural transformation agenda nor the goal of inclusive and sustainable development can be achieved with African women facing severe and complex constraints from earlier ages onward. This Report has introduced a framework to help boost female entrepreneurship in Africa and made use of a large set of data sources to inspire evidence-based policy making. Further cooperation with member States with rigorous country-level impact evaluation of policy interventions can help fine toon the best set of context-specific policies for women's economic empowerment.

References

Acemoglu, Daron, Simon Johnson and James A. Robinson. (2005). Chapter 6: Institutions as a Fundamental Cause of Long-Run Growth. Handbook of Economic Growth, Vol (1), Part A, pp. 385-472.

Adoho, F., S. Chakravarty, D. T. Korkoyah, Jr., M. Lundberg, and A. Tasneem. 2014. "The Impact of and Adolescent Girls Employment Program: The EPAG Project in Liberia." Policy Research Working Paper 6832. World Bank, Policy Research Department, Washington, DC

Aker, Jenny C., Rachid Boumnijel, Amanda McClelland and Niall Tierney (2016). Payment Mechanisms and Antipoverty Programs: Evidence from a Mobile Money Cash Trasnfer Expreiment in Niger. Economic Development and Cultural Change, 65 (1): 1-37.

Amin, Mohammad. (2010). Gender and Informality. Enterprise Note 16. Washington D.C: World Bank.

Arestoff, Florence and Elodie Djemai (2016). Women's Empowerment Across the Life Cycle and Generations: Evidence from Sub-Saharan Africa. World Development, 87, pp. 70-87.

Armendariz B. and Jonathan Morduch. (2010). The Economics of Microfinance, second et. MIT Press, Cambridge.

Aterido, Reyes, Thorsten Beck and Leonardo Iacovone (2011) . Gender and finance in Sub-Saharan Africa: Are women disadvantaged? Policy Research Working Papers February (2011), Washington D.C.: World Bank.

Bandiera, O., N. Buehren, R. Burgess, M. Goldstein, S. Gulesci, I. Rasul, and M. Sulaiman. 2014. "Women's Empowerment in Action: Evidence from a Randomized Control Trial in Africa." International Growth Center Working Paper. London, England.

Banerjee, A. V., & Duflo, E. (2011). Poor economics: A radical rethinking of the way to fight global poverty. New York: Public Affairs.

Beck, Thorsten, Samuel M. Maimbo, Issa Faye and Thouraya Triki (2011). Financing Africa: Through the Crisis and Beyond, Washington D.C: World Bank.

Bekele, Eshetu and Worku, Zeleke (2008). Women Entrepreneurship in Micro, Small and Medium Enterprises: The Case of Ethiopia. *Journal of International Women's Studies*, 10(2), 3-19. Available at: http://vc.bridgew.edu/jiws/vol10/iss2/2

Berge, Lars I. O., Kjetil Bjorvatn, Bertil Tungodden (2014). Human and Financial Capital for Microenterprise Development: Evidence from a Field and Lab Experiment. Management Science. Permalink: https://doi.org/10.1287/mnsc.2014.1933.

Berlinski, Samuel, Sebastian Galiani and Paul Gertler. (2009). The effect of pre-primary education on primary school performance. Journal of Public Economics., 93 (1-2): 219-234.

Björkman-Nyqvist, Martina (2013). Income shocks and gender gaps in education: Evidence from Uganda, Journal of Development Economics, 105, pp. 237–253.

Blattman, Christopher, Jeannie Annan, Eric Green, Julian Jamison. 2013. "Building Women's Economic and Social Empowerment Through Enterprise. An Experimental Assessment of the Women's Income Generating Support (WINGS) Programme in Uganda". IPA - Innovations for Poverty Action.

Blattman, C., N. Fiala, and S. Martinez. (2014). "Generating Skilled Self-Employment in Developing Countries: Experimental Evidence from Uganda." The Quarterly Journal of Economics, 129 (2) :697-752.

Bruhn, Miriam and Bilal Zia (2011). The Impact of Business and Financial Literacy Training for Young Enterpreneurs in Bosnia-Herzogovina. Fiannce & PSD IMpactl No:13, Washington, D.C World Bank.

Bulte, Erwin, Robert Lensink and Nhung Vu. (2016). Do Gender and Business Trainings Affect Business Outcomes? Experimental Eviudence from Vietnam. Mangaement Science. Permalink https://doi.org/10.1287/mnsc.2016.2472

Buvinic, Mayra and Rebecca Furst-Nichols (2014). Promoting Women's Economic Empowerment: What Works? Policy Research Working Paper 7087, Washington D.C: World Bank.

Campos, F., M. Goldstein, L. McGorman, A. M. Munoz Boudet, and O. Pimhidzai. 2013. "Breaking the Metal Ceiling: Female Entrepreneurs Who Succeed in Male-Dominated Sectors in Uganda." A Roadmap for Promoting Women's Economic Empowerment. Available at: www.womeneconroadmap.org. Accessed November 2013.

Cho, Yoon Y., Davie Kalomba, Ahmed Mushfiq Mobarak, and Victor Orozco. 2013. Gender Differences in the Effects of Vocational Training: Constraints on Women and Drop-Out Behavior. Washington D.C: World Bank.

Corsi, Marcella and Marina De Angelis (2016). Gender Discrimination in Microfinance? Some Evidence from Uganda, The Journal of Development Studies, DOI: 10.1080/00220388.2016.1205733

Chinhui. Juhn, Gergely Ujhelyi and Carolina Villegas-Sanchez (2014). Men, women and machines: How trade impacts gender inequality. Journal of Development Economics (106), 179-193.

D'Espallier, Bert, Isabelle Guerin and Roy Mersland (2009). Women and Repayment in Microfiance. Mimeo.

De Jong, Eelke, and Jeroen Smits and Abiba Longwe (2017). Estimating the Causal Effect of Fertility on Women's Employment in Africa Using Twins. World Development, 90, pp. 360-368.

de Mel, S., D. McKenzie, and C. Woodruff . 2009. "Are Women More Credit Constrained? Experimental Evidence on Gender and Microenterprise Returns." American Economic Journal: Applied Economics 1 (3) : 1–32.

de Mel, S., D. McKenzie, and C. Woodruff . 2014. "Business Training and Female Enterprise Start-Up, Growth, and Dynamics: Experimental Evidence from Sri Lanka." Journal of Development Economics 106 : 199–210

Demirguc-Kunt, Asli, Leora Klapper and Dorothe Singer (2013) Financial Inclusion and Legal Discrimination Against Women: Evidence from Developing Countries. Policy Research Working Paper 6416. World Bank: Washington, D.C

Dupas, P., and J. Robinson. 2009. "Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya." NBER Working Papers 14693. National Bureau of Economic Research, Cambridge, MA. ——. 2013. "Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya." American Economic Journal: Applied Economics 5 (1) : 163–92.

Elango, Sneha, Jorge Luis Garcia, James J. Heckman and Andres Hojman. (2015). Early Childhood Education. NBER Working Paper No. 21766, Massachussets: National Buerau of Economic Research.

Ephraim W Chirwa (2008) Effects of gender on the performance of micro and small enterprises in Malawi, Development Southern Africa, 25:3, 347-362.

Fafchamps, M., D. McKenzie, S. Quinn, and C. Woodruff. 2014. "Microenterprise Growth and the Flypaper Effect: Evidence from a Randomized Experiment in Ghana." Journal of Development Economics 106 : 211–26.

Fajnzylber, Pablo, and William F. Maloney, and Gabriel V. Montes-Rojas, (2011). Does formality improve micro-firm performance? Evidence from the Brazilian SIMPLES program, Journal of Development Economics, 94, pp. 262–276.

Ferrari, G. and R. Iyengar. Discussion sessions coupled with microfinancing may enhance the roles of women in household decision-making in burundi. CEP Discussion Papers, 2010.

Field, Erica, Seema Jayachandran, and Rohini Pande. 2010. "Do Traditional Institutions Constrain Female Entrepreneurship? A Field Experiment on Business Training in India." *American Economic Review*, 100(2): 125-29.

Field, Erica, Rohini Pande, John Papp and Natalia Rigol (2013). Does the Classic Micrfinance Model Discourage Entrepreneurship Among the Poor? Experimental Evidence from India American Economic Review 103 (6): 2196-2226.

Fiala, N. 2014. “Stimulating Microenterprise Growth: Results from a Loans, Grants and Training Experiment in Uganda.” Working Paper. German Institute for Economic Research, Berlin, Germany.

Ganle, John. K., Kwadwo Afiriye and Alexander Y. Segbefia. (2015). Microcredit: Empowerement and Disempowerment of Rural Women in Ghana. World Development, 66, pp. 335-345.

Gamberoni, E., R. Heath, and E Nix. 2013. “Subsistence, Transformational and Something in Between.” A Roadmap for Promoting Women’s Economic Empowerment. Available at: www.womeneconroadmap.org. Accessed November 2013

Guma, Prince K. (2015). Business in the urban informal economy: barriers to women’s entrepreneurship in Uganda, Journal of African Business, 16:3, 305-321

Haile, H.B., Bock, B. and Folmer. (2012). H. Microfinance and female empowerment: Do institutions matter? Women’s Studies International Forum, 35, pp. 256-265.

Hallward-Driemeier, Mary. (2013). Enterprising Women; Expanding Economic Opportunities in Africa. Africa Development Forum series. Washington, DC: World Bank

Hallward-Driemeier, M., and A. Rasteletti. 2010. “Women’s and Men’s Entrepreneurship in Africa.” Working paper, World Bank, Washington, DC.

Hallward-Driemeier, Mary and Tazeen Hasan (2012). Empowering Women: Legal Rights and Economic Opportunities in Africa. Africa Development Forum series. Washington, DC: World Bank.

Hassani-Nezhad, Lena and Anna Sjögren (2014) Unilateral Divorce for Women and Labor Supply in the Middle East and North Africa: The Effect of Khul Reform, Feminist Economics, 20:4, 113-137.

Heckman, J., and T. Kautz. 2012. “Hard Evidence on Soft Skills.” Labour Economics 19 (4) : 451–64.

Heckman, James J. and Lakhsmi K. Raut (2016). Intergenerational long-term effects of preschool-structural estimates from a discrete dynamic progmamming model. Jorunal of Econometrics (191): 164-175.

Hicks, Joan Hamory, Michael Kremer, Isaac Mbiti, Edward Miguel. 2013. "Vocational Education in Kenya: Evidence from A Randomized Evaluation Among Youth."

Jakiela, P., and O. Ozier. 2012. "Does Africa Need a Rotten Kin Theorem? Experimental Evidence from Village Economies." Policy Research Working Paper 6085. World Bank, Policy Research Department, Washington, DC.

Johansson de Silva, Sara, Pierella Paci, and Josefina Posadas. 2014. Lessons Learned and Not Yet Learned from a Multicountry Initiative on Women's Economic Empowerment. World Bank Study. Washington, DC: World Bank.

Karlan, Dean and Martin Valdivia (2011). Teaching Enterpreneurship: Impact of Business Training on Microfinance Clients and Institutions. The Review of Economics and Statistics, 93 (2): 510-527.

Kim, J., G. Ferrari, T. Abramsky, C. Watts, J. Hargreaves, L. Morison, G. Phetla, J. Porter, and P. Pronyk. Assessing the incremental effects of combining economic and health interventions: the image study in south africa. Bulletin of the World Health Organization, 87(11):824–832, 2009.

Khushbu Mishra and Abdoul G. Sam (2015). Does Women's Land Ownership Promote Their Empowerment? Empirical Evidence from Nepal. World Development, 78, pp./ 360-371.

Kluve, Jochen, Susana Puerto, David Robalino, Jose Manuel Romero, Friederike Rother, Jonathan Stoterau, Felix Weidenkaff and Mark Witte (2016). Do Youth Employment Programs Improve Labor Market Outcomes? A Systematic Review. IZA Discussion Paper 10263, Bonn: The Institute for the Study of Labor (IZA).

Koenig M.A., S. Ahmed, M.B. Hossain, and A.B.M.K.A. Mozumder. Womens status and domestic violence in rural bangladesh: individual-and community-level effects. Demography, 40(2):269–288, 2003.

Kremer, M., Lee, J.N. and Robinson, J.M. 2010. The return to capital for small retailers in Kenya: evidence from inventories. Mimeo, Havard University.

Ksoll C., Lilleør H., Lønborg J. & Rasmussen O. (2026). "Impact of Village Savings and Loan Associations: Evidence from a cluster randomized trial" Journal of Development Economics # 120 Pp. 70–85

Kulb, Carolyn, Monique Hennink, Ndunge Kiiti and Jane Mutinda. (2016). How does microcredit lead to empowerment? A Case Study of the Vinya wa Aka Group in Kenya. Journal of International Development, 25 (5): 715-732.

Kushnir, Khrystyna and Mohammad Amin (2013). Gender Based Differences in Managerial Experience: The Case of Informal Firsmt in Rwanda. Economics Bulletin, 33 (4), pp. 3033-3049.

La Porta, R., Lopez-De-Silanes, F., Shleifer, A and Vishny, R. (2000), Investor Protection and Corporate Governance", Journal of Financial Economics, 58:3-27.

La Porta, R., Lopez-De-Silanes, F., Shleifer, A and Vishny, R. (2002), Investor Protection and Corporate Valuation", Journal of Finance, 62:1147-1170..

Lee, Soohyung and Benjamin A. Malin (2013). Education's role in China's structural transformation. Journal of Development Economics, 101, pp. 148-166.

Lonborg, Jonas H. and Ode D. Rasmussen (2014). Can Microfinance Reach the Poorest: Evidence from a Community-Managed Microfinance Intervention, World Development, 63, pp. 460-472.

Maggioni, Daniela, Alessia Lo Turco and Mauro Gallegati (2016). Does product complexity matter for firms' output volatility? Journal of Development Economics, 121, pp. 94-109.

Mu, Ren and van de Walle, Dominique (2011). Left behind to farm? Women's labor re-allocation in rural China. Labor Economics, 18 (1), pp, S83-S97.

Mulema, A., Cathy Rozel Farnworth & Kathleen Earl Colverson (2016): Gender-based constraints and opportunities to women's participation in the small ruminant value chain in Ethiopia: A community capitals analysis, Community Development,

Nguimkeu, Pierre (2014). A structural econometric analysis of the informal sector heterogeneity. Journal of Development Economics 107, pp. 175-191.

Nix, Emily, Elisa Gamberoni and Rachel Heath (2016). Bridging the Gender Gap: Identifying Wahat is Holding Self-employed women back in Ghana, Rwanda, Tanzania and the Republic of Congo.World Bank Economic Review, 30 (3): 501-521.

Pande, P. and D. Agarwal (2005). Marital Violence, Human Development and Women's Property Status in India. World Development Report, 33 (5), pp. 823-850.

Prina, S. (2015). Banking the poor via savings accounts: Evidence from a field experiment. Journal of Development Economics, 115, pp. 16-31.

Roland Asare, Mavis Akuffobea, Wilhelmina Quaye & Kwasi Atta-Antwi (2015) Characteristics of micro, small and medium enterprises in Ghana: gender and implications for economic growth, African Journal of Science, Technology, Innovation and Development, 7:1, pp. 26-35.

Stevenson, Betsey and Justin Wolfers. (2006). Bargaining in the Shadow of the Law: Divorce Laws and Family Distress. The Quarterly Journal of Economics, 121 (1): 267-288.

Strom, Reidar O., Bert D'Espallier and Roy Mersland (2014). Female leadership, performance and governance in microfinance institutions. Journal of Banking and Finance, 42, pp. 60-75.

Udry, Christopher and Santosh Anagol, (2006). The return to capital in Ghana. American Economic Review, 96 (2), 388–393.

Valdiva, Martin (2015). Business training plus for female entrepreneurship? Short and medium-term experimental evidence from Peru. Journal of Development Economics, 113, pp. 33-51.

Van Rooyen, C., R. Stewart, T De Wet (2012). The Impact of Microfinance in Sub-Saharan Africa: A Systematic Review of the Evidence. World Development, 40 (11), pp. 2249-2262.

Warnecke, Tonia. (2016) Informal sector entrepreneurship for women in China and India: building networks, gaining recognition, and obtaining support, Journal of Small Business & Entrepreneurship, 28:6, 479-491.

Appendices

Table 13 List of Data Sources

Organization	Database	Explanation
UNECA	African Gender and Development Index – AGDI Database	This database offers a number of unique and original variables in GSI that most international databases do not collect data on. In addition, the AWPS offers insights on how governments self-evaluate their own performance.
ILO	Key Indicators of the Labor Market – KILM Database	Focusing on Africa and following the subregional classification of UNECA, key indicators of labor market such as labor force participation, employment by status, sector, occupation as well as unemployment will be obtained for all years available and if possible by youth and adult population in addition to male-female population.
World Bank	Women, Business and the Law – WBL Database	There are two data sets to be employed. First, 37 African countries are tracked over the 1960-2010 with respect to 17 indicators proxying laws and regulations across all legal codes available and that matters for gender equality and women's empowerment. Second, legal data are available over 142 indicators for up to 52 countries across the continent for 2016. This cross-sectional data goes back to 2010 with lesser countries and indicators.
OECD	Social Institutions and Gender Index Database	Country Profiles for 48 African countries are available based on data as recent as 2014. Since this database primarily focuses on informal institutions, it is a great complement to WBL database in exposing the implementation and enforcement weaknesses observed across the continent.
World Economic Forum	The Global Gender Gap Report	There are a few variables that this report provides for a few number of African countries that are quite crucial for empowerment of the newer generations. For instance, occupation segregation we observe today is mostly a reflection of gender gaps in STEM graduates.

World Bank	The Global Financial Inclusion Database	Data are collected from 48 countries over a set of 64 variables that matter for financial inclusion such as account holding, account usage purpose, saving/borrowing by source and purpose. Aggregate country level data is based on individual level data collected from each one of the 48 countries with some having more than one year of data available.
GEM Consortium	The Global Entrepreneurship Monitor	Data are available from 18 countries across Africa at least for one year and at most for 15 years at the individual level covering on average 2,000 men and women in each country. Data on attitudes toward entrepreneurship, experiences of nascent vs. incumbent entrepreneurs and their expectations from entrepreneurial activity are collected
World Bank	Enterprise Surveys, Informal Enterprise Surveys and Micro Enterprise Surveys	Data are available for majority of African countries at firm-level providing insights on firm characteristics, performance and constraint perceptions at firm-level.
DHS	Micro DHS surveys	Micro data is obtained on all 5 countries regarding women's decision-making role in the household from DHS.