

## Gender and Informality

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**F**rom a sample of informal firms in Burkina Faso, Cameroon, Cape Verde, Côte d'Ivoire, Madagascar and Mauritius, this note compares male- and female-owned businesses. We test a number of hypotheses discussed in the literature and find the following results. First, the female-owned business under-performance hypothesis is confirmed, but only for firm-size. For firm efficiency, measured by the average productivity of labor, we find little difference across male- and female-owned businesses. Second, as documented in the literature, there is a greater proclivity among female relative to male entrepreneurs to work from home than outside the home. However, working from home does not appear to be disadvantageous to female entrepreneurs; at least, no more than for male entrepreneurs. In fact, working from home protects female-owned businesses from crime more so than for male-owned businesses. Lastly, female entrepreneurs are less likely to have a bank account and use external financing sources than male-owned businesses. Reasons for not seeking loans appear to vary by the gender of the owner and are discussed.

There is substantial evidence showing that male and female workers have differing experiences in the labor market. There is also a small but growing body of work showing systematic differences in how male- vs. female-owned and run businesses are organized and how they perform. However, most of this literature is focused on the formal or the registered sector. Furthermore, only a few studies in this area focus on developing or low-income countries. For example, focusing on the firm-size and gender (of the owner) relationship, Brush et al. (2006) find that in the United States, the average revenue of female-owned firms equaled US\$151,130, which is about 26 percent of the average revenue for male-owned businesses. Apart from firm-size, studies also show that female-owned businesses perform worse than male-owned businesses in terms of efficiency and growth. For example, Robb and Wolken (2002) report that in a sample of white-owned small businesses in the United States, female-owned businesses generated only 78 percent of the profits generated by male-owned businesses. Bosma et al. (2004) also find similar results for Dutch businesses. Another popular theme in the literature concerns family responsibility and how it affects women vs. men in their

choice of occupation and working from home vs. outside the home. For example, using the 1980 U.S. Census of Population data, Carr (1996) finds that having children, particularly young children, has a strong positive differential impact on women's tendencies to be self-employed. The study concludes that more than men, women pursue self-employment for the flexible working hours in order to accommodate family-related obligations. Also, poorer access to finance, in part due to discrimination, is reported in a number of studies for female-owned compared with male-owned businesses.

This note looks at some of the themes mentioned above for informal (unregistered) firms in six developing African countries including Burkina Faso, Cameroon, Cape Verde, Côte d'Ivoire, Madagascar and Mauritius. The data used consist of a random sample of informal firms collected by the World Bank's Enterprise Surveys in 2008-09.<sup>1</sup> As is common with surveys of informal firms, our survey is also not representative of the informal sectors in the mentioned countries. Hence, the results below should be treated as pertaining to the surveyed firms rather the informal sector per se.

The survey sample consists of 759 firms. The surveyed firms include a mix of manufacturing and service firms and are roughly equally distributed across the six countries. Throughout this note, we define a firm as female-owned if the owner with the largest share of the firm is female and male-owned otherwise. In our sample, about 39 percent of the firms are female-owned. Without much loss of generality, we use the terms female-owned interchangeably with female-run or female-managed since the individual owning the single largest share of the firm is also the main decision maker or the manager in more than 94 percent of the firms.

her family members, if applicable, in a normal month) varies by the gender of the owner. Except in Côte d'Ivoire, female-owned businesses are smaller than male-owned businesses in all the other sub-groups shown. A roughly similar picture emerges if we look at monthly sales instead of employment, although there are a few country-specific exceptions in this case. These results are discussed in detail in Amin (2010a). In contrast, looking at firm efficiency as measured by the average productivity of labor (sales to employment ratio in a regular month expressed as logarithmic values), we find only weak evidence that female-owned businesses perform worse than

**Although smaller in size, female-owned businesses are as efficient in terms of labor productivity as male-owned businesses.**

**Female-owned businesses are smaller in size, but they are as efficient as male-owned businesses**

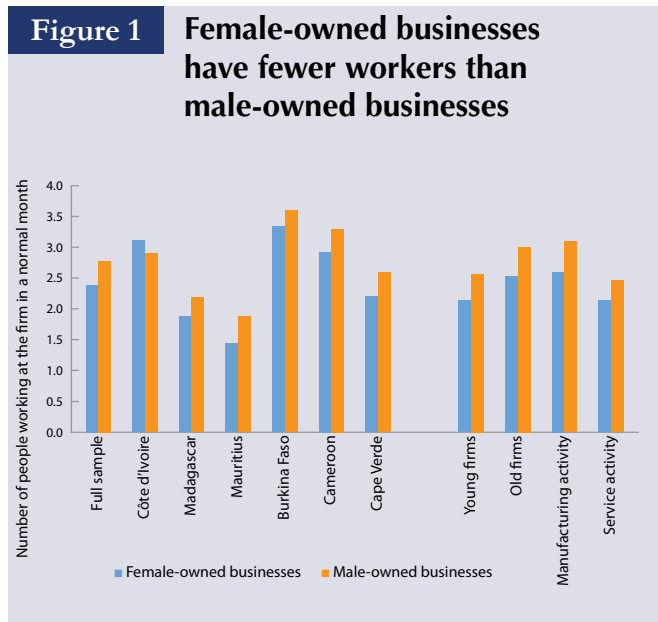
The female under-performance hypothesis has been the focus of a number of studies (mentioned above). This hypothesis posits that female-owned businesses perform worse than male-owned businesses in terms of size, efficiency and growth.

We find mixed evidence for the stated hypothesis. Figure 1 shows how firm-size measured by the total number of people working at the firm (including the owner and his/

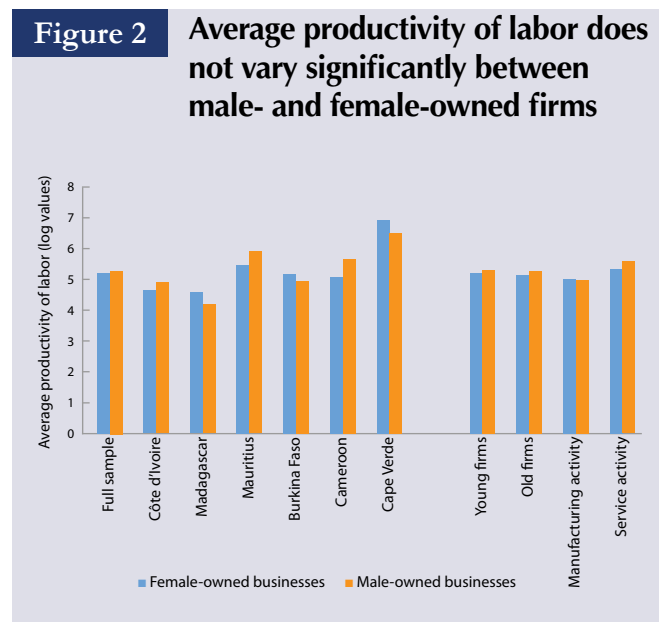
male-owned businesses (figure 2).

**Female entrepreneurs are more likely to operate from inside than outside the household premises**

As mentioned above, in most countries around the globe, women are considered the primary caregivers in the family. The need to balance work and family life can force women to work from home as opposed to from outside the household premises. Social and cultural factors may also contribute to gender based differences in business location. For example, in traditional societies, where men are perceived as primary



Source: Enterprise Surveys. Young firms are defined as those at or below the median age (6 years); the rest are old firms. A firm is engaged in a manufacturing activity if it produces its main product itself and in a service activity otherwise.



Source: Enterprise Surveys. Average productivity of labor is defined as total sales of a firm in a regular month divided by the total number of workers at the firm in a regular month (expressed as logarithmic values).

breadwinners of the family, a husband may feel threatened or embarrassed if his wife also works in the market. Home-based work can be performed privately, and it may be less valued than market-based work, reducing some of the embarrassment and threat experienced by the husband (Akerlof and Kranton 2000).

Do female entrepreneurs in our sample have a greater proclivity than male entrepreneurs to run businesses from home compared to outside the household premises? Does working from home detract from doing business, lowering firm efficiency and the number of hours a business normally operates?

Figure 3 confirms that the percentage of female entrepreneurs working from home is much higher than the percentage of male entrepreneurs in the sample. The only exception is Côte d'Ivoire, and to some extent, Madagascar, where the difference is small. For more details, see Amin (2010b).

For possible detrimental effects to doing business from working inside the home vs. outside the home, we looked at a number of factors such as average productivity of labor, number of hours a business normally operates, access to finance, and crime. However, we found no evidence that working from home implies that doing business is only

tangential to other (household) duties or disadvantageous to doing business, and no more or less so for female- than male-owned businesses. For example, female-owned businesses located inside household premises operated for 54.2 hours in a week on average. This is roughly similar to 53.3 hours of operation for a female-owned business located outside household premises. Similarly, the corresponding figures for male-owned businesses equal 55.6 and 60.8 hours, respectively. Roughly similar results hold for labor productivity (see Amin 2010b).

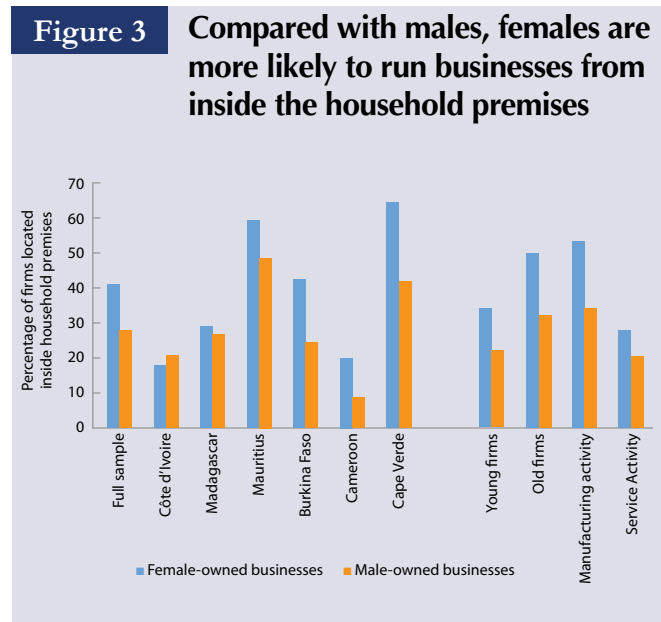
We mentioned that the preference for home-based work among women is largely explained by the need to balance

family life and work and sociocultural factors. This raises an interesting point: is there an economic rationale for the location choice of businesses and does this rationale vary systematically by the gender of the owner of the business? One plausible rationale could be that working from home protects women from incidents of crime more so than men. Our data do not reject this rationale (figure 4). Note that the findings shown in figure 4 are not due to country, sector and a host of firm-specific differences between firms.

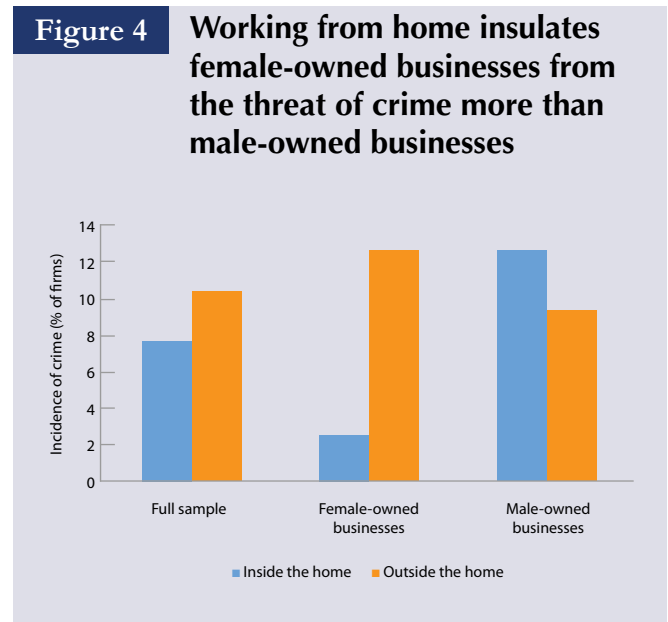
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**The percentage of firms that use a bank account for business purposes is much lower among female- than male-owned businesses (32 percent vs. 43 percent).**

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Source: Enterprise Surveys.



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The incidence of crime equals the percentage of firms that experienced one or more incidents of crime during the survey year. Crime incidents include losses due to arson, theft, robbery or vandalism.

## Female-owned businesses are less likely to use external sources of finance and have bank accounts

Consistent with the broader findings in the literature, we find systematic differences in the use of banks and external financing between male- and female-owned businesses. Compared with male-owned businesses, female-owned businesses are much less likely to rely on external sources to finance the day-to-day operations of the business (25 percent vs. 34 percent).<sup>2</sup> Similarly, the percentage of firms that use a bank account for business purposes is much lower among female- than male-owned businesses (32 percent vs. 43 percent). While the proportion of firms with a bank loan does not vary much by the gender of the owner, the reasons cited for not applying for a loan in the year prior to the survey show substantial differences across male- and female-owned businesses. About 44 percent of female-owned businesses and only 32 percent of male-owned businesses reported “no need for a loan” as the main reason for not having a bank loan. For the sample of the remaining firms, about 27 percent of female-owned firms vs. 41 percent of male-owned firms reported the complex application procedures as the main reason for not applying for a loan. In contrast, high interest rates or lack of required guarantees was the main reason 44 percent of female-owned businesses reported not having a bank loan vs. 33 percent of male-owned businesses.

Existing studies highlight a number of broad themes in the context of male- vs. female-owned and managed businesses. However, most of these studies are restricted to the formal (registered) sector. This note sheds light on some of the issues concerning informal (unregistered) sector firms in six developing African countries. Our results confirm some of the findings in the broader literature, but reject others. The under-performance hypothesis for female-owned as compared with male-owned businesses is restricted to firm-size, and does not hold for labor

productivity. Consistent with the literature, we find that female entrepreneurs are more likely to operate from inside the home than outside the home when compared with male entrepreneurs. However, home-based work does not appear to be disadvantageous to female-owned businesses. Lastly, we confirm the findings of earlier studies that, compared with male owners, female owners are less likely to have a bank account and less likely to use external sources of financing. Some of the important reasons for not seeking external credit are also found to be gender-specific.

### Notes

1. The raw data and fieldwork implementation reports (containing the sampling methodology) are available at [www.enterprisesurveys.org](http://www.enterprisesurveys.org).
2. External sources of finance include credit from suppliers or advances from customers, moneylenders, microfinance institutions and banks.

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