Gender and Informality (A short note)

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For a sample of informal firms in Burkina Faso, Cameroons, Cape Verde, Cote d’Ivoire, Madagascar and Mauritius, this note compares male and female owned businesses. The results provide mixed evidence on a number of hypotheses discussed in the literature for firms in the formal sector. First, the female 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, consistent with the view that women may face glass-ceiling in getting managerial positions, we find that women managers in our sample have less experience than male managers. However, this difference holds only within the sample of the relatively young firms. We provide some explanation for this heterogeneity across young and old firms. Third, as documented in the literature, there is greater proclivity among women relative to male entrepreneurs to work from home than outside. However, working from home does not appear to be disadvantageous to women entrepreneurs; at least, no more than for male entrepreneurs. In fact, working from home protects women owned businesses from crime and more so than male owned businesses. Last, women entrepreneurs are found less likely to have a bank account and use external sources of finance than male owned businesses. Reasons for not seeking a loan also appear to vary by the gender of the owner and are discussed.

There is now 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. Further, only a few studies in this area focus on the developing or the poorer countries. For example, focusing on the firm-size and gender (of the owner) relationship, Brush et al. (2006) find that in the U.S., average revenue of female owned firms equaled USD 151,130, about 0.26 times the same 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 U.S., women owned businesses generated only 78 percent of the profits generated by male owned businesses. Bosma et al. (2004) also find similar results for the case of 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. For example, using the 1980 U.S. Census of Population data, Carr (1996) finds that having children, particularly young children, has a differentially strong positive impact on women’s tendency to be self-employed. The study concludes that that more than men, women pursue self-employment for flexibility of 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 compared with male owned businesses.

This note looks at some of the themes mentioned above for unregistered or informal firms in six developing countries of Africa including Burkina Faso, Cameroons, Cape Verde, Cote 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 2008-09.1 As is common with the 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 than the informal sector per se.

Over 700 firms were surveyed. 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 largest owner of the firm is a 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” firm since the largest owner of the firm is also the main decision maker or the manager in over 94 percent of the firms.
Female owned businesses are smaller in size but there is little evidence that they less efficient than 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.

**Figure 1: Female owned businesses have fewer workers than male owned businesses**

![Graph showing employment and gender](image)

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

*Source: Enterprise Surveys.*

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 owner and his/her family members if applicable, and in a normal month) varies by the gender of the owner. Except in Cote 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, log values), we find only a weak evidence that female owned businesses perform worse than male owned businesses (figure 2).
Figure 2: Average productivity of labor does not vary much between male and female owned firms

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

Source: Enterprise Surveys.

Compared with male owned businesses, female owned businesses have less experienced managers, but only among the relatively young firms

Women often face vertical discrimination or a glass-ceiling in obtaining the more lucrative and sought after managerial jobs. One implication of this is that when women do become managers (for example, in their own firm), they are likely to have less managerial experience than their male counterparts. Typically, in the informal sector, the largest owner is also the manager or the main decision maker. This holds for over 94 percent of the firms in our sample. So, owning a firm in the informal sector could be a useful and easy way for women to catch up with their male counterparts in managerial experience. That is, gender-specific differences in managerial experience are likely to be large (favoring males) among the relatively younger firms, but likely to be much smaller among the relatively older firms. The data do not reject this view (figure 3). We note that the findings in figure 3 continue to hold even when we take into account possible differences in country and sector specific factors, and differences in firm characteristics across male and female owned businesses and how these differences may vary with the age of the firm.
Figure 3: Women managers have less experience in running a business than male managers, but only among the relatively younger firms

Young firms are defined as those at or below 5 years of age. The rest are old firms. The sample used for the figure includes all firms for which the largest owner is also the main decision maker (94 percent of the sample). Source: Enterprise Surveys.

There is a greater proclivity among female compared with male entrepreneurs to operate from inside than outside household premises. However, working from home does not appear to be disadvantageous to doing business

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 or inside vs. outside 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 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 clandestinely, 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 than outside household premises? Does working from home detract one from doing business; lowering firm-efficiency and number of hours a business normally operates?

Figure 4 confirms that the percentage of women entrepreneurs working from home is much higher than the percentage of male entrepreneurs in the sample. The only exception is Cote d’Ivoire, and to some extent, Madagascar, where the difference is not much. For more details, see Amin (2010b).
Figure 4: Women are more likely than men to run businesses from inside household premises

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

Source: Enterprise Surveys

For possible detrimental effects of working from home vs. outside on doing business, 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 that it is disadvantageous to doing business; and no more or less so for female than male owned businesses. For example, figure 5 shows the number of hours a business normally operates in a week. For female owned businesses, hours worked are roughly same for businesses located inside and outside household premises. For male owned businesses, there seems to be some disadvantage (fewer hours worked) of home-based work, although this disadvantage is not statistically significant. Roughly similar results hold for labor productivity (see, Amin 2010b).

Figure 5: Number of hours a business operates is roughly same for female owned businesses located inside and outside household premises
Above, we mentioned that the preference for home-based work among women is largely explained by the need to balance family life and work and socio-cultural factors. This raises an interesting point. That is, is there an economic rationale for the choice of location 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 and more so than men. Our data do not reject this rationale (figure 6). We note that the findings shown in figure 6 are not due to country, sector and a host of firm specific differences between firms.

**Figure 6: Working from home insulates women owned businesses from the threat of crime and more than male owned businesses**

Female owned businesses are less likely to use external sources of finance and have bank accounts. Reasons for not applying for a loan also vary by gender
Consistent with the broader findings in the literature, we find systematic differences in the banking habits and use of external finance between male and female owned businesses. Compared with male, 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). Similarly, percentage of firms that use a bank account for business purposes is much lower among female than male owned businesses (32 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 and only 32 percent of male owned business reported “no need for a loan” as the main reason for not having a bank loan. For the sample of the remaining firms, figure 7 shows that compared with men, women are proportionately more affected by high interest rates and lack of guarantees. The opposite holds for complex application procedures.

**Figure 7:** High interest rates and lack of guarantees are the most severe problems in accessing credit for a larger proportion of female than male entrepreneurs

![Graph showing reasons for not applying for a loan](image)

The sample is restricted to the set of firms that did not apply for a loan in the year prior to the survey. It also excludes firms that reported “no need for a loan” as the main reason for not applying for a loan. Source: *Enterprise Surveys.*

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 or the registered sector. This note sheds light on some of these issues for the case of unregistered or informal sector firms in six developing countries in continental Africa. Our results confirm some of the findings in the broader literature, but reject others. The female under-performance is restricted to firm-size, but does not hold for labor productivity. Consistent with the literature, we find that women entrepreneurs are more likely to operate from home than outside when compared with male entrepreneurs. However, home-based
work does not appear to be disadvantageous to women’s business. As existing studies suggest, we do find evidence of a possible glass-ceiling in women acquiring managerial experience. Last, we confirm the findings in 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 finance. Some of the important reasons for not seeking external credit are also shown to be gender specific.


i The data and sampling methodology are available at www.enterprisesurveys.org.
ii External sources of finance include credit from suppliers or advances from customers, moneylenders, microfinance institutions and banks.