WPS6184

Policy Research Working Paper 6184

Household Enterprises in Sub-Saharan Africa

Why They Matter for Growth, Jobs, and Livelihoods

Louise Fox
Thomas Pave Sohnesen

The World Bank
Africa Region
Poverty Reduction and Economic Management Unit
August 2012

Policy Research Working Paper 6184

Abstract

Despite 40 percent of households relying on household enterprises (non-farm enterprises operated by a single individual or with the help of family members) as an income source, household enterprises are usually ignored in low-income Sub-Saharan-African development strategies. Yet analysis of eight countries shows that although the fast growing economies generated new private non-farm wage jobs at high rates, household enterprises generated most new jobs outside agriculture. Owing to the small size of the non-farm wage job sector, this trend is expected to continue for the foreseeable future.

This analysis of enterprises and their owners shows that although it is a heterogeneous sector within countries, there are many similarities across countries, indicating that cross-country learning is possible. For labor force participants who want to use their skills and energy to create a non-farm income source for themselves and their families, household enterprises offer a good opportunity even if they remain small. The paper finds that given household human capital and location, household enterprise earnings have the same marginal effect on consumption as private wage and salary employment. The authors argue that household enterprises should be seen as part of an integrated job and development strategy.

This paper is a product of the Poverty Reduction and Economic Management Unit, Africa Region. It is part of a larger effort by the World Bank to provide open access to its research and make a contribution to development policy discussions around the world. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at lfox@worldbank.org.

Household Enterprises in Sub-Saharan Africa

- Why they matter for growth, jobs, and livelihoods

Louise Fox

Thomas Pave Sohnesen

JEL: E26, I3, J21, O17

Keywords: Employment, growth, poverty reduction, nano enterprises, informality

Sector Board: Poverty Reduction

Louise Fox is a lead economist in the Africa region (lfox@worldbank.org), Thomas Pave Sohnesen is an extended term consultant in the Development Research Group (tpavesohnesen@worldbank.org) The authors are grateful to Jorge Huerta Munoz for data analysis. Useful comments and suggestions were received from William Steel and Bob Rijkers. This work would not have been possible without financial support from (i) the Multi-donor Trust Fund *Labor Markets, Job Creation, and Economic Growth* through funding from the German, Norwegian, Austrian and Korean governments, (ii) the donors of the TFESSD fund at the World Bank, and (iii) the World Bank. Their support is highly appreciated.

Kisesi, 71 years old, left school after grade 4. His business is to sell hot coffee mixed with ginger (tangawizi), which he has sold for more than 14 years after closing a business as a wholesale trader. He started this business with profits from his trading business, using the money to buy ground coffee powder, ginger powder, charcoal stoves (2), kettles (6), cups (3 dozen), and a bag of charcoal. He generated a huge customer base mainly around the Mosque located in the same area. Mr. Kisesi reported that his daily turnover is above TShs 6,000 – TShs 12,000 and out of which 50% accounts for profits. He manages his resources himself. His wife is involved in his business and takes over sales in case of emergencies or absence.

His outlet is located in an area where he can only serve a small segment of consumers, but he lacks the capital to establish another outlet in the municipal center, where there are many people consuming hot beverages. Customers come from the municipal center to his shop. If he had capital, he would establish another location and also procure a high quality coffee for improved customer care/service. He said: "The taste of coffee and ginger are crucial for their quality." Despite the challenges, his business is earning him enough to support and satisfy his family needs and demands. He is married with a household of 11 people (himself, his wife, 6 children and 3 grandchildren). He supports the education of his last born (a daughter, 15 years old), who attends secondary school.

(This story comes from a focus group participant in Tanzania.)

1. Introduction

Promoting income-generating activities for the working poor and near-poor is essential to inclusive growth. In Sub-Saharan Africa (SSA) almost all of the labor force participants in low-income households are engaged in household-based activities – family farming, and very small non-farm enterprises, commonly called "informal enterprises"[1]. While these very small enterprises have been recognized in the rural development literature as an important part of rural income growth and poverty reduction (Haggeblade, et al., 2010), they are still an under analyzed area in the private enterprise literature (Grimm, van der Hoeven, and Lay , 2011) and underestimated in structural transformation debate (Fox and Pimhidzai, 2011). The household enterprise (HE) sector generates the majority of new nonfarm jobs in most SSA countries, even during times of high economic growth (Fox and Gaal, 2008). A better understanding of the dynamics, constraints, and potential of the nano-enterprises and their owners is essential for designing policies and interventions that can promote this sector as an engine of employment and income growth.

Economists usually have a negative view of informal household enterprises. As Ravi Kanbur has noted,

> *"There seems to be a consensus in the development economics and development policy discourse that "informality" is "bad". It is bad for economic growth, for equity, and for poverty reduction."* (Kanbur, 2012, p. 2)

Informal enterprises used to be seen as an indication of a failed development policy, because development was supposed to create wage jobs in the modern sector, and reduce the size of this sector (Tokman, 2007). They were also seen as an indicator of over-regulation, which stifled growth of larger, more efficient firms. As a result, enterprises stay small and get trapped in low productivity activities (Nwabuzor, 2005, Loayza et al., 2009). Informal enterprises are often operated at a scale so small as to be inefficient, so they have been reported to be a poverty trap (Bannerjee and Duflo, 2007). These views indicate the three different approaches to analyzing informal household enterprises - as employment strategies, as enterprises, and as livelihoods. Each approach conveys a partial view of the role of informal household enterprises in development SSA today.

As a job, self-employment was initially viewed in the 1970s as a sign of disequilibrium resulting from some labor market or other market distortion producing too high wages and thus too little wage employment (e.g. an insider-outsider problem or an overvalued exchange rate). Over time, self-employment or the creation of a microenterprise came to be viewed in some cases as reflecting a positive choice which would maximize earnings given a set of skills (e.g. entrepreneurial skills) or provide more total utility than wage employment because of the value placed on the non-wage aspects (flexibility, etc.), while in other cases it clearly reflecting a lack of alternatives for the qualified workforce (Maloney, 2004). Studies of employment and earnings determination increasingly consider both cases (positive choice or lack of alternatives) plausible (see Guther and Launov, 2011, and World Bank, 2007). The problem for economists working on SSA countries, however, is that one view does not properly characterize the choices available to the economically active. For those located outside of larger cities, there is no choice

[1] We contrast "informal enterprises" with "modern wage employment enterprises" (often called formal enterprises) despite the heterogeneity and overlapping continuums of degrees of formality by different criteria. We avoid the term "informal sector" as according to the latest definitions released by the ILO, it includes both wage workers without access to formal social protection systems and enterprises (of any size) not formally registered. By lumping the two types of employment together a duality is presented which does not correspond to the more segmented and nuanced reality (ILO, 2011).

between wage employment in a large non-farm enterprise and self-employment, because the former does not exist. Even in larger urban areas in SSA, a fast growing labor force means that there are many competitors with similar qualifications when a wage job becomes available.

HEs have not received much attention in the enterprise literature. This is likely because they are very different from both the modern wage employment enterprises and the growth-oriented small start-up enterprises, and a different framework of analysis is needed. As a starting point one of the central goals discussed in the enterprise literature – generation of wage jobs - rarely happens in these enterprises. Further, HEs are integrated with the household and therefore also heavily exposed to household risk, not something usually taken into account in the enterprise literature. Those who analyze this sector have pointed to important cultural differences between HEs and traditional enterprises, including a low level of organization and personal relationships rather than contractual ones (La Porta and Schleifer, 2008; Tokman, 2007). However, some work on HEs as enterprise does exist and it shows that they report different business obstacles than larger enterprises (Loening, Rijkers and Soderbom, 2008, Fox and Sohnesen, 2012) and they react differently to policy change and economic cycles (Mead and Lindholm, 1998; Schoar, 2009). Contrary to previous views, recent work by Grimm, Kruger and Lay suggest that returns to capital might actually be higher in urban areas of some SSA countries in these enterprises than in large enterprises, this result is not supported by analyses in South Asia (De Mel et al 2007/08).

HEs have received significant attention as livelihood strategies for households seeking an escape from poverty. This area is probably where HEs are viewed most negatively. Many authors have noted the vulnerable nature of self-employment, and the fact that earnings are usually lower than in wage employment (e.g. ILO, 2004; several citations on South Asia in Kanbur, 2012). But as Fields (2012) has noted, the only way for poor households in low-income countries such as SSA to get out of poverty is through earning more money from employment. He argues that given that HEs exist, and that most non-agricultural employment in low-income countries is now inHEs, anti-poverty programs must have a component to increase the productivity of returns to self-employment -a perspective we share.[2] Analyzing household enterprises as a livelihood strategy brings a focus on one of the biggest issues HE owners may face: how much time and household capital to allocate to the enterprise, compared with other options such as agricultural activities or household chores. The decision may be based on the local economic environment, household assets and wealth, and household needs for cash income, for food security, for non-market goods such as water from the well, for risk management and income smoothing, as well as social norms and responsibilities to other family, household and community members.

In this paper we argue that to fully understand the role HEs can and should play in SSA economic development strategies, a multifaceted approach is needed.

In this paper we analyze HEs as neither a pure enterprise creation choice nor as an employment choice, but rather through three different lenses:

1) a labor market lens recognizing HEs as a major generator of new jobs,

2) an enterprise lens, viewing HEs as a profit-making activity started by a member of the household, but recognizing that the birth, survival and growth of HEs might be just as dependent on household risks as enterprise risks; and

[2] Mead and Lindholm, (1998) also promoted this view, as does the rural non-farm enterprise literature (Haggblade et al, 2010).

3) a livelihood lens, showing what income from HEs means to the livelihood portfolio of a household trying to maximize welfare and escape or avoid poverty.

The paper argues that based on these pragmatic, results-based approaches, the role of this sector in economic growth and livelihoods can be identified, and context-specific development strategies that will support these businesses and households can be designed, which will enable markets to work for the benefit of low-income households trying to climb out of poverty or stay out of poverty.[3]

The paper is organized as follows. After a brief discussion of data and definitions, section three presents employment and livelihood trends in selected SSA countries that have experienced a recent period of broad-based economic growth, using national household survey datasets. It's shown that even in countries with double digit growth in the non-agricultural, non-mineral extraction sectors, HEs have been responsible for the majority of the non-agricultural employment growth, and this trend is likely to continue for several decades owing to high projected labor force growth, low education levels, and the difficulties of growing employment fast enough in large, modern firms. Section four is an analysis of HE owners themselves: their distinguishing characteristics, the determinants of earnings in this sector, and what HE owners perceive as their constraints. Finally, section five analyzes HEs as a household livelihood strategy, arguing that fragmented evidence suggests that in low income SSA countries, HEs have played an important role in household income generation for households near the poverty line. We conclude that HEs need to be a key element in effective poverty reduction strategies in low-income SSA countries.

2. Data and definitions

This paper primarily analyzes Household Enterprises and occasionally Micro Enterprises. Both Household Enterprises and Micro Enterprises are *informal non-farm enterprises* that are unincorporated and owned by households. Specifically, Household and Micro enterprises are defined as follows:

- *Household Enterprises* (HEs) are own-account (self-employed) enterprises working in non-agricultural sectors that may employ contributing family workers.
- *Micro Enterprises* (MEs) are own-account (self-employed) enterprises working in non-agricultural sectors that employ at least one non-family worker on a continuous basis.
- he whole group of unincorporated enterprises identified in household surveys we refer to as *Non-farm Enterprises* (NFEs). We use this term because in some employment data we are unable to distinguish between HEs and MEs, so we count all those who report their employment status as "self-employed/own account" as NFE.
- When analyzing employment, all participating family workers in HEs or MEs are assigned to the NFE sector as well. Employees in MEs outside the family are not included and likely show up as wage workers.

[3] Our approach does not deny that many, if not most, people who own or work in HEs in SSA have a precarious livelihood. In the terminology of the ILO, this activity is usually "vulnerable employment" (ILO, 2011). What our approach considers is whether this activity is a viable employment strategy which enhances the income and welfare of the household, and if so, for whom?

The classification of enterprises into HEs and MEs is done primarily based on information provided in the enterprises module. Usually, analysis only defines MEs, and does not include HEs as a sub-category. Here they are separated, in recognition of importance of the ability to hire workers from outside the household as an indicator of managerial ability and growth potential, and therefore the probability of a different response to a particular policy or program from MEs compared with HEs (see de Mel et al, 2008 and 2009).

We include enterprises in the study *regardless of registration status*. In classifying an enterprise as *informal*, standard practice (ILO, 2011) requires that it meet (i) an ownership criteria (unincorporated, owned by household members) an*d either* (ii) a size criteria (below a specified level of employment, e.g. 5 or 10 employees depending on the country), and/or (iii) a legal status criteria (non-registration of the enterprise or its employees). We have adopted the first criteria, but not the legal status. We find that the rules on registration differ by country, and within countries there may be several levels of registration -e.g. national as well as sub national. And the meaning of registration is different by country. In some countries, (e.g. Uganda), registration implies a certain level of legitimacy from the state, but in other countries (e.g. Rwanda, Tanzania), it does not. In addition, in some countries it is legal to do business in one's own name *without* registration. This means that the concept of registration is not defined or implemented consistently across sample countries, and so we do not use it as a sorting variable. On this point, our study differs from those using the ILO definition (Grimm et al, 2011; ILO, 2011; Nguyen et al, 2011).

The core analysis is based on nationally representative household survey data from the following countries: Burkina Faso, Cameroon, Republic of Congo (urban only), Ghana, Mozambique, Rwanda, Tanzania, and Uganda.[4] Survey instruments differed by country but we have developed consistent variables for the economic activities of household members over the age of 15 to the extent possible. Variables include; type of activity, and for non-farm activities, time spent in the activity (any unit), and earnings per time period worked. The respondent's stated primary activity is used for the employment analysis, while both primary and secondary information is used for the analysis of all household activities (livelihoods) and the analysis of HE owners. For Ghana, Rwanda, Tanzania, and Uganda, the nationally representative household survey data was supplemented by qualitative and quantitative data collected from field interviews with HE and ME owners. These data are not nationally representative. The fieldwork focused on HE owners' motivations, perceptions about their work, their opportunities, and the constraints they faced.

[4] See Annex Table 1 for a list of countries and data sources.

Box 1 Is reported ownership of HEs biased by social norms?

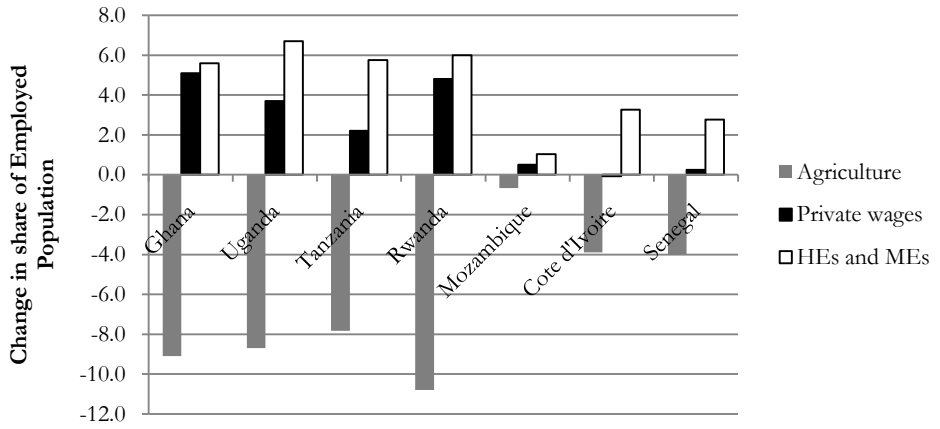
Social norms in highly patriarchal (or matriarchal) societies could lead to a tendency for men (or women) being reported as the owner of HEs. For instance, despite a woman being the main person responsible for a HE, her husband could be reported as the owner while the woman is reported to be a family helper in the enterprise. Is this a problem in our household survey data? Is there a bias toward one gender?

The data do not allow an analysis of this question, but it does indicate that if such a bias exists, it does not affect our analysis very much. While it is true that the majority of those who report their employment status as family helpers are females, there simply are not very many contributing family workers in HEs. Depending on the country, between 77 and 93 percent of HEs are single person operated, hence only between 7 and 23 percent of the observations at most could have some misreporting (assuming that all people working in the HE were reported). Even if half of the observations that could have misreporting did so, only 7 percent of observations on average would be biased, leaving little room for a significant impact on the averages shown here.

3. Recent employment trends in a growing Sub-Saharan Africa – Why is employment in household enterprises on the rise?

The past decade has seen a resurgence of economic growth in low-income SSA countries, including the countries in our study. Mozambique, Ghana, Rwanda, Tanzania, and Uganda all reported GDP per capita growth greater than 3 percent per capita per annum 2000-2008, and the others reported per capita growth between 1-3 percent per annum (World Development Indicators, 2012). During this growth period, in all of the study countries non-farm private wage and salary employment grew faster than the labor force, as did employment in non-farm enterprise activity, including owners and family members in both HEs and MEs (figure 1).

Figure 1 Percentage point change in distribution of employment by sector

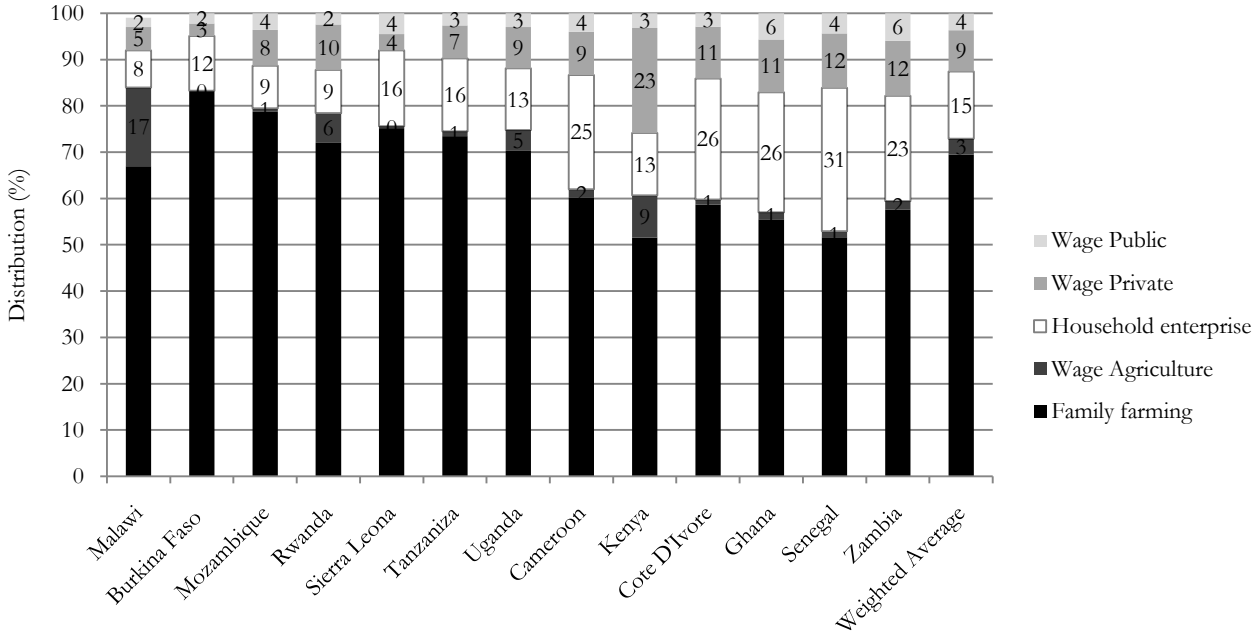


Sources: see Annex Table 1

Though growth in private wage and salary jobs has been high, wage and salary employment in private non-agricultural enterprises is still rare in SSA (figure 2) – this sector on average accounts for only 9 percent of the employed population.[5] In the countries where the share of family farming employment as primary employment is lowest (Cameroon, Ghana, and Senegal), the share in private wage employment is still only slightly above 10 percent. The largest category of non-farm employment is NFEs (HEs and MEs) employing 15 percent of the employed population on average. And the majority of those operating NFEs operate HEs (91 percent, see Figure 6).

[5] In figure 1, private sector wage jobs in agriculture are including in total agricultural employment. They are separated from wage jobs in other sectors as agricultural wage jobs often are of a very different quality, different remuneration level and located in different locations. Furthermore, growth in agricultural wage jobs is generally related to growth or reform in agriculture, while growth in private wage jobs is more dependent on growth in industry and services.

Figure 2 Distribution of primary employment in SSA (%)

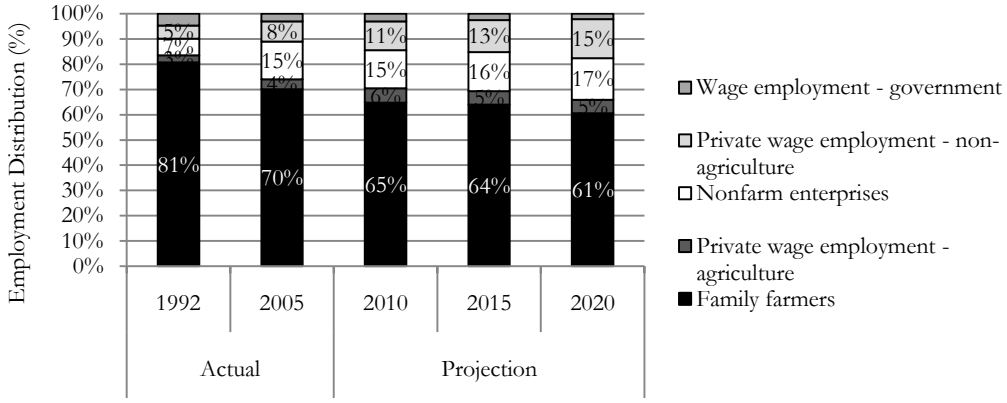


Source: see Annex Table 1.

Why did the movement of the labor force out of agriculture in the last ten years show up disproportionately as NFE employment, and not as wage employment? The primary reason is that the labor force is growing at about 3 percent per annum, faster than economies can create wage and salary jobs. During the initial post-independence period, wage and salary job creation took place mostly in the public sector. During the decades following the debt crisis and subsequent public sector restructuring, many SSA countries suffered a net wage and salary job loss in the public sector, and the small private sector was unable to absorb the rapidly growing labor force (Fox and Gaal, 2008). This meant that even with rapid growth in private sector wage and salary jobs, growth in non-agricultural value added was only able to translate into a gradual change in the structure of employment toward non-farm wage and salary jobs.

Projecting these trends forward leads to what we call "*the inescapable math of informal enterprise growth"*. In Uganda, despite their success with wage and salary job creation (Figure 3), projections of employment growth show that even in optimistic scenarios, assuming that the elasticity of non-agricultural wage jobs to non-agricultural value added is over 1 (which is quite high), and that growth in the non-agricultural economy continues for ten years at 10 percent per annum, private non-agricultural wage jobs are unlikely to become a large share of employment in a foreseeable future**.** It may take a generation before the majority of the labor force has a non-farm wage and salary job.

Figure 3 Uganda employment distribution, actual and projection, 1992-2020



Source: see Annex Table 1 and Authors' projections.

Generalizing this trend to the subcontinent, Figure 4 shows projections of the share of the labor force working in private wage jobs ten years on, based on increasing annual growth rates in private wage jobs, given initial conditions. The simulation assumes a labor force growth of 3 percent per annum (roughly the average for all of SSA). If a country starts with about 10 percent of the labor force in private wage jobs in 2010 (about the average for the 12 countries shown in figure 2, and indicated by the middle line on the graph in figure 4), even with labor intensive growth and the creation of new private sector jobs at the rate of *10 percent per year for 10 years*, the country could expect at most 20 percent of the labor force in private wage jobs by 2020. This would still leave the largest share of the labor force in agriculture or operating NFEs. Countries such as Malawi, Burkina Faso and Sierra Leone with a smaller share of the labor force in private wage jobs (illustrated by the lower trajectory in figure 4) would most likely not even reach Uganda's share in ten years – even with significantly higher private investment in labor-intensive medium and large businesses. The number of people entering the labor force will swamp the capability of the private sector to respond in even the most optimistic scenarios.[6]

Figure 4 Wage jobs as share of future labor force: projections

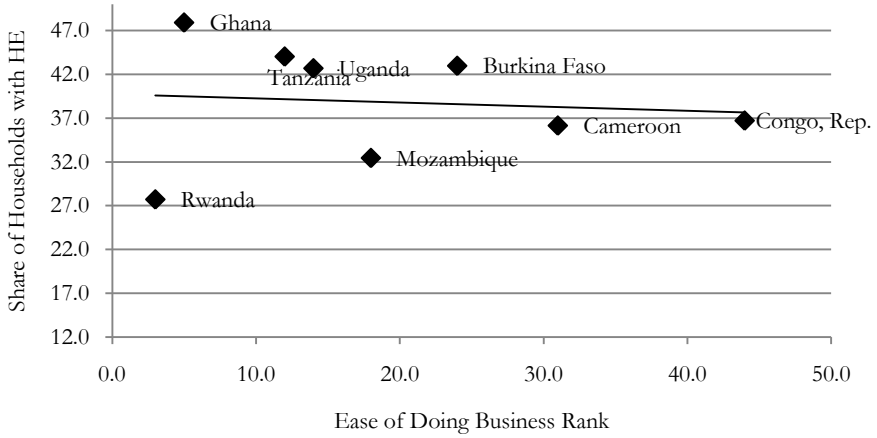
Source: Authors' calculations.

There are other reasons why non-wage employment in HEs and MEs is growing even in very dynamic economies. In urban areas, where the majority of private non-agricultural wage

[6] Gollin, (2008), also makes this argument from a macroeconomic perspective, using a growth model with heterogeneity in productivity across firms.

and salary jobs are being created, much of the labor force cannot access these jobs due to their low education levels. In rural areas, not only is the labor force poorly educated, but the remote locations do not favor investments which would create these jobs. The only opportunity the labor force has to access the non-farm sector is through the creation and development of household enterprise employment.

Figure 5 Difficulty of doing business is not correlated with high number of informal HEs



Source: WB Doing Business 2011. Note: a higher rank indicates a higher difficulty for doing business

Contrary to results from Latin America (Loayaza et al, 2009), more employment in HEs is not associated with a bad business environment. Figure 5 shows that employment in HEs has no correlation with the country rankings of the business environment shown in the Doing Business data base (www.doingbusiness.org). No doubt some aspects of the reported poor business environment in SSA countries reduced investment in labor intensive enterprises (which would create more wage and salary jobs), but these factors do not seem to be primarily responsible for the growth in informal non-farm enterprise employment.

A final point on recent employment trends: in OECD countries it is unusual for adults who have entered employment to engage in more than one income earning activity at a time. But in SSA countries, it is not unusual for this to occur as about 40 percent of the labor force reports a secondary economic activity in a different sector. Often, especially in rural areas, the secondary activity is an HE. On average across the countries in our study, about 17 percent of the labor force reported NFEs as primary employment. *However, this only shows about 60 percent of the number of people that are engaged in the sector*, as another 10 percent, on average, reported non-farm HE or ME as secondary employment (Table 1). Combining primary and secondary employment shows that, on average, 28 percent of the labor force (with a high 37 percent in Ghana) works in HEs or MEs in this sample of SSA countries. [7]

[7] Even this is an underestimate of total employment because our employment data do not allow us to track which wage and salary employees work in informal NFEs. However, as shown in the next section, the number is quite small as about 90% of informal NFEs do not have any employees outside of the family.

Table 1 Share of employed population working NFEs (non-wage only)

Country	Burkina Faso	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Primary employment	11.8	25.9	9.2	9.3	15.7	13.5	16.8
Primary or secondary employment	28.8	37.5	20.1	21.4	28.9	21.0	27.6

Source: Annex table 1.

In sum, the HE sector in low income countries in SSA is likely to provide employment, either as a primary or secondary activity, to a substantial share of the labor force for the foreseeable future. There is no way to change this picture in the medium term. Instead of expecting this segment to disappear (or even actively discouraging it), policymakers and development professions will need to seek job creation solutions through improvements in the opportunities offered in this sector. In the following sections, we analyze the characteristics of this sector in more depth, focusing on owners of HEs and their households. Individuals for whom HE is either a primary or a secondary activity are included as owners, and when we analyze household livelihoods and incomes in section 5 we also include all economic activities of all members to obtain a full indication of the importance of HEs in household income generation.

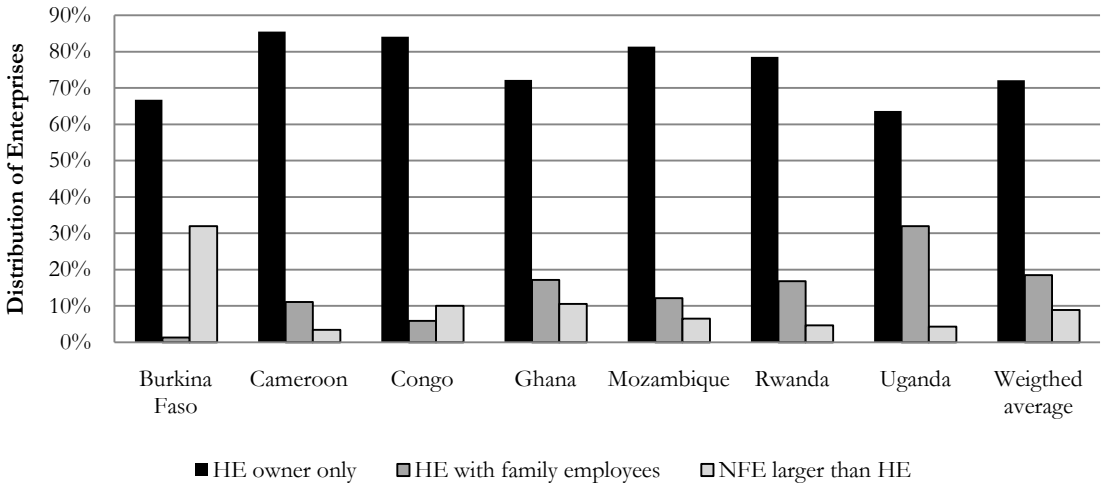
4. Household enterprises and their owners

A full understanding of how to promote employment and income growth through the development of HEs requires several perspectives – an understanding of HEs as business, and an understanding of HE ownership as an employment choice. This section presents our analysis on HEs from both perspectives using the survey data.

HE enterprises

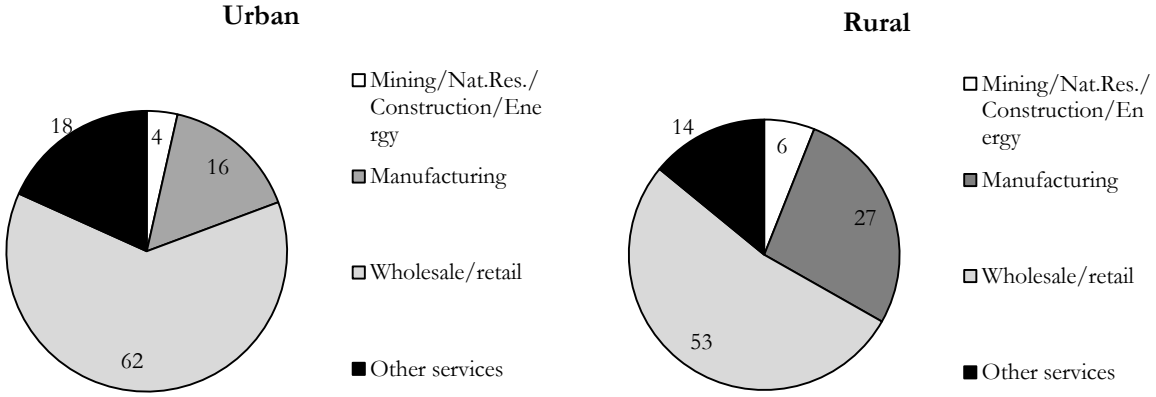
In the employment data above, the distinction between HEs and NFEs was usually not justified. But mostly, this does not matter. Over 90 percent of NFEs found through household surveys are HEs, with 7 out of 10 of these reporting no family help at all - just the owner operating the HE (Figure 6). Despite so few people engaged in each enterprise, HEs still provide employment to more than 80 percent of people employed in NFEs including the employees of MEs. HEs are the dominant group in the sector - a point which is often missed in policy discussions and rarely touched upon in the SME literature. As documented below, HEs and MEs are different enterprises.

Figure 6 HEs are the majority of all NFEs owned by households



Source: Authors' calculations

Figure 7 HE sector of activity, urban and rural areas



Source: Annex tables 16 and 17

The majority of HEs are in the trading sector (Figure 7). Other common activities are manufacturing – primarily transformation of agricultural goods or natural resources such as making charcoal, bricks, or grinding grains, but also artisanal activities such as making custom furniture; construction; and services such as food service (making and selling snacks or lunches), tailoring, transport, and personal services (barbering and hairdressing). Partly due to opportunities to process agricultural products, manufacturing is a more common HE activity in rural areas. On average, across countries both genders are equally represented in each sector of industry, however deeper analysis in Ghana reveals that within each sector of industry there is clear gender segregation - for example, females are more likely to do tailoring, and men to work in construction (Fox et al, 2011). Though street vendors and markets are the most visible signs of HE activity, these activities are harder to observe as 36 to 47 percent of HEs are operated by owners out of their own homes. This number is even higher among women, and in rural areas

(annex table 15). This is consistent with HEs selling mostly to households, rather than other businesses.

Start-up capital is a major problem for HEs. When asked in household surveys to report the most important problem they faced in starting their business, the most popular response was lack of capital (annex table 18). 87 percent of HE owners used their own or family capital to start their business. Even in countries such as Ghana, where household access to financial services is high, most start-up capital comes from home savings. This is not surprising, as with any small business banks need to see evidence of an ability to save and a willingness to invest own funds before taking the risk of making a loan. In addition, banks may wish to have key assets such as land, house, or business equipment pledged as collateral, which may deter formal borrowing. Microfinance approaches could solve some of these market gaps, but so far they are providing start-up capital for only 1.3 percent of all HEs. The use of formal credit (either from bank or micro finance institutions) for start-up is slightly higher in urban areas (3.2%) compared to rural areas (1.7%) and more common for those with completed secondary or above (5.5%) while there is no substantial difference across genders on average (annex tables 13-16).

Consistent with the 42 percent of HE owners reporting it as a secondary activity, only about half report that their business is open more than six months a year. The majority of urban HEs are operated year round, but the seasonality of rural HEs varies by country, with full time HE activity more common in the richer countries, except for Cameroon (annex table 4).

Although unlikely to be registered in national data bases, when required HEs do register with local authorities. In many countries, including Ghana and Tanzania, registration is optional, as it is legal to do business as a HE in one's own name without license or registration. In other countries, such as Rwanda, national legislation requires all HEs and MEs to register with local authorities, (World Bank and IPAR, 2011a). In Ghana, nationally representative data show an increasing tendency of HEs to register in the capital city (40 percent), but not outside (only 13 percent). MEs in Ghana are more likely to register in both areas – hence scale of enterprise matters. In Rwanda and Uganda, focus group surveys revealed that 61 and 58 percent of NFEs were registered with local authorities. These surveys are not nationally representative and are likely to be biased toward registration as the NFE interviewed were more likely to be urban and operating in markets than HEs at large.

A requirement to pay taxes and fees to local authorities is a common reason for registration. 61 and 55 percent of focus group respondents reported paying fees or taxes in Uganda and Rwanda, respectively. The reported taxes vary substantially from 30 to 50 percent of revenues in Uganda, 19 percent in rural Tanzania and 6 percent in Rwanda (Fox and Pimhidzai (2011), Kweka and Fox (2011) and World Bank (2011a)). In Uganda, the high rate of taxation was partially triggered by the need for revenue for local authority budgets after other sources were gradually abolished (Fox and Pimhidzai, 2012). In R. Congo, municipal authorities have the right to impose ten different taxes, including a fee for authorization to open an HE in a fixed location and annual poll taxes (on both the owner and the shop, called census taxes). A security fee is also imposed even though the security is rarely provided. HEs report that they often are not given a receipt for payment of taxes and fees to local governments. Some HEs that reported in the surveys not to be registered did report paying taxes and fees. This indicates *that the common usage of 'registration' as an indicator of the relationship between the enterprise and government can be quite misleading*. Rather than being the dichotomous relationship implied by criteria such as ones proposed by the ILO (2011), the enterprise's relationship with the state is more complex, and can differ by level of government and by sector (e.g. health, trade and industry, justice and security, etc.).

Evidence on business viability is mixed. Our cross section data suggest that a significant minority of HEs are recent start-ups. More than one in five in Mozambique and Rwanda, and one in six in Cameron has been in existence for less than one year. These recent start-ups could be new families starting up HEs for the first time or families changing the line of business or re-launching an HE. In Ghana, where the HE sector has a longer history and a supportive environment, only one in ten is less than one year old. Female operated HEs are more likely to be less than one year old in Cameroon, Ghana and Mozambique, but this is not the case in Rwanda. There does not appear to be any difference in the age of HEs across urban and rural areas. Previous research on failure among single person operated enterprises in SSA found rates around 25 percent per year (Mead and Liedholm, 1998) with a higher start-up rate among female entrepreneurs but a higher survival rates for male and urban start-ups.

That being said, if enterprises are able to survive the start-up phase, then they persist. In the four countries with data on length of business in this sample, between 25 and 50 percent of HEs have been in existence for more than six years. Male owned HEs are on average older. It is not clear from our data if this reflects a lower survival probability for female owners, or just that they have entered the sector more recently - as they gained education, capital and the population in urban areas grew. However, even in Ghana, where HEs (especially female owned HEs) have been important for a long time, 58% of male owned HEs have been in business for 6 years or more compared with only 43% of female owned business. Female enterprises might also be more exposed to household risks as the responsibility of childcare and caring for sick or elderly often falls on female household members.

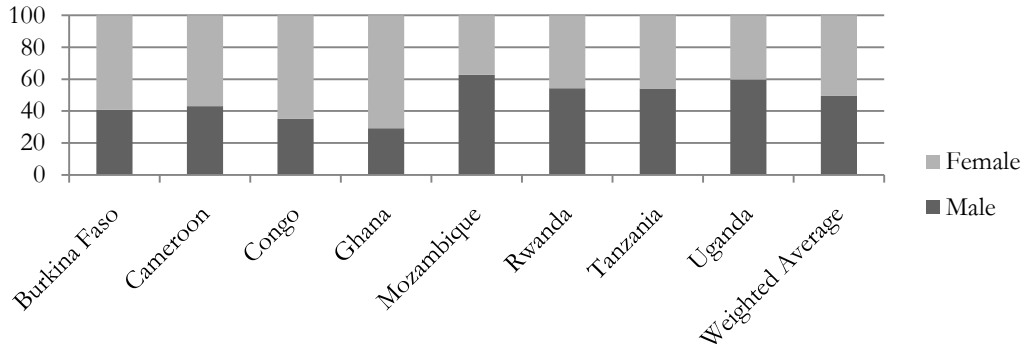
It is important to note, however, that *limited evidence from SSA suggests that even HEs which are able to survive a long time very rarely expand out of HE status*. Most HEs that start as a small one person enterprise stay that way. Few HEs expand into employment beyond the household, growing into micro or even small enterprises. This is the experience from Ethiopia (Loeninng and Imru, 2009), Tanzania (Kinda and Loening, 2008), Madagascar, (Grimm 2011), and other countries outside SSA (Fajnzylber et al, 2006, Schoar, 2009). It is also consistent with what HE owners reported in the quantitative field work – most HE owners did not have aspirations to substantially scale up their business in scope or complexity, though they did have aspirations to succeed on their own terms - as owners of sustainable HEs. (See Box 2) The evidence above suggests that persistence is possible for many enterprises, and the policy issue is how best to increase the probability of survival and persistence.

HE owners

Who are HE owners? As with their businesses, HE owners are heterogeneous –they are both young and old, male and female, have more or less education, and exhibit a high variance in outcomes – some earn a lot, and some report very little earnings. Though a very heterogeneous sector within countries; the sector has many similarities across countries. The similarities across countries could indicate that cross country learning is possible as we expand our knowledge and understanding of this sector.

Across the sub-continent there is no clear gender gap in HE ownership (Figure 8). In Mozambique, Senegal and Uganda about six in ten HEs are owned by men. In Cameroon slightly more women than men work in this sector. In Ghana, however, around 70 percent of HE owners are female – a gender specialization which has existed and persisted for many years. Furthermore, there is not any pattern of males or females being more likely to have a HE as primary or secondary employment (annex table 4).

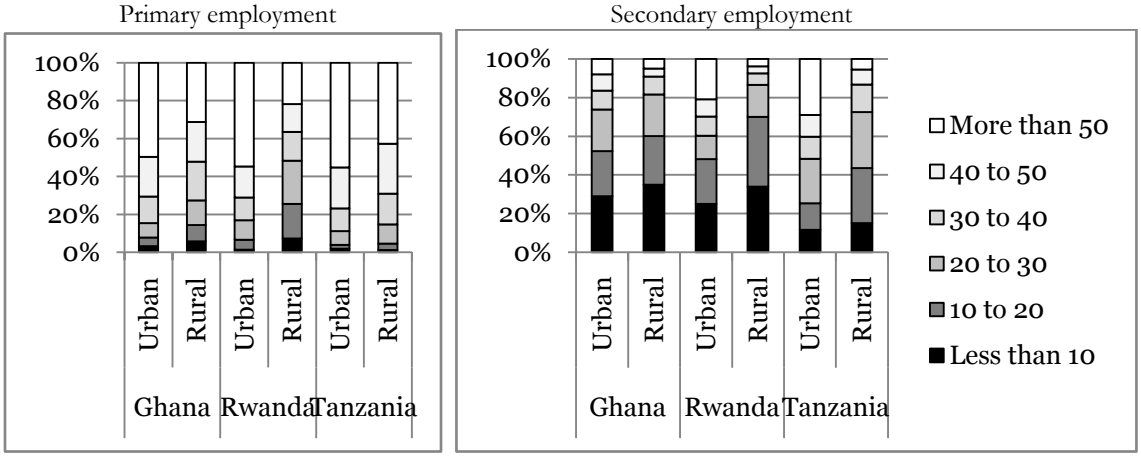
Figure 8 No gender gap in HE ownership



Source: Annex table 3

In the richer, more urbanized countries (R. Congo, urban areas, and Ghana), more than 70 percent of HEs are reported as primary employment for owners, while in other countries 54 percent or more of HE owners only operate a HE as a secondary activity. The pattern is strongly related to location with urban HE owners being much more likely to report HEs as primary employment than rural HE owners (75 percent versus 34 percent on average) - obviously driven by farming being primary employment for in rural areas, especially in less diversified economies. Consistent with HE being the primary employment for urban dwellers, urban HE owners work long hours - often more than 40 hours per week. In Tanzania, about ¼ of rural HE owners work more than 40 hours a week on the enterprise, compared to 67 percent in urban areas. A similar pattern is observed in Ghana and Rwanda. Of course, since primary and secondary employment are self-defined, it is not clear if the fact that an individual spends a lot of time on the job causes an activity to be defined as primary, or vice versa, and what is the role of income earned per hour worked in the decision on which activity is reported as primary. Rural HE owners often can only work on weekends, when markets are open and foot traffic is heavier. Without electrification, working after sunset for the rural HE owner is usually impossible.

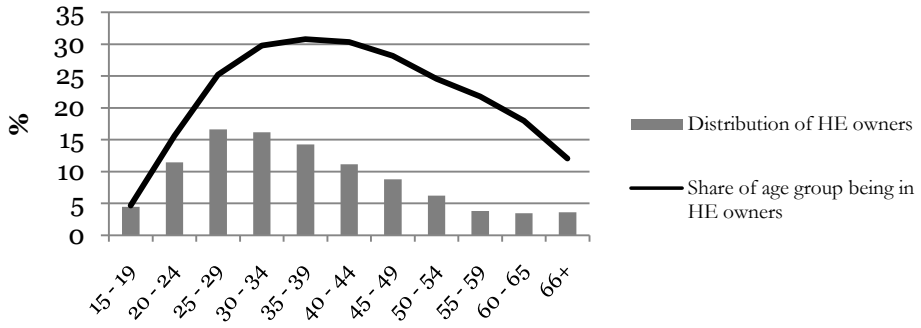
Figure 9 Number of hours operated per week



Source: Annex table 1 and authors' calculations

HEs ownership is not common among youth in low-income SSA (Figure 10). Youth under 25 are the least likely to be HE owners. This observation is fairly consistent across countries**.** On average less than five percent of those between 15 and 19 and only 12 percent of those below 25 own a HE, across the sample of countries, despite the young age of the labor force in low-income SSA, where about half of the population of working age is below 25 years of age. Individuals between the ages of 35 and 50 are most likely to own an HE. This may be influenced by the difficulty of obtaining the necessary capital to start a business. On average there are more young HE owners among rural youth, but the pattern is not observed in all countries and the magnitude is small in most countries. When youth work in the sector, it is likely to be as contributing family workers (not owners), or as apprentices.

Figure 10 Age and HE owners



Source: Annex table 3 and 8

HEs are commonly perceived as the job creation strategy of recent migrants to urban areas, but the role of migration in the development of this sector may be overstated. In Republic of Congo and Mozambique, HEs are more common among recent migrants to urban areas for economic reasons, but this is not the case for Ghana, Uganda and Rwanda where urban non-migrants are more likely to be HE owners (Table 2).[8] In Tanzania HEs are a strategy employed by both migrants and non-migrants equally. Hence, on the surface it does not look like the HE sector is primarily a product of migration. Migration could be a contributing cause if the inflow of students and highly educated individuals to urban areas strengthened competition for available wage jobs, crowding out long-time residents. This could lead to more HE start-ups.

Table 2 Share of employed migrants and non-migrants being HE owners, urban areas

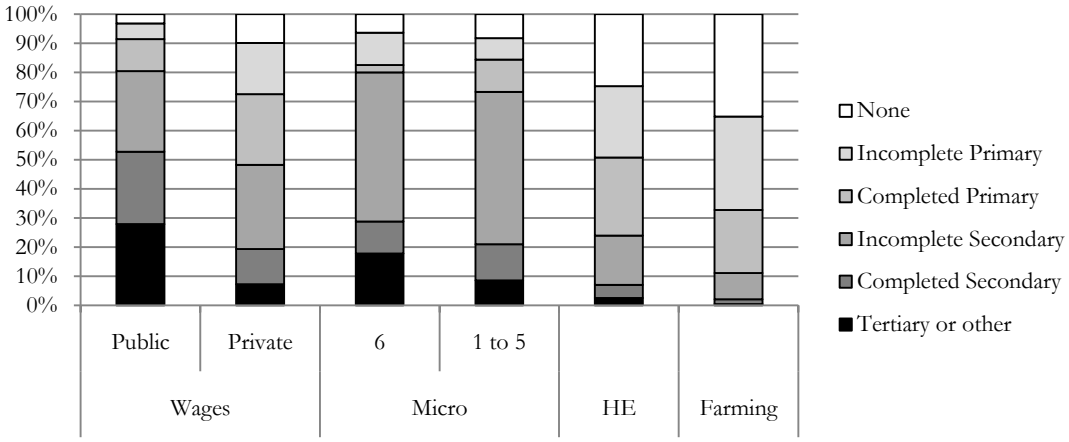
	R. Congo	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted average
Non migrant	29.8	41.7	27.8	17.4	37.4	38.4	35.2
Migrant	36.5	32.7	37.6	14.5	36.2	32.9	32.9

Source: Annex table 9. Notes: table shows share of employed migrants working in the HE sector and share of employed non-migrant working in the HE sector.

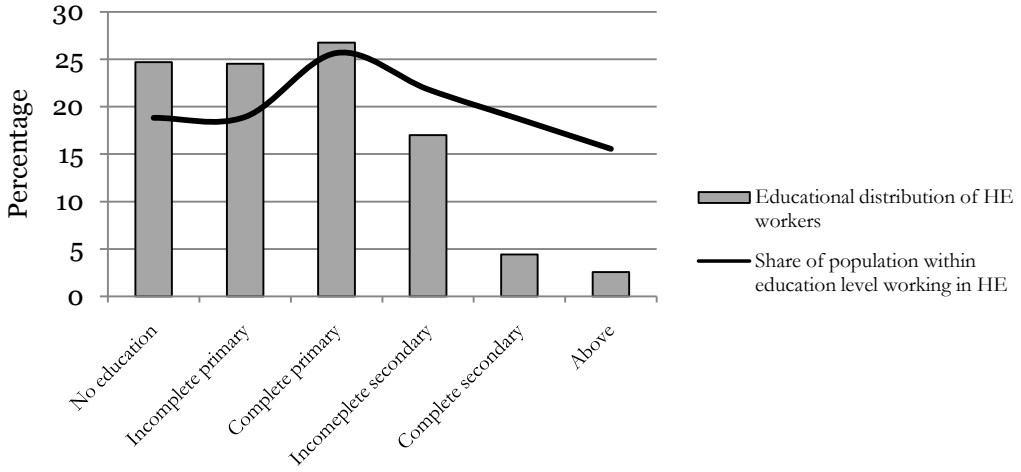
[8] This table does not include migrants outside of the labor force e.g. common migrants as students in secondary schools.

Is it necessary to obtain any formal education in order to start a HE? Perhaps not. Reflecting the overall level of education of the labor force in low-income SSA, most HEs owners have not completed primary education**.** A weighted average across eight countries shows that half of all HE owners have either failed to complete primary school or have no education at all (Figure 11). In Uganda (a country with a slightly more educated labor force), only 17 percent of HE owners have never attended school, while in Burkina Faso more than 80 percent of HE owners lack education (Annex table 3). Reflecting the male advantage in education in the labor force, and the higher education levels in urban areas, male and urban HE owners are more educated than female and rural HE owners. Trends in Ghana indicate that as access to secondary education improved over time so did the education levels of HE owners (Fox et al, 2011).

Figure 11 Half of HE owners have not completed primary education…



but HE ownership is most likely among those who complete primary and go no further



Source: Annex table 1.

However, *the probability of being a HE owner is higher among those that completed primary education.* For a given level of education**,** the likelihood of being a HE owner (seen as the share of the population with a given education level in the bottom half of figure 12) is highest

for people with completed primary education. The lower likelihood of HE ownership for people with completed secondary education and above is consistent with secondary education being rare, and therefore providing opportunities in relatively high paying non-farm wage and salary jobs – often a more desirable alternative. Size of NFE is positively associated education, with self-employed HE owners without family help being the least educated, HE owners with family help being more educated and ME owners the most educated, almost as well educated as public sector wage workers (figure 12). And as shown below, education does increase earnings for HE owners. So while primary education may not be necessary to start a HE or ME, judging but the sorting among occupations be education, it seems to help.

Why do owners start HEs? Obviously, to make money. But are they "pushed" or "pulled" into the sector? Consistent with divergent views of informal enterprises over time, many analysts have discussed whether HEs are the 'reserve' sector, where people end up because they cannot find other opportunities (a view associated with the "exclusion" school of thought) or a dynamic sector, which people enter to as a positive choice, to exploit an opportunity and/or to have the independence that self-employment brings - a view associated with the "new" view of informality (Maloney, 2004). Household surveys in two of our study countries (Tanzania and R. Congo) asked HE owners to report their main reason for starting a business and found that push factors dominated the list. Not being able to find a wage and salary job was the most frequently cited reason, but it was cited by less than 40 percent of respondents (multiple responses were permitted). The need for income came in a close second, and was the most common in rural areas. The most commonly cited pull factor in R. Congo was the desire for independence, while in Tanzania the opportunity to make a profit was the most common response (this responses was not included in the R. Congo survey).

Box 2 Motivations of HE owners in their own words

R. Congo (urban)*:*

- *I don't want to work in a company or for somebody else. I want to be my own boss so I set up my own shop.*
- *I expect to earn from my business. This way, I can put food on the table and pay for my children's education.*
- *I can't find a job so I decided to start a small business. I have no other choice.*

Rwanda

- *We do not like our business. We sell fruits and vegetables because we do not have any other thing to do. We would change our business at any time if there is an alternative.*
- *When we were farming survival was very difficult, but now it is a little better because we make some money every day so we have some cash. This enables us to meet our immediate needs.*

Uganda

- *I don't have much education. This is the only thing I know how to do. It is so hard to find any other job.*
- *I know I can earn more from my business than from working in a company or for somebody else.*
- *I did some vocational training and I want to apply the skills I learned from it.*

Tanzania

- *I just lost my job and I need to earn to support my family.*
- *I am a retiree and my family needs for more income. I have some savings that I used to start my business.*
- *My business gives me a good opportunity to earn more. It does not require much capital, plus I can be independent.*
- *My small business allows me to make some money and at the same do my house chores. I can work at any time, whenever I want.*

Source: Unpublished fieldwork transcripts. See World Bank 2011b and 2012, and Kweka and Fox, 2011

Qualitative data from fieldwork in four countries gives a more nuanced perspective, as the owners were able to speak for themselves (Box 2). They suggest that from an individual's perspective, both the exclusion view and the inclusion view may be relevant. In rural areas, where the alternative is either lower productivity agriculture or idleness (owing to seasonality factors, for example), the decision to start and maintain an enterprise may be a positive, albeit constrained, choice. In urban areas, starting an enterprise may be a positive decision to enter business for oneself, or it may be an alternative pursued as a second choice, in order to survive. In Rwanda, one trader reported that their economic activity was a plus for them and their families, but another expressed frustration with the limited options available within the sector. The desire to be independent, to have control over hours of work, tasks, and income - the key motivating factor cited all over the world by enterprise owners, large, small and micro, is indeed cited by HE owners in our focus groups, and more often than in the household survey data. And in every country where we conducted fieldwork, the desire to make more income dominated the response, even if it was expressed in one hundred different ways.

Does it matter whether HE owners were "pushed" or "pulled"? Given the inescapable math of informal enterprise growth shown above, it may not. In the medium term, as Fields, (2012) noted, labor force participants will have to create jobs for themselves, whether in agriculture, as accidental NFE owners or as NFE owners attracted into a line of business. And regardless of motivation for entering the sector, HE owners report the same constraints *across*

the study countries - access to capital, and difficulty in finding and keeping customers in this highly competitive sector.

What determines HE earnings?

HE owners have a range of personal characteristics, but which ones matter most for earnings? To gauge this question, we ran a simple OLS regression analysis on owners reported gross earnings per hour (e.g. reported gross profits per hour worked by the owner), using age, level of education and training, gender, hours of work, and location as explanatory variables. This simple analysis has several weaknesses. First, we could not control for capital so returns to assets are included as owner's earnings. Second, we did not have variables commonly used to control for the unobserved selection that led a person to start a HE (e.g. know how, networks, business skills, etc.).[9] Since we have only HE owners in the sample, many of these unmeasured personal characteristics will be present at a similar level in, for example, most urban HE owners. Other characteristics will vary across the sample, but may be correlated with education, possibly causing this variable to be overstated.

HE owners' education is highly correlated with earnings. The higher level of education the higher earnings. Consistent with that finding that those with completed primary education had the highest propensity to be HE owners, standardized regressions[10] of hourly earnings for Tanzania, Rwanda and Ghana show that HEs owners do have positive and increasing returns to education if they complete primary, but education below this level does not add significantly to returns in two out of three countries. (Annex Table 2). In both Tanzania and Rwanda, there is no return to having started, but not completed primary education. This is striking given that the majority of HE owners in Rwanda are in this category. But these results may also reflect the tendency of the education variable to pick up the returns to a number of correlated skills and personality traits picked up at home or elsewhere, such as business knowhow, motivation and determination, or family support. For example, in Ghana, where half of the HE owners have attained above primary education, and where there is a long tradition of HEs so that it is easier to acquire business know-how, the returns to education at the higher levels are lowest. And Ghana has the most educated work force among the three countries, so the selectivity associated with primary education should be lower. This may explain why the returns to education in Ghana are the lowest among the three countries and barely increase between complete primary and above primary. Kuepie et al (2009) compared estimated returns to education in all informal jobs in West Africa using an instrumental variables approach and found similar ranges as ours, suggesting that our simple procedure has not vastly overestimated returns to education.

[9] The most common selection correction in earnings regressions is to model the decision to enter the labor force for women, using variables such as number of children to identify the equation. But a decision to be a HE owner is not the same as the decision to participate in the labor force so variables such as household demographics are not helpful. Occupational choice regressions done by others suggest that HE ownership seems to be conditional on many of the variables we already have in the earnings regression such as education and location, and on other personal characteristics that are not measured in these data sets (Kuepie et al, 2009). After several failures at identification, we went back to simple OLS earnings regressions.

[10] More elaborate regressions taking advantage of additional information found in some countries but not in others, and run separately for male, female, rural and urban are found in separate papers for each country.(World Bank, 2011a and 2001b, and Kweka and Fox, 2011) The results presented here are qualitatively similar to the more elaborate regressions, except in Ghana where we found a significant difference in returns to education for urban and rural HE owners - returns. Returns to primary education are positive and significant in rural areas, while in urban areas, the returns to education below secondary are insignificant.

The finding of positive and significant returns of 21-42% to primary education in the HE sector is important, as previous analyses of the rates of return to education in Ghana, Tanzania, and Uganda found no significant return to education in wage employment at this level (See World Bank, 2006 on returns to education in wage jobs in Uganda, and Kingdon et. al, 2004, on returns to education in SMEs for Tanzania and Ghana). It is not surprising, therefore, that primary school graduates who are not able to go to secondary school have the highest propensity to create HEs of any education level in the labor force. The limited wage employment opportunities available to these graduates are more likely to be casual labor, which are not secure and may not pay as well as a HE for this group.

The second most important variable in explaining earnings is the gender of the enterprise owner. All countries show a very high male premium in the earnings regression, even after controlling for age, education, and sector of activity. This is puzzling. In Rwanda the premium shows up as 65% of the log of earnings; in Tanzania and Ghana the premium is around 40% - a premium higher than completing primary education. Some of the estimated female earnings gap is likely driven by differences in size, technology, and capital. Unfortunately we do not have good measures of size and capital investment in the HEs, but there are some indications that these aspects vary systematically with gender. For instance; male-owned HE sales are more common in markets and streets compared to at home than female HEs, and male-owned HEs are slightly older on average than female HEs. While we controlled for sector of activity, this was not detailed enough to capture gender segregation, even though such segregation is common.[11] The role of these differences, and other unmeasured personal characteristics and behavior in explaining such a large observed difference in earnings per hour by gender needs more investigation. To the extent that it reflects broader gender inequities in these countries, these factors are not only hurting the business, but the welfare of the household and the broader development process in the country.[12]

The analysis did not turn up significant returns to apprenticeships in two out of three countries, an important result given the importance many policy makers place on this training. In Tanzania, the apprenticeship system is not well established; only 8 percent of HE owners reported this type of training. In Rwanda, where the share of HE reporting a past apprenticeship is higher- 20% (compared with 30% in Ghana) - an apprenticeship did yield a positive return. Education and apprenticeship are correlated. In Ghana, most have completed primary education before qualifying for an apprenticeship, although this is not the case in Rwanda where education levels were much lower than in Ghana in 2006.

It might be that the post-primary apprenticeship in Ghana did not provide enough value to compensate for the time spent. Heterogeneous quality of apprenticeships may also affect the result, Unmeasured selectivity variables may be important as well. [13] The occupational segregation by gender associated with traditional apprenticeships may also be a contributing factor. Analysis for Ghana reveals that HE owners who apprenticed in traditionally female occupations as sewing did not end up working in the trade they trained for, showing a mismatch between supply created by traditional apprenticeships and the demand for products. As a result, the value of the training would be worth much less than the time spent. This tendency for girls to be excluded from certain fields in all kinds of vocational training including apprenticeships is well known in SSA (Adams, 2010). Hick et al, 2011 provided new evidence of this problem in

[11] Field work in Tanzania reported in Kweka and Fox (2011), found that certain services are performed almost exclusively by men (e.g. butchery, shoe shining) while charcoal sellers were usually women and women's hair dressing was an exclusively female activity.

[12] See World Bank, 2011, for discussion of this point, including cross-country evidence.

[13] This was the conclusion of Quinn and Teal (2008) using urban labor market data.

Kenya. Detailed earnings regressions for Ghana revealed that apprenticeships do seem to offer a return in specific sectors, such as construction, especially in rural areas (World Bank 2001b). Similarly detailed analysis on Rwanda shows that the strong positive returns to apprenticeships occur in urban areas and are high for males, reinforcing the idea that occupational segregation hurts female earnings (World Bank, 2011a). But all this evidence suggests that much more analysis, including analysis of panel data sets, is required to fully understand the impact of this training approach.

Finally, in all regressions, the dummies included for region and district explained a substantial portion of the overall variance explained - 25-30% in Tanzania and Ghana, where we had over 100 separate location dummies each. This may partially reflect unmeasured spatial price differences. However, qualitative evidence from focus groups on the role of local conditions (local infrastructure, size of market area, behavior of local governments) suggest that local economic and political development is an important variable in HE success (see for example Kweka and Fox, 2011).

Although we have some highly significant coefficients, the r-squares are low in these regressions, suggesting that either earnings, or the explanatory variables, are not well measured. More specialized data sets properly controlling for selectivity and enterprise capital among other things are needed to substantially improve the earnings analysis.

5. Household enterprises and household welfare

Section 3 showed that HEs are increasing importance as a source of employment and section 4 showed that this activity is attracting prime working age people of both genders - ones likely to have a family to support. Multivariate analysis showed there are substantial returns to primary education for HE owners, making it a good occupational choice for this group. But before policy makers and development strategies target this sector for growth, it is important to establish whether this activity does actually pay off as a livelihood source. This section analyses (i) the role of HEs in household livelihood strategies; and (ii) the relationship between HE as a livelihood strategy and household welfare.

Household enterprises as livelihood strategies

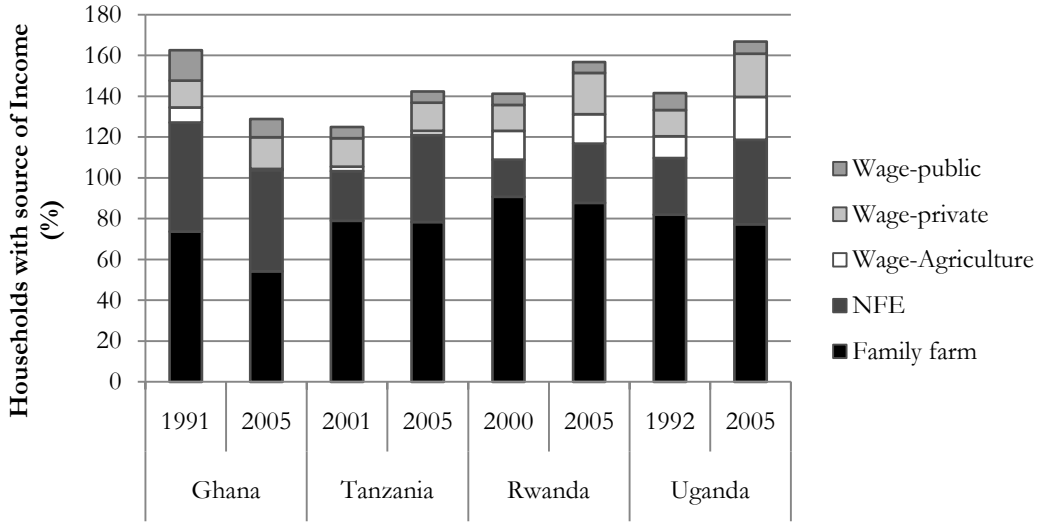
The livelihood strategies that individuals and households adopt reflect the opportunities available to them and the expected remuneration (monetary or otherwise) from these activities. Changes in livelihood strategies represent the response of households to the macro level and local events; livelihood changes at the household-level feed back into sectoral and aggregate economic performance. The causality is not one way, but the results are changes in household income, wealth, and poverty. Livelihood analysis recognizes that the economic activities of individuals are the result individual and household decisions, takes into account the essentially communal nature of household economic activity (see Chambers and Conway, 1991). From an economic point of view, livelihoods can be characterized by the structure of income sources in the household. This approach explicitly recognizes both primary and secondary economic activities.

Although agriculture is still the most common income source in the countries analyzed here, earnings from informal non-farm enterprises are an increasingly important income source for households (Figure 13). These earnings have been has been a source of income for decades in about half of Ghanaian households, and are rising as an income source in countries in Eastern

and Southern Africa. In Uganda, for example, only 18 percent of households had income from this source in 1992, but by 2005/6 over 40 percent reported this source of income. Similarly, the number of households with income from NFEs increased by 20 percentage points over five years in Tanzania and Mozambique, and 12 percentage points in Rwanda.

As early as Adam Smith, it was noticed that in the process of moving out of a subsistence mode, households usually add activities to their portfolio, but as they get more established, specialization and commercialization are likely to occur. This age-old process is now at work in SSA. Of all the countries in our data, Ghanaian households are the only ones that appear to be on the path to specialization. Households are specializing in farm or non-farm earnings, and the total number of households reporting only one type of income (wages, farming or NFE) increased to over 50 percent while the number of household reporting three sources of income fell from 11 % to 6 %. The other countries in the sample appear to be in the diversification stage. In Uganda over 15 years and in Tanzania, Mozambique and Rwanda over five years the number of sources of income per household increased, as most households continued to report income (in cash or in kind) from farming even as they moved into the non-farm sector. Households added HEs as a source of income while maintaining farm activity.

Figure 12 Share of households with income source



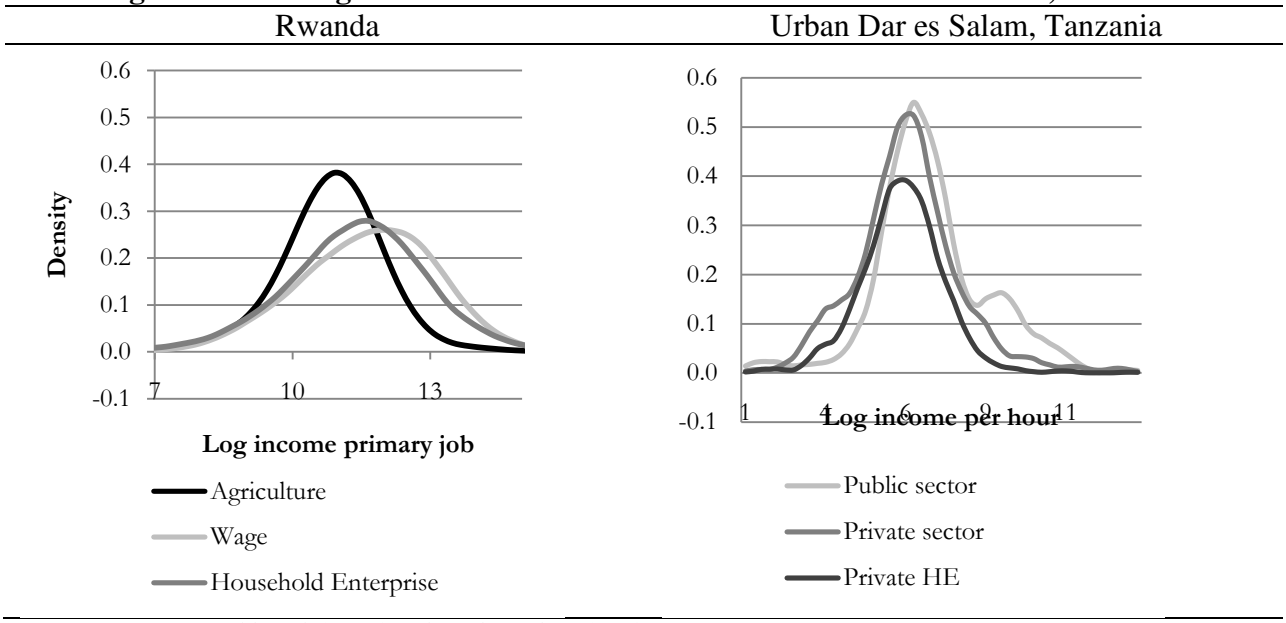
Source: Annex table 1 and authors' calculations

Livelihood strategies and household welfare

The reason agriculture households add NFEs is that HE owners' earnings are usually higher than in agriculture. However, Figure 13 panel (i) using data from Rwanda shows that they also have a wider variance. Similar data from Uganda shows a very high variance in average daily earnings for HE owners and household members working in the business, compared with other income sources (Fox and Pimhidzai, 2011). In urban areas, the differences are not so large. Data from Dar es Salaam, (Figure 13, panel (ii) non-agricultural earnings only), shows that in this capital city where opportunities for both wage employment and HE earnings are highest, median HE earnings are slightly lower than median wage earnings. Not surprising given the higher education levels that wage and salary employees have, the upper tails of the wage earnings distributions are fatter than the HE ones. But still, given the substantially lower level of education in HE owners compared with wage earners in Dar es Salaam, (Kweka and Fox, 2011), it is hard to argue that HE owners do poorly with the education that they have - indeed, as noted

above, those without secondary education might have gotten lower earnings in a wage job. In absence of productivity measures, the higher earnings in informal non-farm enterprises compared with agriculture does suggest that the growth of informal non-farm enterprises should raise average labor productivity, especially in rural areas and small towns.

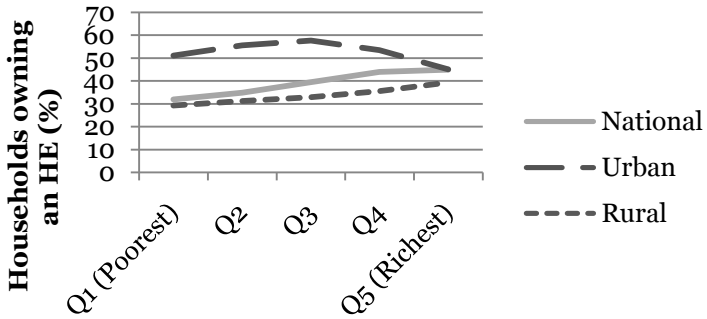
Figure 13 Earnings distributions in Rwanda and Urban Dar es Salam, Tanzania



Source: World Bank (2011a) and Kweka and Fox(2011)

Having a HE is associated with higher household welfare in the countries in our sample. Figure 14 seems to suggest that in urban areas having a HE is most common in the urban middle class, while in rural areas the trend is steadily upward. On average about 45 percent of households in the fifth quintile owns a HE, compared to a little more than 30 percent in the first quintile.

Figure 14: HEs and household welfare



Source: Annex table 1 and authors' calculations. Notes: figures shows weighted average over eight SSA countries and quintiles are defined within urban and rural areas for the urban and rural lines, while the national line is based on national quintiles.

But is having a HE really a good option for households? Table 3 shows the regression coefficients for types of earnings on consumption per capita, for nine SSA countries controlling for education, location, and demographics of the household. Though these regressions do not show causality, they do show the marginal effect on the standard of living of households

associated with different income sources and portfolios of income sources, controlling for other characteristics of the household. [14] These results show that consumption is between 11 and 27 percent higher in urban areas, and 11-32 percent higher in rural areas for households that are engaged in non-farm self-employment, controlling for levels of education and household characteristics. The few households that have microenterprises show even greater effects (over 60 percent higher in Mozambique). What is surprising is that controlling for education, the marginal effect of HE earnings in urban areas is higher than the marginal effect of non-farm private sector wage employment, and only in Burkina Faso and Cameroon is the effect lower

Table 3: Marginal effect of income sources on household consumption

		Wage farming	Family farming	*Household Enterprise*	Micro Enterprise	Private wage	Public Wage
Burkina Faso	Urban	-0.37***	-0.31***	***-0.04***	0.26***	0.06*	0.23***
		(0.10)	(0.05)	(0.04)	(0.04)	(0.03)	(0.05)
	Rural	0.09	-0.36***	***0.01***	0.10***	0.18***	0.36***
		(0.10)	(0.06)	(0.02)	(0.03)	(0.05)	(0.10)
Cameroon	Urban	0.03	-0.22***	***0.11****	0.30***	0.08***	0.32***
		(0.18)	(0.04)	(0.03)	(0.05)	(0.03)	(0.04)
	Rural	-0.09	-0.37***	***0.28****	0.50***	0.37***	0.54***
		(0.10)	(0.05)	(0.04)	(0.10)	(0.06)	(0.06)
Ghana	Urban	-0.13*	-0.00	***0.13****	0.46***	0.07**	0.21***
		(0.08)	(0.03)	(0.03)	(0.05)	(0.03)	(0.04)
	Rural	0.03	-0.07*	***0.11****	0.39***	0.08**	0.17***
		(0.07)	(0.04)	(0.03)	(0.08)	(0.04)	(0.04)
Mozambique	Urban	-0.23***	-0.10***	***0.17****	0.69***	0.08***	0.14***
		(0.08)	(0.03)	(0.02)	(0.13)	(0.02)	(0.03)
	Rural	-0.12**	-0.09	***0.15****	0.61***	0.07*	0.30***
		(0.05)	(0.08)	(0.02)	(0.12)	(0.02)	(0.06)
Rwanda	Urban	-0.14*	-0.11**	***0.27****	0.34**	*0.28***	0.33***
		(0.07)	(0.05)	(0.05)	(0.14)	(0.05)	(0.06)
	Rural	-0.08**	0.19***	***0.32****	0.63***	0.05	0.29***
		(0.04)	(0.05)	(0.03)	(0.10)	(0.05)	(0.07)
Uganda	Urban	-0.12	-0.15***	***0.12****	0.26***	0.11***	0.27***
		(0.09)	(0.04)	(0.03)	(0.08)	(0.03)	(0.05)
	Rural	-0.02	-0.08***	***0.16****	0.24***	0.13***	0.27***
		(0.03)	(0.03)	(0.02)	(0.05)	(0.03)	(0.04)

Source: see annex table 1. Notes: The table shows the regressions coefficient of interest in a regression of log consumption per capita on household demographics, level of education, and location of household, plus source of income in the household (shown). Standard errors are corrected for survey design. Household weights are not applied. For full regression results, see annex table 18 and 19.

than private sector nonfarm wage earnings in rural areas. The marginal effect of public sector wage earnings is almost always higher than private sector non-farm earnings wage or HE earnings, but sometimes lower than those for microenterprise earnings. Similar results have been shown for Viet Nam (Nguyen et al, 2011). *This result suggests that while NFEs may be the occupational choice of people excluded from wage income opportunities (either because of lack*

[14] Regressing sources of income on (log of) consumption avoids potential problems of comparability in the measurement of earnings between different income sources. It may also control for the seasonality of earnings as consumption tends to b smoothed out over time.

of education or simply lack of labor demand), they are a good income choice for many members of this group, and for their households.

The positive correlation between income and HE ownership does not imply causality; in particular not if the rich were already rich and had more personal capital and better access to infrastructure. Tracking of consumption growth over time in panel data provides better evidence, but to date there are not very many panel data sets for SSA. There is still only limited panel data evidence on the role of NFE and changes in consumption. Mead and Lindholm used tracer studies and area panels of enterprises to track the progress of micro and small enterprises in Eastern and Southern Africa in the 1990s, and found positive results for enterprise survival on household incomes. Barrett et al (2001) was one of the first studies to use household panel data to analyze the evolution of livelihoods in rural SSA and how adding nonfarm activities helped households reduce poverty. While finding a positive effect of adding an HE, they also found that better off households were more able to take advantage of opportunities both within and outside the agricultural sector.

There are many reasons why adding an informal non-farm income appears to be a welfare increasing strategy, especially in rural areas. Evidence from Uganda shows that for men, where self-employment in farming is the main activity of the individual and no secondary activity is reported, hours worked per month are on average about 100, well below the 160-180 which would constitute full time employment, indicating the presence of hours-based underemployment. But where the reported main activity is HEs, reported hours worked per month were on average are over 200, exceeding the definition of full the work. (Fox and Pimhidzai, 2011).

Increasing the hours of productive work is not the only benefit of HE ownership in countries such as Uganda. The same analysis suggests that the expansion into non-farm enterprises helped raise agricultural productivity and vice versa. The diversification appears to have provided extra liquidity, thus compensating for the failure of rural credit markets.[15] Evidence from Uganda in 2005/06 shows that agricultural households with other sources of income report higher income from agriculture on average. They are also more likely to buy other fertilizers, seeds and other marketed inputs. This indicates that households with a diversified livelihood portfolio use their non-farm income sources to provide working capital for their farms. This raises yields on their farms thus increasing their incomes further (Fox and Pimhidzai, 2011). Other studies have found similar relationships between nonfarm enterprises and modernization of farming practices in Asia. (Haggblade et al, 2010) Likewise, qualitative evidence shows that increases in farm cash incomes support the growth of the non-farm enterprise sector by increasing demand for these products (World Bank, 2012, Kweka and Fox, 2011).

In sum, available evidence points to HEs as successful livelihood strategy for many households in SSA. They are associated with inclusive growth in countries such as Uganda and Rwanda, and with higher household welfare in most countries in the sample. Controlling for education and location, they produce as much an increase in household welfare as the average wage and salary job. Even with their limitations such as small scale of production and limited potential for growth in size or scope, as an entry point into the nonagricultural sector, they appear to be a good choice for households.

[15] Dercon (2009) suggested that further expansion of NFE in rural areas could substitute for farm credit market failures. Dercon notes that lending against farm production is risky owning to weather and price swings, so microfinance models have not been as successful as they have been for non-farm household enterprises. However, our data suggests that there may be some hurdles to overcome before this substitution happens; our data show that microfinance has hardly reached the HE sector in SSA.

6. Concluding remarks

The debate on how to promote productive income earning opportunities for the rapidly growing labor force in Sub-Saharan Africa is a lively one. This paper contributes to this debate by providing empirical evidence on the role HEs have played, and can be expected to play. in meeting this employment challenge. We find that owing to the demographics and current structure of low income SSA economies, even exceptionally high economic growth rates in the non-farm sectors have not and will not generate enough new non-farm wage employment to absorb both the new entrants and those who seek to leave the agricultural sector. HEs are growing as a share of the labor force not because of regulatory or economic growth failures, but because in low income SSA countries HEs usually are the best option for labor force participants who want to use their skills and energy to create a non-farm income source for themselves and their families. Our simulations suggest that this is not likely to change in the medium term under any feasible growth pattern.

On the positive side, the livelihood analysis shows that HE ownership appears to be a good option for the segment of the labor force that has completed primary education but cannot get wage employment and does not want to work in the agricultural sector. Indeed controlling for education, a household can perform just as well when adding an HE as primary employment as adding a wage income. This is because for those with less that secondary education, private wage incomes are very low - there is almost no return to primary education in the non-farm wage sector. This is an important finding for national development strategies because for at least the next ten years, the majority of those who enter the labor market in SSA will not have had the opportunity to attend secondary school. Developing a HE sector is therefore not a coping strategy, it is a growth strategy. *With 40-50 percent of households engaged in non-farm enterprises on average, and the share increasing in many countries, any investments which result in more household having a viable HE or higher incomes for even half of the HEs would have a substantial impact on GDP and poverty.*

Our analysis of HEs and their owners shows that most HEs are engaged in non-tradable sectors such as retail trade, personal services, and processing of natural resources. Their competition is therefore internal. Earnings are higher for more educated owners, showing the importance of the expansion of educational opportunities for incomes in this sector. Despite being in a competitive sector, the majority of HEs appear to be viable enterprises, having been in operation for several years. In urban areas, it is common for HEs to operate full time as primary employment, but in rural areas HEs tend to operate less than 6 months per year and only a few days a week. If the owner is able to build the HE into a primary employment source, earnings and the contribution to household welfare tend to be higher. However, in all countries studied here, the vast majority of HEs continue to be self-employed even as the sector has grown, indicating that growth of employment in this sector will happen through the growth of new businesses, not through existing businesses taking on employees.

Contrary to popular belief, the majority of HE owners are registered, licensed, or in other ways known to the local authorities. Many report paying taxes or license fees to these sub-national governments, and often the traders pay a fee to have a place in the public market. This demonstrates that the relationship between enterprise and the state cannot be summarized in a simple “formal/informal” dichotomy, as indicated by the variable “registration of enterprise” - the relationship is more complex, with variations across and within countries. Though from a research point of view a national register of all HEs would be helpful, it does not seem necessary (or even feasible) to try to develop such a program given the vast number of HEs and their lack of integration into the national economy. A focus on local governance for HEs is justified also by

the finding from the earnings analysis which shows that local factors play an important role in determining earnings, in additional to individual characteristics. This may be because in a more dynamic local economic environment, opportunities for earning income are higher, or it may reflect differences in governance and access to infrastructure services such as workplaces and market stalls.

By focusing on HEs as a source of employment, a viable enterprise, and a household livelihood, we have been able to identify more clearly the characteristics of this sector in SSA and what makes this sector special, so that effective policies and strategies can be developed. Our data do not contain much information on specific projects or programs, so this paper is primarily an empirical analysis of the sector. Nevertheless, the analysis in this paper points to the following insights for development policies and programs:

- *The majority of enterprises are in rural or semi-rural areas, and these are often seasonal ventures*, especially in the lowest income countries where investments in the agricultural value chain (including water management and market infrastructure) have not reduced risk or raised productivity enough to encourage households to specialize in one sector or another. Programs to support the sector need to take account of this trend. If the trend in Ghana could be generalized, it indicates that as market infrastructure develops and technology and irrigation is brought in, specialization occurs naturally.[16]

- *Although very active in the sector, females are disadvantaged with respect to earnings.* Women tend to be occupationally segregated in this sector, and the traditional apprenticeship system reinforces this. Women are also less likely to create enterprises in rural areas - reflecting a rural household strategy which tends to assign females the role of food security in the family. Local norms may also affect the opportunities of female HE owners differently than those ofr males. Whatever the cause, the result observed in our analysis was a large unexplained male-female earnings gap. Effective programs of support will need to take account of this issue and strive for an understanding at the local- and program-level of these factors. If not, women may be left behind.

- *This sector is not currently a solution for the youth employment problem.* Although this sector is often designated as an entry point to employment for youth, our data suggests the contrary, as those under 25 have a very low probability of being HE owners. The need for basic technical and business skills usually acquired on the job or in lengthy traditional apprenticeships, as well as, the need for start-up capital appears to be important factors. Where youth are employed in this sector, it is usually as contributing family workers. They may be learning on the job, or they may be just be working in this sector while looking for a better opportunity. More research is needed on successful, scalable strategies to achieve breakthroughs here.

- *Financial inclusion is an important issue*. More work is needed in country-specific contexts on what might be the key elements of a support program. However; one result comes out clearly: enterprise owners want easier access to capital. Lack of capital is reported as both the biggest obstacle to start-up and a major constraint to sustaining the business. At this point, few HEs are being served by the microfinance industry or other initiatives.

[16] This is also a key finding of a rural transformation study of 7 countries, including four SSA countries (Losch B., Fréguin Gresh S. and E. White, 2011).

References

Adams, Arvil Van, (2010). "A Framework for the Study of Skills Development in the Informal Sector of Sub-Saharan Africa." Washington DC: World Bank, July

Barrett, C B, T Reardon, P Webb, (2001). "Nonfarm income diversification and household livelihood strategies in rural Africa: concepts, dynamics, and policy implications" Food Policy (2001) Volume: 26, Issue: 4

Bezu, Sosina, Christopher B. Barrett, Stein T. Holden,(2012) "Does the nonfarm economy offer pathways for upward mobility? Evidence from a panel data study in Ethiopia," *World Development*, forthcoming.

Chambers, R. and Conway, G. 1991. "Sustainable rural livelihoods: practical concepts for the 21st century", IDS Discussion Paper No. 296, Brighton: IDS.

Dercon, Stefan (2009). "Rural Poverty: Old Challenges and New Contexts". *World Bank Research Observer* Oxford University Press. April 2009.

de Mel, Suresh. Mckenzie, David, Woodruff, Christopher. (2008) Who Are the Micro Enterprise Owners? Evidence from Sri Lanka on Tokman v. de Soto. World Bank Policy Research Working Paper 4635.

de Mel, Suresh. Mckenzie, David, Woodruff, Christopher. (2009) Innovative Firms or Innovative Owners? Determinants of Innovation in Micro, Small, and Medium Enterprises. World Bank Policy Research Working Paper 4934.

Fajnzylber, Pablo, William Maloney and Gabriel Montes Rojas, (2006). "Microenterprise Dynamics in Developing Countries: How Similar Are They to Those in the Industrialized World? Evidence from Mexico". *World Bank Economic Review*, Oxford University Press, vol. 20(3), pages 389-419.

Fields, Gary s. (2012). Working Hard, Working Poor: A global journey. New York: Oxford University Press.

Falco, Paolo Andrew Kerr, Neil Rankin, Justin Sandefur, Francis Teal. (2011) The returns to formality and informality in urban Africa, Labour Economics 18 (2011) S23–S31

Fox, Louise, Kibbuka, Katie., Munoz, Jorge Huerta., Sohnesen, Thomas Pave (2011). Small is Big: Development of Household Enterprise Sector in Ghana. A quantitative look at household enterprises**.** Washington DC: World Bank, processed.

Fox, Louise and Melissa S. Gaal (2008). *Working out of Poverty: Job Creation and the Quality of Growth in Africa*. The World Bank, Washington, DC.

Fox, Louise and Pimhidzai Obert. (2011). "Is Informality Welfare-enhancing Structural Transformation? Evidence from Uganda" Policy Research Working Paper , No. WPS 5866. The World Bank, Washington DC.

Fox, Louise and Pimhidzai Obert. (2012). "Taking from the poor or local economic development: the taxation of small informal enterprises in Uganda". Washington D.C. Processed.

Fox, Louise and Sohnesen, Thomas Pave (2012). "Household Enterprises in Mozambique: Key to poverty reduction, but not a key agenda?" Processed.

Kingdon, Geeta, Justin Sandefur, and Francis Teal. 2004. "Africa Region Employment Issues – Regional Stocktaking Review." Centre for the Study of African Economies Department of Economics. Oxford University, November.

Gollin, Douglas, (2008). "Nobody's business but my own: Self-employment and small enterprise in economic development" *Journal of Monetary Economics* 55 (2008) 219–233.

Grimm, Michael, Jens Kruger and Jann Lay. 2011. "Barriers to entry and returns to capital in informal activities: Evidence from Sub-Saharan Africa". *Review of Income and Wealth*. Series 57. Special Issue.

Grimm, Michael. Lay, Jann. Roubaud, Francois. (2011). Informal Sector Dynamics in Times of Fragile Growth: The Case of Madagascar. DIAL Working Paper.

Grimm Michael, Rolph van der Hoeven and Jan Lay (2011). Unlocking potential Tackling economic, institutional and social constraints of informal entrepreurship in Sub-Saharan Africa: Main findings and policy conclusions. Erasmus University Rotterdam, May 2011. Processed.

Gunther, Isabel, Launov, Andrey. 2012. Informal employment in developing countries Opportunity or last resort?. Journal of Development Economics 97 (2012) 88-98.

Hicks Joan Hamory, Michael Kremer, Isaac Mbiti, and Edward Miguel. April 2011Vocational Education Voucher Delivery and Labor Market Returns: A Randomized Evaluation Among Kenyan Youth Report for Spanish Impact Evaluation Fund (SIEF) Phase II

Haggblade, Steven, Peter Hazel and Thomas Reardon. 2010. "The rural non-farm economy: prospects and poverty reduction", *World Development*, vol 38

ILO. 2011 *Statistical Update on Employment in the Informal Economy*. Department of Statistics, Geneva, June.

ILO. 2004. *Global Employment Trends Geneva:* ILO.

ILO 2003. Report 1, General Report, 17th International Conference of Labour Statisticians, Geneva, 24 November - 3 December 2003, 100p.

ILO 1993. "Resolution Concerning the International Classification of Status in Employment (ICSE), Adopted by the Fifteenth International Conference of Labour Statisticians" http://www.ilo.org/public/english/bureau/stat/download/res/icse.pdf

Kanbur, Ravi, 2012. "Avoiding Informality Traps". in Ejaz Ghani (Editor), *Reshaping Tomorrow: Positioning South Asia for the Big Leap*. Washington DC: World Bank .

Kremer, M., Lee, J.N., and Robinson, J.M. 2010. The Return to Capital for Small Retailers in Kenya: Evidence from Inventories

Kuepie, Mathias, Christophe Nordman, and Francois Roubaud (2009). Education and Earning in Urban West Africa, *Journal of Comparative Economics*, 37:491-515

Kweka Josephat and Fox, Louise (2011). The household enterprise sector in Tanzania : why it matters and who cares. World Bank Policy Research Working Paper, WPS5882.

La Porta, Rafael and Shleifer, Andrei "The Unofficial Economy and Economic Development" Brookings Papers on Economic Activity, Fall, 2008.

Loayza, Norman V., Luis Servén, Naotaka Sugawara.(2009) " Informality in Latin America and the Caribbean." Policy Research Working Paper 4888, The World Bank: Washington DC, March.

Loening, Josef, Laketh Mikael Imru . 2009. "Ethiopia: Diversifying the Rural Economy. An assessment of the Investment Climate for Small and Informal Enterprises". *MPRA Paper No. 23278*

Loening, Josef, Bob Rijkers, and Mans Soderbom (2008). "Nonfarm microenterprises and the investment climate: Evidence from rural Ethiopia". World Bank Policy Working Paper Series #4577.

Losch B., Fréguin Gresh S. and E. White, 2011. *Rural Transformation and Late Developing Countries in a Globalizing World. A Comparative Analysis of Rural Change*. Final Report of the RuralStruc Program, Revised Version. Washington, DC: World Bank

Maloney, William F., 2004. "Informality Revisited," World Development, Elsevier, vol. 32(7), pages 1159-1178, July.

Mead, D.C and Liedholm, C. 1998. *The dynamics of micro and small enterprises in developing countries*. World Development. Volume 26, Issue 1, January 1998, Pages 61-74

Nwabuzor, A. 2005. Corruption and Development: New initiatives in economic openness and strengthened rule of law. *Journal of Business Ethics*. 59 (1/2) 121-138.

Nguyen, Huu Chi, Christpohe J. Nordman, and Francois Rouband 2011. "Who Suffers the Penalty? A Panel Data Analysis of Earnings Gaps in VietNam." Paris:DIAL September.

OECD 2009. *Is Informal Normal? Towards More and Better Jobs in Developing Countries*. ISBN Number:978-92-64-05923-8.

Quinn, Simon and Francis Teal (2008) *Private Sector Development and Income Dynamics: A Panel Study of the Tanzanian Labour Market*. CSAE WPS/2008-09, Oxford.

Schoar, Antoinette. 2009 "The Divide between Subsistence and Transformational Entrepreneurship" in Joshua Lerner and Scott Stern (Eds.), NBER *Innovation Policy and the Economy* 2009.

Steel, William F. and Donald Snodgrass. 2008. "Raising Productivity and Reducing Risks of Household Enterprises, Diagnostic Methodology Framework"

Tidane Kinda and Josef Loening. 2008. "Small enterprise growth and the rural investment climate: Evidence from Tanzania". World Bank Policy Research Working Paper 4675.

World Bank (2006). *Uganda: Poverty and Vulnerability Assessment*. World Bank, Washington D.C., Report No 36996-UG

World Bank, (2007). *Informality: Exit and Exclusion*. World Bank, Washington D.C.

World Bank 2011a. Rwanda Economic Update, Second Edition. Resilience in the Face of Economic Adversity. Policies For Growth With A Focus on Household Enterprises.

World Bank 2011b. Raising Productivity and Reducing the Risk of Household Enterprises. Ghana Country Study, Policy Note. World Bank Mimeo.

World Bank 2012. Raising Productivity and Reducing the Risk of Household Enterprises. Uganda Country Study,. World Bank Mimeo.

ANNEX

Table 1: Sources of data

Country	Name of survey	year	Reference
Burkina Faso	EBCVM	2003	http://www.insd.bf/fr/
Cameroon	ECAM	2001	http://www.statistics-cameroon.org
Cameroon	ECAM	2007	http://www.statistics-cameroon.org
R. Congo	ESSIC	2009	http://www.cnsee.org/index.php?option=com_content&view=category&id=34&Itemid=61
Cote d'Ivoire	ENV	2002	http://www.ins.ci/nada/index.php/catalog
Cote d'Ivoire	ENV	2008	http://www.ins.ci/nada/index.php/catalog
Ghana	GLSS1	1991/92	http://www.statsghana.gov.gh/
Ghana	GLSS5	2005/06	http://www.statsghana.gov.gh/
Kenya	KIHBS	2005/06	http://www.knbs.or.ke/surveys.php
Mozambique	IAF	2002/03	http://www.ine.gov.mz/inqueritos_dir/iaf/
Mozambique	IOF	2008/09	http://www.ine.gov.mz/inqueritos_dir/iaf/
Mozambique	National Panel Survey	2002-2008	http://microdata.worldbank.org/index.php/catalog/999/overview
Rwanda	EICV	2000/01	http://www.statistics.gov.rw/survey/integrated-household-living-conditions-survey-eicv
Rwanda	EICV	2005/06	http://www.statistics.gov.rw/survey/integrated-household-living-conditions-survey-eicv
Senegal	ESPS	2000/01	http://www.ansd.sn/dsrp.html
Senegal	ESPS	2005/06	http://www.ansd.sn/dsrp.html
Tanzania	HBS	2001	http://www.tanzania.go.tz/hbs/HomePage_HBS.html
Tanzania	ILFS	2005/06	http://www.nbs.go.tz/tnada/index.php/catalog
Uganda	UNHS	1992/93	http://www.ubos.org/index.php?st=pagerelations2&id=32&p=related%20pages%202:Household
Uganda	UNHS	2005/06	http://www.ubos.org/index.php?st=pagerelations2&id=32&p=related%20pages%202:Household

Note: websites visited on March 08, 2012.

Table 2 Hourly earnings regressions for HE owners

	Log earnings per hour			Log monthly earnings
	Tanzania	Rwanda	Ghana	Uganda
Male HE owner	0.46***	0.65***	0.38***	0.74
	(0.03)	(0.08)	(0.05)	(0.06)
Age of HE owner	0.05***	0.08***	0.09***	0.06***
	(0.00)	(0.01)	(0.01)	(0.01)
Age squared and divided by 100	-0.06***	-0.08***	-0.08***	-0.07***
	(0.01)	(0.02)	(0.01)	(0.01)
Education (no education is excluded variable)				
Incomplete primary	0.03	0.12	0.19***	0.10
	(0.05)	(0.11)	(0.07)	(0.09)
Complete primary	0.21***	0.42***	0.26***	0.36***
	(0.04)	(0.12)	(0.08)	(0.10)
Complete lower secondary	0.27***	0.67***	0.30***	0.56***
	(0.08)	(0.14)	(0.05)	(0.10)
Complete upper secondary	0.42***	1.18***	-0.11	0.74***
	(0.07)	(0.27)	(0.20)	(0.14)
Post-secondary	0.98***	1.81***	0.37***	1.09***
	(0.16)	(0.51)	(0.09)	(0.16)
Past Apprentice	0.10	0.26***	0.01	
	(0.05)	(0.08)	(0.04)	
Location (rural areas is the excluded variable)				
Urban	0.06	0.38***	0.10*	-0.79
	(0.03)	(0.12)	(0.06)	(0.50)
Hours worked a week	-0.01***	0.03***	0.07***	
	(0.00)	(0.01)	(0.00)	
Hours worked a week squared and divided by 100	0.00	-0.02***	-0.03***	
	(0.00)	(0.01)	(0.00)	
Observations	6774	1666	3141	2,505
R-squared	0.19	0.32	0.53	0.327
Dummies for sector of industry	Yes	Yes	Yes	Yes
Dummies for region and district	Yes	Yes	Yes	Yes

Source: Ghana (GLSS5 2005/06), Rwanda (EICV 2005/06), Tanzania (ILFS 2005/06).
Notes: earnings are net income from HE divided by hours worked by owner.

Mean of Variables

	Tanzania	Rwanda	Ghana	Uganda
Log earnings per hour in int $ ppp	-0.56	5.64	2.50	4.12
Male HE owner	51.8%	54.3%	26.7%	
Age of HE owner	35.7	34.1	38.6	
Age squared and divided by 100	14.4	13.1	16.4	
No education	16.8%	17.2%	36.7%	13.2%
Incomplete primary	13.6%	44.3%	12.2%	42.6%
Complete primary	61.9%	24.2%	5.1%	17.0%
Complete lower secondary	2.5%	11.9%	38.8%	16.6%
Complete upper secondary	4.7%	1.9%	2.5%	5.8%
Above primary	0.6%	0.5%	4.6%	4.8%
Past Apprentice	8.2%	26.2%	31.4%	na
Urban	49.4%	31.1%	45.5%	34.1%
Hours worked a week	52.4	32.2	42.1	na
Hours worked a week squared and divided by 100	31.6	15.9	22.3	na
Observations	6774	1666	3141	2505

Source: Ghana (GLSS5 2005/06), Rwanda (EICV 2005/06), Tanzania (ILFS 2005/06).
Notes: earnings are net income from HE divided by hours worked by owner.

Table 3: Characteristics of HE owners by country

	Burkina Faso	Cameroon	R. Congo	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Gender									
Male	40.9	43.2	35.3	29.2	62.8	54.3	54.2	59.7	49.5
Female	59.1	56.8	64.7	70.8	37.2	45.7	45.8	40.3	50.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Location									
Rural	76.1	55.6	n.a.	52.5	58.2	77.3	58.4	74.3	60.9
Urban	23.9	44.4	100.0	47.5	41.8	22.7	41.6	25.7	39.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Age									
15 - 19	5.9	5.5	1.2	1.7	5.6	7.4	5.7	3.4	4.4
20 - 24	11.9	12.4	8.3	7.8	12.5	19.7	12.7	10.8	11.5
25 - 29	15.2	17.2	16.1	14.8	16.5	18.0	17.5	17.4	16.6
30 - 34	15.5	15.0	17.8	15.2	16.6	14.3	17.1	16.4	16.1
35 - 39	14.2	12.7	17.5	15.2	13.9	10.5	14.0	15.1	14.3
40 - 44	11.0	11.0	14.2	13.6	9.8	10.1	10.1	11.0	11.1
45 - 49	8.6	8.8	7.5	11.2	9.3	8.1	7.5	8.4	8.8
50 - 54	7.0	7.2	5.8	8.0	5.5	5.0	5.3	5.7	6.2
55 - 59	4.2	3.3	3.6	4.2	3.9	3.1	3.6	4.1	3.8
60 - 65	3.4	3.6	3.8	4.5	3.1	1.8	3.1	3.4	3.5
66+	3.1	3.3	4.3	3.7	3.6	2.0	3.5	4.3	3.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Education									
None	84.4	32.9	8.2	32.1	0.6	18.0	17.2	12.1	24.7
Incomplete Primary	7.3	21.5	16.5	11.9	73.7	47.1	13.5	41.5	24.5
Completed Primary	3.2	17.3	8.7	5.5	9.9	23.0	60.8	17.2	26.8
Incomplete Secondary	3.9	18.3	50.1	42.9	12.6	10.3	2.6	16.9	17.0
Completed Secondary	0.7	8.2	11.9	2.6	2.7	1.4	5.1	6.2	4.4
Tertiary or other	0.6	1.8	4.6	5.1	0.6	0.3	0.8	6.0	2.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Migrant									
No	n.a.	n.a.	48.1	92.9	95.3	87.4	91.7	75.4	89.6
Yes			51.9	7.1	4.7	12.6	8.3	24.6	10.4
Number of hours worked in HE a week									
less than 10	n.a.	n.a.	n.a.	11.4	n.a.	17.3	8.6	n.a.	10.1
10 to 20				10.7		22.9	15.0		13.9
20 to 30				12.7		17.4	18.9		16.6
30 to 40				14.8		10.8	13.6		13.9
40 to 50				17.0		10.5	15.2		15.6
more than 50				33.4		21.2	28.7		30.0
total				100.0		100.0	100.0		100.0
Employment type									
HEs is primary employment	30.8	n.a.	87.3	70.1	44.7	45.2	45.8	63.5	57.9
HE is secondary employment	69.2		12.7	29.9	55.3	54.8	54.2	36.5	42.1
Total	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: most recent household survey, see table 1 in annex. *R. Congo only includes urban areas.

Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section.

Table 4: Characteristics of *male* HE owners by country

	Burkina Faso	Cameroon	R. Congo	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Location									
Rural	70.8	52.6	n.a.	50.1	67.6	80.7	60.2	77.0	64.1
Urban	29.2	47.4	100.0	49.9	32.4	19.3	39.8	23.0	35.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Age									
15 - 19	4.0	5.0	0.8	2.2	5.0	6.3	5.8	2.9	4.4
20 - 24	9.5	13.0	8.8	6.8	11.8	19.5	11.4	9.9	10.9
25 - 29	15.5	17.3	16.8	14.6	17.3	19.6	17.3	16.3	16.7
30 - 34	16.9	15.9	20.2	15.1	16.6	14.8	17.8	17.2	16.9
35 - 39	14.6	11.9	19.0	14.3	13.9	11.1	13.9	16.3	14.3
40 - 44	11.1	11.2	11.7	13.9	9.4	9.9	10.3	11.0	10.9
45 - 49	9.3	7.3	9.3	12.1	9.3	7.6	7.0	8.8	8.5
50 - 54	6.8	6.2	3.6	6.6	5.5	4.5	5.5	5.0	5.6
55 - 59	4.5	3.7	2.8	5.4	3.9	3.0	3.8	4.1	4.1
60 - 65	3.5	3.8	3.9	4.0	3.1	1.4	3.4	3.9	3.5
66+	4.2	4.7	3.1	4.9	4.2	2.2	3.9	4.6	4.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Education									
None	76.8	24.7	6.1	20.2	0.3	13.2	12.3	5.1	15.9
Incomplete Primary	10.4	20.9	14.9	9.3	73.4	50.1	14.4	41.0	27.8
Completed Primary	4.4	19.4	8.5	4.6	10.2	25.6	63.3	20.8	31.4
Incomplete Secondary	5.8	19.6	42.9	51.9	12.7	9.0	2.7	18.1	15.6
Completed Secondary	1.4	11.8	19.1	5.4	2.8	1.6	6.1	7.3	5.9
Tertiary or other	1.1	3.6	8.6	8.5	0.6	0.5	1.1	7.7	3.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of hours worked in HE a week									
less than 10	n.a.	n.a.	n.a.	12.5	n.a.	13.3	8.0	n.a.	9.4
10 to 20				10.6		20.3	12.4		12.6
20 to 30				11.6		18.1	16.9		15.8
30 to 40				9.8		12.1	12.4		11.8
40 to 50				16.6		11.4	14.3		14.6
more than 50				38.8		24.8	35.8		35.7
total				100.0		100.0	100.0		100.0
Employment type		n.a.							
HEs is primary employment	34.5		73.4	58.6	41.1	50.3	44.4	63.0	53.5
HE is secondary employment	65.5		26.6	41.4	58.9	49.7	55.6	37.0	46.5
Total	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: most recent household survey, see table 1 in annex. *R. Congo only includes urban areas.

Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section.

Table 5: Characteristics of *female* HE owners by country

	Burkina Faso	Cameroon	R. Congo	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Location									
Rural	79.7	57.8	n.a.	53.5	42.3	73.2	56.1	70.3	58.0
Urban	20.3	42.2	100.0	46.5	57.7	26.8	43.9	29.7	42.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Age									
15 - 19	7.3	5.8	1.4	1.6	6.5	8.7	5.6	4.1	4.5
20 - 24	13.6	12.0	8.0	8.2	13.6	20.0	14.2	12.1	12.0
25 - 29	15.0	17.1	15.7	14.9	15.1	16.1	17.7	19.2	16.6
30 - 34	14.5	14.4	16.5	15.3	16.5	13.8	16.3	15.2	15.4
35 - 39	13.9	13.3	16.7	15.6	13.8	9.7	14.0	13.4	14.2
40 - 44	10.9	10.9	15.6	13.4	10.4	10.4	9.8	10.9	11.4
45 - 49	8.1	10.0	6.5	10.8	9.1	8.6	8.1	7.8	9.1
50 - 54	7.1	7.9	6.9	8.6	5.3	5.5	5.0	6.7	6.8
55 - 59	4.0	3.0	4.0	3.7	3.9	3.2	3.3	4.0	3.6
60 - 65	3.3	3.5	3.7	4.7	3.0	2.2	2.7	2.8	3.4
66+	2.3	2.2	5.0	3.2	2.7	1.8	3.1	3.9	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Education									
None	89.6	39.1	9.4	36.9	1.3	23.6	23.0	21.0	32.7
Incomplete Primary	5.1	21.9	17.4	13.0	74.1	43.5	12.4	42.3	21.6
Completed Primary	2.4	15.7	8.8	5.8	9.3	19.9	57.9	12.7	22.5
Incomplete Secondary	2.5	17.3	54.0	39.1	12.5	11.8	2.3	15.3	18.3
Completed Secondary	0.1	5.5	8.0	1.5	2.3	1.2	4.0	4.8	3.1
Tertiary or other	0.2	0.5	2.5	3.7	0.5	0.0	0.3	4.0	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of hours worked in HE a week									
less than 10	n.a.	n.a.	n.a.	11.0	n.a.	22.3	9.2	n.a.	10.7
10 to 20				10.7		26.1	18.1		14.9
20 to 30				13.1		16.4	21.4		17.2
30 to 40				16.7		9.1	14.9		15.5
40 to 50				17.2		9.3	16.2		16.3
more than 50				31.3		16.7	20.2		25.4
total				100.0		100.0	100.0		100.0
Employment type		n.a.							
HEs is primary employment	28.2		94.9	74.8	50.8	39.1	47.4	64.2	61.9
HE is secondary employment	71.8		5.1	25.2	49.2	60.9	52.6	35.8	38.1
Source:	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: most recent household survey, see table 1 in annex. *R. Congo only includes urban areas.

Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section.

Table 6: Characteristics of *urban* HE owners by country

	Burkina Faso	Cameroon	R. Congo	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Gender									
Male	49.9	46.0	35.3	30.7	48.7	46.1	51.7	53.5	44.8
Female	50.1	54.0	64.7	69.3	51.3	53.9	48.3	46.5	55.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Age									
15 - 19	2.9	4.1	1.2	1.3	5.7	5.7	4.0	3.6	3.4
20 - 24	8.8	12.5	8.3	7.4	13.5	20.2	12.1	10.0	10.8
25 - 29	15.3	18.8	16.1	14.7	18.6	19.3	19.5	19.7	17.8
30 - 34	17.9	16.5	17.8	15.1	15.0	18.5	18.5	17.1	16.8
35 - 39	15.0	13.4	17.5	15.8	14.5	10.5	14.9	17.2	15.2
40 - 44	12.9	11.7	14.2	14.3	9.9	10.2	9.9	11.0	11.6
45 - 49	9.6	8.7	7.5	11.7	9.6	6.5	7.4	7.9	9.0
50 - 54	7.3	6.1	5.8	8.0	4.8	4.6	5.1	5.3	6.0
55 - 59	4.8	2.9	3.6	4.3	3.3	2.6	3.5	2.5	3.5
60 - 65	2.9	3.2	3.8	4.1	2.5	0.9	2.4	2.8	3.0
66+	2.6	2.2	4.3	3.4	2.7	1.0	2.7	2.9	2.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Education									
None	62.9	18.0	8.2	20.7	1.0	12.3	9.9	7.7	14.7
Incomplete Primary	14.1	19.3	16.5	9.4	61.0	37.7	10.3	32.0	19.6
Completed Primary	7.5	20.3	8.7	5.2	11.2	25.6	65.8	17.2	29.0
Incomplete Secondary	11.3	26.6	50.1	52.2	20.9	19.6	3.6	22.7	24.8
Completed Secondary	2.2	12.4	11.9	4.1	4.6	3.6	8.7	8.5	7.2
Tertiary or other	2.1	3.4	4.6	8.4	1.3	1.1	1.5	11.9	4.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of hours worked in HE a week									
less than 10	n.a.	n.a.	n.a.	5.3	n.a.	7.7	4.6	n.a.	5.0
10 to 20				6.1		10.0	5.3		5.8
20 to 30				8.8		10.8	11.7		10.5
30 to 40				13.6		11.4	11.9		12.6
40 to 50				19.9		14.4	18.7		19.1
more than 50				46.3		45.7	47.8		47.1
total				100.0		100.0	100.0		100.0
Employment type									
HEs is primary employment	77.0	n.a.	87.3	88.1	73.8	67.5	72.3	87.9	81.6
HE is secondary employment	23.0		12.7	11.9	26.2	32.5	27.7	12.1	18.4
Total	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: most recent household survey, see table 1 in annex. *R. Congo only includes urban areas.

Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section.

Table 7: Characteristics of *rural* HE owners by country

	Burkina Faso	Cameroon	R. Congo	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Gender									
Male	38.1	40.9	n.a.	27.9	73.0	56.7	55.9	61.8	52.7
Female	61.9	59.1		72.1	27.0	43.3	44.1	38.2	47.3
Total	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0
Age			n.a.						
15 - 19	6.9	6.5		2.2	5.4	7.9	6.9	3.3	5.1
20 - 24	12.9	12.3		8.1	11.7	19.6	13.1	11.1	11.9
25 - 29	15.2	15.9		15.0	15.0	17.6	16.0	16.6	15.9
30 - 34	14.8	13.9		15.3	17.7	13.1	16.1	16.2	15.7
35 - 39	13.9	12.2		14.7	13.5	10.5	13.4	14.4	13.6
40 - 44	10.4	10.5		12.9	9.7	10.1	10.3	10.9	10.8
45 - 49	8.3	8.9		10.8	9.0	8.5	7.5	8.5	8.7
50 - 54	6.9	8.0		8.1	6.0	5.0	5.4	5.8	6.4
55 - 59	4.0	3.7		4.1	4.3	3.3	3.6	4.6	4.0
60 - 65	3.5	4.0		4.9	3.5	2.0	3.6	3.7	3.8
66+	3.2	4.2		4.0	4.3	2.3	4.1	4.8	4.1
Total	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0
Education			n.a.						
None	91.1	44.8		42.3	0.3	19.6	22.4	13.9	31.5
Incomplete Primary	5.1	23.2		14.2	84.0	49.9	15.7	45.4	27.9
Completed Primary	1.9	14.9		5.7	8.8	22.2	57.3	17.2	25.2
Incomplete Secondary	1.6	11.7		34.4	5.9	7.5	1.8	14.5	11.7
Completed Secondary	0.2	4.8		1.3	1.1	0.8	2.6	5.3	2.5
Tertiary or other	0.1	0.5		2.2	0.0	0.1	0.2	3.7	1.2
Total	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0
Number of hours worked in HE a week									
less than 10	n.a.	n.a.	n.a.	17.4	n.a.	20.6	11.3	n.a.	14.0
10 to 20				15.2		27.3	21.8		20.1
20 to 30				16.5		19.6	24.0		21.2
30 to 40				16.0		10.5	14.8		14.8
40 to 50				14.1		9.1	12.7		12.9
more than 50				20.8		12.8	15.3		16.9
total				100.0		100.0	100.0		100.0
Employment type									
HEs is primary employment	16.3	n.a.	n.a.	53.7	23.8	38.6	26.8	53.6	42.0
HE is secondary employment	83.7			46.3	76.2	61.4	73.2	46.4	58.0
Total	100.0			100.0	100.0	100.0	100.0	100.0	100.0

Source: most recent household survey, see table 1 in annex. *R. Congo only includes urban areas.

Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section.

Table 8: HE owners as share of reference population

	Burkina Faso	Cameroon	R. Congo	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Share of HE owners to Employed population									
National	21.4	23.5	32.9	31.4	18.3	12.3	24.2	19.8	22.9
HE owners as share of employed by gender									
Male	18.8	20.6	19.8	19.6	25.2	14.8	27.3	30.5	24.7
Female	23.9	26.2	51.6	41.7	12.5	10.3	21.3	18.8	22.7
HE owners as share of employed by Location									
Rural	19.7	18.2	n.a.	25.9	14.7	11.5	19.4	21.6	19.3
Urban	30.7	36.5	32.9	41.0	28.1	16.6	37.2	38.3	35.3
Total	50.4	54.8	32.9	66.9	42.8	28.1	56.6	60.0	54.6
HE owners as share of active labor force in age group									
15 - 19	5.7	4.5	1.4	2.2	4.9	3.8	7.6	3.5	4.7
20 - 24	14.8	13.0	10.3	13.8	13.8	12.2	20.9	15.8	15.6
25 - 29	22.2	20.5	19.6	29.7	19.3	16.2	29.3	28.3	25.2
30 - 34	27.4	24.3	22.8	36.6	22.5	18.0	32.9	34.1	29.8
35 - 39	29.1	25.5	26.6	38.7	21.5	16.6	32.3	37.6	30.8
40 - 44	29.0	24.9	30.9	41.0	21.4	15.6	30.9	35.1	30.3
45 - 49	28.7	26.0	22.4	37.2	21.4	14.6	26.7	33.9	28.2
50 - 54	26.0	21.6	22.2	31.5	16.7	11.5	23.5	32.9	24.5
55 - 59	21.7	16.5	24.2	25.8	16.7	11.3	21.3	30.6	21.8
60 - 65	15.5	13.3	25.2	25.1	14.2	7.6	16.2	23.9	18.0
66+	10.5	10.3	23.6	13.3	10.8	4.6	11.0	17.3	12.0
HE owners as share of employed with level of education									
None	20.3	18.8	30.4	25.3	20.1	9.1	15.4	16.8	18.8
Incomplete primary	18.5	18.2	25.2	25.7	18.8	11.4	18.5	20.9	18.9
Complete primary	18.1	19.4	22.7	23.7	24.3	16.3	28.3	23.0	25.7
Incomplete secondary	10.9	13.6	19.8	25.6	13.2	11.8	14.5	33.8	21.8
Complete secondary	8.0	12.8	12.0	12.3	13.7	7.5	26.8	35.5	18.7
Tertiary or other	8.8	8.0	7.1	21.1	6.9	3.8	14.2	35.9	15.5
HE owners as share of employed with migrant status									
No migrant	n.a.	n.a.	29.8	31.7	18.0	12.2	23.7	19.1	22.3
Migrant			36.5	28.0	31.3	13.2	31.2	22.6	25.7
HE owner as share of employed by primary or secondary employment									
HEs is primary employment	6.6	n.a.	28.8	22.0	8.2	5.6	11.1	12.6	13.3
HE is secondary employment	14.8		4.2	9.4	10.1	6.8	13.1	7.2	9.6

Source: most recent household survey, see table 1 in the annex. *R. Congo only includes urban areas.

Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section. A HE owner is defined as a migrant if he/she moved to current location within the last five years in Mozambique and Rwanda, the last four years in Tanzania, and last year in R. Congo.

Table 9: Male HE owners as share of reference population

	Burkina Faso	Cameroon	R. Congo	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Share of HE owners to Employed population									
Male National	18.7	20.6	19.8	19.6	25.2	14.8	27.3	23.7	23.1
HE owners as share of employed by Location									
Rural	16.2	16.3	n.a.	15.5	24.2	14.4	22.7	28.1	21.3
Urban	30.7	29.5	19.8	26.7	27.7	16.4	39.5	42.6	32.0
HE owners as share of active labor force in age group									
15 - 19	3.2	3.6	0.7	1.6	5.7	3.7	8.1	3.6	4.5
20 - 24	10.8	12.8	8.7	7.4	19.8	13.8	24.1	19.7	16.4
25 - 29	21.0	19.2	16.2	18.6	29.5	21.1	35.3	35.0	27.7
30 - 34	27.3	23.5	17.5	24.3	31.7	23.1	38.6	42.6	32.6
35 - 39	28.1	21.5	19.8	23.5	29.5	21.4	36.2	48.4	32.1
40 - 44	25.7	22.6	17.9	26.5	28.5	18.8	34.3	44.4	30.6
45 - 49	26.7	19.6	17.4	24.9	27.2	16.7	28.1	42.0	27.7
50 - 54	22.8	18.6	10.1	16.4	22.6	12.8	27.5	37.1	23.3
55 - 59	17.9	16.8	11.7	18.3	22.2	12.8	23.5	37.9	22.4
60 - 65	13.8	12.6	20.0	14.8	18.3	8.0	20.6	36.5	19.2
66+	10.5	12.3	12.0	11.7	17.4	6.4	13.1	22.7	14.2
HE owners as share of employed with level of education									
None	17.6	18.2	36.8	13.6	23.1	10.5	17.3	20.3	16.7
Incomplete primary	17.1	15.9	18.3	13.3	24.8	13.9	19.0	25.1	20.9
Complete primary	16.5	17.9	17.2	12.6	25.9	19.6	32.4	28.5	28.5
Incomplete secondary	11.6	12.2	13.6	16.8	14.0	10.9	14.8	39.7	18.9
Complete secondary	10.3	13.2	11.8	12.3	14.9	8.5	29.4	40.8	20.3
Tertiary or other	9.5	9.5	6.7	16.4	7.6	5.6	16.6	41.3	14.5
HE owners as share of employed with migrant status									
No migrant	n.a.	n.a.	16.5	20.0	24.9	14.8	26.9	22.8	23.0
Migrant			23.5	14.9	33.3	14.7	33.5	27.5	25.6
HE owner as share of employed by primary or secondary employment									
HEs is primary employment	6.5	n.a.	14.5	11.5	10.4	7.4	12.1	14.9	12.4
HE is secondary employment	12.2		5.3	8.1	14.9	7.3	15.2	8.8	10.7

Source: most recent household survey, see table 1 in the annex. *R. Congo only includes urban areas.

Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section. A HE owner is defined as a migrant if he/she moved to current location within the last five years in Mozambique and Rwanda, the last four years in Tanzania, and last year in R. Congo.

Table 10: Female HE owners as share of reference population

	Burkina Faso	Cameroon	R. Congo	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Share of HE owners to Employed population									
Female National	23.8	26.2	51.6	41.7	12.5	10.3	21.3	16.4	22.6
HE owners as share of employed by Location									
Rural	22.6	19.9	n.a.	35.0	7.1	9.1	16.3	15.8	17.6
Urban	30.8	46.0	51.6	53.8	28.5	16.9	35.0	34.4	38.5
HE owners as share of active labor force in age group									
15 - 19	8.0	5.3	1.9	2.9	4.1	3.9	7.0	3.4	4.8
20 - 24	18.0	13.1	11.5	19.6	9.6	10.7	18.5	12.8	15.0
25 - 29	23.2	21.7	22.4	39.0	11.6	12.1	24.5	22.8	23.2
30 - 34	27.4	25.1	28.4	46.1	15.1	14.0	27.6	25.6	27.3
35 - 39	29.9	29.3	34.0	51.2	14.7	12.7	28.7	26.8	29.6
40 - 44	31.8	27.0	43.9	53.4	15.5	13.1	27.6	26.8	30.1
45 - 49	30.4	31.7	28.7	48.3	15.6	12.8	25.5	25.7	28.6
50 - 54	28.7	24.0	33.7	44.4	11.5	10.4	19.9	29.3	25.6
55 - 59	25.9	16.3	41.1	34.5	11.8	10.1	19.0	23.7	21.2
60 - 65	17.1	14.1	29.6	33.3	10.2	7.3	12.3	14.1	16.9
66+	10.5	8.1	34.6	14.5	5.4	3.3	8.9	12.2	10.0
HE owners as share of employed with level of education									
None	22.3	19.2	28.6	31.5	19.2	8.3	14.3	15.6	20.0
Incomplete primary	20.8	20.3	30.6	35.4	13.0	9.2	18.0	16.8	16.9
Complete primary	20.4	20.9	27.3	33.5	21.5	13.0	24.3	16.4	22.8
Incomplete secondary	10.1	15.0	24.7	35.9	11.9	12.7	14.1	26.0	25.3
Complete secondary	3.1	12.2	12.4	12.4	11.6	6.3	23.1	26.3	16.2
Tertiary or other	7.1	4.4	8.1	29.0	5.6	0.5	8.7	21.6	17.5
HE owners as share of employed with migrant status									
No migrant	n.a.	n.a.	48.4	42.0	12.3	10.2	20.7	15.5	21.8
Migrant			55.4	38.9	27.0	11.6	29.2	19.2	25.7
HE owner as share of employed by primary or secondary employment									
HEs is primary employment	6.7	n.a.	49.0	31.2	6.4	4.0	10.1	10.5	14.0
HE is secondary employment	17.1		2.6	10.5	6.2	6.3	11.2	5.9	8.6

Source: most recent household survey, see table 1 in the annex. *R. Congo only includes urban areas.

Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section. A HE owner is defined as a migrant if he/she moved to current location within the last five years in Mozambique and Rwanda, the last four years in Tanzania, and last year in R. Congo.

Table 11: Urban HE owners as share of reference population

	Burkina Faso	Cameroon	R. Congo	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Share of HE owners to Employed population									
National	30.5	36.5	32.9	41.0	28.1	16.6	37.2	36.6	35.0
HE owners as share of employed by gender									
Male	30.7	29.5	19.8	26.7	27.7	16.4	39.5	42.6	32.0
Female	30.8	46.0	51.6	53.8	28.5	16.9	35.0	34.4	38.9
HE owners as share of active labor force in age group									
15 - 19	3.0	3.7	1.4	1.9	5.6	3.8	7.9	5.8	4.6
20 - 24	10.2	12.3	10.3	13.3	15.8	14.7	26.3	17.5	16.5
25 - 29	22.4	22.6	19.6	31.6	26.1	18.7	41.4	37.5	31.0
30 - 34	33.0	28.3	22.8	40.9	27.6	26.0	48.2	46.4	37.6
35 - 39	37.2	31.1	26.6	46.6	31.1	20.0	47.9	61.1	41.5
40 - 44	39.6	32.0	30.9	49.2	29.0	24.4	46.3	60.9	41.7
45 - 49	38.2	33.6	22.4	46.4	29.7	19.1	41.1	57.3	39.0
50 - 54	37.2	29.2	22.2	38.2	21.9	16.9	36.3	57.5	33.8
55 - 59	33.0	25.6	24.2	32.7	23.1	14.7	35.9	43.7	31.1
60 - 65	21.6	22.3	25.2	33.1	18.6	8.1	24.4	48.7	26.7
66+	15.9	18.1	23.6	17.9	14.6	3.8	18.5	30.6	18.3
HE owners as share of employed with level of education									
None	31.7	31.2	30.4	36.9	38.7	12.8	30.2	37.5	32.3
Incomplete primary	21.5	26.6	25.2	34.3	25.3	15.4	29.4	35.7	27.5
Complete primary	17.3	26.2	22.7	28.4	25.1	20.9	39.4	25.7	34.1
Incomplete secondary	10.7	15.9	19.8	29.3	14.4	14.7	15.5	37.0	23.0
Complete secondary	7.7	12.1	12.0	12.1	13.1	8.6	28.0	36.1	17.8
Tertiary or other	8.4	8.1	7.1	21.2	8.1	3.8	13.8	38.5	15.1
HE owners as share of employed with migrant status									
No migrant	n.a.	n.a.	29.8	41.7	27.8	17.4	37.4	38.4	35.2
Migrant			36.5	32.7	37.6	14.5	36.2	32.9	32.9
HE owner as share of employed by primary or secondary employment									
HEs is primary employment	23.5	n.a.	28.8	36.1	20.7	11.2	26.9	32.2	28.6
HE is secondary employment	7.0		4.2	4.9	7.4	5.4	10.3	4.4	6.5

Source: most recent household survey, see table 1 in the annex. *R. Congo only includes urban areas.

Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section. A HE owner is defined as a migrant if he/she moved to current location within the last five years in Mozambique and Rwanda, the last four years in Tanzania, and last year in R. Congo.

Table 12: Rural HE owners as share of reference population

	Burkina Faso	Cameroon	R. Congo	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Share of HE owners to Employed population									
Rural	19.6	18.2	n.a.	25.9	14.7	11.5	19.4	16.7	18.5
HE owners as share of employed by gender									
Male	16.2	16.3	n.a.	15.5	24.2	14.4	22.7	28.1	21.8
Female	22.6	19.9		35.0	7.1	9.1	16.3	15.8	17.1
HE owners as share of active labor force in age group									
15 - 19	6.4	5.1	n.a.	2.4	4.5	3.8	7.4	3.0	4.7
20 - 24	16.4	13.6		14.2	12.5	11.5	18.4	15.4	15.2
25 - 29	22.1	18.9		28.1	15.7	15.5	23.4	25.7	22.3
30 - 34	25.7	21.5		33.4	20.3	16.0	26.0	31.1	26.0
35 - 39	27.1	22.0		33.2	17.3	15.8	25.7	32.4	26.0
40 - 44	26.2	20.8		35.1	18.0	14.1	25.2	30.6	25.5
45 - 49	26.3	22.1		31.1	17.6	13.9	21.4	30.0	23.8
50 - 54	23.6	18.7		27.2	14.7	10.6	19.0	29.1	21.1
55 - 59	19.2	13.6		21.5	14.5	10.8	16.7	29.0	18.7
60 - 65	14.5	10.6		21.2	12.6	7.5	13.9	21.1	15.4
66+	9.7	8.7		11.1	9.7	4.7	9.2	15.9	10.4
HE owners as share of employed with level of education									
None	18.8	16.7	n.a.	22.3	8.3	8.6	13.3	15.1	16.6
Incomplete primary	16.5	15.0		22.4	16.3	10.8	15.8	19.0	16.6
Complete primary	19.0	15.1		20.9	23.4	15.2	22.9	22.2	21.7
Incomplete secondary	11.6	10.7		21.9	10.6	10.2	13.2	32.2	20.5
Complete secondary	9.1	14.3		13.0	16.7	6.4	24.2	34.9	20.9
Tertiary or other	12.8	7.8		20.5	0.0	3.9	16.2	30.8	17.5
HE owners as share of employed with migrant status									
No migrant	n.a.	n.a.	n.a.	25.9	14.3	11.4	19.2	16.1	18.2
Migrant				25.4	28.0	12.4	23.8	19.4	20.7
HE owner as share of employed by primary or secondary employment									
HEs is primary employment	3.2	n.a.	n.a.	13.9	3.5	4.4	5.2	9.0	7.8
HE is secondary employment	16.4			12.0	11.2	7.0	14.2	7.7	10.7

Source: most recent household survey, see table 1 in the annex. *R. Congo only includes urban areas.

Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section. A HE owner is defined as a migrant if he/she moved to current location within the last five years in Mozambique and Rwanda, the last four years in Tanzania, and last year in R. Congo.

Table 13: Characteristics of Household Enterprises by country

	Burkina Faso	Cameroon	R. Congo	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Age of enterprise									
Less than 1 year	n.a.	16.6	n.a.	9.5	22.8	21.8	n.a.	n.a.	15.0
1-5 years		44.2		43.4	54.8	50.2			46.6
6 or more		39.2		47.1	22.4	28.0			38.4
Total		100.0		100.0	100.0	100.0			
Number of months operated a year									
1-3 months	7.2	29.4	n.a.	9.5	17.6	17.4	n.a.	n.a.	12.3
4-6 months	24.3	31.4		12.2	13.6	13.9			15.3
7-9 months	8.7	31.9		10.9	12.8	10.3			9.6
10-12 months	59.8	7.3		67.3	56.0	58.3			62.7
Total	100.0	100.0		100.0	100.0	100.0			100.0
Location									
Rural	75.0	56.4	n.a.	51.5	61.1	85.3	46.5	59.2	76.4
Urban	25.0	43.6		48.5	38.9	14.7	53.5	40.8	23.6
Total	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0
Point of operation	n.a.					n.a.		n.a.	n.a.
Home		36.8	41.2	33.2	47.0		36.0		37.0
Permanent building			1.9	13.5	1.5		7.8		7.5
Street			28.9	20.5	10.2		43.0		25.4
Market			27.4	2.5	31.1		13.1		10.7
Other		63.2	0.6	30.1	10.2				19.4
Total		100.0	100.0	100.0	100.0		100.0		100.0
Sector									
Mining/Nat.Res./Construction/Energy	6.2	3.8	4.5	1.8	4.2	3.6	8.9	7.1	4.5
Manufacturing	34.1	17.3	13.7	32.1	27.8	10.4	9.1	17.1	26.3
Wholesale/retail	34.4	67.1	75.7	54.5	65.1	67.0	62.5	57.7	50.8
Other services	25.3	11.8	6.1	11.6	2.9	19.0	19.5	18.1	18.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Push-Pull factors							n.a.		n.a.
Did not find paid work/employment	n.a.	n.a.	40.3	n.a.	n.a.	n.a.	18.9	18.9	20.5
To obtain a better income			9.4				56.5	56.5	53.1
To be independent (its own)			28.3				5.8	5.8	7.5
By family tradition			9.7				1.5	1.5	2.1
Good business opportunity			12.2				16.8	16.8	15.5
Other			12.2				0.5	0.5	1.4
Total			112.2				100.0		100.0
Capital to start-up business									
Personal savings	n.a.	62.6	81.5	59.7	n.a.	67.5	n.a.	85.6	70.9
Family/Relatives		25.2	1.1	31.1		9.3			16.2
Bank		1.6		1.3		0.4		0.8	1.0
Traditional loans		10.0	0.4	1.4		2.3		1.3	1.8
Microfinance/Coop/Assoc.			3.5	0.6		2.2		1.9	1.3
Other		0.7	13.4	6.0		18.3		10.4	8.7
Total		100.0	100.0	100.0		100.0		100.0	100.0
Difficulty to startup business									
No difficulty	n.a.	n.a.		37.2	n.a.	38.8		n.a.	34.8
Lack of Capital			21.9	58.7		20.3			49.9
No Market/Access to Market			20.4	1.7		15.9			5.3
Regulation			7.4	0.8		4.8			1.9
Location			14.5			5.6			1.9
Other			35.8	1.6		14.6			6.1
Total			100.0	100.0		100.0			100.0

Source: most recent household survey, see table 1 in the annex. *R. Congo only includes urban areas.
Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section.

Table 14: Characteristics of Household Enterprises owned by *males* by country

	Burkina Faso	Cameroon	Congo*	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Age of enterprise									n.a.
Less than 1 year	n.a.	15.0	n.a.	6.2	19.6	21.9	n.a.	n.a.	14.4
1-5 years		43.0		36.7	55.4	48.3			45.4
6 or more		42.1		57.2	25.0	29.8			40.2
Total		100.0		100.0	100.0	100.0			100.0
Number of months operated a year									
1-3 months	9.1	31.6	n.a.	8.3	16.3	16.4	n.a.	n.a.	12.4
4-6 months	23.6	28.0		10.3	12.7	12.9			14.7
7-9 months	9.5	32.2		8.6	12.9	10.6			9.6
10-12 months	57.8	8.2		72.8	58.1	60.0			63.4
Total	100.0	100.0		100.0	100.0	100.0			100.0
Location									
Rural	71.4	54.6	n.a.	48.2	68.8	87.2	50.3	60.5	77.3
Urban	28.6	45.4		51.8	31.2	12.8	49.7	39.5	22.7
Total	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0
Point of operation									
Home	n.a.	22.9	38.6	22.7	40.5	n.a.	26.9	n.a.	28.2
Permanent building			3.8	13.6	1.6		9.4		7.5
Street			34.8	13.5	11.5		51.3		29.9
Market			22.8	7.3	34.2		12.4		13.7
Other		77.1		42.9	12.2				20.7
Total		100.0	100.0	100.0	100.0		100.0		100.0
Sector									
Mining/Nat.Res./Construction/Energy	12.9	8.0	12.5	3.7	6.8	6.0	13.9	11.8	4.9
Manufacturing	22.5	21.3	13.9	32.8	31.9	10.8	12.5	14.2	26.6
Wholesale/retail	44.1	50.2	57.3	47.5	58.1	58.6	49.1	51.6	53.9
Other services	20.5	20.6	16.4	16.0	3.2	24.7	24.6	22.4	14.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Push-Pull factors							n.a.		n.a.
Did not find paid work/employment	n.a.	n.a.	45.5	n.a.	n.a.	n.a.	18.9	18.9	20.1
To obtain a better income			9.5				54.5	54.5	52.4
To be independent (its own)			30.8				6.4	6.4	7.5
By family tradition			4.0				1.7	1.7	1.8
Good business opportunity			10.2				18.2	18.2	17.3
Other			10.2				0.5	0.5	0.9
Total			110.2				100.0		100.0
Capital to start-up business									
Personal savings	n.a.	70.3	80.5	62.0	n.a.	68.0	n.a.	86.6	76.7
Family/Relatives		18.3	1.2	29.2		8.7			10.0
Bank		2.5		1.7		0.6		0.9	1.2
Traditional loans		8.7	1.2	1.5		2.1		1.5	1.9
Microfinance/Coop/Assoc.			2.3	0.4		2.8		1.6	1.3
Other		0.3	14.9	5.1		17.7		9.4	8.8
Total		100.0	100.0	100.0		100.0		100.0	100.0
Difficulty to startup business									
No difficulty	n.a.	n.a.		37.0	n.a.	37.2		n.a.	34.4
Lack of Capital			24.2	57.1		21.2			44.7
No Market/Access to Market			20.3	2.9		13.5			7.1
Regulation			7.2	1.0		6.4			2.9
Location			13.6			5.7			2.6
Other			34.7	2.1		16.0			8.3
Total			100.0	100.0		100.0			100.0

Source: most recent household survey, see table 1 in the annex. *R. Congo only includes urban areas.
Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section.

Table 15: Characteristics of Household Enterprises owned by *females* by country

	Burkina Faso	Cameroon	R. Congo*	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Age of enterprise									
Less than 1 year	n.a.	18.0	n.a.	10.7	27.4	21.7	n.a.	n.a.	15.3
1-5 years		45.1		45.8	53.8	52.4			47.3
6 or more		36.9		43.5	18.8	25.9			37.3
Total		100.0		100.0	100.0	100.0			100.0
Number of months operated a year									
1-3 months	5.9	27.6	n.a.	10.0	19.3	18.6	n.a.	n.a.	12.2
4-6 months	24.8	34.1		13.0	14.8	15.1			16.4
7-9 months	8.1	31.7		11.8	12.6	10.0			9.7
10-12 months	61.1	6.6		65.2	53.4	56.3			61.7
Total	100.0	100.0		100.0	100.0	100.0			100.0
Location									
Rural	77.5	56.9	n.a.	52.2	44.2	84.8	40.0	56.3	71.2
Urban	22.5	43.1		47.8	55.8	15.2	60.0	43.7	28.8
Total	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0
Point of operation									
Home	n.a.	47.4	42.3	37.3	55.3	n.a.	46.4	n.a.	43.9
Permanent building			1.1	13.5	1.4		5.9		7.4
Street			26.2	23.2	8.6		33.6		21.9
Market			29.5	0.7	27.1		14.0		8.3
Other		52.6	0.9	25.2	7.5				18.5
Total		100.0	100.0	100.0	100.0		100.0		100.0
Sector									
Mining/Nat.Res./Construction/Energy	1.5	0.7	0.8	1.2	0.7	0.8	1.5	1.6	3.9
Manufacturing	42.2	14.3	13.6	31.9	22.6	9.9	4.1	20.5	25.8
Wholesale/retail	27.7	80.1	84.3	56.9	74.0	77.1	82.6	65.0	46.2
Other services	28.6	5.0	1.3	10.0	2.6	12.3	11.8	12.9	24.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Push-Pull factors							n.a.		n.a.
Did not find paid work/employment	n.a.	n.a.	37.9	n.a.	n.a.	n.a.	18.9	18.9	20.9
To obtain a better income			9.4				58.8	58.8	53.8
To be independent (its own)			27.2				5.2	5.2	7.4
By family tradition			12.4				1.4	1.4	2.5
Good business opportunity			13.1				15.2	15.2	13.7
Other			13.1				0.5	0.5	1.8
Total			113.1				100.0		100.0
Capital to start-up business									
Personal savings	n.a.	56.7	82.0	58.8	n.a.	66.8	n.a.	83.8	66.4
Family/Relatives		30.4	1.1	31.8		10.0			21.0
Bank		0.9		1.2		0.2		0.6	0.9
Traditional loans		11.0		1.3		2.6		1.1	1.8
Microfinance/Coop/Assoc.			4.1	0.6		1.4		2.4	1.2
Other		0.9	12.8	6.3		19.1		12.1	8.7
Total		100.0	100.0	100.0		100.0		100.0	100.0
Difficulty to startup business									
No difficulty	n.a.	n.a.		37.3	n.a.	40.8		n.a.	35.0
Lack of Capital			20.9	59.3		19.3			52.3
No Market/Access to Market			20.4	1.2		18.7			4.4
Regulation			7.5	0.8		2.9			1.5
Location			14.9			5.4			1.6
Other			36.3	1.5		12.9			5.2
Total			100.0	100.0		100.0			100.0

Source: most recent household survey, see table 1 in the annex. *R. Congo only includes urban areas.
Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section.

Table 16: Characteristics of *urban* Household Enterprises by country

	Burkina Faso	Cameroon	R. Congo*	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Age of enterprise									
Less than 1 year	n.a.	18.4	n.a.	9.2	24.8	21.1	n.a.	n.a.	15.2
1-5 years		45.5		46.7	55.0	51.8			44.7
6 or more		36.2		44.2	20.2	27.0			40.1
Total		100.0		100.0	100.0	100.0			100.0
Number of months operated a year									
1-3 months	4.1	15.0	n.a.	9.9	14.7	12.7	n.a.	n.a.	10.9
4-6 months	7.2	45.1		15.8	10.3	13.1			12.2
7-9 months	6.1	28.1		13.8	9.7	9.5			8.3
10-12 months	82.6	11.8		60.5	65.2	64.7			68.6
Total	100.0	100.0		100.0	100.0	100.0			100.0
Point of operation									
Home	n.a.	23.2	41.2	42.4	44.0	n.a.	31.1	n.a.	29.8
Permanent building			1.9	9.1	2.1		12.8		11.0
Street			28.9	17.2	11.7		39.1		25.2
Market			27.4	1.4	32.9		17.0		12.8
Other		76.8	0.6	29.8	9.2				21.2
Total		100.0	100.0	100.0	100.0		100.0		
Sector									
Mining/Nat.Res./Construction/Energy	5.9	4.0	4.5	1.4	2.1	1.8	7.0	4.8	1.4
Manufacturing	19.3	16.5	13.7	22.7	14.2	5.7	10.8	13.1	15.6
Wholesale/retail	50.8	64.3	75.7	62.8	79.3	71.1	61.4	59.4	55.7
Other services	24.0	15.2	6.1	13.1	4.4	21.4	20.8	22.6	27.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Push-Pull factors							n.a.		n.a.
Did not find paid work/employment	n.a.	n.a.	40.3	n.a.	n.a.	n.a.	22.0		27.8
To obtain a better income			9.4				57.4		42.2
To be independent (its own)			28.3				4.4		12.0
By family tradition			9.7				0.9		3.7
Good business opportunity							14.6		9.9
Other			12.2				0.7		4.3
Total			100.0				100.0		100.0
Capital to start-up business									
Personal savings	n.a.	49.7	81.5	60.3	n.a.	65.2	n.a.	78.7	66.1
Family/Relatives		29.3	1.1	27.1		10.1			17.7
Bank		2.5		1.9		0.7		1.3	1.6
Traditional loans		17.2	0.4	1.7		1.8		1.0	2.1
Microfinance/Coop/Assoc.			3.5	0.7		3.2		3.1	1.6
Other		1.3	13.4	8.3		19.1		15.9	10.8
Total		100.0	100.0	100.0		100.0		100.0	100.0
Difficulty to startup business									
No difficulty	n.a.	n.a.		38.3	n.a.	30.4		n.a.	31.8
Lack of Capital			21.9	57.6		19.8			49.0
No Market/Access to Market			20.4	1.6		15.7			5.6
Regulation			7.4	0.9		8.5			2.5
Location			14.5			9.9			3.0
Other			35.8	1.7		15.6			8.1
Total			100.0	100.0		100.0			100.0

Source: most recent household survey, see table 1 in the annex. *R. Congo only includes urban areas.
Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section.

Table 17: Characteristics of *rural* Household Enterprises by country

	Burkina Faso	Cameroon	R. Congo*	Ghana	Mozambique	Rwanda	Tanzania	Uganda	Weighted Average
Age of enterprise									
Less than 1 year	n.a.	15.4	n.a.	9.7	22.5	22.0	n.a.	n.a.	14.8
1-5 years		43.3		39.3	54.3	49.7			48.1
6 or more		41.3		51.1	23.2	28.3			37.2
Total		100.0		100.0	100.0	100.0			100.0
Number of months operated a year									
1-3 months	8.2	42.8	n.a.	9.1	19.7	18.8	n.a.	n.a.	12.8
4-6 months	29.7	18.7		8.5	16.0	14.2			16.3
7-9 months	9.5	35.5		7.8	15.1	10.6			10.0
10-12 months	52.6	3.0		74.6	49.2	56.5			60.9
Total	100.0	100.0		100.0	100.0	100.0			100.0
Point of operation									
Home	n.a.	47.6	n.a.	23.4	49.2	n.a.	39.7	n.a.	43.0
Permanent building				18.3	1.1		4.1		4.5
Street				24.1	9.1		46.0		25.6
Market				3.8	29.7		10.3		8.9
Other		52.4		30.5	10.9				18.0
Total		100.0		100.0	100.0		100.0		100.0
Sector									
Mining/Nat.Res./Construction/Energy	6.3	3.7	n.a.	2.2	5.7	4.1	11.2	8.8	5.5
Manufacturing	38.8	18.0		40.4	37.9	11.7	7.2	19.9	30.0
Wholesale/retail	29.2	69.3		47.2	54.5	65.8	63.7	56.5	49.1
Other services	25.7	9.0		10.2	1.9	18.3	18.0	14.8	15.4
Total	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0
Push-Pull factors							n.a.		n.a.
Did not find paid work/employment	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	18.3	18.3	18.3
To obtain a better income							56.4	56.4	56.4
To be independent (its own)							6.1	6.1	6.1
By family tradition							1.6	1.6	1.6
Good business opportunity							17.2	17.2	17.2
Other							0.4	0.4	0.4
Total							100.0		100.0
Capital to start-up business									
Personal savings	n.a.	70.2		59.1	n.a.	68.1	n.a.	87.7	73.8
Family/Relatives		22.7		34.7		9.0			15.4
Bank		1.1		0.8		0.3		0.6	0.7
Traditional loans		5.8		1.1		2.5		1.5	1.6
Microfinance/Coop/Assoc.				0.5		1.9		1.5	1.1
Other		0.3		3.9		18.1		8.7	7.5
Total		100.0		100.0		100.0		100.0	100.0
Difficulty to startup business									
No difficulty	n.a.	n.a.		36.3	n.a.	41.2		n.a.	37.4
Lack of Capital				59.6		20.5			50.7
No Market/Access to Market				1.8		15.9			5.0
Regulation				0.8		3.8			1.4
Location						4.3			1.0
Other				1.6		14.3			4.5
Total				100.0		100.0			100.0

Source: most recent household survey, see table 1 in the annex. *R. Congo only includes urban areas.
Notes: A person is considered a HE owner if they report to be self-employed in the non agricultural sector either as primary or secondary employment or if listed as owner in of an enterprise in the enterprise section. HE as secondary employment includes observations based on the presence of a HE from the enterprise section.

Table 18 Consumption per adult equivalent OLS regressions, Urban

	Burkina Faso	Cameroon	Ghana	Mozambique	Rwanda	Uganda
Demographics						
Household size	-0.17***	-0.12***	-0.28***	-0.17***	-0.29***	-0.13***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.03)	(0.02)
Household size squared	0.01***	0.00***	0.01***	0.01***	0.02***	0.01***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Male head	0.13***	0.04	0.06**	0.10***	0.18***	0.08**
	(0.04)	(0.03)	(0.03)	(0.02)	(0.04)	(0.03)
Age of head	0.01*	0.00	0.01***	0.03***	0.00	0.01
	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)
squared age of head	-0.01	-0.00	-0.01***	-0.02***	-0.00	-0.01
	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)
Education						
Share of hh with incomplete primary	0.20***	-0.06	0.20***	0.16***	0.42***	-0.16***
	(0.06)	(0.06)	(0.07)	(0.04)	(0.08)	(0.06)
Share of hh with complete primary	0.42***	0.16**	0.14	0.50***	0.83***	-0.02
	(0.08)	(0.07)	(0.11)	(0.06)	(0.10)	(0.06)
Share of hh with incomplete secondary	0.64***	0.21***	0.29***	0.97***	1.26***	0.17***
	(0.06)	(0.06)	(0.05)	(0.05)	(0.09)	(0.06)
Share of hh with complete secondary	0.90***	0.48***	0.62***	1.44***	1.84***	0.35***
	(0.09)	(0.06)	(0.07)	(0.08)	(0.17)	(0.09)
Share of hh with above complete secondary	1.50***	0.71***	0.85***	2.61***	2.17***	0.44***
	(0.09)	(0.08)	(0.07)	(0.12)	(0.20)	(0.07)
Income sources						
Wage agriculture	-0.40***	0.03	-0.13*	-0.23***	-0.14*	-0.12
	(0.09)	(0.18)	(0.08)	(0.08)	(0.07)	(0.09)
Family farm	-0.29***	-0.22***	-0.00	-0.10***	-0.11**	-0.15***
	(0.06)	(0.04)	(0.03)	(0.03)	(0.05)	(0.04)
Household enterprise	-0.07*	0.11***	0.13***	0.17***	0.27***	0.12***
	(0.04)	(0.03)	(0.03)	(0.02)	(0.05)	(0.03)
Micro enterprise	0.27***	0.30***	0.46***	0.69***	0.34**	0.26***
	(0.04)	(0.05)	(0.05)	(0.13)	(0.14)	(0.08)
Wage privat sector	0.02	0.08***	0.07**	0.08***	0.28***	0.11***
	(0.03)	(0.03)	(0.03)	(0.02)	(0.05)	(0.03)
Wage public sector	0.24***	0.32***	0.21***	0.14***	0.33***	0.27***
	(0.04)	(0.04)	(0.04)	(0.03)	(0.06)	(0.05)
Location dummies	Yes	Yes	Yes	Yes	Yes	Yes
R Square	0.52	0.28	0.34	0.47	0.50	0.35
Observations	2600	4973	3589	5218	1620	1697
R square without location dummies	0.49	0.12	0.32	0.42	0.44	0.29

Table 19 Consumption per adult equivalent OLS regressions, Rural

	Burkina Faso	Cameroon	Ghana	Mozambique	Rwanda	Uganda
Demographics						
Household size	-0.12***	-0.18***	-0.24***	-0.22***	-0.28***	-0.13***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)
Household size squared	0.00***	0.01***	0.01***	0.01***	0.02***	0.00***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Male head	0.19***	0.07*	0.11***	0.11***	0.15***	0.09***
	(0.04)	(0.04)	(0.02)	(0.02)	(0.02)	(0.02)
Age of head	-0.01***	0.01***	0.01***	0.01***	0.00	0.01***
	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
squared age of head	0.01**	-0.01***	-0.01***	-0.01***	0.00	-0.01***
	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Education						
Share of hh with incomplete primary	0.29***	0.13*	0.07*	0.06***	0.38***	0.00
	(0.07)	(0.07)	(0.04)	(0.02)	(0.04)	(0.03)
Share of hh with complete primary	0.18*	0.44***	0.15***	0.28***	0.73***	0.21***
	(0.09)	(0.08)	(0.05)	(0.06)	(0.05)	(0.04)
Share of hh with incomplete secondary	0.54***	0.59***	0.20***	0.49***	1.24***	0.37***
	(0.09)	(0.08)	(0.04)	(0.06)	(0.07)	(0.04)
Share of hh with complete secondary	1.02***	0.90***	0.51***	0.57***	2.05***	0.39***
	(0.18)	(0.10)	(0.08)	(0.22)	(0.16)	(0.06)
Share of hh with above complete secondary	1.49***	0.94***	0.62***	0.98**	2.97***	0.67***
	(0.27)	(0.16)	(0.07)	(0.47)	(0.64)	(0.08)
Income sources						
Wage agriculture	0.11	-0.09	0.03	-0.12**	-0.08**	-0.02
	(0.10)	(0.10)	(0.07)	(0.05)	(0.04)	(0.03)
Family farm	-0.28***	-0.37***	-0.07*	-0.09	0.19***	-0.08***
	(0.07)	(0.05)	(0.04)	(0.08)	(0.05)	(0.03)
Household enterprise	0.04*	0.28***	0.11***	0.15***	0.32***	0.16***
	(0.02)	(0.04)	(0.03)	(0.02)	(0.03)	(0.02)
Micro enterprise	0.11***	0.50***	0.39***	0.61***	0.63***	0.24***
	(0.03)	(0.10)	(0.08)	(0.12)	(0.10)	(0.05)
Wage privat sector	0.17***	0.37***	0.08**	0.07*	0.05	0.13***
	(0.05)	(0.06)	(0.04)	(0.04)	(0.03)	(0.03)
Wage public sector	0.35***	0.54***	0.17***	0.30***	0.29***	0.27***
	(0.09)	(0.06)	(0.04)	(0.06)	(0.07)	(0.04)
Location dummies	Yes	Yes	Yes	Yes	Yes	Yes
R Square	0.31	0.34	0.51	0.23	0.26	0.35
Observations	5,900	6,012	5,048	5,603	5,280	5,716
R square without location dummies	0.25	0.19	0.39	0.18	0.19	0.24

Table 20 Mean of Variables for Regressions in Table 18 and 19

	Burkina Faso		Cameroon		Ghana		Mozambique		Rwanda		Uganda	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Demographics												
ln(Consumption)	11.49	12.28	6.96	7.83	6.89	7.34	6.03	6.40	5.10	6.23	5.98	6.48
Household size	6.69	5.60	5.15	5.12	4.75	3.61	4.56	4.91	5.02	5.10	5.34	4.71
Household size squared	62.12	45.36	38.93	38.58	32.00	18.81	26.42	31.05	30.31	32.99	37.16	30.73
Household has male head	0.94	0.85	0.76	0.75	0.75	0.67	0.70	0.68	0.72	0.72	0.73	0.71
Age of household head	44.93	42.61	44.94	40.54	46.64	43.53	42.64	41.79	44.81	41.63	43.18	38.75
Age of household head squared	22.68	19.99	22.75	18.24	24.28	21.21	20.64	19.48	22.46	19.39	21.20	16.94
Education												
Share of hh with no education	0.90	0.43	0.36	0.14	0.46	0.18	0.36	0.16	0.27	0.15	0.33	0.26
Share of hh with incomplete primary	0.05	0.13	0.23	0.15	0.13	0.07	0.55	0.44	0.49	0.35	0.41	0.27
Share of hh with complete primary	0.02	0.08	0.14	0.14	0.06	0.05	0.04	0.08	0.16	0.20	0.12	0.13
Share of hh with incomplete secondary	0.02	0.21	0.19	0.31	0.31	0.49	0.05	0.23	0.07	0.20	0.09	0.18
Share of hh with complete secondary	0.01	0.07	0.07	0.19	0.02	0.09	0.01	0.06	0.01	0.06	0.03	0.06
Share of hh with secondary above	0.00	0.07	0.02	0.08	0.02	0.11	0.00	0.03	0.00	0.04	0.02	0.10
Household income source												
Agricultural wage	0.01	0.01	0.02	0.01	0.03	0.02	0.03	0.02	0.15	0.10	0.08	0.04
Non-wage farm	0.96	0.25	0.70	0.18	0.88	0.29	0.97	0.48	0.92	0.66	0.85	0.41
Household enterprise	0.42	0.52	0.34	0.46	0.44	0.53	0.28	0.45	0.26	0.37	0.32	0.55
Micro or small enterprise	0.14	0.20	0.02	0.05	0.01	0.04	0.01	0.01	0.01	0.03	0.02	0.04
HE as primary occupation	0.08	0.40	0.33	0.46	0.23	0.48	0.07	0.34	0.11	0.26	0.17	0.47
HE as secondary occupation	0.35	0.14	0.01	0.01	0.24	0.07	0.23	0.13	0.17	0.12	0.17	0.09
Private wage	0.02	0.31	0.10	0.34	0.09	0.32	0.07	0.38	0.14	0.55	0.09	0.38
Public wage	0.02	0.21	0.08	0.17	0.05	0.16	0.04	0.16	0.04	0.15	0.05	0.11