Session 3
Labor demand and labor supply. Matching data on firms, farms, households and individuals.

The Household Perspective

Paula Nagler
Erasmus University Rotterdam

Workshop: Improving the Availability and Quality of Individual-level Data on Women and Youth in Living Standard Measurement Study (LSMS) Surveys
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Introduction

- All LSMS-ISA surveys contain a section on non-farm enterprises (or it is embedded in the labor force section).

- Each household is asked if one (or more) household member(s) is/are engaged in non-farm business activities or in non-farm self-employment.
  - → Non-farm enterprises are therefore **household enterprises**.

- NFE sections are similar across surveys, but not identical.
  - → Differences concern the availability of certain questions, precise formulation of questions and answer possibilities.

Prevalence of household enterprises

First round of LSMS-ISA surveys (rural areas)

Country	Nr of HH surveyed	HH with NFE	in % weighted	Nr of NFEs	Avg Nr of NFE/HH
Ethiopia	3,466	919	22.87	1,112	1.21
Malawi	10,038	1,755	16.88	1,872	1.07
Niger	2,430	1,427	61.73	2,188	1.53
Nigeria	3,380	1,707	52.62	2,688	1.57
Tanzania	2,629	1,061	38.65	1,363	1.26
Uganda	2,105	953	42.24	1,471	1.54
Total	24,551	8,115	41.63	11,064	1.36

Nagler & Naudé (2017)

Which information is available?

Variable	ETH	MAL	NIG	NIA	TZA	UGA
Identification question - Set of questions - Single question (Depending on country, a time frame of 12 months is furthermore indicated – but not in all countries. TZA further distinguishes between one week and 12 months)	X	X	X	X	X	X
Enterprise ID code	X	X	X	X	X	X
Description of activities	X	X	X	X	X	X
Sector/industry/activity/ISIC code	X	X	X	X	X	X
Owner Manager	X	X X	X X	X X	X	X
Start of business: month & year	X	X	X	X	X	X
How many months was the business operating over the last 12 months? (NIA: How many months since the last interview)	X	X	X	X	X	X

→ Variables in all surveys (questions contain some variation)

Which information is available?

Variable	ETH	MAL	NIG	NIA	TZA	UGA
Number of hired employees	X	X	X	X	X	X
Household members working in enterprise	X	X	X	X	(X)	X
Sales/revenues	X	X	X	X	X	X
Monthly operating costs/expenditure (single question or various questions capturing different cost elements)	X	X	X	X	X	X
Formality of enterprise	X	X	X	X		X
Location of enterprise operation	X	X	X	X	X	X
Main buyer of enterprise products and services	X	X		X	X	X
Source of start-up capital	X	X		X	X	X

→ **Variables in all or most surveys (questions contain some variation)**

Which information is available?

Variable	ETH	MAL	NIG	NIA	TZA	UGA
Co-owners		X	X		X	
Receipt of credit to expand business & repayment of loans				X		X
Receipt of credit to expand business & repayment of loans (credit section)	X	X			X	
Share of household income from enterprise	X	X	X			
Why was the enterprise not in operation all year long		X	X	(X)		

→ **Variables in about half of all surveys (questions contain some variation)**

Which information is available?

Variable	ETH	MAL	NIG	NIA	TZA	UGA
Seasonality of activities	X			(X)		
Months of highest activity	X	X				
Days per month active	X					
Characteristics of enterprise (e.g. access to and source of electricity, access to running water, telephone, written accounts)		X	X			
Value of physical capital stock/ value of inputs and supply/ value of finished merchandise and goods for sale				X	X	
Tax payments			X			
Constraints to NFE operation and growth	X					
Additional businesses					X	
Plans to open a NFE	X					
Constraints to open a NFE	X					

→ **Variables only available in one or two surveys (questions contain some variation)**

Which information is available in other sections?

Section: Credit

- Receipt of credit and repayment of loans (ETH, MAL, TZA)

Section: (Time Use &) Labor / Labor Force Status

- Time use of household members
- Plans to open a NFE (UGA)

Section: Other Household Income

- Share of household income from enterprise (UGA)

Which information is missing?

- Information of **discontinued enterprises**
  - Relevant for subsequent rounds of survey
  - Year and month of enterprise discontinuation
  - Temporary or permanent discontinuation
  - Reason for enterprise discontinuation (i.e. failure or other type of exit)
- Precise **tracking** of businesses over survey rounds
- **Motivation** why enterprise was started
  - Identification: opportunity vs necessity entrepreneurship
- **Constraints** to open an enterprise or to expand the business
- **Skills and training needs** to improve business activities
- **Gender attitudes** towards NFE activities

Which information is missing?

- Share of goods and services for **own consumption**
- Experience of **shocks** for business operation
  - Shocks available in other section, but not specific to business operation
- **Prices and quantity** of inputs and outputs
- **Technology** employed
  - Partly available (e.g. use of telephone, access to electricity)
- Stronger focus on **seasonality** (beyond the variable 'months in operation'), **intermittent operation** and **variability of activities**
  - Which are the months of enterprise operation over the year?
  - Why does the enterprise not operate all year long?
  - In which months are activities higher/lower? (available for ETH)
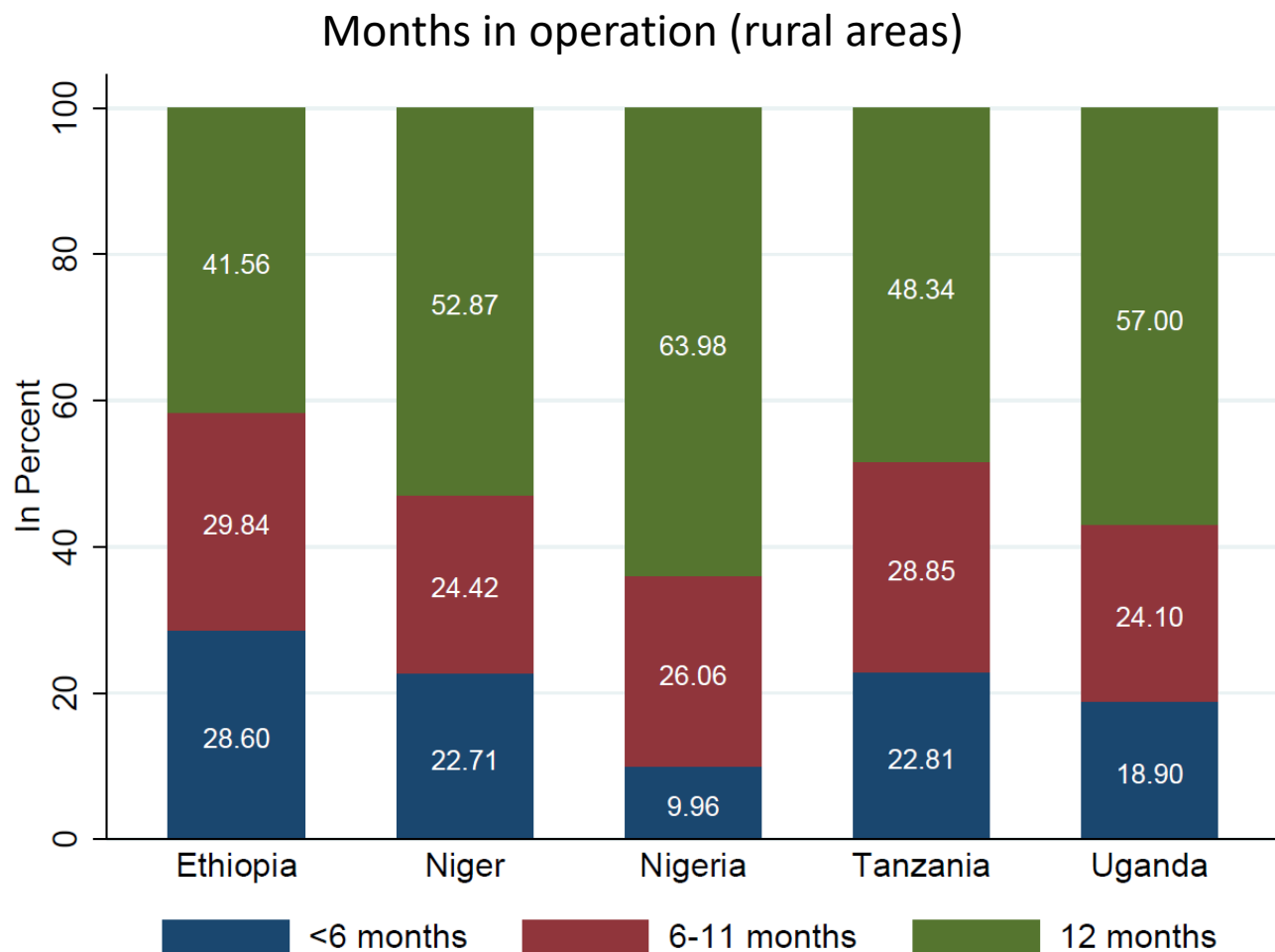
Which existing information could be improved?

Major drawback are the **variations** between surveys:
- Availability of questions
- Precise formulation of questions
- Answer possibilities (if categorical)
- Time reference indicated
- Outliers, non-sensical values

→ Limits the possibility to conduct **cross-country analyses**

Time input of enterprise workers
- Partly available in NFE section, partly available in labor force section for household workers (but some inconsistencies, see paper by Desiere & Costa)
- Not always available for non-household workers (only available for MAL, NIG)
- More focus on **seasonality/intermittent operation/work intensity over the year** needed (highly relevant in rural areas) → overall relevant, but particularly for women and youth
- Furthermore: Remuneration of workers (in cash and kind) is often lacking

Example: Seasonality

Months in operation (rural areas)

Nagler & Naudé (2017)

Earnings

Depending on country, question asks for either **sales** or **revenues** of business.

- Time frame however differs (average monthly sales, last month of operation, last 30 days, last week)
- MAL and TZA are the only surveys which directly ask for profit
- Other countries ask for input costs → profits can be calculated
- Some countries: ask for months with low/medium/high sales

Earnings share of household income
- ETH, MAL, NIG: question on i) share of cash incomes derived from business or ii) which share of the profits is kept by the household.
- UGA: income from household enterprise available in Section 11 (other household income).

But no question on **own consumption** of goods and services.

Earnings

For debate: how precise are sales/revenues or profit estimates?

- – Products and services are also consumed by household
- – Strong seasonality component for rural enterprises
- – How many household enterprises keep books? (recall error)

General question: how to capture earnings in a developing country context?

1. **Retrospective questions about revenues and profits**
   - – Single question (profit)
   - – Various questions to calculate profit (revenues – input costs)
2. **'Gold standard' diary?**

Further aspect: How are NFE profits distributed within household?

Productivity

Productivity function is currently imprecise and not directly comparable between countries (different time periods).

Proxied by: **Labor productivity** $= \dfrac{Revenues}{Number\ of\ Workers}$

- Not possible to calculate value-added for alls countries
  (e.g. ETH: total sales and total costs, including labor)

- Certain input costs are not available: intermediate goods, time input of non-household workers for some countries (i.e. work intensity)

- How consistent is the number of workers (or work intensity if available)/ are revenues over the year?

- Where time input is available, mistakes make it complicated to use the information
  (e.g. MAL: Question: During those days, how many hours did 1st HH member work in NFE? Unclear if per day or all hours worked in the days of last month. Answers range from 5 to 900, with ca 55% < 16 hours).

Informality

Question(s) about formality of enterprise are included in most surveys, with the exception of TZA.

- Precise formulation of question varies due to country context:
  - ETH: Does the the enterprise have a licence?
  - MAL: Is the enterprise officially registered with the [...]? Does this enterprise (or any of this owners/ managers) belong to any registered business association?
  - NIG: Is the enterprise registered in the Commercial Register?
  - NIA: Is the enterprise officially registered with the governments?
  - UGA: Is the enterprise registered for VAT/income tax?

→ Large majority of rural household enterprises are informal (between 91% to close to 100%).

Informality

<u>Shortcomings</u>

- No information if (non-household) workers are formal

- Reasons for informality

- Advantages/disadvantages of formalization
  - Is the enterprise owner interested in formalizing business activities?

- Obstacles to becoming formal
  - E.g. costs, administrative requirements

Methodological work

- How to ask questions:
  - Single question (e.g. profit)
  - Various questions (sales and expenditure) to calculate profit
  - Use of diaries or other methods
- Formulation of questions to avoid misinterpretation
- Alignment of reference periods – what makes sense in a rural context
- Short- and longer-term reference periods
  - 7 weeks, last month, typical month, last 12 months
- How to quantify own consumption in household enterprises
- How to capture seasonality and intermittent operation (in labor input, earnings, productivity)

Discussion

Main aspects:

- Possibility to better **align questions** across surveys?
- Revise existing questions regarding their current formulation:
  - Are questions clear (to enumerators/to different types of respondents)?
- What are the possibilities to **address the issues identified** without increasing the length of the NFE section?
- To what extent can the surveys be extended with **additional questions**? (information need vs. survey length)

Thank you for your attention

Contact:
nagler@ihs.nl