

**7<sup>TH</sup> IMF Statistical Forum**

**MEASURING +  
THE INFORMAL  
ECONOMY**

**STATISTICS DEPARTMENT**

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## **Measuring the non-observed economy in Vietnam: *A focus on informal economy***

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**General Statistics Office**

# Outline

- **Motivations**
- **Concepts, measures, data**
- **The Vietnam case in perspective**
- **Takeaways**

# Motivations

**Employment is the main source of income of (poor) people in developing countries, labour is their main asset. Informal Economy contribute to the the GDP**

- **Better understand the labour market** (Characteristics of jobs, insertion into the labour market according to individual characteristics, working conditions, etc.)

*A focus on the informal sector and informal employment*

- **Position and role of the informal sector/employment in the economy?**

Numerous research questions in debate:

- Working in the informal economy: choice (exit) or constraint (exclusion) ?
- Subsistence or dynamic economy ?
- Integrated or marginal sector into the economy ?
- Structural change: Informality corresponds to a transition between the traditional to the modern economy or is it here to stay?

- **Amount and Share of Informal Economy in Vietnam?**

# Concepts, Measures & Data

**Many different definitions used by researchers** (popular economy, underground economy, unregistered, unobserved, informal, illegal economy, in the open sun, moonlighting, etc.) -> **Generalized confusion**

**Heterogeneity of the informal economy and variety of factors for being informal**

→ *Three main approaches (components):*

- **Dualist:** subsistence economy; insufficient demand for employment of the modern sector; should disappear with development (ILO, 1972).
- **Structuralist:** subordinate economy; sub-contracting by multinationals; cost reduction with globalization (Castells et al., 1989).
- **Legalist (liberal):** micro-entrepreneurs trying to escape public regulations and choosing to work in the informal sector (De Soto, 1986).

# Concepts, Measures & Data

**International recommendations (statistics):** ILO 1993, 2003 & 2013 ; OECD 2002 ; UNSD, SNA 1993 & 2008)

## *Three components of non-observed economy (OECD, 2003)*

**Informal economy** : partially/totally by-passing public regulations; its activities are not necessarily carried out with the deliberate intention of avoiding payment of taxes or social security contributions. [direct approach: surveys]

**Underground economy**: intentionally by-passing public regulations (under-declaration) by registered (big) firms [indirect approach: audits, econometric estimations: demand of money...]

**Illegal economy**: illegal production (goods or services: drugs, etc.) [indirect approach: technical coefficients]

# Concepts, Measures & Data

## Three different components of the Non-Observed Economy

	<b>Informal economy</b>	<b>Underground economy</b>	<b>Illegal economy</b>
<b>Example</b>	Self-employment	Tax evasion	Drugs
<b>Size of enterprises</b>	Micro	Large	?
<b>Attitude towards the State</b>	(by-passing) Unvoluntarily	(by-passing) Voluntarily	(by-passing) Voluntarily
<b>Measurement</b>	Direct surveys	Indirect approach (demand of money, fiscal audits)	Indirect approach (technical coefficient)
<b>National accounts integration</b>	Household sub-sector	Branch/sector estimations	Products re-estimation

Source: Based on Roubaud (1994)

# Concepts, Measures & Data

## *Definition of the informal economy (ILO, 1993 & 2003)*

**Informal sector:** *all private unincorporated enterprises that produce at least some of their goods and services for sale or barter, are not registered (no business licence) and are engaged in non-agricultural activities (or without written accounts, etc.)*

**Informal employment:** *employment with no protection (social insurance; written contract, wage slip, etc.)*

**Informal economy = informal sector + informal employment**

# Concepts, Measures & Data

## Conceptual Framework: Informal Employment

Production units by type	Jobs by status in employment								
	Own-account workers		Employers		Contributing family workers	Employees		Members of producers' cooperatives	
	Informal	Formal	Informal	Formal	Informal	Informal	Formal	Informal	Formal
Formal sector enterprises					1	2			
Informal sector enterprises <sup>(a)</sup>	3		4		5	6	7	8	
Households <sup>(b)</sup>	9					10			

- (a) As defined by the Fifteenth International Conference of Labour Statisticians (excluding households employing paid domestic workers).
- (b) Households producing goods exclusively for their own final use and households employing paid domestic workers.

Note: Cells shaded in dark grey refer to jobs, which, by definition, do not exist in the type of production unit in question. Cells shaded in light grey refer to formal jobs. Un-shaded cells represent the various types of informal jobs.

**Informal employment:** Cells 1 to 6 and 8 to 10.

**Employment in the informal sector:** Cells 3 to 8.

**Informal employment outside the informal sector:** Cells 1, 2, 9 and 10.

# Concepts, Measures & Data

## 4 good reasons to favour the direct (survey) approach over indirect (macro) approaches to the Informal Economy

- Feasible and more reliable (*confidence intervals of the macro approaches?*)
- Allow for both macro and micro analysis
- Policy oriented (disaggregation)
- Relay the Informal Workers' Voice to promote producers organizations (ILO 2015 Resolution 204; SDG8)

(provided we have a good survey candidate)

# Concepts, Measures & Data

**The challenge of measuring the informal economy** → *ad hoc* survey

**Mixed** (household/enterprise) **surveys** (1-2 surveys; ILO, 2013; 1<sup>st</sup> Mexico: EPSI, 1988; ENEI, 1990; ENAMIN, 1992- )

**Extension: 1-2-3 surveys** (already conducted in more than 30 developing countries):

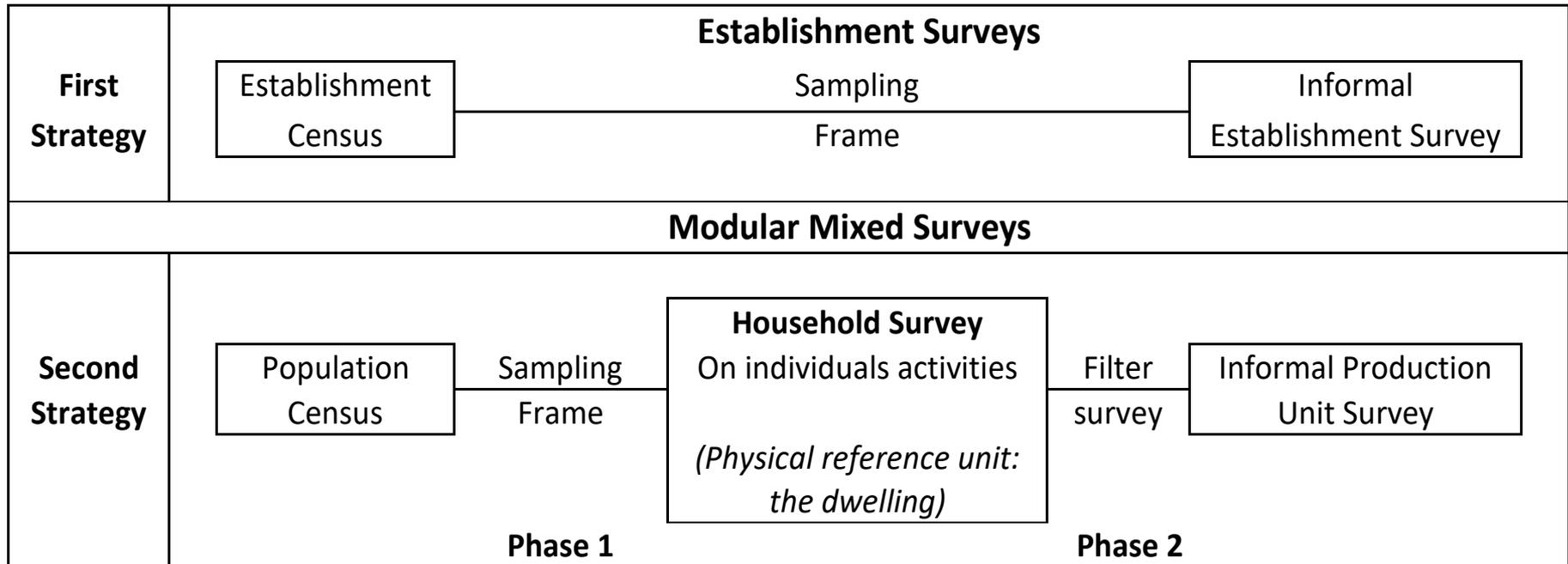
3 nested surveys

Monitoring:

- labour markets
- informal sector (informal firms); supply side
- private consumption/expenditure (formal/informal); demand side

# The mixed (household/enterprise) approach (1-2 surveys) versus the “classical” approach

## Two alternative sampling strategies for measuring the informal sector



**Source:** Roubaud and Sérurier (1991).

**Note:** If the sampling frames (censuses of population or establishments) are unavailable or not up to date, the two methods may be applied from primary units selected from an area-sampling frame.

# Comparison of the two methods: a double bias the case of Vietnam (1)

**Comparison between the LFS-HB&IS and the AHBS, National Level, 2007 & 2009**  
A massive underestimation (+ a selection bias)

		2007			2009		
		LFS-HB&IS	AHBS	Coverage/ bias	LFS, HB&IS	AHBS	Coverage/ bias
<b>No. of HBs</b>	<b>IHB</b>	8,284,038	-	-	8,411,680	-	-
	<b>FHB</b>	1,861,123	-	-	1,877,401	-	-
	<b>Total HB</b>	<b>10,145,161</b>	<b>3,748,138</b>	<b>36.9%</b>	<b>10,289,081</b>	<b>3,986,071</b>	<b>38.7%</b>
<b>No. of Jobs</b>	<b>IHB</b>	12,302,844	-	-	13,143,789	-	-
	<b>FHB</b>	3,712,533	-	-	3,935,964	-	-
	<b>Total HB</b>	<b>16,015,377</b>	<b>6,593,867</b>	<b>41.2%</b>	<b>17,079,753</b>	<b>7,161,007</b>	<b>41.9%</b>
<b>Turnover (Total)</b>	<b>IHB</b>	729,608	-	-	1,157,836	-	-
	<b>FHB</b>	780,857	-	-	738,775	-	-
<b>Billion VND</b>	<b>Total HB</b>	<b>1,611,628</b>	<b>672,087</b>	<b>41.7%</b>	<b>1,919,888</b>	<b>949,013</b>	<b>49.4%</b>

Source: Cling et al. (2010).

Note: IHB: Informal Household Businesses; FHB: Formal Household Businesses.

 **Estimators of Totals: an underestimation bias**

## Comparison of the two methods: the case of Vietnam (2)

**TABLE 1.2.**  
**NUMBER OF HBS ESTIMATED IN THE NFIDBE SURVEYS AND THE 2014 LFS**

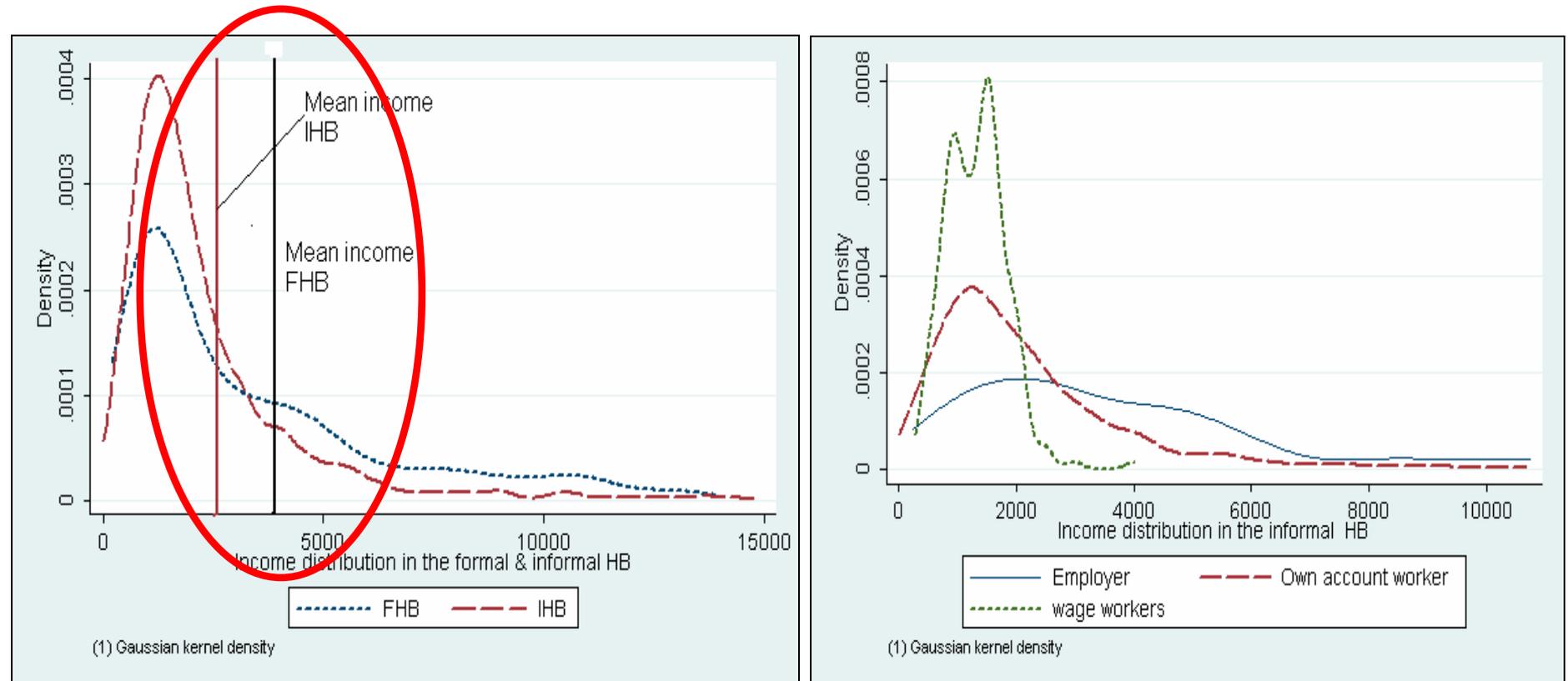
Category	NFIDBE surveys		2014 Total included in the survey	2014 LFS	Ratio
	2012 Total included in the survey	2012 Fixed place only			
Total	4,624,885	4,093,084	4,671,339	8,913,150	45.9%
Location					
Urban		1,574,532		3,977,866	39.6%
Rural		2,518,552		4,935,284	51.0%
Registration status					
Registered		1,263,400		2,287,034	55.2%
Unregistered		2,829,684		6,626,116	42.7%

Source: GSO (2013), GSO (2015) and authors' estimation from the 2014 LFS

# Does it make a difference?

## Formal Household Businesses vs Informal Household Businesses (Vietnam, 2007)

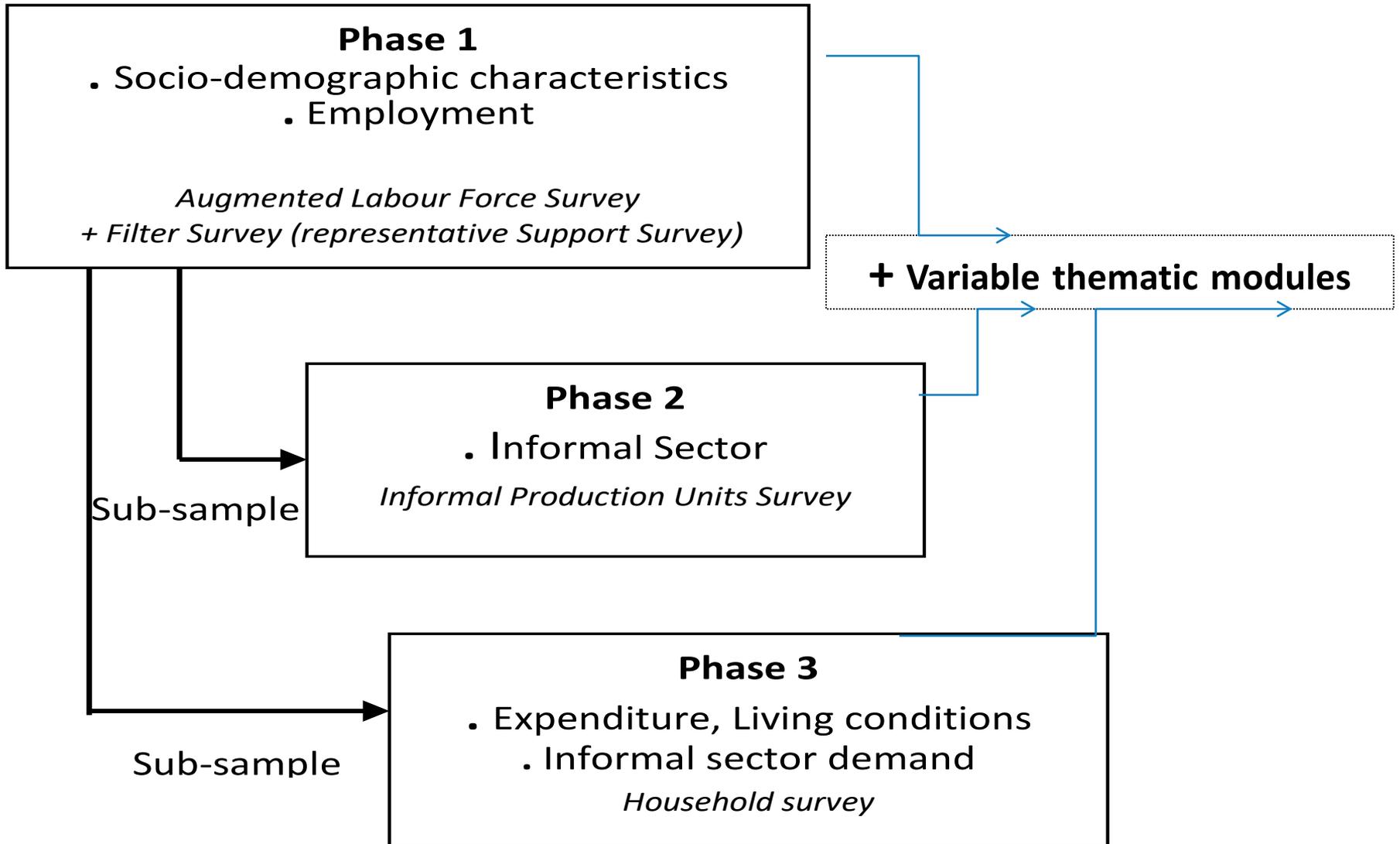
Figure 1: Income distribution in the informal sector



**Source:** HB&IS survey, Hanoi (2007), GSO-ISS / IRD-DIAL.

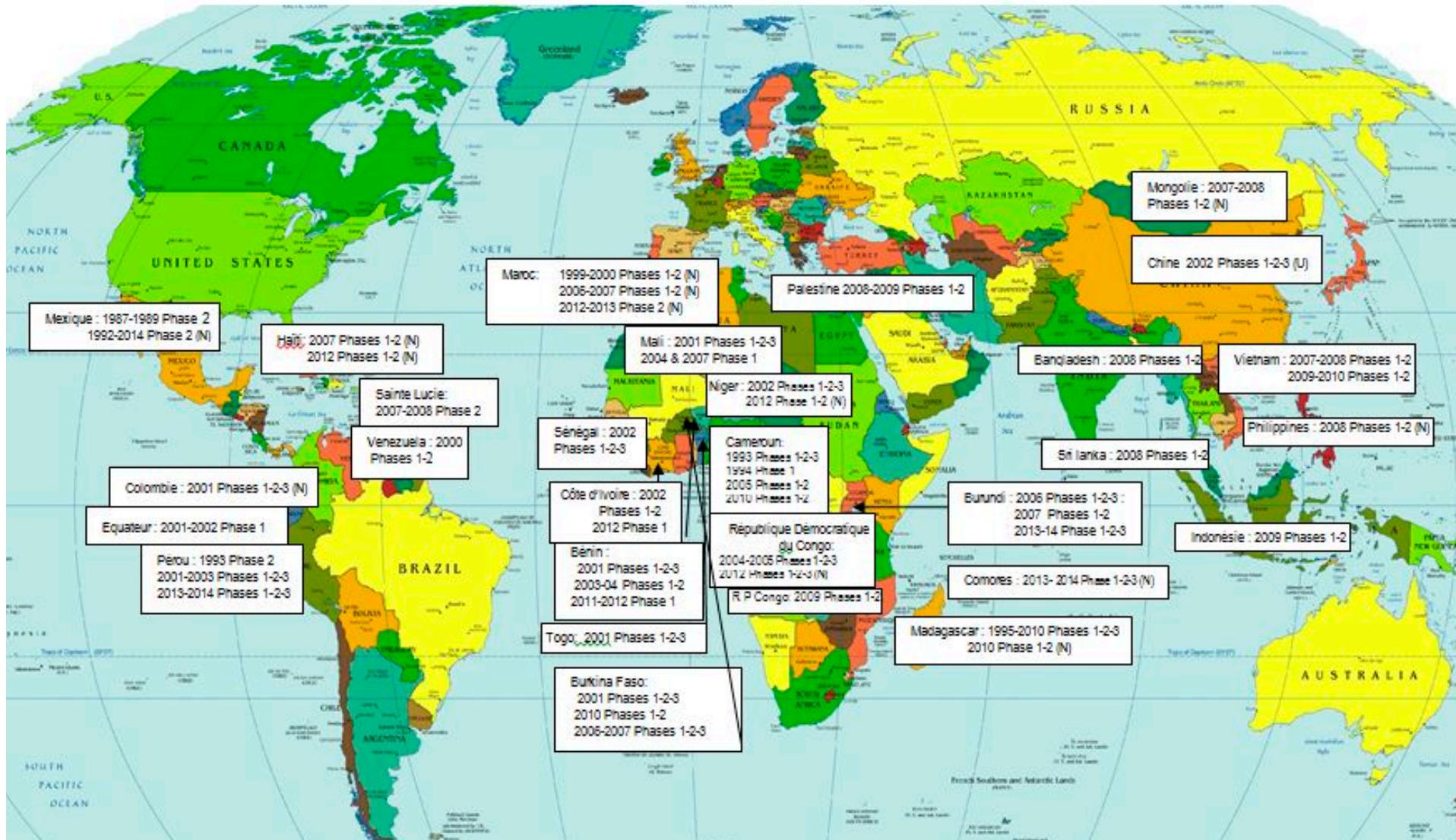
**Estimators of Means: an overestimation bias**

# An augmented Mixed survey: the **1-2-3 Survey** generic Scheme

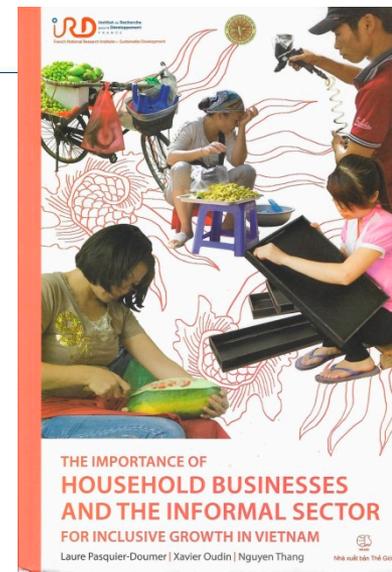
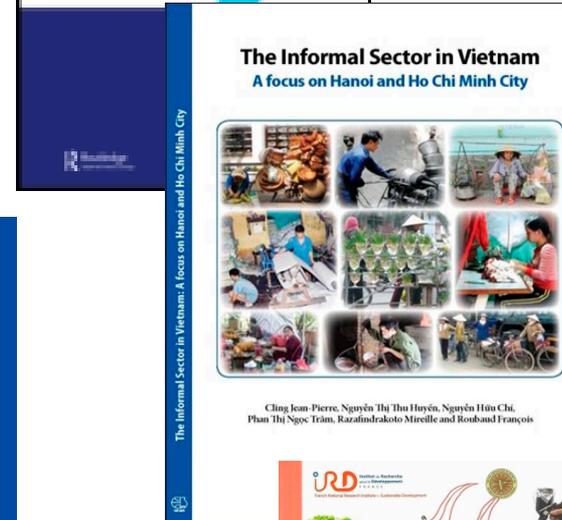
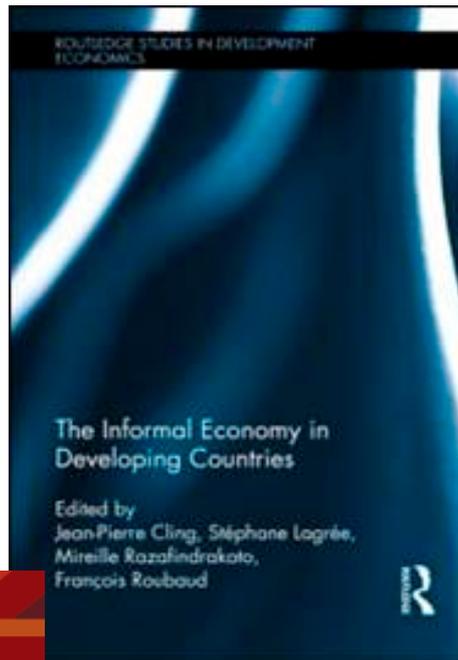
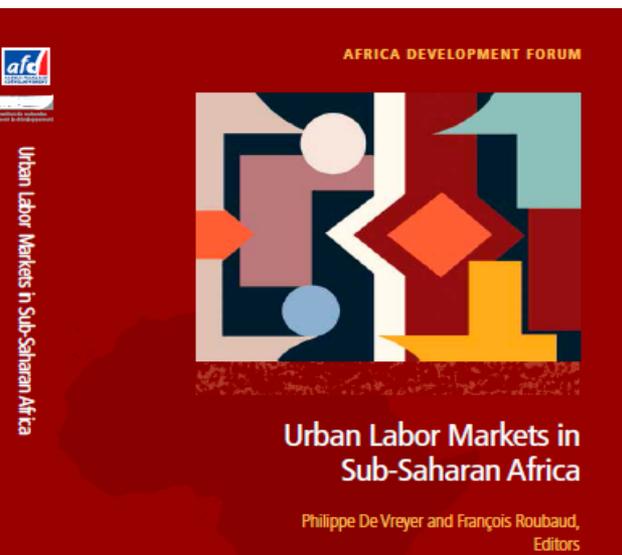


# 1-2-3 Surveys and derivatives around the world (1987-2015)

LES ENQUÊTES 1-2-3 ET LEURS DERIVÉS DANS LE MONDE



# Recent books on the labour market and the informal economy



In between...



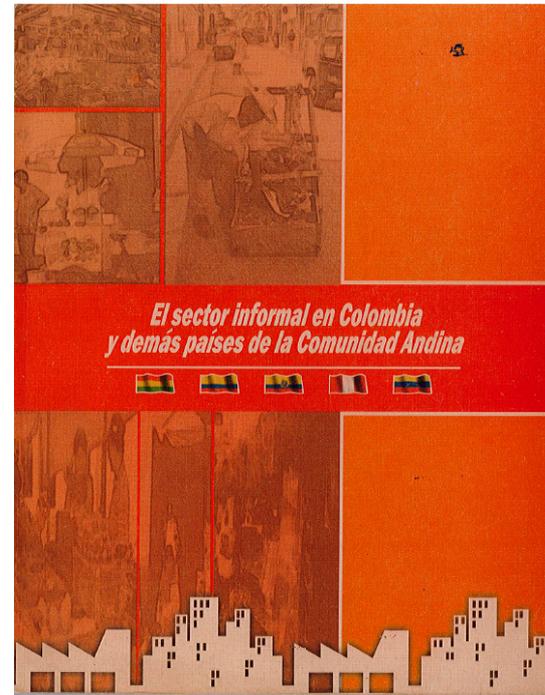
François Roubaud  
La economía  
informal en México

De la esfera doméstica a la dinámica macroeconómica

ORSTOM Institut Français de Recherche  
Scientifique pour le Développement en Coopération  
INEGI Instituto Nacional de Estadística, Geografía e Informática  
FONDEC Fondo de Cultura Económica/Economía Latinoamericana

1994-1995

2004



El sector informal en Colombia  
y demás países de la Comunidad Andina



2018

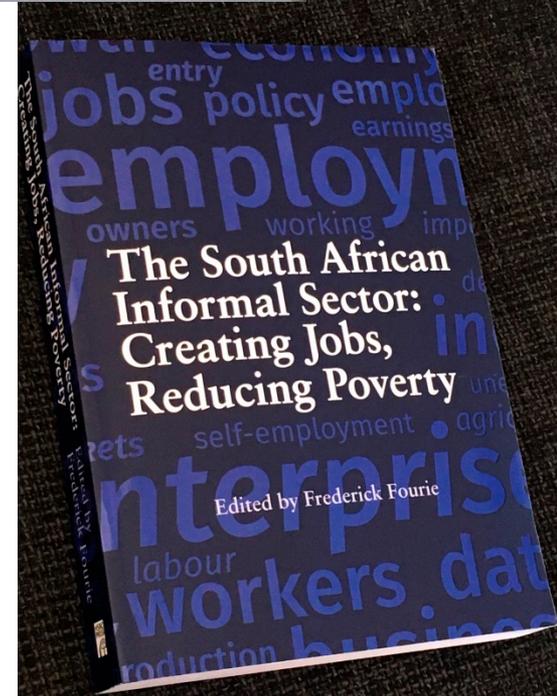
François Roubaud

L'économie informelle  
au  
Mexique

De la sphère domestique  
à la dynamique macro-économique



KARTHALA - ORSTOM



## Some research projects based on *1-2-3 surveys*

***Labour Market and informal economy in Sub-Saharan Africa*** (Roubaud et al., IRD-AFRISTAT, 2006-2010)

***Unlocking potential: Tackling economic, institutional and social constraints of informal entrepreneurship in Sub-Saharan Africa*** (Grimm et al., World Bank, 2009-2012)

***Informal sector in Vietnam*** (IRD-DIAL, 2007-2011)

***Integrating the Informal Economy into the National Accounts (IENA) project*** (IRD-INSEE, 2011-2014)

***Nopoor project*** (IRD-DIAL, EU, 2012-2017)

***Informality and Vulnerability*** (OECD-ILO, 2016-2018)

# Phase 1

## *Augmented LFS*

**Socio-demographic characteristics**

**Labour market indicators**

**Informal jobs & Informal sector jobs (Labour demand/supply)**

*Individual survey*

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### **Statistics**

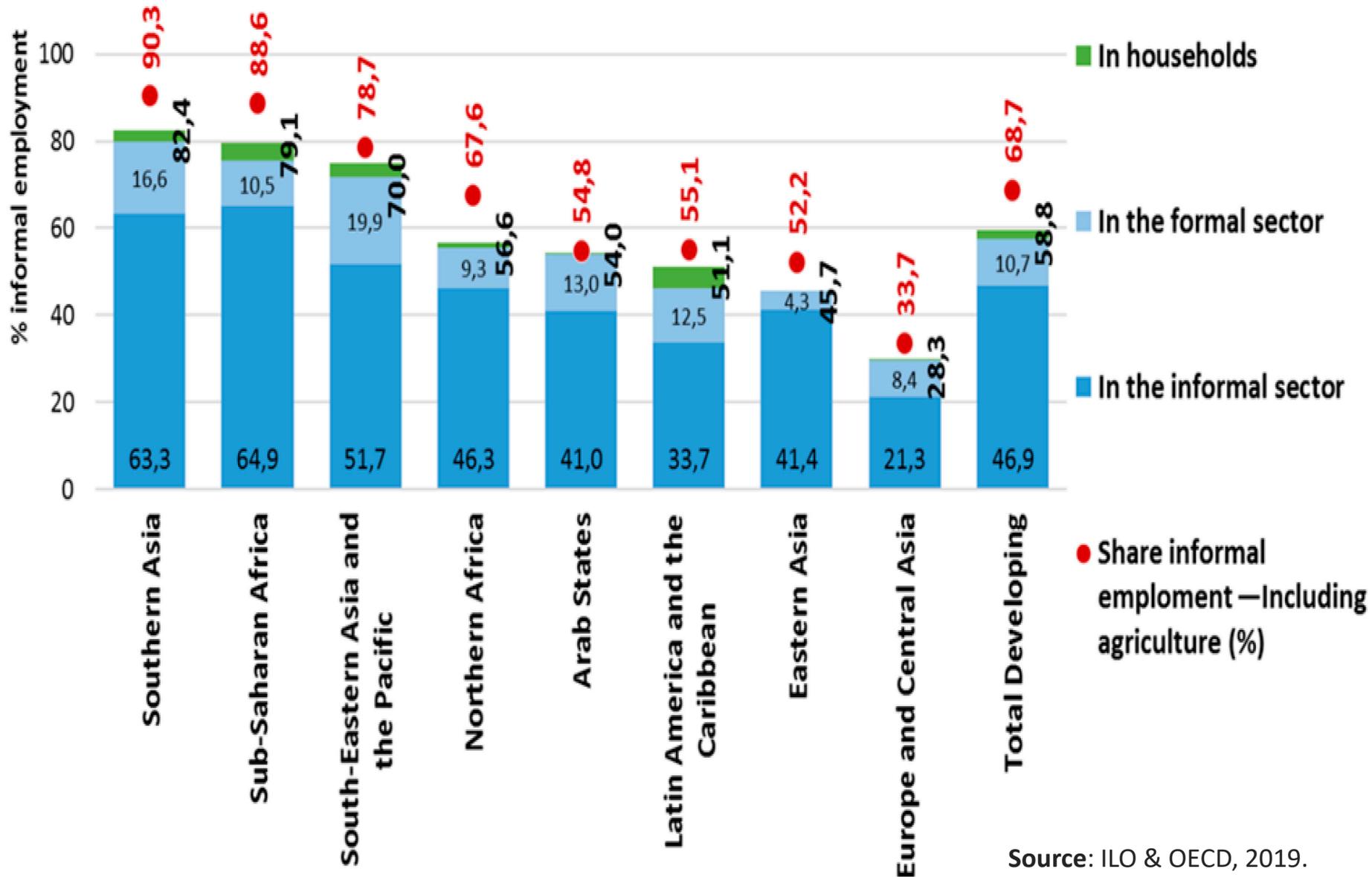
- Benchmark for the household surveys system

### **Economy**

- Labour market : the main drive belt between the macroeconomic conditions and the household living conditions (micro)
- Jobs: primary source of income for the households (in particular the Poor)
- Work : factor of integration vs segmentation & discrimination



# Informal Employment by Component in the World (circa 2015)



Source: ILO & OECD, 2019.

# Phase 1 Augmented LFS

## Informal jobs & Informal sector jobs (Labour demand/supply)

### Main and secondary jobs by institutional sector in Vietnam 2007 & 2017

Institutional Sector	2017		2007		2007		Main & secondary job	
	Main job		Main job		Secondary job			
	Number	Structure (%)	Number	Structure (%)	Number	Structure (%)	Number	Structure (%)
Public sector	4,099,700	7.6	4,953,600	10.7	186,300	2.2	5,140,000	9.4
Foreign enterprise	2,662,100	5.0	907,700	2.0	6,200	0.1	913,900	1.7
Domestic enterprise	7,519,200	14.0	2,646,000	5.7	89,500	1.1	2,735,500	5.0
Formal HB	5,648,100	10.5	3,583,800	7.8	151,200	1.8	3,735,000	6.8
Informal sector	12,186,200	22.7	10,865,800	23.5	1,547,500	18.4	12,413,000	22.7
Agriculture	21,564,700	40.2	23,118,100	50.0	6,427,700	76.3	29,545,600	54.1
<b>Total</b>	<b>53,703,700</b>	<b>100</b>	<b>46,211,200</b>	<b>100</b>	<b>8,424,800</b>	<b>100</b>	<b>52,636,000</b>	<b>100</b>

Sources: Nghiem & Roubaud (2019)

# Phase 1 Augmented LFS

## Informal jobs & Informal sector jobs (Labour demand/supply)

### Labor Matrix in Vietnam 2007

Institutional sector	Jobs (million)			Full-time equivalent (million)		
	Main job	Secondary job	Total	Main job	Secondary job	Total
Public sector	4.954	0.186	5.140	4.579	0.068	4.647
Foreign enterprise	0.908	0.006	0.914	0.964	0.002	0.967
Domestic enterprise	2.646	0.089	2.735	2.837	0.045	2.882
Formal HB	3.584	0.151	3.735	3.912	0.070	3.981
Informal sector	10.866	1.548	12.413	10.750	0.686	11.437
Agriculture	23.118	6.428	29.546	19.010	2.197	21.207
<b>Total</b>	<b>46.211</b>	<b>8.425</b>	<b>54.636</b>	<b>42.187</b>	<b>3.073</b>	<b>45.260</b>

**Source:** Cling et al., 2010.

### Total Labor Income

Institutional sector	Main job		Secondary job		Main and secondary job	
	Amount (billion)	Structure (%)	Amount (billion)	Structure (%)	Amount (billion)	Structure (%)
Public sector	101,855	19.1	747	2.6	102,602	18.2
Foreign enterprise	17,641	3.3	56	0.2	17,697	3.1
Domestic enterprise	52,847	9.9	713	2.4	53,559	9.5
Formal HB	68,636	12.8	1,441	4.9	70,077	12.4
Informal sector	135,082	25.3	6,216	21.3	141,298	25.1
Agriculture	155,739	29.1	19,935	68.4	175,674	31.2
<b>Total</b>	<b>534,345</b>	<b>100</b>	<b>29,156</b>	<b>100</b>	<b>563,500</b>	<b>100.0</b>
<b>GDP (and % of GDP)</b>	<b>1,143,442</b>	<b>46.7</b>	<b>1,143,442</b>	<b>2.5</b>	<b>1,143,442</b>	<b>49.3</b>

# Phase 1 Augmented LFS

## Informal jobs & Informal sector jobs (Labour demand/supply)

### Share of informal employment by institutional sector, Vietnam 2007-2017

	Number (1,000)	Structure (%)	Institutional sector					
			Public sector	FDI enterprise	Domestic enterprise	Formal HB	Informal sector	Agriculture
<b>2007</b>	37,705	81.9	12.3	17.2	52.9	48.0	100	99.0
<b>2009</b>	38,288	80.5	12.6	12.9	48.0	51.6	100	98.6
<b>2010</b>	39,539	79.1	9.2	11.4	38.0	52.5	100	98.5
<b>2017</b>	41,861	78.0	9.6	7.1	29.0	51.2	99.7	99.2

Sources: Nghiem & Roubaud (2019)

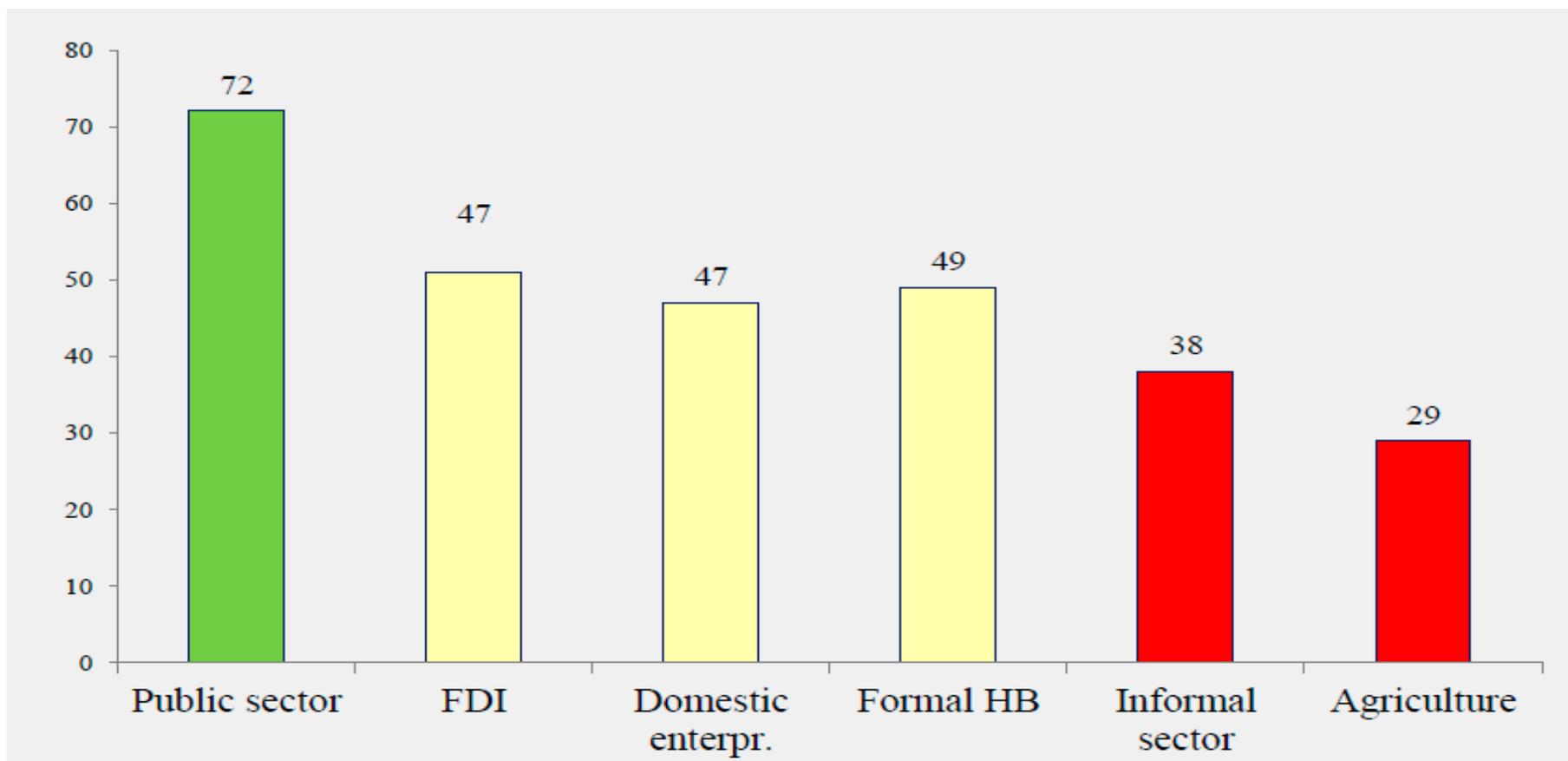
# Phase 1

## *Augmented LFS*

### Informal jobs & Informal sector jobs (Labour demand/supply)

#### Job satisfaction by institutional sectors, Vietnam 2009

(% of very satisfied+satisfied with their job)



## Phase 2

### Informal Sector (Supply side)

#### *Informal production units (IPU) Survey*

- Concentration of poverty
- Links production & consumption (micro level), improve National Accounts Aggregates
- Households' strategy / private initiative incentive
- Targeted Policies: Micro-finance, capacity building, access to markets, etc.

# Phase 2

## Informal Sector (Supply side) *A Matched Employer-Employee Survey*

### MO 2. Demographic Characteristics of the Manpower

	Name	Relationship	Sex	Age	School attendance	Apprenticeship	Longevity
1		<input type="checkbox"/>					
2		<input type="checkbox"/>					
3		<input type="checkbox"/>					
4		<input type="checkbox"/>					
5		<input type="checkbox"/>					
6		<input type="checkbox"/>					
7		<input type="checkbox"/>					
8		<input type="checkbox"/>					
9		<input type="checkbox"/>					
10		<input type="checkbox"/>					
11		<input type="checkbox"/>					
12		<input type="checkbox"/>					

# Phase 2

## Informal Sector (Supply side) Matched Employer-Employee Survey

MO 3. Characteristics of the employment							
	Status	Stability	Type of contract	Recruitment	Nature of the Payment	Number of working hours within the last month of activity	Remuneration of the last month of activity (in thousand Fcfa)
1	<input type="checkbox"/>	<input type="checkbox"/>					
2	<input type="checkbox"/>	<input type="checkbox"/>					
3	<input type="checkbox"/>	<input type="checkbox"/>					
4	<input type="checkbox"/>	<input type="checkbox"/>					
5	<input type="checkbox"/>	<input type="checkbox"/>					
6	<input type="checkbox"/>	<input type="checkbox"/>					
7	<input type="checkbox"/>	<input type="checkbox"/>					
8	<input type="checkbox"/>	<input type="checkbox"/>					
9	<input type="checkbox"/>	<input type="checkbox"/>					
10	<input type="checkbox"/>	<input type="checkbox"/>					
11	<input type="checkbox"/>	<input type="checkbox"/>					
12	<input type="checkbox"/>	<input type="checkbox"/>					
				<b>TOTAL →</b>		<input type="checkbox"/>	<input type="checkbox"/>

MO 4. Characteristics of allowances and bonuses						
	End of year bonuses	Other bonuses	Paid leaves	Profit sharing	NSIF	Other
1	<input type="checkbox"/>					
2	<input type="checkbox"/>					
3	<input type="checkbox"/>					
4	<input type="checkbox"/>					
5	<input type="checkbox"/>					
6	<input type="checkbox"/>					
7	<input type="checkbox"/>					
8	<input type="checkbox"/>					
9	<input type="checkbox"/>					
10	<input type="checkbox"/>					
11	<input type="checkbox"/>					
12	<input type="checkbox"/>					
	<input type="checkbox"/>					

Allowances and bonuses code (MO 4):  
1. Yes 2. No

← MONTHLY TOTALS (in thousand Fcfa)



# Phase 2

## Informal Sector (Supply side)

*Elaborating the Accounts; prices; backward linkages*

**DC 1a. How much did you spend for your activity within the last month for raw materials ?**

	Name of the product	Period	Unit	Quantity	Unit price (n FCFA)	Monthly value (in FCFA)	Financing	Origin
1		<input type="text"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2		<input type="text"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3		<input type="text"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4		<input type="text"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5		<input type="text"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
6		<input type="text"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
0		<input type="text"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>MONTHLY TOTAL</b>						<input type="text"/>		

Product code	Monthly Value	Financing	Origin
Value	gin (in thousand of Fcfa)		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**DC 1b. For products sold without transformation in the course of last month of activity, how much did you spend (cost of stocks)?**

	Name of the product	Period	Unit	Quantity	Unit price (in FCFA)	Monthly value (in FCFA)	Financing	Origin
		<input type="text"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

# Phase 2

## Informal Sector (Supply side)

### Seasonality; Capital, Investment (amount & structure)

DC 6a. How did the activity of your production unit fluctuate within the past 12 months?

RHYTHM	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
1. Maximum												
2. Average												
3. Minimum												
0. No activity												
Answer code	<input type="text"/>											

*How the sausage is made does matter!*

(Del Mel et al., 2008)

### EIF. EQUIPMENTS, INVESTMENT, FINANCING AND DEBT

EIF 1. Note the equipment you made use of within the past 12 months to make your production unit function

Type	Characteristics (Write name)	Quality	Ownership	Origin	Financing	Date of acquisition (month / year)	Present Value (replacement cost) (thousands of Fcfa)
Land	1.	<input type="text"/> <input type="text"/>	<input type="text"/>				
	2.	<input type="text"/> <input type="text"/>	<input type="text"/>				
	0.	<input type="text"/> <input type="text"/>	<input type="text"/>				
Premises	1.	<input type="text"/> <input type="text"/>	<input type="text"/>				
	2.	<input type="text"/> <input type="text"/>	<input type="text"/>				
	0.	<input type="text"/> <input type="text"/>	<input type="text"/>				
Tractors	1.	<input type="text"/> <input type="text"/>	<input type="text"/>				
	2.	<input type="text"/> <input type="text"/>	<input type="text"/>				
	0.	<input type="text"/> <input type="text"/>	<input type="text"/>				

# Phase 2

## Informal Sector (Supply side)

### Corruption, Gifts and Fines

D 5a1. Did you have <b>any contact</b> with state agents from the following institutions in the exercise of your activity within the pas 12 months ? 1. Yes 2. No		D 5a2. If yes which type ?	D 5a3. How this contact has ended? (settlement)	D 5b. In total what is the amount of gifts and fines that you paid for your production unit to these state agents during the past 12 months? (In thousand of VND)		
				D 5b1 "gifts" or fine without receipt	D 5b2 fines with receipt	
1	Local administration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
2	Police	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
3	Justice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
4	Taxes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
5	Customs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
6	Price / Market control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
7	Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>
<b>TOTAL</b>					<input type="text"/>	<input type="text"/>

**Type of contact code (D5a2):**

1. Related to the premises
2. Related to taxes and licence
3. Related to products used/sold
4. Related to the prices
5. Related to other rule/regulation
6. Other \_\_\_\_\_ (Specify)

**Settlement due to the contact code (D 5a3):**

1. Payment of a fine (with receipt)
2. Payment of a "gift" or amicable settlement or fine without receipt
3. Payment of a fine and a gift
4. In compliance with the law without any payment
5. No settlement **on the reason of the contact**
6. Other (specify)

# Phase 2

## Informal Sector (Supply side)

### *Selected examples*

**Characteristics of the informal sector firms: The “Gold number”**  
**(Peru: 1.6, ENAHO 2017; South Africa: 1.5, SESE 2013)**

	Vietnam		Cameroon		Madagascar	WAEMU
	Hanoi	HCMC	Douala	Yaoundé	Antananarivo	7 cities
<b>Job type and weekly hours</b>						
Self-employment (%)	72.7	70.7	69.5	72.1	69.5	73.6
Rate of wage-earners (%)	15.3	16.9	10.9	16.8	16.4	13.6
Weekly working hours (average)	49.3	52.1	44.4	48.8	41.0	46.1
<b>Characteristics of IHBs</b>						
Average size of IHBs	1.4	1.5	1.5	1.6	1.5	1.5
IHB without premises	39.9	37.2	52.4	47.9	32.9	47.3
<b>Income</b>						
Average monthly income	133	121	100	135	46	128
Median monthly income	84	77	55	92	17	36

# Phase 2

## Informal Sector (Supply side)

### Selected examples

#### Main destination and origin of products (% of total value)

	Vietnam		Cameroon		Madagascar	WAEMU
	Hanoi	HCMC	Douala	Yaoundé	Antananarivo	7 cities
<b>Destination of production</b>						
Formal sector	5.8	3.0	6.4	3.2	9.7	7.5
Informal sector	19.5	20.7	25.0	20.3	18.6	16.5
Households	74.7	76.3	68.6	76.5	72.4	75.3
Exports	0	0	-	-	1.3	0.8
<b>Origin of intermediate consumption</b>						
Formal sector	24.5	14.9	24.0	35.9	46.6	10.3
Informal sector	73.8	82.8	75.8	63.6	49.8	82.7
Other (public, etc.)	1.7	2.3	0.2	0.5	1.7	6.9

# Phase 2

## Informal Sector (Supply side)

### *Selected examples*

**Trends in the main aggregates for the informal sector, Madagascar 2012-2015:  
the prices issue**

	2012 (MGF billions 2012)	2012 (MGF billions 2015)	2015 (MGF billions 2015)	Trend 2015/2012	
				Nominal	Real*
<b>Capital</b>	199	356	596	+199.5%	+67.4%
<b>Turnover</b>	1 309	2 352	3 004	+129.5%	+27.7%
<b>Production</b>	721	1 291	1 769	+145.4%	+37.0%
<b>Added value</b>	405	706	1 139	+181.2%	+61.3%

*Sources* : 1-2-3 surveys, phase 2, INSTAT ; authors' calculations.

*Note*: In order to deflate the aggregates by value, specific indices of sale, production and added value prices were drawn up for the informal sector. Capital was valued at production price, unless specific information was available.

**Phase 3**  
**Income/expenditure**  
**Living conditions**  
**Informal sector (Demand side)**

*Household survey*

- Traditional indicators for monetary poverty
- In-depth monitoring of households living standards
- Informal sector demand: which households consumes which product in which sector?

➤ *Elaborate SAM, CGEM*

# Phase 3

## Income/expenditure - Living conditions

### Informal sector (Demand side)

Module number	Primary unit number	Household number	DAILY PURCHASES OF PRODUCT AND/OR SERVICE FOR THE CONSUMPTION OF THE HOUSEHOLD ; GIFTS GIVEN AND RECEIVED IN CASH						DATE	
_ _ _	_ _ _	_ _ _							_ _	_ _
			<i>What have you effectively paid ?</i>		<i>What quantity of ... (PRODUCTS, SERVICE) ... have been purchased this day ?</i>	<i>Unit</i>	<i>What is the total expenditure ?</i>	<i>Place of purchase</i>	<i>Main reason for purchase</i>	<i>Country of production</i>
LINE Number	<i>Precise description of the product or service purchased</i>	<i>PRODUCT COD To be reported each evening after having checked the questionnaire</i>	<i>QUANTITY PAID</i>	<i>UNIT PRICE</i>						
_0_ _1_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
_0_ _2_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
_0_ _3_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
_0_ _4_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
_0_ _5_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
_0_ _6_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
_0_ _7_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
_0_ _8_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
_0_ _9_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
_1_ _0_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
_1_ _1_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
_1_ _2_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
_1_ _3_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
_1_ _4_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
_1_ _5_		_ _ _	_ _ _	_ _ _	_ _	_ _ _ _ _ _ _	_	_	_	
<b>TOTAL →</b>			_ _ _	_ _ _	_ _	_ _ _ _ _ _ _				



# Phase 3

## Income/expenditure - Living conditions

### Informal sector (Demand side)

**Share of informal sector expenditure by type of households, Madagascar**  
(% of total Expenditures)

% of total expenditure in the informal sector	TYPE OF HOUSEHOLDS				
	1er Quartile	2 <sup>nd</sup> Quartile	3rd Quartile	4th Quartile	TOTAL
1.- Food	99,8	99,4	98,3	92,9	96,7
2.- Clothes	95,3	88,7	82,7	67,7	76,5
3.- Housing	86,3	76,0	69,0	59,0	67,9
4.- House equipment and maintenance	98,9	94,3	79,7	86,2	86,7
5.- Health, personal care	49,0	47,1	47,5	33,8	39,5
6.- Transport, communication	16,8	19,4	24,2	33,4	30,5
7.- Education, spare time activities	48,1	45,4	34,9	26,4	31,8
<b>TOTAL</b>	<b>92,2</b>	<b>86,3</b>	<b>81,3</b>	<b>66,8</b>	<b>76,5</b>

# Innovations, extensions

## Methodological Innovations

- Panel surveys
- *ad hoc* protocol for impact evaluation (Gubert et Roubaud, 2003 & 2011).

## Extensions

- Farm Informal Sector
- Formal Household Businesses
- Micro-entreprises

## Integration of the Informal Sector into the National Accounts

# Studying the IS Dynamics: Why?

**Preliminary comment** : up to date, no one can say for any country:

*Did informal sector production increase or decrease over time?*

*(Which deflator?)*

## Macro

- **Informal Sector and economic dynamics: pro or contra-cyclical?** (*jobs, production, productivity*)
- **Monitoring & evaluation (policies, programmes, projects)**

## Micro

- **Job transitions on the LM**
  - Are informal sector workers trapped in informality?
  - Are informal sector jobs a step to better jobs?
- **Earning dynamics (and formal/informal gap)**
  - Is there a monetary penalty to informal sector jobs?
  - Are some IS jobs better paid? If yes, which?
  - Does the formal / informal earning gap vary along the earnings distribution

**Declination: IS heterogeneity**

# Back to Vietnam: A massive underestimation (GDP)

## Value Added: National Accounts vs LFS-HB&IS estimates, 2009

2009	GSO		HB&ISS		LFS		
	HB	IHB	FHB	Coverage	IHB	FHB	Coverage
Accommodation	<b>40,612</b>	34,076	25,092	68.6%	22,925	13,684	110.9%
Construction	<b>38,853</b>	44,418	2,533	82.8%	58,810	2,091	63.8%
Manufacturing	<b>49,107</b>	61,108	19,566	60.9%	45,790	25,284	69.1%
Other service	<b>7,334</b>	11,690	6,259	40.9%	11,092	4,040	48.5%
Transportation, communication	<b>18,316</b>	22,430	13,966	50.3%	20,761	12,753	54.7%
Wholesale retail trade	<b>74,805</b>	142,736	101,624	30.6%	71,300	50,740	61.3%
Other branches	<b>10,513</b>	15,390	1,570	62.0%	14,572	4,864	54.1%
Real estate	<b>46,683</b>	3,932	2,181	763%	2,992	1,250	110.0%
<b>Total</b>	<b>286,223</b>	335,781	172,792	<b>56.3%</b>	248,242	114,705	<b>78.9%</b>
<b>Total (without Real Estate)</b>	<b>239,540</b>	331,849	170,611	<b>47.7%</b>	245,250	113,455	<b>66.8%</b>

**Source:** Cling et al. (2010).

**Note:** IHB: Informal Household Businesses; FHB: Formal Household Businesses.

# Back to Vietnam: A massive underestimation (GDP)

## Value Added: National Accounts vs LFS-HB&IS estimates, 2007

2007	GSO		HBIS		LFS		
	HB	IHB	FHB		IHB	FHB	
Accommodation	27,371	27,236	19,663	58.4%	13,688	7,865	127.0%
Construction	24,552	29,582	1,205	79.7%	28,640	1,448	81.6%
Manufacturing	37,265	43,010	32,415	49.4%	29,110	14,315	85.8%
Other service	4,693	6,400	2,193	54.6%	6,740	2,269	52.1%
Transportation, communication	12,456	15,278	12,444	44.9%	11,613	7,746	64.3%
Wholesale retail	49,334	68,370	62,623	37.7%	44,450	31,306	65.1%
Other branches	6,959	8,489	6,772	45.6%	6,417	3,429	70.7%
Real estate	34,578	1,084	629	2019%	615	518	3052%
<b>Total</b>	<b>197,207</b>	199,449	137,943	<b>58.5%</b>	141,273	68,895	<b>93.8%</b>
<b>Total (without Real Estate)</b>	<b>162,629</b>	198,366	137,315	<b>48.4%</b>	140,658	68,377	<b>77.8%</b>

Sources: LFS 2007&2009; HB&IS Hanoi & HCMC (2007&2009), National Accounts; unofficial figures; authors' calculations.

Note: "other branches" include active households, arts, education, electricity water, financial intermediation, health, mining and scientific activities. Administration, activities of communist party & extraterritorial activities are excluded (not household institutional sector).

**Source:** Cling et al. (2010).

**Note:** IHB: Informal Household Businesses; FHB: Formal Household Businesses.

# ***Contribution of the informal sector to the GDP: first estimates***

20% of the GDP in 2007 (included or not included?)

## **Box 2**

### **A tentative approach at measuring the contribution of the informal sector and household businesses to GDP in 2007**

Various indicators confirm that our hypothesis is consistent. For instance, average monthly income per IHB is 51.7% higher than at national level, reflecting higher price and business levels in the cities. Given that Hanoi and Ho Chi Minh City's informal incomes represent 19.4% of total informal incomes captured by the LFS, we can impute that the total value-added generated by the informal sector at national level is 228,767 billion VND. Compared with GDP, estimated at 1,143,442 billion VND in 2007, we obtain a ratio of 20%, or 25.1% of non-primary GDP.<sup>36</sup>

Taking things a step further, we can consolidate our results for the entire household business sector (both formal and informal). Using the same methodology, we obtain for the formal household business sector: 3,735,000 jobs, 1,894,000 production units (average size: two persons) and 12.6% of GDP (consistently, the level of underestimation of incomes in the LFS is higher than for the informal sector: 106% vs. 62%). When these two components are added together, the corresponding figures for the entire household business sector are: 15,620,000 jobs, 10,275,000 household businesses and 32.7% of GDP.

# Contribution of the informal sector to the GDP: first estimates

Total value added of HBs & IS firms and share in GDP 2014

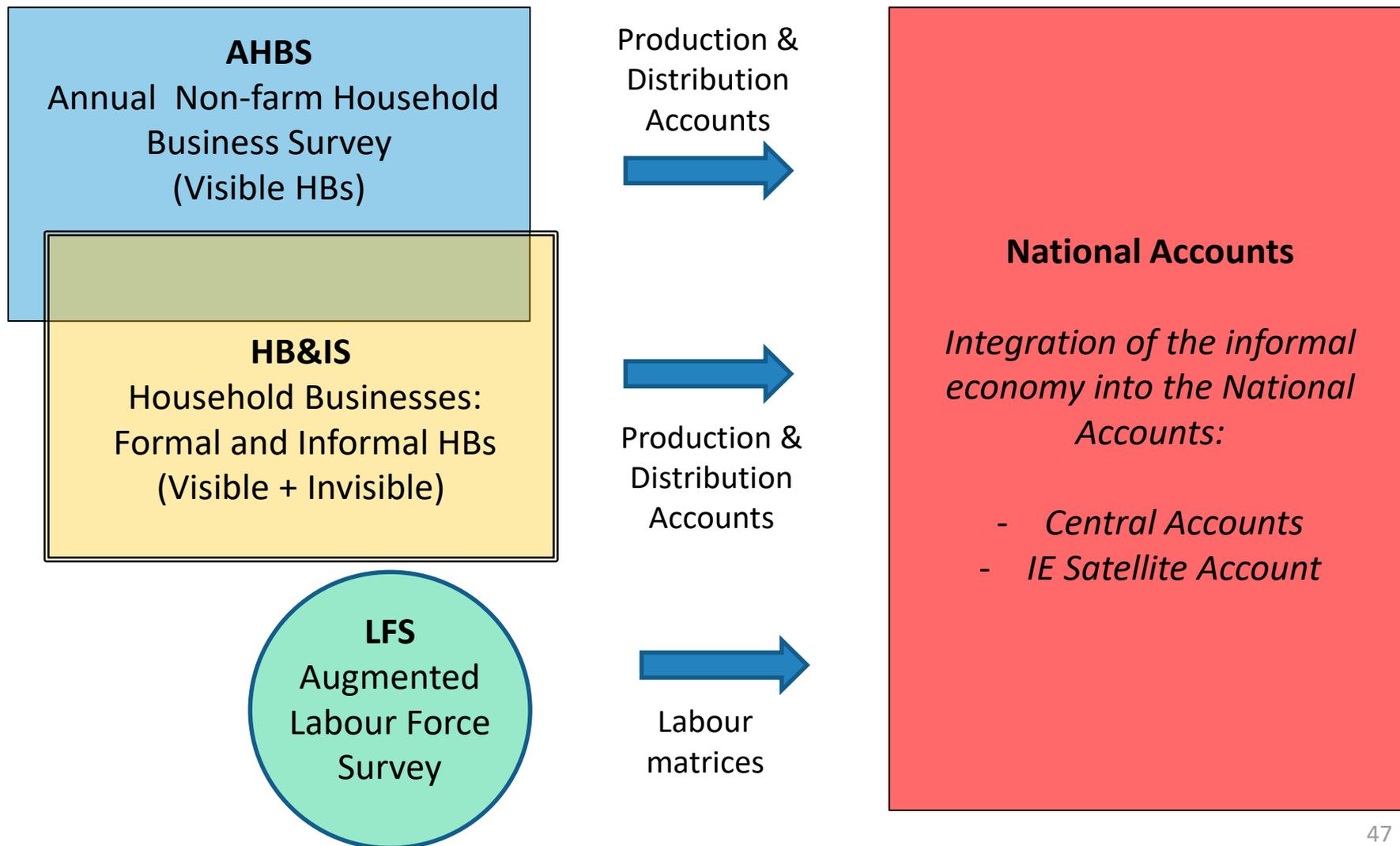
**TABLE 5.1.**  
**TOTAL VALUE ADDED OF THE HBS AND THE INFORMAL SECTOR AND THEIR SHARE OF THE GDP**

	GDP (billion VND)			Contribution of HB value added to actual GDP (%)	
	Vietnam <sup>(a)</sup>	All HBs <sup>(b)</sup>	Informal HBs <sup>(b)</sup>	All HBs	Informal HBs
Agriculture	726,330	-	-	-	-
Manufacturing	1,475,361	334,705	181,261	22.7	12.3
Trade	550,019	345,144	164,756	62.8	30.0
Service	1,186,146	210,733	125,618	17.8	10.6
<b>Total non-farm</b>	<b>3,211,526</b>	<b>890,582</b>	<b>471,635</b>	<b>27.7</b>	<b>14.7</b>
<b>Total (incl. agriculture)</b>	<b>3,937,856</b>	<b>890,582</b>	<b>471,635</b>	<b>22.6</b>	<b>12.0</b>

Source: (a) GSO national GDP figures for 2014, ([https://www.gso.gov.vn/default\\_en.aspx?tabid=775](https://www.gso.gov.vn/default_en.aspx?tabid=775)) preliminary figures; (b) 2014/15 HB&IS survey, VASS-CAF & IRD-DIAL; authors' calculations.

Sources: Source: Oudin & Vu Hoang (2017).

# *An integrated to survey scheme to capture the informal economy into the National Accounts*



# Conclusion

## General

**Privilege the direct approach to measure the Informal Economy**

**Comprehensive and robust survey methodology are available** (more reliable than formal sector surveys)

## Vietnam

**A massive underestimation of the IE in the National Accounts**

**A paradox**

1- Methods and data are available

2- No institutionalization of a sound methodology to measure the IE

**Political economy explanations**

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# Annexes

# Policy Recommendations

The 10 commandements for policies towards the informal economy

## ☞ **Recognition, monitoring of the informal economy**

- 1 - Adoption of official definitions (ILO recommendations): policies, voice
- 2 - Measure and regular monitoring (surveys, integration into national accounts)
- 3 - Evaluation of the impact of policies

## ☞ **Transparency and simplification of bureaucracy**

- 4 - Simple rules for registration (the same for all informal enterprises)
- 5 - Uniform tax rate for all informal enterprises (low tax rate)

## ☞ **Targeted policies**

- 6 - Financial institutions and micro-finance towards the informal sector
- 7 - Targeted training programmes (vocational training, business literacy...)
- 8 - Promotion of professional networks for the informal sector
- 9 - Extension of social protection scheme (universal coverage)
- 10 – Reduction of Informal employment in the Formal sector by associating stakeholders in the fixation of compulsory contribution

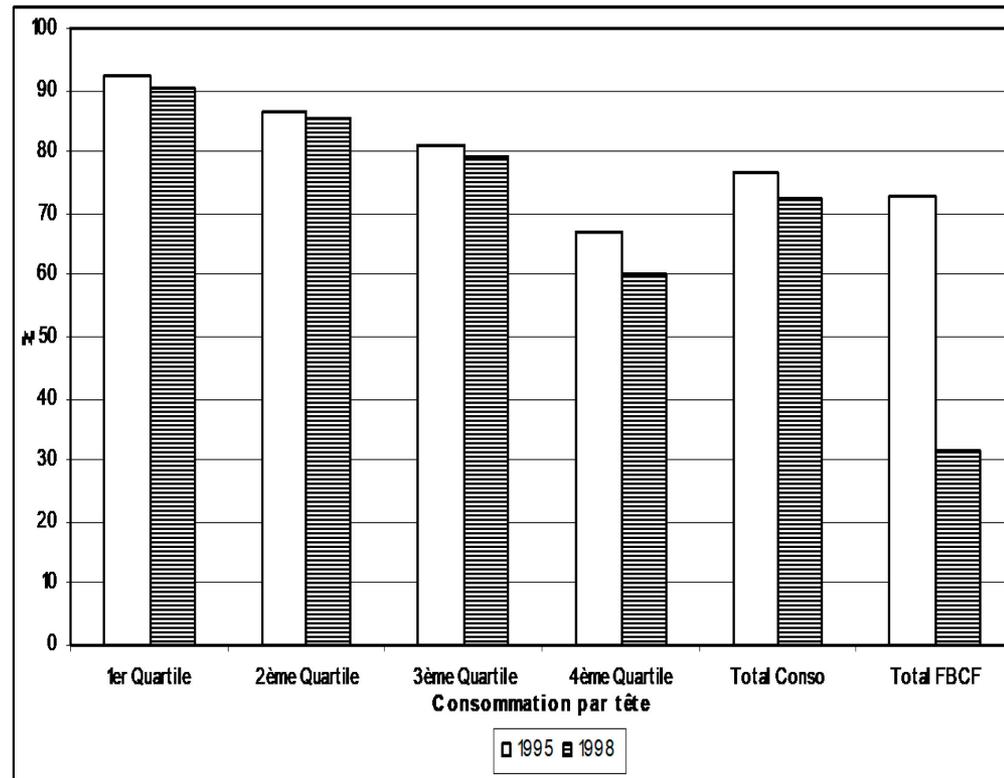
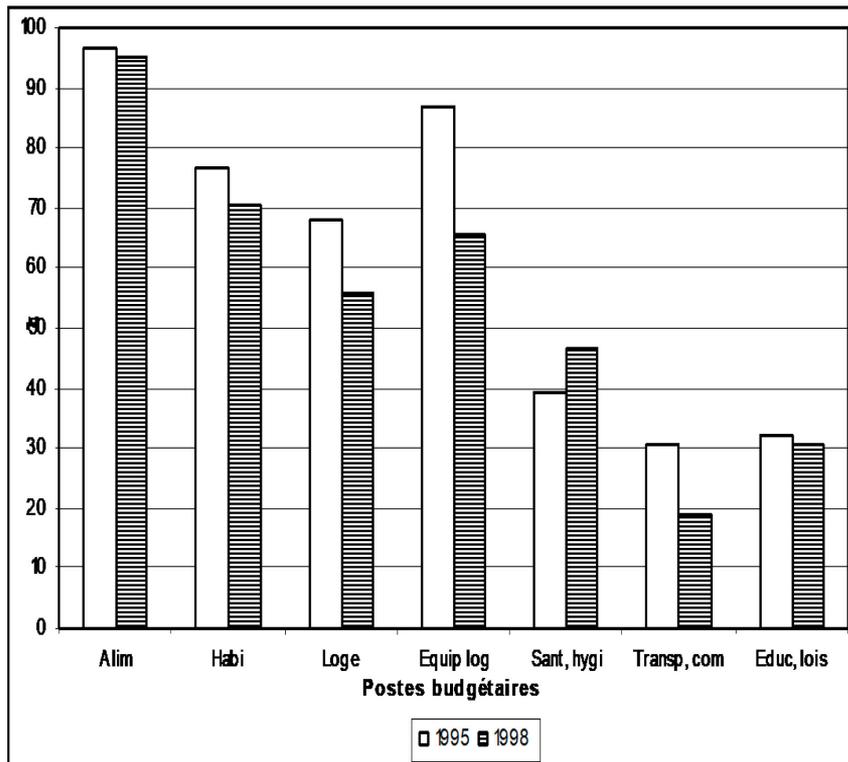


# Phase 3

## Income/expenditure - Living conditions

### Informal sector (Demand side)

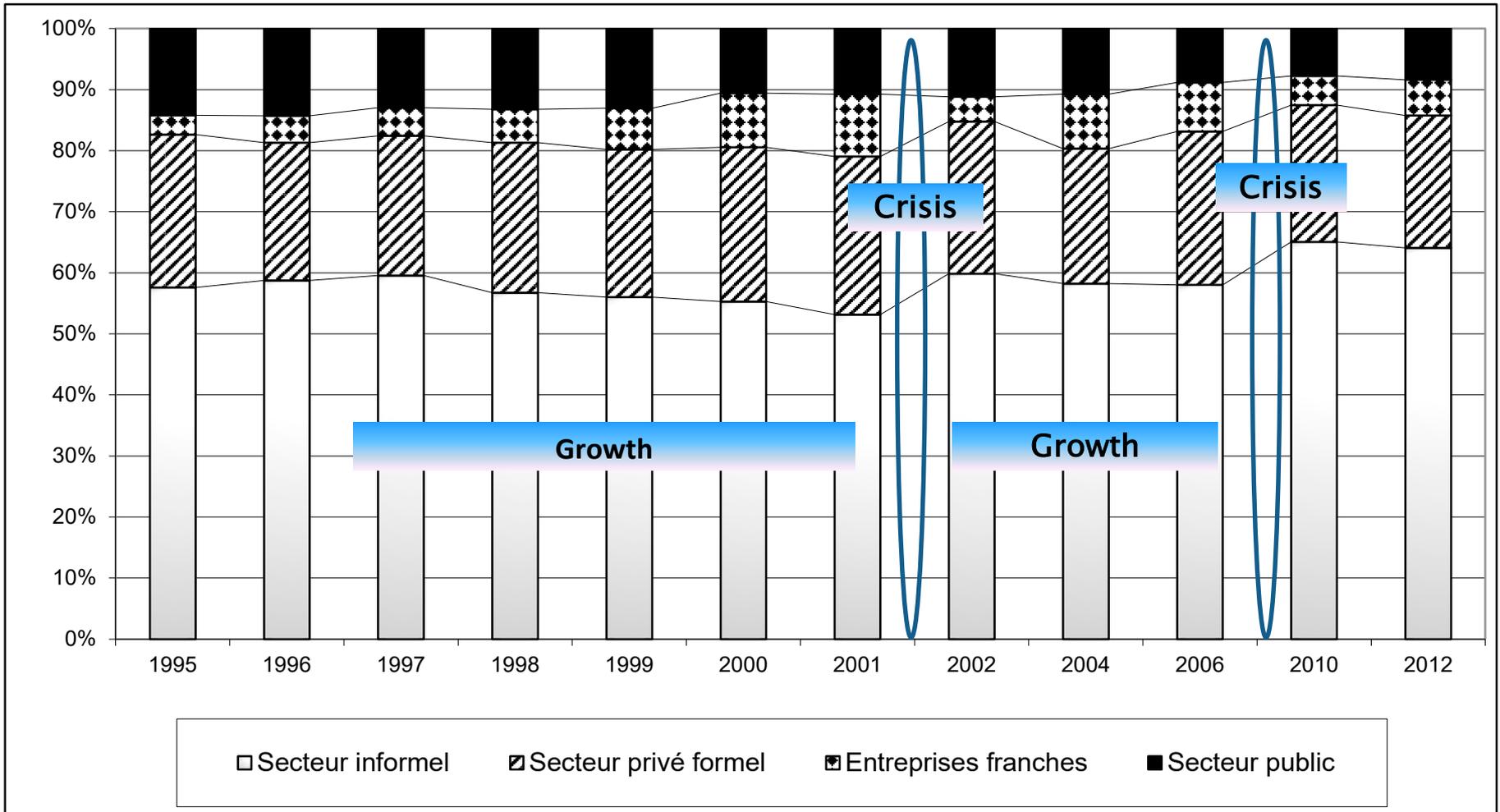
**Share of expenditure in the informal sector by functions and type of households, Madagascar**  
(% of total Expenditures)



# Macro dynamics (repeated cross sections)

## Informal sector: contra-cyclical (jobs)

Share of employment by institutional sectors (Antananarivo, 1995-2012)

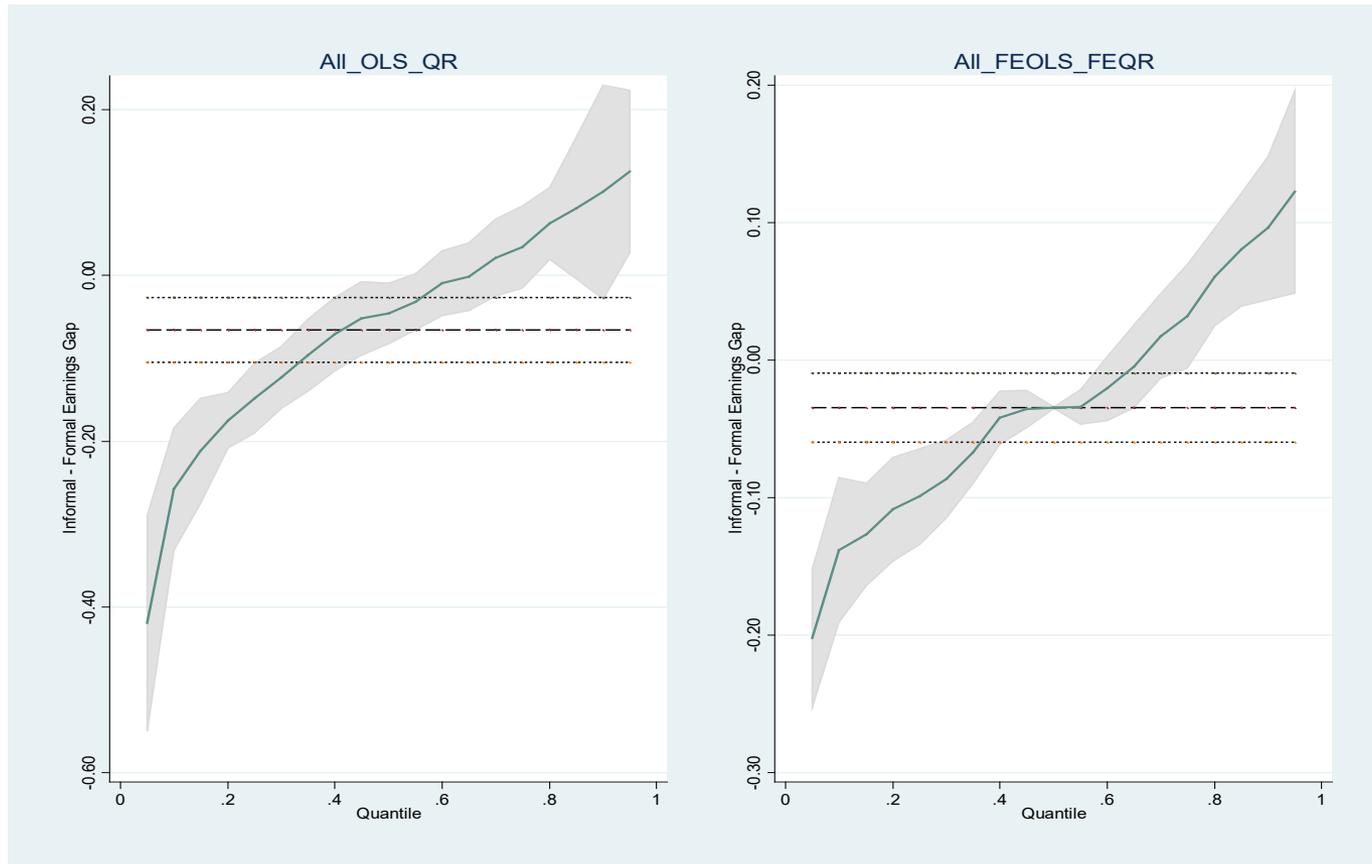


# **Micro dynamics (panel, retrospective - biographical)**

***The 1-2-3 Survey (Phase 1) Panel Data***

***The 1-2-3 Survey (Phase 2) Panel Data***

# Who suffers the penalty: Informal vs. Formal Sectors workers



- At the aggregate level, not accounting for firm size, a huge gap of about 20%, divided by two when we control for unobserved heterogeneity (physical capital; unobserved individual ability or social networks?)
- Controlling for firm size, the “purged size gap” is low (OLS: -6%; FE: n.s.)
- Decreasing gap along the earnings distribution: no systematic penalty for informal sector jobs
  - intra sectoral heterogeneity to be investigated

# Micro dynamics of the informal firms

The *1-2-3 Survey (Phase 2)* Panel Data (Vietnam, 2007-2009)

**High mortality rate. 14% in Hanoi and 19% in HCMC.**

+ not found (if they stopped activity → 21% in Hanoi & 30% in HCMC)

The bigger the HBs are, the less vulnerable they are.

or HBs which manage to survive can increase their size.

## Mortality rate , 2007-2009

in %	Hanoi		Ho Chi Minh City		
	Economic activity	Stop activity	No info	Stop activity	No info
Manufacturing		13.1	5.7	26.1	12.6
Trade		12.5	4.4	18.8	9.8
Services		17.1	9.2	20.0	11.5
<b>Total IHB</b>		<b>14.7</b>	6.8	<b>21.0</b>	11.2
<b>Total FHB</b>		12.4	8.4	13.9	9.5
<b>Total</b>		<b>14.2</b>	<b>7.1</b>	<b>19.2</b>	<b>10.7</b>

# Micro dynamics of the informal firms

The *1-2-3 Survey (Phase 2)* Panel Data (Vietnam, 2007-2014)

**At the micro level:**

**Huge attrition rate over 7 years** (59% in HN, 70% in HCMC) in spite of tracking...

	2007	2009	2014	Attrition (total) 2007-2014	Attrition (per year) 2007-2014
Hanoi	1,310	1,013	531	59%	13.8%
HCMC	1,333	1,026	401	70%	18.7%
Total	2,643	2,039	932	65%	16.1%

**Sources:** HB&ISS 2007-2014, authors' calculations

# Micro dynamics of the informal firms

The *1-2-3 Survey (Phase 2)* Panel Data (Vietnam, 2007-2009)

At the micro level:

High mortality rate (14% in HN, 19% in HCMC)...

... And important transitions between formal/informal sectors corresponding to an informalization process

Economic activity (2007)	Formalisation rate		Informalisation rate	
	Hanoi	HCMC	Hanoi	HCMC
Industry	4.5	9.5	25.4	9.0
Trade	10.9	12.9	26.1	10.6
Services	7.7	8.5	47.3	26.1
<b>Total HBs</b>	<b>8.3</b>	<b>10.2</b>	<b>31.1</b>	<b>15.3</b>

# Micro dynamics of the informal firms

*ENAHO Survey (Integrated 1-2-3) Panel Data (Peru, 2002-2010)*

**Evolution of failure, creation and survival rates of IPU's 2002-2010 (%)**

	<b>Average 2002/ 2010</b>	<b>2003/ 2002</b>	<b>2004/ 2003</b>	<b>2005/ 2004</b>	<b>2006/ 2005</b>	<b>2008/ 2007</b>	<b>2009/ 2008</b>	<b>2010/ 2009</b>
<b>Mortality rate</b>	35.4%	31.0%	34.8%	39.5%	37.9%	35.9%	36.1%	35.2%
<b>Creation rate</b>	38.0%	40.8%	37.9%	40.7%	40.4%	36.9%	37.3%	36.8%
<b>Survival rate</b>	64.6%	69.0%	65.2%	60.5%	62.1%	64.1%	63.9%	64.8%

Source: ENAHO 2002-2010, INEI ; authors' calculations.

Note: The data is missing for 2007/2006 because of a new survey design implying a total renovation of the panel.

# Impact Evaluation and *1-2-3 Survey*

- The *1-2-3 survey* can serve as a base to elaborate *ad hoc protocols of impact evaluation*:
  - Whatever the method: RCT, quasi-experimental (double-difference, before/after, cross section matching, etc.)
  - Identification of control group (always); of treated group (possible)...
  
- **Advantages :**
  - Economies of scale and comparative advantage
  - Institutionalization, Public Good (NSO)
  - Costs

# Impact Evaluation: A quasi-experimental method

## MFI programme in Madagascar (2001-2004)

articulate *1-2-3 surveys* / client survey (P2)

