

Measuring the non-observed economy in Vietnam:

A focus on informal economy

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Abstract

This paper takes advantage of this new political demand at the government highest level to focus on the measurement of the informal economy in Vietnam from statistical perspective. After this introduction, Section 2 presents the main challenges, concepts and definitions regarding the informal economy within the framework of non-observed economy. Section 3 discusses alternative methodologies to measuring informal sector, in general and their application to Vietnam. As the two main strategies to measure the informal sector have been conducted in parallel since 2007, it gives a unique opportunity the compare the two approaches. Based on past experiences, some recommendations for designing an improved system are provided. Section 4 is devoted to illustrative empirical results, both on the labour market and the national accounts. Section 5 provides concluding remarks and challenges ahead.

Key words: Informal Economy, Non-Observed Economy, Mixed Surveys, National Accounts, Statistics, Vietnam

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1. Introduction

The OECD (Jutting and de Laiglesia, 2009) reports that, “*Informal employment is the norm, not the exception in many parts of the world.*” This remark certainly applies to Vietnam. Indeed, the informal sector, and more broadly the informal economy, is ubiquitous in Vietnam as in most developing countries, and many households, in particular the poor, derive all or part of their earnings from it. Evidence of this is found every time you buy fruit from a roving street vendor, have a soup perched on a stool on the pavement, take a ride on a motorbike taxi (*xe ôm*) and have a shirt made by a neighbourhood seamstress.

Paradoxically, despite its economic weight, knowledge of the informal economy is extremely limited in Vietnam as it is in most developing countries. This situation is due to a number of factors. First of all, the concept of what constitutes “informal” is vague with a multitude of definitions having been put forward by different authors. Secondly, measuring the informal sector is a tricky business since it operates on the fringes of the economy. Thirdly, this sector suffers from a lack of interest on the part of the authorities as it does not pay (or pays little) taxes and is seen more as a nuisance (especially in the towns) and a mark of underdevelopment inevitably doomed to extinction by the country’s economic growth. These elements explain why there has been no really significant effort to date to improve knowledge in this area. However, things are progressively changing.

This paper sets out to amend this situation by providing accurate statistical data and in-depth analyses on the informal sector and informal employment in Vietnam for the first time ever. Its authors are a French-Vietnamese team made up of economists and statisticians from the Vietnamese General Statistics Office (GSO) and the French Research Institute for Sustainable Development (IRD). This objective is all the more that on 1 February 2019, the Prime Minister of Vietnam has approved a Decree on measuring the non-observed economy. The purposes are to: (1) evaluate the production results of non-observed economy, serving for the compilation of gross domestic products in accordance with international standards and practices as well as in accordance with the Vietnam's practice, in order to fully reflect the scope and scale of the economy; (2) to contribute to improve statistical capacity in general and the capacity of national accounts statistics in particular.

This paper takes advantage of this new political demand at the government highest level to focus on the measurement of the informal economy in Vietnam from statistical perspective. After this introduction, Section 2 presents the main challenges, concepts and definitions regarding the informal economy within the framework of non-observed economy. Section 3 discusses alternative methodologies to measuring informal sector, in general and their application to Vietnam. As the two main strategies to measure the informal sector have been conducted in parallel since 2007, it gives a unique opportunity to compare the two approaches. Based on past experiences, some recommendations for designing an improved system are provided. Section 4 is devoted to illustrative empirical results, both on the labour market and the national accounts. Section 5 provides concluding remarks and challenges ahead.

2. A focus on informal economy: concept and definitions

The term “informal sector” (and latter “informal employment”) can have different meanings in everyday language. Even among social scientists, the definition of the informal sector is a matter of debate as shown by the many concepts associated with it, appropriately or not: “*underground economy*”, “*black economy*”, “*grey economy*”, “*moon-lighting economy*”, “*in-*

the-open-sun economy”, “*popular economy*”, “*illegal economy*”, “*subterranean economy*”, “*non-observed economy*”, etc.

Within this fuzzy framework, three main competing schools of thought (Table 1), which have been called the “dualist”, “structuralist” and “legalist” schools (Roubaud, 1994; Perry et al., 2007, Bacchetta, Ernst and Bustamante, 2009), have been prevailing:

- **The “dualist” school.** The “dualist” approach is an extension of the work by Lewis (1954) and Harris and Todaro (1970). It is based on a dual labour market model where the informal sector is considered to be a residual component of this market totally unrelated to the formal economy. It is a subsistence economy that only exists because the formal economy is incapable of providing enough jobs.
- **The “structuralist” school.** Unlike the dualist school, the “structuralist” approach focuses on the interdependencies between the informal and formal sectors (Moser, 1978; Portes, Castells and Benton, 1989). Under this neo-Marxist approach, the informal sector is part of, but subordinate to the capitalist system; by providing formal firms with cheap labour and products, the informal sector increases the economy’s flexibility and competitiveness.

The “legalist” school. The “legalist” or “orthodox” approach considers that the informal sector is made up of micro-entrepreneurs who prefer to operate informally to evade the economic regulations (de Soto, 1989); this liberal school of thought is in sharp contrast to the other two in that the choice of informality is voluntary due to the exorbitant legalisation costs associated with formal status and registration.

Table 1
The three main economic approaches to the informal economy

	<i>Dualist School</i>	<i>Structuralist School</i>	<i>Legalist School</i>
Main focus	Production techniques	Public regulations	Public regulations
Economic school	Keynesian	Neo-Marxist	Liberal
Seminal Author	(ILO, 1972)	(Portes <i>et al.</i> , 1989)	(De Soto, 1986)
Economic behaviour	- Households’ strategy is to generate their own job and income - Subsistence, poverty	- Strategy of international capital to lower labour costs - Precarisation	- To escape inhibitive State intervention - Prohibitive transaction costs of legalisation
Main characteristics	Micro-enterprises, labour intensive	Large firms (international), Unprotected labour	Micro-enterprises, entrepreneurial skills
Economic policies	Capacity building, micro-credit, sub-contracting, Workfare programmes	Welfare state enforcement, labour and social security legislation	Market-friendly policies, liberalisation, State retrenchment, property rights

Source: based on Roubaud (1994).

These competing approaches generated a lot of chaos and confusion. Fortunately, the statistical community progressively elaborated a common terminology and a global framework. Thanks to this joint effort, international recommendations have been adopted (ILO 1993, 2003 & 2013; OECD et al. 2002; UNSD: System of National Accounts, SNA 1993 & 2008). The first conceptualisation distinguishes three main components within the non-observed economy (OECD et al., 2002):

- **The 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.
- **The underground economy:** intentionally by-passing public regulations (under-declaration) by registered (big) firms
- **The illegal economy:** illegal production (goods or services: drugs, etc.)

Table 2 synthetize the main stylized characteristics of the three components.

Table 2
The three main components of the non-observed economy

	Informal Sector	Underground Economy	Illegal Economy
Example	Self-employment	Black market	Drugs
Size of enterprises	Micro	Large	Unknown
Attitude towards the State	(by-passing) Involuntarily	(by-passing) Voluntarily	(by-passing) Voluntarily
Measurement	Direct approach (surveys)	Indirect approach (money demand, tax audits)	Indirect approach (technical coefficient)
National accounts integration	Household sector, satellite account	Branch/Sector estimates	Product re- estimation

Source: Roubaud (1994).

Note: the table does not include two other components of NOE: household production for final own use and deficiencies in the basic data collection program

The second agreement concerns the informal economy. Initiated by the ILO (1993 & 2003), the definitions have endorsed by other international institutions. In particular, it ensures consistency between labour force statistics and economic statistics compiled and integrated into the SNA. Informal economy comprises two different components:

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

3. Methodology measuring informal economy

3.1 A general framework

The conventional measurement approach is to conduct informal sector survey drawn from the sample frame provided by an “exhaustive” establishment/enterprise census (see “first strategy” in Figure 1). However, main problem with this approach is the difficulty in achieving a comprehensive coverage of the informal sector (Roubaud and Sérurier, 1991). Two major shortcomings are at stake:

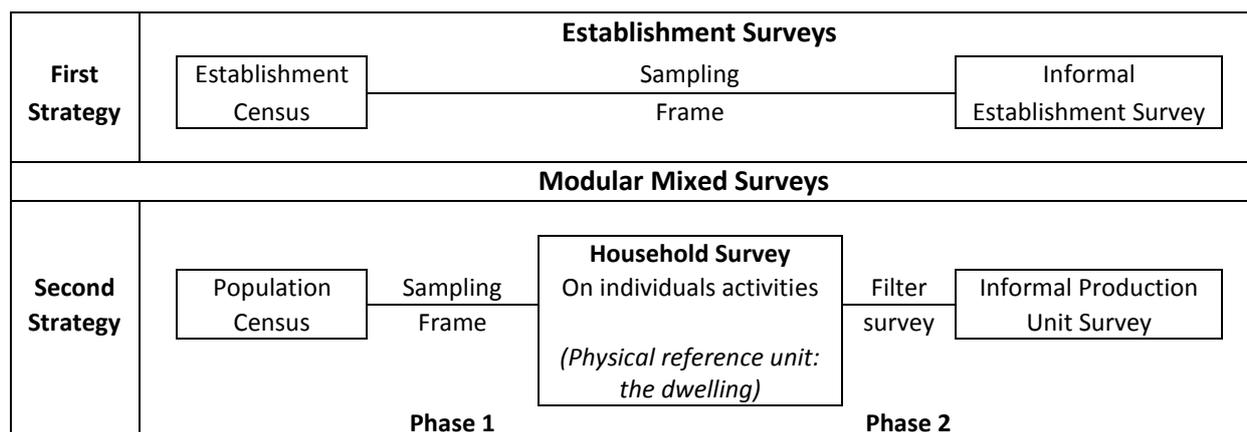
- First, it is hard for this approach to gain a full picture of the reference population (informal production enterprises). Unless the Economic Census is conducted and dovetailed with the

Population Census, comprehensive coverage cannot be attained, especially for activities performed at home or on unfixed premises;

- Second, given the informal sector enterprises' erratic demographic laws (start-up and closure rates), it is usually impossible to update registers to draw representative samples of the informal sector. So most of these types of surveys have produced unreliable and inconsistent estimators (underestimating totals, overestimating the weight of informal production units with premises, and consequently overstating the informal sector's economic performances, as enterprises with premises usually perform better than those without.

The alternative approach is based on the mixed (household/establishment) surveys (ILO, 2013). The general principle of the mixed survey is to use information drawn from a survey of households concerning the activity of individuals (phase 1) in order to select a sample of production units to which is applied a specific questionnaire on informal activity (phase 2). Each individual belonging to the occupied labour force (defined by the ILO as any individual who has worked for at least one hour during the reference week) who states that s/he is an employer or an own-account worker in a unit satisfying an informal sector criterion (size or non-registration) is asked to complete the questionnaire on his/her informal production unit.

Figure 1
Two alternative sampling strategies for measuring the informal sector



Source: Roubaud and Sérurier (1991).

3.2 The Vietnam case

Prior to 2007, statistical information on the informal sector (in terms of labour, income and production) was scarce. Academic works were solely based on information on case studies and small unrepresentative surveys. In terms of statistics, the GSO strategy to capture household businesses (HB; informal sector firm being one component) adopted the direct measure through direct establishment surveys (see Figure 1 above). Since the beginning of the 2000s, production statistics (non-farm) have been based on two types of sources: the Enterprise Survey and the Non-Farm Individual/Household Business Establishment Survey (AHBS), which is a census some years (Household Business Census; HBC). Theoretically, the two sources are complementary (no crossover between household businesses and enterprises coming under the Law on Enterprises),³ and are supposed to paint the full picture on non-farm activities in the country. The first source concentrates on corporate enterprises

³ The national accounts consider two sources to estimate non-farm activity in the country: the enterprise survey and the non-farm individual business establishment survey.

whereas the second's scope is household businesses (household unincorporated enterprises), which normally include the informal sector in keeping with international definitions.

The GSO survey system was suffering three main shortcomings. First, the LFS did not provide any information on jobs institutional sectors, formal status and earnings. Second, no information was provided on the informal sector, as a sub-part of the Household Business sector. Third, Household Businesses (both formal and informal) are captured through establishment surveys (HBC and AHBS), not mixed survey. As discussed above this strategy may lead to underestimate the size of the informal sector. We will see below that this is a huge problem in the concrete case of Vietnam.

Therefore, the Institute of Statistical Science (ISS) at the GSO decided, in partnership with the French research group DIAL-IRD, to conduct a project to provide comprehensive informal sector and employment statistics to pave the way for more in-depth analyses of the role of the informal sector in the Vietnamese economy. In 2007, a suitable framework was designed in line with international recommendations and tailored to the Vietnamese context. It was implemented in Hanoi and HCMC to measure the informal sector and informal employment (Razafindrakoto, Roubaud and Le Van Duy, 2008). The methodology, which adopts the two-phase (or mixed household/enterprise) survey principles, was based on the *1-2-3 Survey* scheme (Roubaud, 2009). The strategy included two components:

- A new improved design for the existing Labour Force Survey (LFS), which was conducted in August 2007, funded by the national budget allocated to the GSO (for the LFS) and the programme (for the IB&ISS). The main changes of the new “augmented LFS” were threefolds: introducing additional questions in the questionnaire, in order to capture a) the institutional sector of the firms workers are employed (size and registration), b) earnings, and c) information about the secondary job (in particular, identification of informal jobs and informal sector and associated earnings);
- A specific Household Business and Informal Sector Survey (HB&ISS), grafted onto the LFS, which was conducted in Hanoi in December 2007 and in HCMC in January 2008. This specific survey was designed to provide reliable, low-cost estimates of the weight of the informal sector (production, labour, capital, etc.), taking into account international and national experiences. The survey methodology was developed to be sound and sustainable to facilitate its integration into the National Statistical System.

2007 was the starting point, and the collaboration is still going on in 2019, twelve years later. The results from the two initial surveys (the augmented LFS and the HB&ISS) were highly appreciated by the GSO officials. They were also acknowledged by the main donors active in Vietnam (World Bank, UNDP, ILO, DFID, ADB...). Various methodological papers and policy briefs, presenting the methodology and illustrative figures, were drawn from the survey results (Razafindrakoto, Roubaud and Le Van Duy, 2008). Finally an analytical book, the first one on the informal economy was also published, in English and Vietnamese, in 2010 (Cling et al., 2010).

Given the success of the pilot phase, the survey scheme was re-conducted in 2009. The LFS2009, keeping with the innovations, was implemented, as the HB&ISS in Hanoi and HCMC. The HB&ISS was elaborated based on two sub-samples: one representative at the two cities level, the sample design being drawn from the new LFS 2009 (with some additional innovation (see the job satisfaction illustration in Section 4); the second relied on a panel survey based on the HB&ISS 2007 baseline, in order to assess the micro-dynamics of the informal sector and the impact of the global crisis (2008 onwards). Again various publications were derived from this new set of survey, the formalisation/informalisation process of household businesses (Cling et al., 2012; Demenet, Razafindrakoto and Roubaud, 2016).

In 2011, at the end of this collaboration first phase, while recognizing the interest of the project, did not endorse a full set of surveys to be incorporated in the national statistical system. The augmented LFS was kept, with higher frequency (annual) and a rotating panel component, but the HS&ISS was (provisionally) abandoned, for political economy reasons explained below. However, the collaboration between IRD and Vietnam on the informal economy continued. A second team of IRD researchers came to Vietnam for a long term assignment (2012-2016), but this time to be posted in an academic research centre, the CAF (Centre of Analysis and Forecasting) of the VASS, one of the best research centers in Vietnam. Among the various activities of the project, a new HB&ISS was conducted in 2014, but at the national level this time. Based on the LFS2014 sampling frame, the HS&ISS2014 adopted the same methodology than the previous HB&ISS, again with a two pronged strategy: apart from the national sample representative of the non-farm household businesses in Vietnam, it includes a panel component, as a follow-up of the 2007-2009 panel survey, to assess the long term (7 years dynamics) of the informal and household business sector. The main results of this experience were published in a collective book (Pasquier-Doumer, Oudin and Nguyễn Thang, 2017).

This research programme had an impact not only on statistics and academic works but also in the policy arena. First, the recognition of the existence and the weight of the informal economy in 2011 led to its inclusion for the first time in the *National Employment Strategy* of the Ministry of Labor (MoLISA). The government is committed to providing benefits to the "formalization" of productive units through access to credit or a better market location. Second, the new *Law on Enterprises* (2017) introduces aid for the formalization of individual enterprises, (adoption of a formal micro-enterprise status): tax supports; accounting training, etc. The support is part of the government's announced target in 2017 of doubling the number of formal enterprises in Vietnam from 500,000 to 1 million by 2020. Finally, the decree enacted early 2019 by the Prime Minister, to improve the measurement of the non-observed economy in Vietnam, offers a new opportunity to put the informal economy among the government top priorities.

In methodological terms, what can be drawn from this ten years experience in measuring the informal economy? Since 2007 two protocols aiming at capturing the household businesses have been conducted in parallel, with limited coordination. Although this "double track" is not cost effective, from a methodological view, it provides a unique opportunity to compare the two approaches. **Table 3** compares the results from the two surveys (AHBS and HB&ISS) in Hanoi and HCMC, in 2007 and 2009. Globally, the AHBS massively underestimates the economic weight of the informal sector and the household businesses in general. According to the AHBS, in 2007 Hanoi and HCMC gathered 459,000 HBs. HS&ISS registered 1,397,000 HB, which corresponds to a coverage rate by AHBS of 33% of the total number of HBs. Unfortunately, the AHBS does not allow for splitting between formal and informal HB. It had probably shown that the coverage rate of IHB would have been even lower. If we compare the number of jobs, the AHBS coverage rate increases a bit to 41%, as for the total turnover.

As a consequence, the turnover per HB is 25% higher in AHBS than in HB&ISS. The reason is obvious: as stressed in section 3.1, the AHBS only capture the largest (visible) HB. As shown in Table 2, the results are highly consistent, as the figures are very similar in 2009, comparing the new sets of independent surveys.

Table 3
Comparison between HB&IS and the Annual Non-Farm Individual/Household Business Establishment Survey (AHBS), Hanoi and HCMC, 2007 & 2009

		2007			2009		
		HB&IS	AHBS	Coverage/ bias	HB&IS	AHBS	Coverage/ bias
No. of HBs	IHB	1,063,630	-	25.9%	1,679,293	-	-
	FHB	333,663	-	55.2%	331,832	-	-
	Total HB	1,397,293	459,086	32.9%	2,011,125	633,156	31.5%
No. of Jobs	IHB	1,550,083	-	-	2,443,896	-	-
	FHB	707,716	-	-	815,938	-	-
	Total HB	2,257,799	937,325	41.5%	3,259,834	1,296,705	39.8%
Turnover (Total) Billion VND	IHB	139,400	-	-	295,000	-	-
	FHB	208,300	-	-	225,600	-	-
	Total HB	348,000	143,813	41.3%	520,000	234,855	45.2%
Turnover (by PU) Mill. VND	IHB	131.1	-	-	175.7	-	-
	FHB	624.3	-	-	679.9	-	-
	Total HB	249.1	313.3	-25.8%	258.6	370.9	-43.4%

Sources: AHBS 2007 & 2009; HB&IS 2007 & 2009, Hanoi & HCMC, GSO/IRD; authors' calculations.

Notes: IHB: Informal Household businesses. FHB: Formal Household businesses.

To get a broader picture, as no HB&ISS had been conducted at the national level, one can compare the results from the AHBS with the augmented LFS. Again, the AHBS only capture a small part of the household business sector: 37% of the number of HBs, 41% of the jobs and 42% of the turnover (Table 4).⁴ These ratios are similar in 2009 (39%, 42% and 49% respectively), confirming the robustness of our results. In 2009 there were 10.289 million HBs, while the official source used by the National Accounts, registered only 3.986 million HBs.

Table 4
Comparison between the LFS-HB&IS and the AHBS, National Level, 2007 & 2009

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

Sources: HB&IS 2007 & 2009, Hanoi & HCMC; AHBS, LFS 2007 & 2009; GSO/IRD; authors' calculations.

⁴ As unanimously acknowledged, earnings captured in LFSs should be taken with caution. They are very difficult to capture through direct questions, which usually leads to underestimated levels, especially in the case of non-wage workers (employers and own account workers), who are the main part of the informal sector.

The new HB&ISS conducted at the nationwide in 2014 provides additional evidence of the huge underestimation of the informal sector in official statistics. According to the NFIDBES (Non-Farm Individual Business Establishment Survey; the new acronym of the AHBS), there were 4.671 million HBs compared to 8.913 million identified in the LFS 2014 (Pasquier-Doumer, Oudin and Nguyễn Thang, 2017). In spite of a slight improvement in the coverage rate (45% in 2014 vs 39% in 2009),⁵ more than half of the HBs (and the corresponding economic outcomes: production, value added, investment, etc.) are missing in the National Accounts. The NFIDBE has the advantage over the previous AHBSs to collect the HBs register status, providing the opportunity to distinguish formal and informal HBs. The evidence shows that even for the formal HB, the rate of coverage is low (55% vs 43% for the informal sector).

All in all, the actual official statistical system to measure the informal sector presents acute concerns of non-registration. This problem has two implications, generating a double bias: **an underestimation bias** (with affects the *Estimators of Totals*), and **a selection bias** (which affects the *Estimators of Means and Ratios*), leading to an overestimation of these estimators.

3.3 Improving the system: recommendations for Vietnam

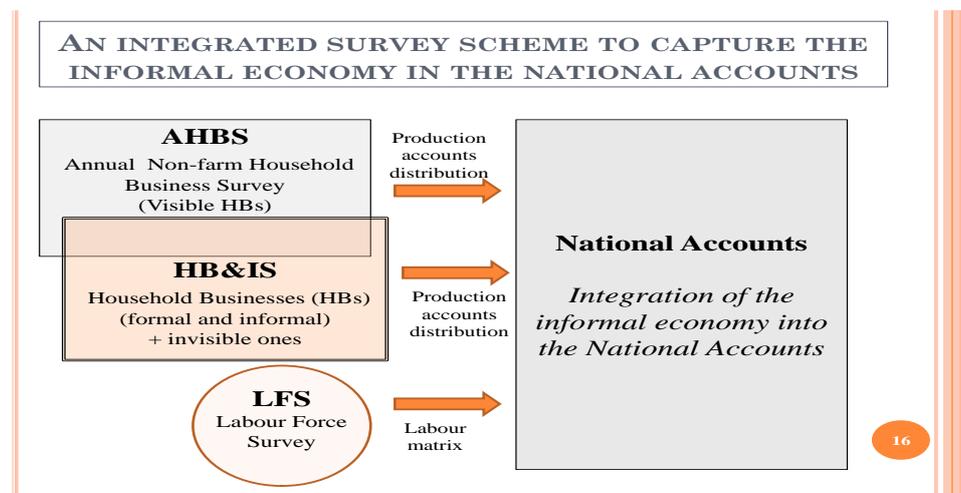
The confrontation of recent studies from different sources showed a significant and constant underestimation of official data. This issue could be handled by properly integrating the Informal Sector and Informal Employment at the different levels of the statistical system. Five main recommendations can be formulated:

- Adopt an official definition of the informal sector and the informal employment (in process).
- Include stabilize questions on informal sector and informal employment in the LFS. If the possibility to identify jobs in the informal sector and the informal economy, the revision of the questionnaire from 2010 onwards stays behind the 2007 & 2009 LFS, in two main areas: earnings are captured only for wage workers, where they should be collected for all the labour force (even acknowledging that income of self-employed is noisier); collect information on secondary job, as a substantial part of the labour force holds multiple jobs at the same time (in particular informal jobs).
- Include questions to identify informal sector and informal employment in the Agriculture Census, in order to capture farm informal sector.
- Conduct (and sustain) an HBISS at the national level with a regular periodicity (every other year for instance), in order to get more reliable information on economic outcomes of informal firms and household businesses.
- Design a new sample frame to articulate the two surveys: the AHBS/NFIDBES (“visible” HBs) on the one hand and the HB&ISS on the other (“invisible” HBs); see Figure 1. Some methodological works should be undertaken to assess the overlaps.
- Integrate the results into the national accounts (for the new base year), both in the central accounts but also by elaborating a satellite account of the Informal Economy. The Peruvian case could be as a benchmark (INEI, 2013).

More concretely, taking advantage of the existing surveys in Vietnam, (Figure 2) provides a comprehensive survey frame to include the sound measure of informal economy into the national system of statistics, and in particular its integration into the national accounts.

⁵ The figures are not perfectly comparable as the 2014 are nationwide while the 2007 and 2009 are restricted to Hanoi and HCMC.

Figure 2
A comprehensive framework to integrate the informal economy into the national accounts



Source: Authors.

4. Some illustrative empirical results

In this section we present some illustrative examples of results obtained from the surveys conducted between 2007 and 2017. We selected those which have direct implications for National Accounts elaboration (labour matrices and production accounts).

Distribution of jobs by institutional sectors and formality status: the big picture

The Vietnamese workforce was estimated at 53.7 million in 2107 (Table 5). More than 12 million of these workers are employed in the informal sector (in their main job). At 22.7% of the total labour force, the informal sector is the number two job provider behind agriculture (40.2%), but way ahead of private enterprises (14.0%), formal household businesses (10.5%) and the public sector (7.6%), and. A full 39% of jobs excluding agriculture are found in the informal sector. If peasant farming and jobs worked in non-farm FHBs are added in, over four-fifths of all jobs (73%) are generated by the household business sector. Since 2007, labour market structure changed substantially. The main transformation is the huge 10 percent points decrease in agriculture jobs (from 50% to 40%), at the benefit of all other sectors, except public employment. The highest growth rates are concentrated in the domestic and foreign enterprises. However, the informal sector nearly stabilized its share with a slight decrease from 23.5% to 22.7% of the working force in 10 years.

These impressive figures are only part of the whole picture, as a significant proportion of the labour force holds more than one job at the same time. Unfortunately this phenomenon can only be captured for 2007, as the questions on secondary jobs have been removed from the LFS questionnaire, as stated above. In 2007, the national rate of multi-activity was 18.2% accounting for 8.425 million additional jobs. As expected, these secondary jobs are mainly agricultural jobs (76.3%), and marginally formal sector jobs where multiple jobholding is often prohibited. Here again, the informal sector is the number two employer with 18.4% of all secondary jobs. All in all, taking into account both main and secondary jobs, 12.413 million jobs out of 52.636 million were held in the informal sector, which represented 22.7% of total jobs, 49.8% of non-farm jobs and 62.7% of private non-farm jobs.

Table 5
Main and secondary jobs by institutional sector in Vietnam 2007-2017

Institutional Sector	2017		2007		2007		Main & secondary job	
	Main job		Secondary job		Secondary job		Main & secondary job	
	Number	Structure (%)	Number	Structure (%)	Number	Structure (%)	Number	Structure (%)
Public sector	4,953,600	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	29,545,000	54.1
Total	53,703,700	100	46,211,200	100	8,424,800	100	52,636,000	100

Source: LFS2007, GSO; authors' calculations.

Note: Total employment is not exactly the sum of employment in all sectors, because 0.3 % of jobs cannot be classed in a given institutional sector.

In 2017, informal jobs gathers nearly 42 million workers (in their main job), equivalent to 78% of the total labour force. The rate of informal employment obviously varies a great deal by institutional sector. Informal employment peaks at more than 99% in agriculture and the informal sector (Table 6). But informal employment exists in all institutional sectors (including the public sector). 29% of domestic enterprise jobs are informal. Even in foreign enterprises and the public sector, nearly one in ten workers (8% and 10% respectively) does not have any social security coverage. FHBs are a particular case. If we adopt the ILO definition, “only” 51% of jobs are informal, that is less than for domestic enterprises. In fact, when we also define employers and own-account workers without social security coverage as informal, the informal employment rate more than doubles (98.2%). FHBs are the sector in which the ILO’s definition pitfall is the most striking.

Looking at the evolution over the past decade, the share of informal jobs is decreasing at a very slow pace (from 82% in 2007 to 78% in 2007), a mere 0.5% a year. Not only is the contraction is surprisingly limited given the huge economic growth during the period, but informal employment increases by 4 million additional workers in absolute terms. However to sectors registered a remarkable formalization process of the labour force: domestic enterprises on the one hand (from 53% in 2007 to 29% in 2007), and foreign enterprise on the other (from 17% to 7% respectively).

Table 6
Share of informal employment by institutional sector, Vietnam 2007-2017

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

Source: LFS2007-2010, GSO; authors' calculations.

Contribution of the informal sector to the GDP: first estimates

Turning to contribution of informal sector to the GDP, we take advantage of the new sources (augmented LFS and HB&ISS) to provide some tentative estimates. The first intent uses the LFS 2007 (national) and HB&ISS 2007. Developing a methodology to combine the two sources (Cling et al., 2010), we imputed that the total value-added generated by the informal sector at national level was 228,767 billion VND. Compared with 2007 GDP, estimated at 1,143,442 billion VND, we obtain a ratio of 20%, or 25.1% of non-primary GDP; without being able to know which part was already included into the National Accounts. However, given the massive underestimation of HB numbers (3.7 million vs 10.3 million), our guess is that the main part is not taken into account.

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.

Table 7
Non-Farm Household institutional sector, Value added
Comparison between LFS, HBISS and the National Accounts, national Level, 2007 & 2009

2009	GSO	HB&ISS			LFS		
	HB	IHB	FHB	Coverage	IHB	FHB	Coverage
Accommodation	40,612	34,076	25,092	68.6%	22,925	13,684	110.9%
Construction	38,853	44,418	2,533	82.8%	58,810	2,091	63.8%
Manufacturing	49,107	61,108	19,566	60.9%	45,790	25,284	69.1%
Other service	7,334	11,690	6,259	40.9%	11,092	4,040	48.5%
Transportation, communication	18,316	22,430	13,966	50.3%	20,761	12,753	54.7%
Wholesale retail trade	74,805	142,736	101,624	30.6%	71,300	50,740	61.3%
Other branches	10,513	15,390	1,570	62.0%	14,572	4,864	54.1%
Real estate	46,683	3,932	2,181	76.3%	2,992	1,250	110.2%
Total	286,223	335,781	172,792	56.3%	248,242	114,705	78.9%
Total (without Real Estate)	239,540	331,849	170,611	47.7%	245,250	113,455	66.8%
2007	GSO	HBIS			LFS		
	HB	IHB	FHB	Coverage	IHB	FHB	Coverage
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%
Total	197,207	199,449	137,943	58.5%	141,273	68,895	93.8%
Total (without Real Estate)	162,629	198,366	137,315	48.4%	140,658	68,377	77.8%

Sources: LFS 2007&2009; HB&IS Hanoi & HCMC (2007&2009), National Accounts; unofficial figures; authors' calculations. Note: for "Other branches" see footnote 5, p.13.

A second set of estimations compares the official national account data with LFS and HB&ISS by sector for 2007 and 2009. The results are presented in [Table 7](#). Consistently with the previous results, the Non-farm GDP (household businesses; excluding Real Estate) covers only 48% of the value added captured in the LFS-HB&IS, both in 2007 and 2009 (excluding *Real Estate*). The mere contribution of the informal sector is 39% higher than the amount captured in the National Accounts for the whole HB sector (formal and informal), and this unregistered part is increasing over time (39% vs 22% in 2007). *Construction, Accomodation, “Other branches”*⁶ and *Manufacturing* are the sectors where GDP underestimation is at its highest.

As a robustness check we compare the labour incomes (as a proxy of value added) captured in the LFS and the value added registered in the National Accounts. Although earnings are notoriously noisy and underestimated in LFSs, and labour incomes are only a sub-part of value added, National Accounts only accounts for 67% (2007) to 78% (2009) of the earnings captured in the LFS.

To investigate these points further, the HB&ISS 2014 data can be usefully used. This survey gives a more comprehensive and updated measure of the contribution of the informal sector to the GDP. One advantage of this set of estimations is that we don’t have to extrapolate the value added obtained by surveys conducted only in Hanoi and HCMC, as the HB&ISS 2014 has been conducted at the national level. Again, the estimate based on the HB&ISS is 48.5% higher than the official figure provided by the GSO in the National Accounts ([Table 8](#)). In 2014, Non-Farm Households businesses accounted for 28% of the Non-Farm GDP, and the informal sector 15% (Oudin & Vu Hoang, 2017).

Table 8
Total value added of HBs & IS firms and share in GDP 2014

	GDP Million USD			% of GDP	
	Vietnam	all HBs	Informal sector	All HBs	Informal HBs
Agriculture	34 587	-	-	-	-
Manufacturing	70 255	15 938	8 631	22.7	12.3
Trade	26 191	16 435	7 846	62.8	30.0
Services	56 483	10 035	5 982	17.8	10.6
Total non-farm	152 930	42 409	22 459	27.7	14.7
Total (incl. Agriculture)	187 517	42 409	22 459	22.6	12.0

Source: Oudin & Vu Hoang (2017).

5. Conclusion: Challenges and road ahead

In this paper we focus on the informal economy as part of the non-observed economy in Vietnam. We presented a research programme conducted during more than ten years by the GSO in partnership with the French IRD, aiming at designing a customize methodology to better account for the different component of the informal economy in official statistics (labour force and national accounts). Thanks to this new survey architecture, we compare the empirical results with the official figures and show evidence of a massive underestimation. Finally we suggest a new survey scheme, based on the successful experience, to integrate the

⁶ “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).

informal economy into the national system of statistics, both for the labour market and the national accounts.

However, to this day, the survey system has not yet been institutionalized within the national statistical system, despite the prospects that lie ahead. We can then question the reasons for this resistance. To answer this question it is necessary to appeal to a political economy approach, the statistical reason is not always the best. Two main reasons can be invoked. The first is institutional. Acknowledging the massive underestimation of the informal economy in the public statistics system amounts to implicitly recognizing that so far the work has been poorly done. This failure poses a double problem: on the one hand, internally to the GSO, by questioning the instruments in place and hence the service in charge of its measurement; on the other hand, by undermining the credibility of the institution vis-à-vis the outside, and hence the power, thereby incurring its wrath. The second is more political. A better measure of the informal would have inevitably led to a substantial revaluation of GDP, leading Vietnam to deprive itself of privileged access to external financing granted to the poor country as part of official development assistance, and probably to the withdrawal of the main donors on the Vietnamese scene. The irony of the story is that the situation has totally reversed. Since Vietnam's accession to middle-income status (date), the country has to finance, at least in part, international financial markets. Moreover, it is legally (constitutionally) constrained by an upper bound on the country's debt ratio, set at 65% of GDP. Since the numerator (the amount of debt) is known and cannot be manipulated, is not the best way to reduce the ratio to increase the denominator (GDP)? In this context, a re-estimation of the weight of the informal economy, more in line with reality, appears as an ideal candidate.

Finally, thanks to the research program conducted by IRD researcher in collaboration with national institutions (GSO and VASS), Vietnam now has the tools to take a realistic measure of the informal economy and the political will to do it (even if the reasons of this renewed interest may be discussed). But the latter is capricious, and the situation can still turn. Let's bet, however, that scientific reason will eventually prevail.⁷

References

- Bacchetta M., Ernst E., and J.P. Bustamante (2009), *Globalization and Informal Jobs in Developing Countries*, Geneva: ILO and WTO.
- Cling J.-P., Lagrée S., Razafindrakoto M., Roubaud F. (éds.) (2014), *The Informal Economy in Developing Countries*, Routledge: London/New York.
- Cling J.-P., Nguyễn Thị Thu Huyền, Nguyễn Hữu Chí, Phan T. Ngọc Trâm, Razafindrakoto M., Roubaud F. (2010), *The Informal Sector in Vietnam: A focus on Hanoi and Ho Chi Minh City*, The Gioi Editions: Hanoi, 247p.
- Cling J.-P., Razafindrakoto M., Roubaud F. (2012), "To be or not be registered? Explanatory factors behind formalizing non-farm household businesses in Vietnam", *Journal of the Asia Pacific Economy*, 17(4): 632-652.
- Cling J.-P., Razafindrakoto M., Roubaud F., Dô Trong Khanh, Lê Van Duyệt (eds) (2008), *Measuring the Informal Sector in Vietnam: International Experience and Challenges*, *Statistical Scientific Information Review*, Special Issue, Hanoi.

⁷ Vietnam's surprise GDP upward revision by a huge 25.4%, announced early September, is a puzzling news in this respect.

- Demenet A., Razafindrakoto M., Roubaud F. (2016), “Do Informal Businesses Gain From Registration and How? Panel Data Evidence from Vietnam”, *World Development* 84: 326-341.
- De Soto H. (1989), *The Other Path: The Invisible Revolution in the Third World*, New York: Harper and Row.
- ILO (1993), “Resolution Concerning Statistics of Employment in the Informal Sector”, Fifteenth International Conference of Labour Statistics, ILO January 1993.
- ILO (2003), “Guidelines Concerning a Statistical Definition of Informal Employment”, Seventeenth International Conference of Labour Statisticians, ILO, 24 November - 3 December 2003.
- ILO (2013), *Measuring Informality: A Statistical Manual on the Informal Sector and Informal Employment*, Geneva: ILO.
- INEI (2013), *Cuenta satélite Producción y Empleo Informal en el Perú: Cuenta Satélite de la Economía Informal 2007-2012*, Lima: INEI Editions.
- Jutting J.P. and J.R. de Laiglesia, eds. (2009), *Is Informal Normal? Towards more and better jobs in developing countries*, Paris: OECD Development Centre.
- Nguyễn Hữu Chí, Nguyễn Thị Thu Huyền, Razafindrakoto M., Roubaud F (2010), “Vietnam labour market and informal economy in a time of crisis 2007-2009. Main findings of the Labour Force Surveys (LFS)”, Working Paper No 61675, Washington D.C.: The World Bank.
- Nguyễn Hữu Chí, Nordman C.J., Roubaud F. (2013), “Who suffers the penalty? A panel data analysis of earnings gaps in Vietnam”, *Journal of Development Studies*, 49(12): 1694-1710.
- OECD, IMF, ILO and CIS STAT (2002), *Measuring the Non-Observed Economy. A Handbook*, Paris.
- Oudin & Vu Hoang (2017), “Reviewing the Gross Domestic Product with the Informal Sector in Vietnam”, Nopoor Policy Brief 64.
- Oudin X., Pasquier-Doumer L., Phạm Minh Thái, Roubaud F., Vũ Hoàng Đạt (2013), “Adjustment of the Labour Market in Time of Economic Fluctuations and Structural Changes”, in Nguyễn Đức Thành (ed.), *Vietnam Annual Economic Report 2013: On the Bumpy Road to the Future*, Chapter 6, Vietnam National University Publisher, Hanoi: 263-301.
- Pasquier-Doumer L., Oudin X., Nguyễn Thang (2017), *The Importance of Household Businesses and The Informal Sector for Inclusive Growth in Vietnam*, The Gioi Editions: Hanoi, 326p.
- Perry G.E., Maloney W.F., Arias O.S., Fajnzylber P., Mason A.D., and Saavedra-Chanduvi J. (2007), *Informality: Exit and Exclusion*, Washington DC: The World Bank, World Bank Latin American and Caribbean Studies.
- Portes A., M. Castells, and L.A. Benton (1989), *The Informal economy: Studies in advanced and less developed countries*, Baltimore MD, The John Hopkins University Press.
- Razafindrakoto M., Roubaud F., Lê Văn Duyệt (2008), “Measuring the Informal Sector in Vietnam: Situation and Prospects”, *Statistical Scientific Information*, Special Issue on Informal Sector, No. 2008/1-2: 15-29.
- Roubaud F. (2009), “Mixed surveys using the modular approach”, in ILO, *Manual on Surveys of Informal Employment and Informal Sector*, Geneva.
- Roubaud F. (1994), *La economía informal en México: de la esfera doméstica a la dinámica macroeconómica*, Mexico: Fondo de Cultura Económica.
- Roubaud F., Sérurier M. (1991), *Economie non enregistrée par la statistique et secteur informel dans les pays en développement*, Statéco 68, INSEE, Paris