

DRAFT CHAPTER 9

USE OF DATA ON INFORMAL SECTOR AND INFORMAL EMPLOYMENT IN THE PREPARATION OF NATIONAL ACCOUNTS

INTRODUCTION

The informal sector as well as informal employment belong to the areas that the national accounts are seeking to measure. However, in both cases the informal only represents a portion of these areas. For national accounting, the employed population (whether formally employed or not) takes part in the creation of values that the GDP measures; and this is the sum of the value added by all production units, whether market-oriented or not, which intervene in the national economy.

When this informal economy is barely present, it is conceivable that national accountants do not bother to factor them in during their evaluation of the national economy. However, in many countries this economy plays a more or less significant part in the Gross Domestic Product (GDP). To ignore this specificity in their work would no doubt lead to a rather vague evaluation of this aggregate. Nevertheless, it should be even more demanding: due to its significance, it is important to offer a specific measure, and one which does not limit itself to a single global aggregate; in order to know it well, a diversified measure is required.

For all this, the classifications that structure the central framework of national accounting (as detailed in the manual describing the SNA - System of National Accounts¹) do not refer to this substructure of the economy. The informal sector is of course included, but it is not mentioned as such, since it pertains to a socio-economic approach that is not considered to be a priority in the organisation by the national accountants of the central framework.

The terms under which the informal sector functions within the central framework should therefore be formalised; this is a prerequisite for measuring it in reference to the rest of the economy of the country. In reference to the concepts and definitions put forward in chapter 2 of this document, one will find in this chapter a detailed presentation of the areas within the central framework in which the multi-facets of the informal economy operate.

The most important factor, however, concerns the measure of the economy itself, whether formal or informal. Thanks to the surveys being carried out, it is now possible to reach a direct statistical measure of this informal economy, even if it is more particularly concerned with statistical non-observation. And this contribution can prove to be of the foremost importance in the elaboration of national accounts in countries where the informal economy is far from insignificant. Although naturally the methods used in their elaboration would have to be capable of taking into account the results of the surveys in question.

On the other hand, an exhaustive evaluation of the national economy by the national accountants can fill in the part of the informal economy that statistics cannot take into account. Thanks to this homogeneous approach to economic phenomena, we obtain both a more complete evaluation of the informal sector and a representation of the place it holds within the national economy.

Naturally, such a homogeneous (integrated) measure is firstly limited to the context of the central framework, while analysis of the informal economy requires the implementation of other variables. But if this macro-economic evaluation is used as a basis, we are then in a position to build an account of the informal sector that is compatible with the other aggregates of the national economy. It is what the SNA manual refers to as a "satellite account"².

¹ "System of National Accounts 2008" ed European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, World Bank

² See chapter 29 of this document, and the mention of a satellite account of informality, § 29.86 : "*The treatment of informal sector in chapter 25 is clearly satellite account*".

1. THE INFORMAL ECONOMY WITHIN NATIONAL ACCOUNTING

From its inception at the end of the first half of the 20th century, according to agreements that differed from one country to the next, national accounting was very quickly structured into a framework of internationally accepted standards. In 1993 a total convergence was finally accepted on a worldwide scale, thanks to the joint initiative of the international bodies and of the most developed countries. This body of doctrines is gathered together in what is known as the SNA93³, a revision of which was adopted as recently as 2008.

The heart of the system is called the central framework; it is made up of a set of perfectly integrated concepts and definitions, which propose a representation of the whole of the socially organised economy, within the structure of a yearly calendar. This framework is binding, and if local adaptations are considered to be desirable, they can under no circumstance infringe upon the coherence required by the system.

However, the implementation of this extremely rigorous and synthetic approach means that it is forced to limit itself to the single elements considered to be essential in insuring its coherence, as much as to limit its size as not to impose too many constraints on the countries bearing the responsibility of its elaboration. It is therefore not surprising that the central framework does not take into account the existence of the informal economy as such.

On the other hand, the SNA does not limit its vision solely to the central framework. On the contrary, it is put forward as the reference for all measures of a macro-economic nature, e.g. quarterly or regional accounts; and the concepts and definitions that it uses are shared by the balance of payments or public or financial statistics. Furthermore, it has been conceived so that the aggregates whereby it proposes the measure can be associated with the most varied evaluations: detailed accounts of particular areas, satellite accounts allowing the analysis of specific functions, differentiated approaches to complex phenomena,... Moreover, it is in this spirit that the recent revision has added a chapter dedicated specifically to the informal economy (Chapter 25: Informal aspects of the economy)⁴.

1.1 The central framework and its recent revision

The central framework is as interested in the creation of values allowed by national output and its appropriation by economic agents as it is in capital and its evolution during the annual period with which this analysis is concerned. The value retained in order to measure these flows and stocks is that of the market, either through the price of the flows when they are monetary, that is to say their potential market value as regards stocks, or as an indirect trade evaluation where non-trade phenomena are concerned.

The field of production applies to any creation of value that uses socially organised factors: work when it is provided by an employed population (according to the ILO definition), and/or the assets produced (hence the household output of an attributed housing service regarding the occupation of houses where they are the owners).

The proposed analysis is implemented thanks to a succession of aggregates connected by accounting equations, so that the whole economy is synthesised through a set of sub-accounts, which completely balance each other out.

Originally, the accounting plan was limited to a consolidated vision of national economy, offset by the "rest of the world". But it was rapidly agreed that the intervening agents within the national economy be differentiated, so that the spending of some could become the revenue of others. At the same time, it seemed important to include in the outline the detailed analysis of the production device allowed by the Leontiev matrix, which in the central framework goes by the name of Supply and Use Tables (SUT).

The following graph gives a global vision of the various elements of which this central framework is made up, although it is but a bare skeleton. It is made possible by means of a certain

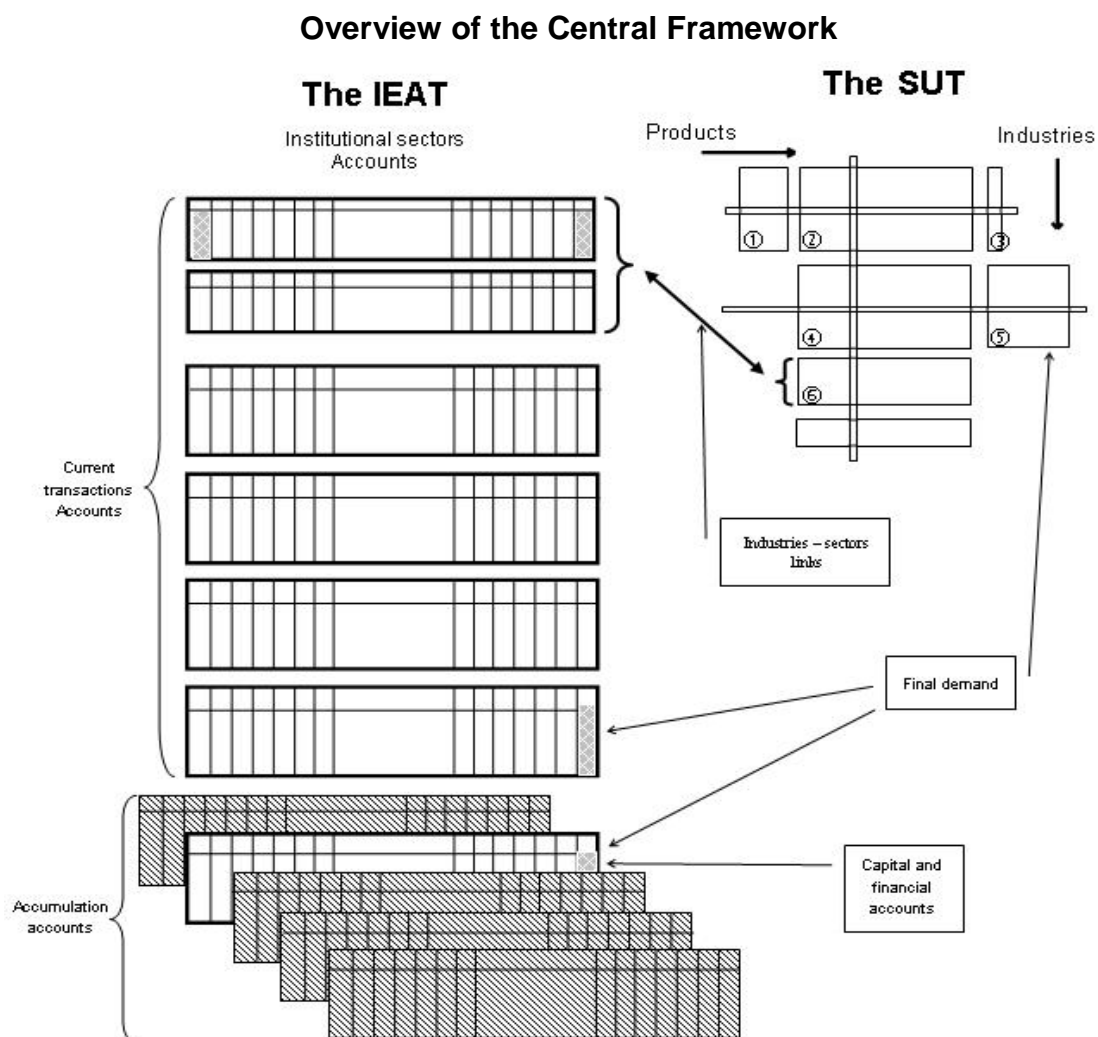
³ « System of National Accounts 1993 »

⁴ « System of National Accounts 2008 »

number of classifications, each of which constitutes a “partition⁵” of the set that is the national economy, partition because each time the details of one of the characteristics of this national economy should be put forward. These classifications are as follows:

- Transactions (for flows)
- Assets, financial or not (for capital stocks)
- Institutional sectors (for institutional units, which include corporations and households)
- Industries⁶ of economic activity (for trade or non-trade establishments)
- Goods (for goods and services)
- Jobs (for people supplying work)

According to this approach, any economic "object" (or statistical data) must, depending on its nature, belong to one or the other of these classifications, and find its place in one, and only one, of the basic positions of the classifications to which it belongs.



SUT: Supply and Use Table

⁵ Partition is a mathematical concept of the set theory. To proceed with the partition of a set consists in sharing it out amongst various subsets, so that any element (object) of the initial set (group) now only belongs to one, and only one, of the subsets of the partition.

⁶ In the System of National Accounts (1993 or 2008) the term used is “industry” rather than “branch”.

IEAT: Integrated Economic Accounts Table

- ① Offer at purchase price
- ② Output by industry
- ③ Imports
- ④ Intermediary consumption by industry
- ⑤ Final employment
- ⑥ Industries' generation of income accounts.

1.2 Locating the informal economy within the central framework

According to definitions agreed upon over time at the International Conferences of Labour Statisticians (ICLS), the informal sector and informal employment are both in their entirety inevitably included in the field of National Accounting. It was specifically formulated in the adopted resolutions. On the other hand, and as is clearly highlighted in chapter 2, the way in which the proposed definitions are implemented can lead to somewhat different outlines from country to country. One does notice, however, that the differences thus introduced do not change the way in which one would locate them in the places described by the central framework. On the other hand, the problem arises when it comes to drawing a boundary within these spaces to isolate the informal part they contain. However, this is not the point of the present paragraph (more so that of paragraph 6).

1.2.1 The informal sector

The informal sector groups together production units that are not established as corporations, and therefore belong to the institutional sector of households, where there are no complete accounts (if there were, they would then be quasi-corporations). Furthermore, these units must have a market output.

However, with no unique criterion to distinguish the boundary, not necessarily all production units belonging to households are informal; according to recommendations set out by labour statisticians, it may either be due to administrative non-registration, or because of a size criterion (number of people employed). According to the first criterion, all establishments with a formal character are excluded; according to the second, a criterion of statistical visibility is favoured to mark the boundary. It should therefore be noted that in both cases, the informal sector extends wholly or in part to illegal activities and establishments with underground existences (those which refuse to be located).

From the national accounting's point of view, the informal sector regroups establishments, and more precisely market establishments belonging to households⁷. As such, the informal sector elevates industry accounts by economic activity, such as those set out in the central framework, the balance of which accounts is called "mixed income" when the establishments belong to households; therefore the implemented factors of production (workforce, fixed capital and its growth: gross fixed capital formation (GFCF)) can be associated with these establishments.

There is, however, an element of complexity in this localisation, even if it can be considered as marginal. The SNA counts separately the household non-market establishments, that is to say those whose main production is not market (for own final use), knowing that they can sell part of their output in a secondary way. Yet the ILO (International Labour Organization) diverges on this point, and keeps such establishments in the informal sector, insofar as they sell part of their production. A correspondence between these two points of view is thus to be planned.

The informal sector and the institutional sector 'households'

In reference to certain passages of the SNA93, some authors thought that the informal sector could be considered as a sub-sector of the institutional sector of households. This is not the

⁷ "In the SNA, a corporation represents a single enterprise but each such enterprise may consist of a number of establishments. A key difference between an enterprise and an establishment is that a full set of accounts must exist, or could be constructed, for an enterprise but for an establishment a much more restricted set of data is available, typically only information relating to production, number of employees and the capital formation associated with the activity" (SNA 25.49).

case, and the 2008 revision insists on making this clear: « *The term “sector” in the expression “informal sector” does not have the same basis as the usual use of the word sector throughout the SNA. In the SNA, sectors are made up of complete institutional units; in the context of the informal sector only the productive activities are concerned* » (25.48). The informal sector is therefore a subset of production units (establishments) belonging to the institutional sector of households.

This clarification allows certain erroneous interpretations that appeared following the publication of the SNA 93 to be put aside. Even so, it does not prevent one from considering the place held by the informal economy within the institutional sector of households. It concerns mainly three of the aggregates present in their accounting:

- payments made to undeclared employees,
- the mixed income of entrepreneurs (owners or own-account) who manage the establishments belonging to the informal sector,
- the final consumption, for the share of goods originating from these same establishments.

It should be noted that for this analysis, a grouping of households is not necessarily the most appropriate approach. Indeed, within the same household, certain members can work in the formal sector, others holding down two jobs, one formal one informal, and others finally running an informal corporation, as an employer or as a freelancer. Whatever the manner of regrouping households under one "informal" subset, the latter will inevitably contain income from one area or the other, and income from the informality will always be present in the other subset. Such groupings can be interesting for certain analyses, but it is out of the question that it be named informal sub-sector of households. Different approaches are conceivable, however, within the framework of a satellite account of the informal.

1.2.2 Informal employment

Diagram 3 presented in chapter 2 gives a detailed outline of the national accounting "locations" where informal jobs can be found. That said, it is important to highlight that the central framework as such has no table in which the employment data can be presented. Of course, this data is presented in the SNA (chapter 19), but without a related table. In other words, a matrix presenting jobs by sectors, or by industry, is not required as such by the countries that elaborate the totality of the central framework. Further on in this chapter (see § 6), just such a matrix is featured, as well as methodological propositions to ensure its elaboration. One notices that in this case, it would be possible to obtain indirectly the data relating to informal employment in the economy.

1.3 Crossing of approaches and associated aggregates

Judging from the previous analysis, it would appear that the central framework as such is of no help in giving a direct measure of the informal economy. This measure is well and truly present in the quantities presented, but in a non-differentiated manner. And it would only be possible to extract it at the cost of additional work. The aim of the following paragraphs is precisely to suggest routes that could bring such work to a successful conclusion; work of which a more or less important part could be located within the very structure of the elaboration process of the central framework.

At this stage of the analysis, the places within the central framework in which this additional work could be undertaken should be synthesised.

a) Within industry accounts

Industry accounts are exclusively directed at the aggregates that report on the production process, within the two following sub-accounts:

The production account

P2 Intermediate consumption <i>B1g Value added, gross</i> P51c Consumption of fixed capital <i>B1n Value added, net</i>	P11 Market output P12 Output for own final use P13 Non-market output
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The generation of income account

D1 Compensation of employees D11 Wages and salaries D12 Employers' social contributions D29 Other taxes on production D39 Other subsidies on production <i>B2g Operating surplus, gross</i> <i>B3g Mixed income, gross</i> <i>B2n Operating surplus, net</i> <i>B3n Mixed income, net</i>	B1g Value added, gross B1n Value added, net
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The central framework allows for a crossed matrix of these accounts between industries and institutional sectors, this is done in such a way that they can only be used for establishments belonging to households (as household unincorporated enterprises).

These accounts are organised by activity; one should therefore be able to isolate:

- agriculture and livestock-farming (or any other trade activity),
- household non-market output as regards:
 - * accommodation services for for own final use
 - * domestic services;

... knowing that this non-market output is excluded from the field of the informal sector.

Besides, P. 12 output is isolated (this is for own final use output, that is to say self-sufficiency as regards the industry accounts of establishments belonging to households).

On the other hand, the central framework is not intended to differentiate salaries (D11) on the premise of the employment being formal or informal.

b) Within the household account

As discussed in the previous paragraph, a household institutional sub-sector where all income from informal activity alone could be grouped together is not conceivable, since for many households such income only makes up a small fraction of the income derived from its members' professional activities. On the other hand, this income resulting from informality can only be present in a fraction of the income that the central framework does differentiate, namely:

B3g Mixed income, gross
(B3n Mixed income, net)
D11 Wages and salaries
D752 Current transfers between resident and non-resident households

Mixed income naturally includes that arising from formal household unincorporated enterprises; therefore salaries compensate both formal and informal jobs. As for the current transfers between households, they could in part stem from income earned from an informal cross-border activity.

But then again, the central framework does not offer the possibility of differentiating what is specifically the result of informal activity.

c) By developing a jobs matrix

Nothing is set out in the central framework as regards the principle of a jobs matrix, and more especially the variables it could display.

Let us first make a note of the fact that there are three different quantities to be taken into account when measuring the workforce employed in economic activity:

- the employed population: it is only through a head count of the persons who declare having worked during the reference period of the survey that we are able to gain this knowledge; it also corresponds to the number of first time jobs.
- the number of jobs recorded in the economy (on a given date, or in a given period); this

amount therefore tallies the secondary jobs taken on by the employed population⁸ ;
 - the amount of work the production process takes on.

The matrix proposed here is intended for the second of these quantities, because it is the one best suited to coordinate the associated macro-economic measures both in the development of the central framework and in the informal economy's localisation within it. But it is obvious that the matrices associated with the other two quantities also show interesting points.

The first job matrix to be developed should bring together the following variables:

- On the one hand, the industries of economic activity retained in the central framework; on the other hand, the employment status of the persons concerned, namely:
 - * declared employees
 - * undeclared employees
 - * household unincorporated enterprise employers
 - * own-account workers
 - * contributing family workers.

Indeed, at this stage of the development process, it would not yet be possible to determine how many of these jobs would belong to the informal sector.

d) Conclusion

Following this analysis of the central framework, it is clear that the entire informal economy is present, albeit invisible. Would it then be possible to make it visible?: probably, but not through changing the central framework, more likely by changing the way in which it is developed, since some development procedures render such a visibility impossible. On the other hand, other procedures would allow it, but only if the appropriate elements of analysis were introduced. More precisely, it is through differentiation of approaches and evaluations that this measure becomes possible; and for that, one would need to:

- open the partitions proposed by the central framework beforehand, and
- introduce new ones that would belong to areas other than macro-economics alone.

2. MUTUAL CONTRIBUTIONS FOR AN IMPROVED MEASURE

By introducing the concept of informality, economists did not want to get stuck in a qualitative approach to the phenomenon. It was therefore no fluke that the labour statisticians handled the formalisation of this concept: the objective was to succeed in measuring it. Seeing as the concepts at stake had something in common with those introduced by national accounting, it was quite natural that the latter was taken as reference in locating the informal economy within the proposed mechanism for measuring the economy as a whole.

This proximity did not, however, mean that the measures would be jointly carried out; and it still happens quite frequently that the data proposed for each area remains heterogeneous. This is not surprising, as there is a difference in the nature of the statistical measure resulting from informal agent surveys and the macro-economic measure that the national accountants have to develop. It is therefore important to clearly define the respective contributions of both approaches, so as to show how essential each one is to the other.

But beyond this epistemological difficulty, a joint interest in reaching an integrated measure of informality exists between the national accountants and specialists of the informal economy:

- for the national accountants: because the informal economy is characterised by a specific production function, the consideration of which can play an essential role in the elaboration of the central framework;
- for the informal economy specialists: not only as a means of helping them find a place for the informal economy within the national economy as a whole, but also, seeing as it concerns an indirectly measured quantity, to bring a certain thoroughness to its evaluation.

⁸ We cannot however ignore that the employed population refers to the resident population, while jobs known to the economic surveys are those carried out on domestic territory (the margin corresponds to cross-border jobs).

2.1 From the statistical to the macro-economic measure

Statistical surveys (or censuses), like national accounting, measure economic or social phenomena at a collective level. However, the nature of the measure obtained is not the same.

In the case of statistical output, the measure is reached through the collection of micro-data supplied (and produced) by elementary agents (or events): corporations, households or administrative data. By simple aggregation or through appropriate surveys, and thanks to the classifications he or she has created the statistician proceeds to a synthetic reading of the micro-data he or she has collected. The problem is that with this approach no distance can be taken with regard to the micro-data obtained. The proposed measure therefore remains associated with the event from whence it came. Furthermore, in the case of informality, an additional problem appears due to the difficulty in isolating the agents involved.

As regards national accounting, the methodological context is quite different. What one could call the macro-economic measure is characterised by the fact of putting the concept first, concept which is intended to be operational for the socio-economic analysis. The objective then is to associate a number to quantities defined as such, in reference to the phenomena that economic theory considers as significant: unemployment, inflation, output... To reach this goal, one must draw from all available information, at the forefront of which appear the statistical data. It is then necessary to overcome the contradictions that can appear between them, and complete the elements missing from the statistical observation.

2.2 The contribution of statistics on informality in favour of the national accounts

The national accountants' concern is not so much about proposing a specific measure of the informal economy, as it is about reaching the most satisfactory evaluation possible of economic activities as a whole, while respecting the SNA's central framework partitions. In order to do this, they must start making indirect evaluations of non-statistically covered zones (also known as the "non-observed economy").

One of the zones ignored by statistics is often that of the small production units, in particular those that depend upon the institutional sector of households, a zone to which the informal sector belongs. In the absence of statistical information on this zone, one is left with only indirect methods to estimate its accounts.

This is why, when carrying out this evaluation, a survey on the informal economy takes on a major significance; and even more so if it also keeps one informed on its evolution in time. However, several conditions are required for it to be used properly:

- that the field of the survey is well defined, and in particular that it is possible to position it in relation to other small units, more specifically those depending on households;
- that the information gathered allows the measure of quantities as set out in the central framework;
- that this information is available not only for the benchmark year (which is already invaluable), but that it also takes into account the measure of its evolution through time;
- and finally that the national accountants set up a development method permitting the best usage of this information.

However, one must also be aware that this contribution of statistics on informality to national accounting, whilst essential in its elaboration, does not greatly guarantee that the national accountants will be able to propose a specific measure of the informal economy. Other conditions are required, which will be described further on.

2.3 The contribution of national accounts to measurement of the informal economy

The realisation of surveys on the informal economy is an essential element to the quantitative understanding of this phenomenon. However, it is an area in which access to information is difficult for several reasons:

- difficulty in recognising whether units are informal,
- difficulty in reaching those that actually are,

- this public concerned has trouble mastering the quantified economic information relating to them,
- experience also shows a significant tendency to underestimate the income actually perceived from their activity.

As a result, as long as methods are implemented that can detect these statistical insufficiencies, national accounting's contribution can be significant. Indeed, thanks to the global and integrated approach the central framework allows, it is possible to indirectly measure the grey areas that surround surveys relating to the informal economy, and thus to reach a more satisfactory macro-economic measure of the phenomenon. Of course, this measure will only be as relevant as the information supplied by the surveys themselves, in accordance with what was stated in the previous paragraph. And it goes without saying that we depend on these surveys to help us shed light on the more detailed characteristics of the informality.

But there also exists another, complementary, contribution that proves to be very interesting: this measure of the informal economy obtained via national accounting offers the guarantee of coherence when attempting to define the importance of the informal economy in relation to the national economy as a whole or to its diverse constituent parts; because only a homogeneous measure of these various aggregates renders such a comparison significant.

3. THE CHALLENGES OF NON-OBSERVED STATISTICS

It is a well-established fact: the informal economy is particularly concerned with the difficulty statisticians have in observing it. Even if in the last few years, important progress has been made in developing more efficient statistical instruments, the fact remains that this field of economic activity still significantly eludes statistical observation.

This situation is sufficiently worrying that the chapter devoted to the informal economy in the SNA's⁹ new manual (Chapter 25: Informal aspects of the economy) dedicates the greater part of its introduction to the link that exists between the two phenomena. And the document that the OECD and other international organisations dedicated to the question in 2002¹⁰ also pays special attention to the measuring of the informal economy, through both statistics and its evaluation within the framework of national accounting.

The fact that the insufficiency of statistical information is a problem that concerns the informal economy is in itself worthy of attention in this chapter. But it would be best to tackle this phenomenon on a larger scale, because the answers the national accountant can bring to the measure of informal economy also depend on solutions chosen to measure other zones that elude statistical observation. Indeed, within the framework of an integrated approach to the macro-economic measure, a strong correlation exists between the various reconciliations to be rendered, so much so in fact that all available variables must be considered.

3.1 Reasons for statistical non-registration

It is important to differentiate the various reasons that explain the lack of statistical observation of certain economic phenomena, for different choices are made in order to overcome these shortcomings. And they also help us understand why we are seeing different situations from country to country. Among these reasons, we find that:

- 1/ Insufficient coverage of the statistical instrument means that it cannot encompass all universes needing to be measured: surveys that ignore geographic zones (such as the exclusion of rural areas) or certain economic activities, excluding certain categories of individuals (collective households), being limited to the biggest production units (according to the number of people employed), ...
- 2/ An inadequate quality of statistical collection: insufficient knowledge of universes being investigated (no corporation directories, outdated demographic census), incomplete or unsuitable questionnaires, several deficiencies in the production line,
- 3/ Problems inherent to each type of survey: underestimation of income or profits (generally linked to tax evasion), the non-declaration of certain goods or consummation

⁹ System of National Accounts 2008 (voir aussi le §C de ce même chapitre 25)

¹⁰ Measuring the Non-Observed Economy - A Handbook, OECD/IMF/ILO/CIS STAT, 2002

(drink, tobacco, perfumes), smuggling, fund transfers throughout the world, ... The respondent agrees to answer, but only reveals some of the points covered in the survey.

4/ Areas inaccessible to the investigator: the underground economy (to elude administrative check-ups), undeclared work, illegal activities, ... in this case it is the refusal to answer, or the impossibility of accessing or even of knowing the existence of the unit needing to be investigated.

All countries are affected by the phenomenon of statistical non-observation, or at least as concerns cases 3 and 4. In cases 1 and 2, it is a question of lack of means (for whatever reasons) or of the insufficient technical skills of institutions in charge of the statistical production; strategies for improvement that would push back the boundaries of the non-observance are therefore conceivable. On the other hand, it is much harder, if not impossible, to push back the boundaries of cases 3 and 4; however, it is not unthinkable that new doors could be opened thanks to methodological or sociological initiatives. And this would most certainly concern the area of informality.

3.2 The management of statistical inconsistencies by the national accountant

The production of national accounts is certainly a driving force in the promotion of development for better statistical observation, since this requires information on all aspects of national economic life. But this promotion will not take effect immediately; it takes time to improve a statistical device.

In the meantime the production of accounts cannot be put on hold; the aggregates set out by the central framework therefore need to be measured with the information available at present. And the most appropriate time to work out the methods best suited to measuring all the zones that statistics have left by the wayside is when a new statistical base for national accounts is being implemented.

Currently, the central framework is a totally integrated system, so much so that all the ill-defined zones interfere with each other: thus, an increase in the households' income resulting from the calculation of an underestimated tax return turns into additional savings, and thus there is a need to increase the assets the households have acquired over a period of time. This is why all areas for which statistical observation is insufficient need to be located, and we must not just limit ourselves in the field of production to the grey areas: smuggling, undeclared work, tax evasion, final consumption, transfers between households (in particular originating from or going to the rest of the world), or even money-laundering.

In this context, control of the economic coherence of the households account occupies an essential place, that is, as long as its financial part is also available.

3.3 Informal economy and non-observed statistics

With regard to the informal economy non-observed statistics take specific forms, and it is advisable to differentiate what concerns the informal sector and what relates to informal employment.

3.3.1 The informal sector

a) The basic statistical unit

For the informal sector, this unit is the establishment (in the sense of National Accounting); and more precisely, those establishments depending on a household (household unincorporated enterprises). One should, however, be reminded that not all of these establishments are informal, which raises the problem of the boundary to be introduced within this population. It naturally depends on the definition used locally in locating the informal sector; but one cannot either ignore two more general phenomena concerning this sector:

- A great adaptability of the households in changing the conditions of their informal output, as much for the evolution of the administrative constraints as for the fluctuations in the economic, commercial or technical environment. This results in serious instability in the location of the concerned units.
- And consequently, the absence of a clear and stable boundary between the formal, the underground, the assumed informal or the illegal. In this particular case, we can talk about a continuum of situations making the "classification" of establishments located by the

statistician difficult (as well as their willingness or not to answer the investigator's questions).

On this matter, the "assumed informal" concept seems very important in estimating the statistical quality of the information gathered. By assumed informal, it should be understood as the fact that an employer or own account worker can recognise his or her informality without fear of undergoing a penalising administrative control.

b) The different statistical tools available

In each case presented here, it is obvious that the establishments wishing to remain "underground" dodge these tools, and that the answers result essentially from the "assumed informal".

- The economic census: limited in time, such a census is capable of locating quite a few informal establishments, but it does not guarantee thorough coverage (those reported missing will be establishments without premises, or those thrown in with household accommodation, or even those lost in rural areas where census-takers do not venture). Secondary market output of households for own use is also ignored.

- A census specifically dedicated to the informal establishments: the limits remain the same as those of the previous tool, and are aggravated by the fact that the filter introduced to detect informal establishments may not be very efficient.

- Yearly economic surveys: as a rule, these do not concern informal establishments; and, furthermore, they very often ignore the much smaller formal establishments, which presents the risk of pushing them back into a subset of non-observed units where distinction from the informal units becomes impossible.

- Household surveys: some of these are not structured to give information on the informal sector, but they can provide information on the nature of the income that results from it, or on the secondary market output of the households producing for own use. On the other hand, other surveys are essential in getting to know the informal sector, because they are structured to meet this objective (varying types of mixed enquiries are described in chapters 6 and 7 of this manual). But it would then be very important that these surveys provide the means of locating the informal establishments in relation to the rest of the micro-establishments, and more generally that they shed light on the continuum mentioned above.

c) Some characteristics common to these tools

- Most of the time, we are confronted with an "elusive" universe. Unlike the formal economy, a directory of informal units is practically impossible, both because of their volatility and by their refusal to be registered under any circumstances.

- The underground or illegal units will always elude these statistical tools, however good they may be.

- And as for the units that agree to respond, it is likely that the answers obtained are significantly under-declared, without more developed surveys to estimate by what amount not yet being available.

- If several of these tools are simultaneously deployed, we note that it is hugely difficult (and even impossible) to make them compatible with each other.

- There are often insufficiencies in geographic and/or demographic coverage (collective households).

- And also sometimes insufficiencies in the coverage of activities.

- Finally, in most countries an evaluation of the temporal evolution of the informal sector is non-existent (which would imply homogeneity of the answers over time and isolation of the 'variation of the universe' effect).

d) Some methodological suggestions

This inventory brings to the surface many deficiencies in the observation of the informal sector for the needs of economic analysis and the elaboration of national accounts. Even if real progress has been made in the past couple of years, it would be wise to continue applying pressure in order to overcome other obstacles. In the current context, we could mention the following points:

- Draw up in each country a rigorous topography of the units concerned, which would allow the implementation of statistically operational boundaries that would bring to a successful conclusion work undertaken on macro-economic measuring.
- Analyse the reasons for non-response (inaccessibility, or refusal to answer), the behaviour pattern concerning under-declaration, and an estimate of the amount.
- Promote methods for measuring the temporal evolution of informal production and the factors with which it is associated (such as the productivity of the work or salary per head).
- Put forward satisfactory hypotheses of behaviour contingent on the economic cycles of the formal economy, so as to avoid developing the informal economy in the same manner as the formal economy (to this day the national accountants' most common practice due to the lack of information allowing them a specific evaluation).

3.3.2 Informal employment

It is normally by means of the "jobs" survey that it is possible to know the total number of persons in gainful employment. When this survey exists, it is understood that it allows the distinction between formal and informal jobs, and when it comes to paid employment, it lets us know whether it gives rise to the payment of social contributions as set out by local law (criterion accepted in national accounting in order to determine declared employees).

While we can expect a good evaluation of informal employment from the employment survey, it is, on the other hand, more difficult to obtain the necessary information for its distribution according to the various production units where it is carried out (see diagram 3 of chapter 2).

In particular, the national accountant must be able to estimate, by industry of economic activity:

- employment by formal units of undeclared employees,
- the distribution of owners, own-account workers and contributing family workers between the informal sector and formal enterprises.
- the informal sector's number of employees (to be, without exception, considered undeclared).

It is also highly unlikely that the persons working in underground or illegal establishments will admit to having a job.

Besides, little can be expected from statistics originating from formal enterprises or establishments: it is very unlikely that they would admit to employing staff not hired according to labour laws. Which then begs the question of how the corresponding recompenses are taken into account in their accounting: intermediate consumption, other methods of payment,... by means of a "slush fund", or within the framework of wider practices of under-declared tax returns?

3.4 The measure of the informal economy in a context of statistical non-observation

As we have gathered in the aforementioned, there is no one solution to measure the grey areas of statistical information, and in particular when these concern the informal economy, because situations differ greatly from one country to the next, and because it is not always easy to define the boundaries of the informal economy when these zigzag across the grey areas in question!

Furthermore, the national accountant must first and foremost find solutions for the entire economic area, as regards production as well as for the other areas of the central framework: distribution of income, relations with the rest of the world, evolution and investment of capital.

Besides, the evaluations selected keep interfering with each other, without it always being possible to arbitrate between the various possible solutions. Thus, a shortcoming in the offer of a product can be resolved either by the incorporation of an underestimation of the formal economy, an increase on the part of the informal economy or even by taking into account imported smuggling. Only the search for complementary criteria can allow an economic analysis of the various options, thus offering the most plausible!

In such a context, it can prove difficult, if not impossible, during the conciliation process to isolate the informal economy as the synthesis of the central framework requires. These are the challenges addressed in the following paragraphs.

4. THE WORK OF THE NATIONAL ACCOUNTANT¹¹

In all countries where the informal economy is significant, there is a strong demand for the national accountant to make an evaluation that is at least global, and if possible well-detailed. This, however, proves to be difficult, if not impossible. It is therefore important to clarify the reasons for this to those who expect such a measure; and also to suggest ways of getting there to the national accountants, since some methodological options are better than others for obtaining the desired measure.

We can in fact conclude from everything aforementioned that a specific measure of the informal economy within the framework of national accounting is conceivable, but not in an immediate and guaranteed manner; and that, in order to reach it, the national accountant has to implement methods that are not necessarily available locally.

As explained in paragraph 2.2, the measure attained by the national accountant is of a different nature to that proposed by statistical production. This measure, known as "macro-economic", attempts to quantify operating concepts for socio-economic analysis. Beyond the events to which the statistician has access, it is aimed at the exhaustiveness of the phenomena, within the framework of an accounting plan that connects the concepts reserved.

However, the implementation of the tool, followed by the realisation of the corresponding evaluations, makes it a tall and complex order, that will mobilise important means over a period of several years if it is to bring to a successful conclusion the following projects:

- Set up the theoretical plan locally, as laid out by the SNA.
- Decide on the amplitude of the work needing to be done: all or part of the central framework on the one hand, level of detail of the work needing to be done on the other hand.
- Set the classifications reached through the previous decisions.
- Define the elaboration methods needing to be implemented (and develop the related computing tools).
- Research and process all the statistical data considered necessary in carrying out the work.
- Work out the accounts for the first reference year (known as a statistical base - benchmark), and then a series of annual and quarterly accounts taking into account the present situation and the past evolution.
- And seeing as such a series tends to deteriorate with time, its elaboration would need to be renewed every ten years or so.

This is not the place to detail all the work needing to be done, but it is a place where one can emphasize the elements playing a significant role in the possible measure of the informal economy, the satellite of such a central framework.

4.1 Local implementation of the SNA

The concepts and definitions proposed by the SNA remain very general. A local adaptation is therefore necessary, from an institutional, economic, social and statistical point of view (this last point is covered more specifically in paragraph 4.3). Among the decisions needing to be taken, the following two areas, involved in consideration of the informal economy, need mentioning.

a) Local adaptation of the classifications proposed by the SNA

A list of these classifications can be found in paragraph 1.1. Points that need to be considered are as follows:

¹¹ For a more detailed presentation of this work, one can refer to the document "Las cuentas nacionales: lineamientos conceptuales, metodológicos y prácticos" – CEPAL – julio de 2007

- Institutional sectors: the boundary between corporations (financial or not) and households, by considering possibilities offered by the available statistics (one is sometimes led to integrate the small corporations for which no information is available into the households sector).

- Industries of economic activity: their number shapes the breakdown of work needing to be carried out for the establishment of the production and generation of income accounts; and locally important activities should be isolated (or activities significant from the informal sector's point of view), even if the ISIC (International Standard Industrial Classification of all economic activities) of the United Nations does not mention them explicitly.

- Goods: same comments as for industries

- The transactions

Two breakdown methods are recommended:

- For gross salaries: gross salaries of declared employees and gross salaries of undeclared employees
- For dividends: declared dividends and dividends awarded by conciliation (which lets one deal with the calculation of tax evasion).

- Jobs: in connection with what has been suggested for gross salaries, paid employment should be broken down into declared and undeclared employees.

b) What the country chooses to elaborate in the central framework

The central framework has provided for several tables, the detail of which depends on classification made locally. Their elaboration requires appropriate statistical sources, but also sufficient technical means (financial and in assessment). This is the reason for which countries frequently limit the size of tables needing to be produced, whether for the accounts of the benchmark year or sometimes even for the accounts of current years.

To give up the balance sheets is not greatly significant as regards understanding of the informal economy; the absence of financial transaction accounts is however more worrying, because it makes it impossible to provide consistency in the households account (by controlling the financial counterpart of the balance of current operations: savings and ability to finance). Certain countries also choose not to elaborate the non-financial accounts of the institutional sectors (and therefore that of the households), limiting their work to the elaboration of a Supply and Use Table (SUT) and the consolidated accounts of the nation.

c) Elaboration of accounts in current years

Many countries elaborate the SUT for the benchmark year only, when it is an essential element should one need to follow the evolution of the informal economy within the national economy, just as the absence of direct information on the evolution in value of the formal economy makes a differentiation of the evolution of informality more difficult.

4.2 From statistical data to a macro-economic measure

In order to elaborate the nation's accounts, the national accountant draws on all the data supplied by the country's statistical instrument. Such data, however, are incomplete (see non-observed statistics above); they depend on micro-data that the respondent accepts to divulge to the statistician (every survey suffers from sociologically analysable bias). It is classic that the concrete collection does not cover the whole of the target field, and all surveys contain an element of uncertainty concerning restored values. Finally, there is often a difference between the subject surveyed and the concept as defined by the SNA. All of this explains the difference mentioned in paragraph 2.1; and this difference results in a multitude of insufficiencies and contradictions in the data provided by the statistics, which appear when the national accountant associates these data with the aggregates he or she is supposed to measure. To overcome these contradictions and propose evaluations where the information is missing requires the management of a specific profession, which can be summed up in one key word: reconciliation.

This term holds a central position in the vocabulary of the national accountant. To arbitrate in fact signifies appropriating the right to question statistical data which are a priori irreproachable, by using as a base a reasoning of which the logical foundations are not of the same nature, and without an

error of calculation being associated with it. Against criticisms that never fail to make themselves known, it is in no way pointless to draw attention to the professionalism such a decision requires.

The need for reconciliation results from the previously mentioned discontinuity between statistical measure and macro-economic measure. Reconciliation must therefore be brought into play as soon as a difference between the statistical information and the concept for which this measure is proposed appears; and this is how the hypothesis of fraud makes one doubt the measure of the output obtained from tax returns. But one also finds the need when at least two pieces of information claim to represent, in contradictory terms, the same economic phenomenon, since national accounting provides for the uniqueness of representation. Finally it is needed in reducing inflexible differences between statistical sources.

In order to resolve such contradictions, one cannot be satisfied with mathematical procedures such as averages, proportional distribution, or other formulae considered to be more appropriate. For any significant difference in statistical data is the manifestation of additional undiscovered information. In other words, reconciliation can under no circumstance boil down to a decision of an algorithmic nature; and it is only after interpretation of the difference observed that the appropriate process to reduce it can be put forward.

To reach such a result requires a craft that has been acquired progressively, and of which the technical bases are of both a statistical and economic nature. In the first place, a statistician's job consists in guaranteeing the comparability of the sources, so that if the difference remains, its interpretation is inevitably of an economic nature. It is also as an economist that the statistician is able to validate the quality of the reconciliation returned.

Finally, it is at the very core of the reconciliations needing to be realized that the national accountant can shed additional light on the information he or she has gathered, so that the results obtained give a more complete and reliable representation of the national economy than the sum of the elementary data. And therein lies all the complexity of his or her work.

4.3 Different possible methods

In the early days of national accounting, we were usually content with a punctual elaboration: the direct evaluation of the big aggregates such as they appeared in the nation's consolidated accounts plan and proposed in the first version of the SNA.

After this, a bigger breakdown has been retained, with the elaboration of production and generation of income accounts by industry; but the process is still of a linear type. This procedure consists of converting progressively and in an autonomous way a selection of statistical data into some of the aggregates proposed by the system, and of calculating the others through the balance. In accordance with this process, it is standard that the GDP be obtained from the only production industry accounts; and the final household consumption is therefore obtained through the balance. More generally, it is the households account which receives all the undetected statistical gaps. Many countries still use this linear approach for the elaboration of their national accounts. But one should make quite sure that it only gives the elementary data on which the aggregates have been established.

Some countries have expanded the process by managing several linear approaches at the same time, according to each of the equations in which the GDP finds itself implicated (through costs, income and final demand), but without taking into account the possible interference between these three different approaches. The question that should then be asked is to know how to reconcile the three values obtained (keep the results different, or make an average). It should be noted, moreover, that this isolated approach of the GDP still serves as a reference in official documents (such as chapter 2 in the document "Measuring the Non-Observed Economy, A Handbook"¹²).

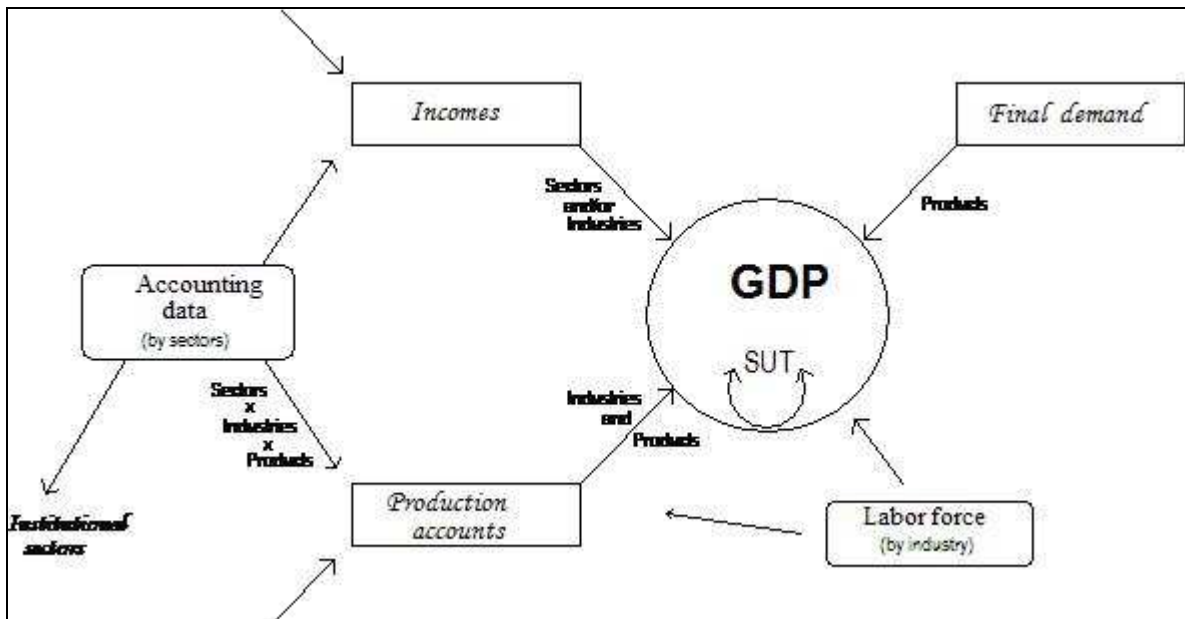
However, a qualitative leap in the method of elaboration of national accounts has been made possible thanks to the central framework proposed by the SNA in its 1993 version. The complete set of accounts which it proposes allows the setting up of an integrated procedure of elaboration, of such a kind that it is possible to manage simultaneously all the accounting equations present in the central framework. It is thus possible to validate collectively:

- goods and services accounts and industry accounts,

¹² Measuring the Non-Observed Economy - A Handbook, OECD/IMF/ILO/CIS STAT, 2002

- production and generation of income accounts according to industry and institutional sector,
- goods and services transactions in the SUT and in the sector accounts,
- the financial section of sector accounts with their non-financial share.

In addition, in place of a linear evaluation of the aggregates, it is preferable to proceed to an iterative step in the process, in such a way that reconciliations that have been given locally can be called into question in view of the contradictions they can initiate in other parts of the central network. Thus, the decisions finally taken shed, at best, some light on the diverse statistical sources available. The following table shows how such an iterative procedure can be brought into the framework of the only SUT, successfully addressing the three approaches already mentioned in the GDP, and adding to it a fourth approach, that supplied by the jobs matrix.



4.4 Requests to the national accountant for measuring the informal economy

In a country where the informal economy is important, the national accountant cannot conduct his or her work without taking this into account, above all if it is the subject of a specific survey. This, however, affects the very manner in which the central framework is elaborated, not through a specific measure of the informal within itself, seeing as the informal does not as such have a place herein. The institution in charge of the elaboration of the accounts must therefore receive the request, and an agreement must be reached in order to implement a specific measure of the informal economy. In addition, the request must be made sufficiently early to allow a change in the statistical data-base of national accounts so that the reconciliations and methods allow it to take place.

Nevertheless, this also means that the national accountant must reflect on the best way to carry out this measure, and to make the appropriate methodological choices to achieve it. This is why the two following paragraphs are more particularly destined to national accountants, in order to find susceptible methods of helping them to respond to such a request. What is proposed here is in line with an integrated and iterative procedure of elaboration; but some of the resources proposed can perfectly well take their place in a less complex procedure. This is particularly the case for the jobs matrix, which is the subject of a more detailed presentation, and for the elaboration of industry accounts by mode of production.

5. A METHOD COMPATIBLE WITH THE MEASUREMENT OF INFORMALITY

The elaboration of national accounts can be broken down in two important stages: the preparation of statistics data on one hand, and carrying out the reconciliations on the other. These two stages are treated separately here; but it is very important to insist on their great interaction; for the method of preparing data depends closely on the methods engaged for conducting reconciliations.

5.1 The preparation of statistical data

This first stage of putting into place a new statistics database for national accounts represents a huge amount of work. For it includes all the available information in the country, which has to be analysed and then put into the language of national accounting. Propositions made here do not specifically apply to the informal economy; but it should be noted that the quality of the reconciliations dealing with it depends closely on the reconciliations as a whole that will be made concerning the rest of the central framework.

5.1.1 *Some general recommendations*

It is desirable that the preparation of statistical data respects the three following rules:

a) Use all the available sources

There can be a temptation to assemble national accounts at the lowest cost, limiting each post to only one source, and making the best of the results, which can be obtained through the balance (particularly those posts for which no direct information exists). Using all the available sources will no doubt increase the number of contradictions which will need to be surmounted; but the actual existence of these contradictions reveals an imperfect statistical approach of the phenomenon, and most likely errors in data collection. Interpreting the discrepancy therefore brings additional information.

b) Treat each source one time only and in its entirety

Another traditional practice should be put into question: leaving each person to go and find the information he or she needs. This is how contradictory interpretations from the same source of information are exposed, thus running the risk of part of the available information being overlooked. Good practice consists in treating each source for its own sake and for the entirety of the information contained therein, without having to be preoccupied in knowing *a priori* for whom this information could be useful. This way of going about it leads to the setting up of "intermediate systems of accounts", of which the elaboration is recommended by the SNA (§ 1.60), where the incorporated transposition into SNA language for each statistical source is stored.

c) Make sure that everyone has all the necessary data at their disposal

The equivalent of this centralised preparation of statistical data is the setting up of an information technology system permitting every professional to have all the information concerning his or her work at his or her disposal. The use of a computer data-base is strongly recommended for organising the management of all the available information.

5.1.2 *Knowledge of the universes counted by national accounting*

The purpose of national accounting is to measure the whole of the economic life of a country. For all the aggregates in question there is a theoretic universal reference, which should be measured in its entirety. For each of these universes, the coverage should be verified by assuring which statistical sources are available. Yet experience shows that this coverage is sometimes far from being secured by the information imparted. Amongst the important universes for the elaboration of a measure of informality, the following areas can be mentioned:

- Institutional units:

*As far as corporations are concerned (whether financial or not); only a directory updated on an annual basis can demonstrate over time just how many of them there are; and experience shows that economic surveys are nowhere near retrieving the bulk of it. On the other hand, access to tax data allows for a better coverage, albeit with insufficient data. At the same time corporations that have not been located get mixed up with household unincorporated enterprises within the non-observed statistics.

* For households, their universe is known thanks to demographic censuses; but this source of statistics does not normally show up the informal units which depend on it.

- Establishments: this population is still more difficult to get to know, because it also concerns all establishments belonging to households, within which the informal sector is found. Even an economic census remains well beneath their universe. Here as well, a directory is possible (set up through institutional units), but its actualisation is much more delicate (and the tax source is very deficient in this matter).

- Individuals: the best coverage is supplied through demographic censuses, but it is well-known that a shortcoming in the coverage of 5% is not abnormal. Within this population, persons who are active, whether employed or not, occupy an important place. Housing is also important, because of its role in the sampling of surveys concerning households. This question is developed further on, along with the jobs matrix.

- Production: the SNA gives production a definition both very ample and very precise. The national accountant has to locate all shapes that the said production takes locally, and has to be concerned about how he or she or she will identify its existence, and if possible its value. However, an essential conceptual element exists permitting him or her to carry out this survey: through convention, production must necessarily appeal to one or the other of the following factors of production: work and fixed capital. And as far as work is concerned, it is agreed that this is provided by individuals having a job in the ILO's sense of the word. The universe of production is therefore accessible through that of jobs, with the exception of activities linked uniquely to a fixed capital (such as the presentation of housing services by proprietors of households).

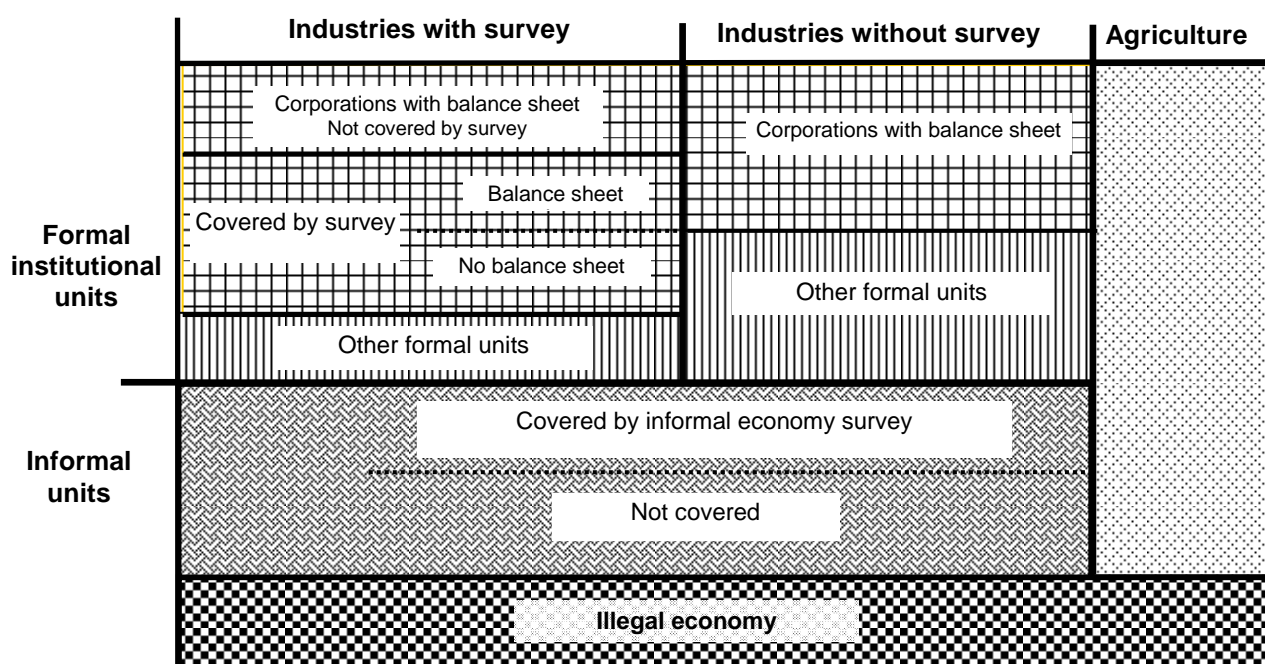
- The final consumption: this concerns the most important jobs in production. To be able to measure it directly is therefore essential. This is why it is very important to be able to define the share of this consumption, which is accessible to the surveys carried out by this economic role.

5.1.3 Statistical cartography

The measure of production is at the heart of National Accounting, and it is with reference to the aggregate that it is important to situate the informal sector. It is why the "cartography" proposed here is of the highest importance.

Production is at the crossroads of several of the partitions intended by the SNA: institutional sectors, industries of economic activity, goods (trade or non-trade), employment. In breaking down the field of production according to the different criteria, a draughtboard of several dimensions is achieved. The statistical cartography proposed consists of relating each slot in this board (or in the groups still to be defined) to the statistical source or sources which allow the factors put in place to be known and to measure the value of the corresponding production.

As an example, a simplified cartography, recently carried out in Colombia, is proposed here:



In the context of this country, the following elements can be observed:

- we do not know the formal institutional units present in agriculture,
- we know that there exist formal institutional units for which the statistical data is not disseminated,
- it is noted that a portion of the jobs which could pertain to the informal economy are not covered by the informal economy survey,
- nothing comes up for the illegal economy (principally drugs) in the statistics available.

5.2 An integrated and iterative process of elaboration

The method proposed here is that which best defines the content of the informal economy. It presupposes the realisation of the totality of the central framework (with the eventual exception of balance sheets). It is evident, however, that some of the tools proposed here can be applied in the framework of a less complete method of elaboration of the central framework. The presentation made in this chapter is very synthetic; it would be better to refer to other documents for a more detailed presentation¹³.

In accordance with what has preceded, the first preoccupation of national accountants, in the framework of the process of elaboration, is to achieve the most satisfying evaluation possible of the overall economic activity, respecting the partitions foreseen by the central framework of the SNA. In this context, it is unlikely to come directly to a specific measure of informal economy. Nevertheless, if the means are taken within the framework of this elaboration, and if the available information allows it, such a measure can result from it relatively easily.

5.2.1 Formalising the production universe

The production universe is already formalised through the central framework of the SNA. But the partitions proposed are not sufficient for the elaboration of accounts. They should be completed by two complementary approaches, depending on the local context:

¹³ « Mesurer l'économie informelle dans le cadre de la comptabilité nationale » - revue STATECO n° 104 – INSEE, Afristat, DIAL – Paris 2009
Internet assistance ERETES

a) A partition of a statistical nature

This follows on from the cartography proposed in the previous paragraph. For example, the following situations can be differentiated :

- * belonging to a directory of enterprises,
- * survey based on an extensive inventory (economic survey, tax declaration, census,...),
- * survey based on sampling,
- * public accounting,
- * ... and finally the report of the non-observed economy.

b) A division of a social-economic nature ¹⁴

This division allows the recognition of differentiated functions of production in the framework of the elaboration of industry accounts:

- * observed formal economy (in whichever institutional sector),
- * non-observed formal economy (through statistical deficiency),
- * underground economy (establishments refusing observation),
- * informal economy (observed or not),
- * illegal economy,
- * non-market household economy.

5.2.2 Organising the interface between industries and institutional sectors

This interface is at the heart of the analysis of the production system; in effect, production and generation of income accounts belong at the same time to the partition by industry (grouping of establishments by economic activity) and the partition by institutional sectors (grouping of corporations, households, government units or non-profit institutions). Furthermore, the relative information as to production stems from establishments, institutional units, goods placed on the market and/or factors used. To take into account this double diversity, production accounts should be developed by industry through differentiating the methods to be put in place and their correspondence with the institutional sectors. This is what could be called "**production modes**". Their number can only decrease, since each mode of production presupposes a specific elaboration of the production and generation of income accounts of each industry. But it is thanks to them that it is possible to define much more precisely what is in keeping with the informal sector.

By way of example, for the same Latin-American country mentioned above, the following modes of production have been used:

- 1 – corporations with balance sheet
- 2 – corporations and households, economic survey only
- 3 – Micro-establishments surveyed
- 4 - Under-declaration of source units
- 5 - Households not surveyed
- 6 – Public government units
- 7 – Private non-profit institutions
- 8 – Non-market household production.

In the case of this country, the information available has not allowed a specific mode of production to be isolated for the sole informal sector. However, it is not out of the question that this could take place in other contexts (see below, § 6.2.4), which would enable it to achieve the benchmark directly within the central framework.

Of course, it is necessary to specify, for each mode of production, the institutional sector or sectors with which they are associated. In the cases proposed, mode 1 concerns financial and non-financial corporations, and mode 2 non-financial corporations and households; but in both cases, available sources give information as to the division to be carried out. Modes 3, 5 and 8 only concern households. Mode 4 concerns sectors associated with modes 1 and 2.

¹⁴ This approach is developed in the document "Measuring the Non-Observed Economy, A Handbook" - OECD/IMF/ILO/CIS STAT - 2002

5.2.3 Putting in place the jobs matrix

The jobs matrix plays a strategic role in the procedure of the elaboration of national accounting; jobs in effect constitute the most complete field at our disposal in defining the universe of production. This matrix brings together jobs according to status with industries and their modes of production. Thanks to this, production data can be pieced together where statistics are inefficient. But its development is fairly complex, which is why it is preferable to devote a specific chapter to it (§ 6).

5.2.4 Developing the accounts of industries by production mode

For certain modes of production, information concerning their production and generation of income accounts are provided directly by available statistical sources. For those taken from non-observed statistics (and where the informal takes up an eventually important share), their accounts are reconstituted from the jobs attributed to them by the matrix, related individual incomes and technical coefficients, according to the industry. If the country has on hand a survey that concerns its informal economy, then this extra information on methods of production of units surveyed will be of benefit. Of course, production calculated in this way must also be broken down by product, according to the chief products of each of the industries.

5.2.5 Industry accounts and goods and services accounts (first stage of the iterative process)

So let us proceed to a first elaboration of goods and services accounts (still known as 'Supply and Use Balance' (SUB). The rapport between the supply and use of products shows up contradictions, which lead to the modification of the initial data introduced. A first iteration allows feedback on the offer of goods (industry production and the import of smuggling). For production, an under-declaration on the part of the source units, or a modification of the estimate retained for non-observed units, taking into account the available facts (other division of jobs by industry, unused intermediate consumption, modification of the income per capita...)

But the reconsideration may of course equally concern demand from institutional sectors.

5.2.6 Industries, goods and institutional sector accounts (second stage of the iterative process)

Any modification at the level of the final demand (household consumption, gross fixed capital formation, changes in inventories, exports, taxes on goods) leads to modifications in the accounts of institutional sectors; some of them, as with households, are not well-known, even though the reconciliations often bear on the final consumption. Transfers between goods are possible, within the same sector. Smuggling can also be envisaged, but within the limits of locally known behaviour. Having said this, constraints specific to each sector and each type of transaction impose limits on the desired reconciliations.

As for the intermediary demand, it must find its balance within the Supply and Use Table (SUT), at the same time respecting industrial coherence (technical coefficients).

5.2.7 Grey areas to be evaluated

These grey areas (the result of non-observed statistics) are diverse, and this is why it is important to draw up an inventory and to determine the characteristics: quality of available sources, concerns of local socio-economic behaviour, their place in the set of accounting equations in the central framework, macro-economic hypotheses as to the acceptable amounts attributed to them.

- Under-declaration statistics are often allied to tax evasion, which can be very different according to the activities and the size of the enterprises. Normally it benefits household sectors, just as taking money out of undeclared funds benefit the directors of an enterprise.

- Some grey areas can be found worldwide: smuggling, traffic of illegal goods, money laundering, the transfer of funds by immigrant workers, undeclared investments in tax-free havens. All these areas need to be balanced out, within the framework of the financial ties the country has with the rest of the world.

- Reconciliation at the level of the non-registered legal production of small establishments is more complex, and primarily concerns the evaluation of the informal sector. A change in level of this offer modifies at the same time household income (via mixed income) and the production of goods and services destined principally to the final consumption. The balance of the households account thus remains unchanged! The control of coherence must therefore be researched according to the three

following directives: consistency of industry accounts (available jobs and respecting technical coefficients), analysis of per head income (to be compared with data collected in the framework of the jobs matrix), and socio-economic validation of the vector of household consumption (not forgetting capital equipment, such as buildings).

5.2.8 Validating the institutional sector accounts

For institutional sector accounts where the accounts are based on accounting data, one should verify that all the modifications introduced do not damage the accounting equilibrium of the initial source. This manifests itself through the statistical discrepancy which could appear between the financial and non-financial parts of their accounts.

For everyone else it is a matter of making sure of the pertinence of eventual modifications introduced in relation to the data of the balance of payments, and to their impact on its equilibrium.

And it is of course the households account which suffers the consequences of all the reconciliations rendered. In the absence of the elaboration of their financial transactions, it is difficult to validate the result obtained. One can, however, explore the actives and passives concerning them more specifically, and check on the compatibility with the balance of the non-financial operations (which should correspond to their capacity or need for funding).

6. THE STRATEGIC ROLE OF THE JOBS MATRIX

Thanks to demographic statistical data, we have a fairly complete knowledge of persons who are employed (employed population). The number of jobs thus enumerated constitutes the most complete information available in defining as closely as possible the theoretic universe of production. Furthermore, the appropriate treatment of data taken in the framework of these demographic sources allows an indirect perspective of the grey areas left by the economic surveys, a control on the income generated by the work and an estimation of its productivity. Finally it is thanks to this resource that it is possible to define the curve of the informal sector and to evaluate the importance of informal work. However, to fulfil all these functions, the matrix in question is not a simple double entry table; it must be filled in using different information that has been carefully coordinated. This is why its development necessitates great attention, and also why mastery of the concepts it is carrying out is essential.

6.1 Some conceptual and statistical bench marks

a) The information concerning jobs has three origins: on one hand the demographic data, supplied by households (this also includes job offers), on the other hand those coming from employers, through surveys and economic censuses (here this includes job applications) and for the third part those provided by the institution handling social protection.

b) The demographic information presents the best coverage of the number of employed population, knowing however that this coverage cannot be complete. Apart from the EP, surveys can provide data on persons in more than one job, as well as the number of hours worked. So there are three complementary variables:

- the size of the employed population,
- the number of jobs being carried out,
- a measure of the volume of work used in the economy.

The first of these variables is used so that the demographic data is consistent. It is the second which allows the confrontation between job offers and applications. The third refers to productivity, and can therefore serve as a technical coefficient for estimating production.

c) In general, in developing countries, demographic data is collected on a particular date, or during a limited period; on the other hand, the economic data frequently refers to an employment average over a period of time, which could be yearly, but is sometimes quarterly. The seasonal aspect of economic activity can lead to statistical inconsistencies which can be difficult to detect.

d) It is quite often noted that there is a difference concerning the number of employed persons, between the quantity provided by a demographic census on one hand, and labour force surveys on the other, the latter providing in general a slightly higher number. This difference should be explained when it exists; but it is generally considered that surveys are better suited to measuring the employed population. One should therefore go by this last figure, but not forgetting eventual rectifications that could bring the theoretical coverage closer to that of total employment.

e) Agriculture and livestock farming occupy a separate place in the economic approach to production per number of jobs (and to a lesser extent forestry and fishing). Productivity in these fields does not depend on the number of workers, apart from the area under cultivation (and the vagaries of the weather). On the one hand, in the case of small production units, the whole family is involved in production, which is not necessarily revealed in a jobs survey. Employment in these fields should therefore be accounted for separately, eventually completing it through complementary sources (such as an agricultural census); on the other hand, the use made of this information does not take on the same importance as for the other activities.

f) The jobs matrix to be established joins up the following variables: employment status on one hand and industries of economic activity on the other, and both, furthermore, needing to be broken down according to the production modes retained. For each box proposed, it is desirable to associate them with the average wage per head generated by the jobs enumerated. If possible it should be completed by a second matrix using the same entries, and giving the amount of work provided by these jobs (in hours, or the equivalent annual full-time employment).

- g) The status to consider (as much for persons in work as for the jobs) are:
- declared employees (through social protection institutions)¹⁵
 - non-declared wages through a like system
 - owners of household unincorporated enterprises (in the conceptual framework of the SNA, enterprise owners should be considered as employees)
 - own-account workers
 - contributing family workers.

From the point of view of national accounting, owners of household unincorporated enterprises and own-account workers can, however, be grouped together, both being considered as “employer or own-account worker”.

- h) Certain thresholds are not easy to define:
- corporations may not employ own-account workers; these being considered as undeclared workers, to whom a salary is attributed;
 - the personnel handled by interim agencies should be classified in the sectors which actually employ them (but should be counted separately);
 - sometimes corporations or government units take on “freelance” workers, not for the services provided but just to benefit from their workforce; national accounting prefers to treat them as employees.

i) Concerning the precision of the data figured in these matrixes, it is essential not to be overcome by detail. The total amount to retain is an incontrovertible figure, as it is the most reliable that the survey can produce; on the other hand, the more one goes into the detail of the sectors and their production modes, the more the amount retained is uncertain, in particular concerning information from surveys regarding households. This means that there is a large freedom to manoeuvre when it comes to carrying out the reconciliations; but without this leading to a reconsideration of the retained total.

j) All the work proposed below assumes the reconciliations or breakdowns that go beyond the available statistical information; when the requisite detail is lacking, one should look for socio-economic hypotheses which permit it to be calculated. It is therefore very much a job incumbent to the national accountant and his or her reasoning.

6.2 Methodological suggestions for the elaboration of the jobs matrix

To achieve a jobs matrix conforming to national accounting requirements, significant work in the area of statistics must be carried out. One should in fact develop two autonomous matrixes, one demographic (jobs on offer), and the other economic (job applications), thus together providing a basis on which to develop the jobs matrix, a matrix which allows at the same time:

- to establish employment associated with non-observed production through economic statistics,

¹⁵ This distinction suits the elaboration of the central framework (confrontation with welfare, and control of the level of deduction of social charges); it is only later that one can move on to the concept of formal or informal employment.

- to propose an interpretation of it, which will allow the localisation of the informal economy (sector and employment),
- to be used as a starting point for the imputation of missing data (production and generation of income accounts of the establishments detected),
- to go with the reconciliations offered within the framework of the Supply and Use Table (SUT), including productivity,
- to supply a structure for evaluations of revenue generated by production.

6.2.1 *The demographic matrix (labour supply)*

This matrix is developed from the only data collected from households, whether in the framework of a demographic census, or through the intermediary of surveys, principally those dealing with employment, but also those dealing with lifestyle or consumption, and of course the survey as regards informality, where it exists. The objective is to render these sources compatible, and to deduce from them the number and characteristics of jobs thus revealed. As a first step, the analysis concerns only the EP (that is to say people declaring at least one job) and in the framework of the classifications used for this statistical production. The compatibility particularly concerns:

- the date (or the period) of the execution of the surveys,
- the classifications used (including the economic activity where the work is being carried out),
- the definition of the working population, and the way in which the existence of a job has been detected,
- the universe surveyed, and the gap possibly estimated between the theoretic universe and the responses obtained,
- in the case of a survey, on sampling and the universe having served in its expansion.

Comparison of data should then be carried out on a comparable basis (same date, same definitions and classifications, identical universe), supposing that certain data be transposed in accordance with the references retained. The best way is to retain a date in the year which is being proposed for the elaboration of national accounts, on the condition that one of the sources has been carried out during this period (the employment survey, if possible). Otherwise it will be necessary to transpose the results obtained from the year in question to elaborate the accounts.

Processing the results looked for should be carried out in the following order:

1/ To agree on a total number of the employed population and its distribution by status in employment; one should in particular make a hypothesis on insufficient coverage with regard to the theoretic universe of the resident population in the country (sufficiency criterion of national accounting). One knows for example that a demographic census does not achieve sufficiency: is a rectification carried out? It is very probable that jobs in the informal underground and in the illegal economy are not declared. Besides, if this total employed population comes from a survey with an isolated date (or over a period inferior to the benchmark year), it is desirable to propose a number which can be considered as an annual average. These amounts should not be put into question later on (except when returning to the hypotheses which started them). One could also propose a breakdown of the results according to the large categories of economic activity (first level of the ISIC).

2/ To break down these results at the finest level of classification of activities used for production statistics; to achieve this the existing data in the diverse sources (and in particular those provided by the last demographic census will be used, in view of the precision a census allows for detailed data), but without referring for the moment to the data on job applications.

3/ To move from this matrix "employed population" to the jobs matrix, incorporating the available data on secondary employment; in the absence of such data, one should be satisfied with a proxy, which could besides be the employed population matrix itself. In addition to this jobs matrix, to introduce the average wage per employment for each of the units retained in the matrix, as well as the average number of hours, if this information is available. Of course, if it is possible to have this information available by par décile, so much the better!

4/ To transpose the matrix thus obtained (and its associated data) according to the sectors intended in order to elaborate the central framework of the national accounts.

6.2.2 *The economic matrix (labour demand)*

This matrix is put together from statistical data from the units which have declared an economic activity, whether it is government units, corporations or other equivalent juridical forms, associations and other non-profit institutions (NPI) or establishments belonging to households. It could be public accounting, censuses and/or economic surveys, tax declarations or again data collected by organisations mandated to this effect (particular trusteeship bodies, commercial tribunals or supermanagements responsible for control).

Some of these sources supply data on the number of people employed; when this information is lacking but the overall wage is known, the corresponding number of jobs should be brought together. And if the institutional unit is made up of several establishments, the production and generation of income accounts data should be divided up between them, as well as the number of jobs. For all data relating to employment, it is best that their number corresponds with an annual average. When several sources exist for the same unit detected, they should then be synchronised, which should also have a bearing on the employment data. The preparation of statistics also presupposes the regrouping of this data according to the sectors retained for the elaboration of the central framework, by distinguishing at the heart of it the origin of the statistics and the institutional sectors concerned.

It is fundamental to be sure that such information adds up, so that the same jobs do not get counted several times over. This is why it is not possible to take into account here an eventual survey on informal economy, insofar as it does not carry information allowing the units already present in the other sources to be pushed aside.

From this information, it is then possible to build an economic matrix of jobs. In the case of production units institutionally constituted, the only possible status is that of employee (in most cases with declared employees, but we could still find at a local level cases of non-declared employees who have been observed through statistics). In the case of establishments belonging to households, the owners, own-account workers and contributing family workers will be found.

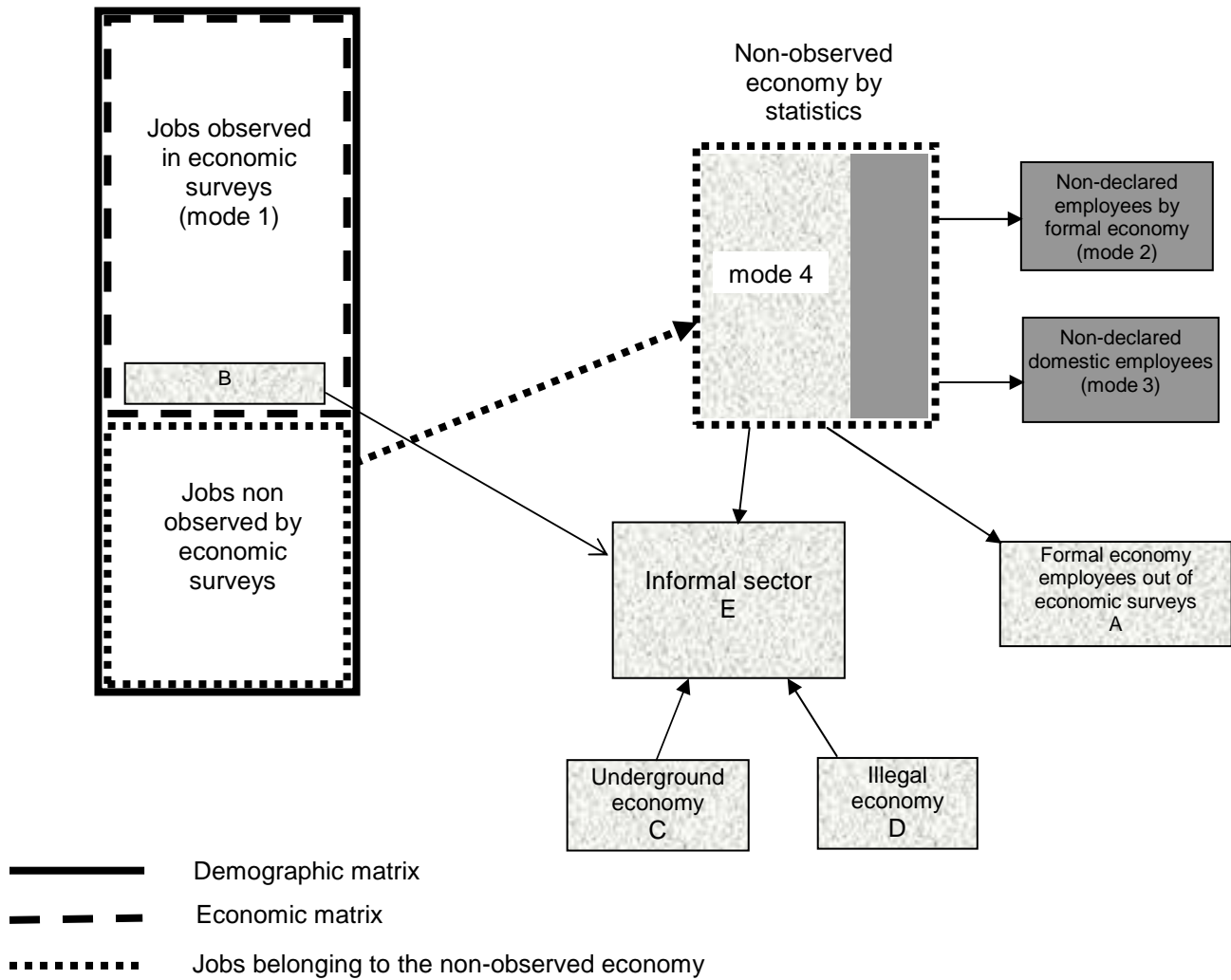
6.2.3 *The jobs matrix*

It is the comparison between these two matrixes, job offers and applications, which, subject to new reconciliations, enables the production of a unique matrix, known here as the "jobs matrix".

Setting this up at first presupposes that the mode of production be defined, thanks to which jobs from the two matrixes can be differentiated. In practice, at least four positions for these production modes should be distinguished:

- Mode 1: employment supplied through economic statistics (those which correspond to the data present in the job offer matrix and coming from source units); employment measured by an eventual survey of households in the informal sector is not part of this production mode.
- Mode 2: a production mode which remains empty for the moment; it allows ulterior recording of estimated amounts of under-declaration on the part of the units present in mode 1.
- Mode 3: the own final use households output; the only salaried job figured here corresponds to domestic staff.
- Mode 4: non-registered employment in other modes, which corresponds to market output not registered by economic statistics.

Reconciliations to be anticipated are the following (according to the description proposed in the diagram below):



- Put all the jobs in the economic matrix in mode 1; this is for the main bulk of declared employees.
- Put in mode 3 domestic staff from the demographic matrix, distinguishing between those declared and those non-declared.
- Verify the total of declared employees thus obtained and compare it with the amount to be disposed of provided by the social protection services. Interpret these disparities between the three sources, and propose one solution for the total.
- Adjust the numbers of declared employees by industry from the demographic matrix, giving priority to the numbers from the economic matrix.
- The economic matrix can also mention the owners and own-account workers (in regard to household establishments present in the surveys carried out). What is left of the employees in the demographic matrix is to be placed in mode 4.

A summarized jobs matrix by production mode for Colombia is shown in the Annex to this chapter.

6.2.4 Interpreting and reconciling the contents in mode 4

The reconciliations to be made can of course be modified in the framework of an iterative process to come. Below are some pointers to facilitate this work:

- Evaluate the per head income which can be attributed to jobs in mode 4, taking into account the per head income from economic sources as well as the hours worked (if possible).
- See how to deal with declared employees eventually redundant (who could be working in formal units not represented in the economic sources). In fact everything depends on the statistics coverage stemming from the formal units, and particularly those that have been legally set up; in some countries, this coverage is reduced, in which case mode 4 appears to be heterogeneous.
- Initialise a solution for the non-declared employees, in the knowledge that they may be attributed a non-declared employment in the units in mode 1, and therefore should be placed in mode 2 (under declaration of these units); or consider them to be employees as in the units in mode 4.
- It should be noted in this matter that the owners and own-account workers represent many different establishments dependent on households, and we cannot for the moment know whether these are formal or informal.

Localising the informal sector

It is the analysis of the contents of mode 4 which can eventually allow this localisation. The presence of an informal economy survey may facilitate the task, but not always. It is in fact necessary to clarify several questions:

- to be able to evaluate the share in the formal economy which escapes the economic surveys (A);
- to be in a position to situate the units which take part in an informal economy survey compared with those which take part in economic surveys (B) ;
- where to situate employment which does not belong in formal economy (mode 1 or mode 2), nor to the units which have responded to the informal survey?
- to incorporate employment (and production) of underground units (C) and illegal (D) (knowing that some people working in these units could be positioned differently).

In certain cases, it is probable that one is not able to answer these questions in a sufficiently reliable way. On the other hand, where responses can be provided, one will be in a position to propose a curve of informality in terms of employment (E). However, this does not so much signify that it is possible to measure production at the time of the elaboration of the central framework; for it will in any case be necessary to propose a production associated with employment which is still outside the different subgroups.

Apart from separating this set of jobs into differentiated and complementary subsets, of which one would be the informal sector, the national accountant cannot but proceed with a global elaboration of their accounts, mixing the small sized formal, the informal presented in the survey and the remaining non-attributed employment. Requests from the national accountant for statistics allowing him or her to answer these different needs can be found at § 8.

7. FOR A MORE COMPLETE MEASURE: AN INFORMALITY ACCOUNT SATELLITE TO THE CENTRAL FRAMEWORK

At the end of this presentation, the question of principles remains unsolved, as it can only receive a general response. Effectively, the real question is the following: is it possible to position informal economy as one of the measurable subgroups belonging to the partition in the field of production? If the answer is positive, its benchmark in the central framework goes without saying, but only at a very global level. Otherwise, it will be necessary to look to a satellite account in the informal sector. In any case, it is this latter approach which should be envisaged, provided that it is hoped that a more detailed approach of this phenomenon will be elaborated, and more particularly that the measures desired by a large number of statistics users in the informal economy sector will be carried out.

7.1 Satellite accounts to the central framework

Chapter 29 of the SNA 2008¹⁶ presents reasons for which satellite accounts in the central framework should be put in place. These accounts are satellites insofar as they are compatible with the concepts used for the central framework and on the scale associated with them. But they are different insofar as they propose developments or extensions that the central framework is not in a position to put forward.

The SNA proposes two large categories of satellite accounts; an informal satellite account is found in the first, as described in the manual (§ 29.5):

“Broadly speaking, there are two types of satellite accounts. One type involves some rearrangement of central classifications and the possible introduction of complementary elements. Such satellite accounts mostly cover accounts specific to given fields such as education, tourism and environmental protection consumption and may be seen as an extension of the key sector accounts just referred to. They may involve some differences from the central system, such as an alternative treatment of ancillary activities, but they do not change the underlying concepts of the SNA in a fundamental way. The main reason for developing such a satellite account is that to encompass all the detail for all sectors of interest as part of the standard system would simply overburden it and possibly distract attention from the main features of the accounts as a whole. Many elements shown in a satellite account are invisible in the central accounts. Either they are explicitly estimated in the making of the central accounts, but they are merged for presentation in more aggregated figures, or they are only implicit components of transactions which are estimated globally.”

7.2 A specific account for informality

This possibility is mentioned explicitly in the same chapter 29 of the new SNA:

29.86 The boundary between satellite accounts and a straightforward elaboration of the SNA or even with other systems is not clear cut. The links to balance of payments and the international accounts as presented in *BPM6*, government finance statistics as in *GFSM2001*, or the *Monetary and Financial Statistics Manual (MFSM)* could all be seen as a form of satellite account. The treatment of NPIs in chapter 23 and the informal sector in chapter 25 are clearly satellite accounts.

Why should an informality account, satellite of the central framework, be developed?

The first reason is the consequence of the preceding analyses. It is very rare that the national accountant is in a position to proceed to the measure of the informality within the context of the elaboration of the central framework, either because the methods used are incapable of differentiating the specificities, or because the information available does not allow the isolation of the outline at the heart of the partitions set out by the central framework.

But there is another much more important reason: the central framework is not in a position to propose all the detail which should be provided to outline the informal economy. In the event of a direct measure being possible, it is only thanks to complementary work that a detailed analysis can be proposed; and if this direct measure is not possible, it is also through specific work on the data of the central framework, and linked to the jobs matrix, that an indirect measure of the large aggregates of the informal economy can be proposed, but compatible with those of the central framework. It is on this basis that one will be in a position to put forward the most detailed analysis allowed by a satellite account.

In both cases, the contribution of the central framework to the satellite account of informality consists of three areas:

- Production accounts by occupation, differentiated by mode of production and by institutional sectors,
- A jobs matrix by status according to the same criteria (occupation, mode of production and sectors),
- An approximate localisation of informal establishments present in the production modes, through associated jobs.

¹⁶ « System of National Accounts 2008 » ed European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, World Bank

7.3 Defining the contents

For the moment, the contents of this account of informality are yet to be defined. For it is desirable that its conceptual framework and that the tables which take account of it result in an international accord, subject to comparability between countries. In the meantime several propositions can be made regarding the contents of such an account (without claiming sufficiency).

For the different chapters proposed, the scales to be considered are: output, value-added, other transactions of production and generation of income accounts, jobs and non-financial assets. The distribution could be proposed by the institutional sectors and/or economic activities, as well as by geographic zone, size of establishments...

1/ A differentiated measure of the different aspects of the informal economy:

- the informal sector (informal marketing establishments depending on households), in differentiating if possible according to the different criteria proposed for characterising it, and if need be by degree of informality.

- informal employment (according to diagram 3 in chapter 2)
- households own final use non-market output, such as housing construction for own final use.

2/ Situating the informal economy in relation to the rest of the national economy:

- formal economy (and in particular formal micro-enterprises);
- underground economy (tax evasion on one hand, "underground" establishments on the other),
- assumed informal economy,
- illegal economy,
- social economy,
- subsistence economy.

3/ A diversification of the informal sector according to different criteria to be determined, such as:

- with or without employees,
- urban/rural,
- according to the size criterion,
- by entrepreneurial income group,
- the share of goods from the informal sector.

4/ Taking into account recommendations from the Delhi group, with a view to allowing international comparisons:

- establishments of less than five employees,
- establishments with no administrative record,
- isolate agriculture,
- whether it is first or second job,
- consider domestic staff separately.

5/ An analysis of informality within the household sector

Partitioning the institutional sector of households according to the informality criterion does not make much sense; in fact, several workers can belong to the same household, some can be employed in formal units; in addition, the same individual can have several jobs, with only one being informal.

In consequence, other analysis criteria of this sector should be imagined so that this diversity can be taken into account, in particular where jobs and the incomes they generate are concerned.

6/ Establishing links between poverty and informality

A country such as Peru carries out analyses concerning poverty and its evolution; it could be very interesting to apply such analyses with regard to informality.

8. STATISTICAL CHALLENGES RESULTING FROM THIS JOINED MEASURE

The presentation of the method to follow to allow a measure of informal economy in connection with the rest of the economy carries with it a certain number of requests for the statisticians.

8.1 Concerning the surveys of the informal sector

- A survey consecrated to the informal sector must take into account the specific needs of the national accountant: use of compatible classifications, annualisable economic data, method of evaluation of monetary data, ... to be defined in accordance with the national accountants of the country concerned.

- This survey must of course allow requests expressed by the CIST or the Delhi group to be taken into account. Such information is essential in supplying the satellite account.

- It is fundamental that the field retained for the survey, as well as the questions asked, allow the units retained to be situated in relation to other production units, and in particular with those susceptible to answering other economic surveys carried out in the country concerned. To do this, it may be appropriate to extend the survey to a larger area (depending on the size or juridical organisation criterion, for example), within which those which are considered to be informal are differentiated.

- More specifically, it is important to be able to analyse the continuum of the productive network between formal micro-enterprises and the informality under its different degrees of marginality.

- Exploring the possibilities of surveys allowing a measure of the evolution of the informal sector (knowing that this evolution must also take into account an eventual modification of its curve in the course of time).

8.2 In respect of the quality of information collected

This question concerns to a larger extent all surveys. It is a well-known fact that every survey is a victim of bias on the part of the units surveyed:

- In the case of economic surveys, enterprises do not declare that which concerns tax evasion, which they might practise.

- As for households, and in the case of consumer surveys, studies reveal that the under-estimation of the final consumption of households is in the order of 10 to 20% according to the country.

This raises the question: what is the scale of the phenomenon in the case of surveys in the informal economy? Some experts speak of an underestimation in the order of 30% of the incomes of own-account workers. Such hypotheses would merit that a more systematic investigation be undertaken; since reconciliations rendered by national accounting cannot take on such discrepancies without a minimum guarantee provided by the statisticians¹⁷.

8.3 Requests in favour of the satellite account

- To facilitate the measure of the informal sector starting from the central framework, one should be able to put in place a production mode dedicated to it. For this, it is necessary that the survey allows the informal establishments to be situated with regard to their neighbours, and in particular the

17 See however the study carried out in Argentina: "Cuenta de generación del ingreso e insumo de mano de obra - Fuentes, métodos y estimaciones - Años 1993 – 2005." - Octubre 2006 Dirección nacional de cuentas nacionales - Instituto nacional de estadísticas y censos (www.indec.mecon.ar/)

formal establishments of small size. This also assumes that a good knowledge of the formal sector exists, which alone allows a directory of enterprises based on data from the tax services.

- Beyond the central framework, a satellite account allows a much more complete perspective of the group affected. Still, it is necessary to have at one's disposal sources allowing the filling in of the framework retained for this; but thanks to the framing permitted by the central framework, one can be satisfied with less precise indicators.

- The evolution of informality over the course of time corresponds with a persistent grey area. For this reason, it seems at present difficult to realize annual satellite accounts of informality which are compatible. The inter-temporal information is in fact difficult to manage because of the difficulty involved in properly measuring the evolution of the population of the informal establishments over time. We await the statisticians and their backers to take up the challenge.

ANNEX

COLOMBIA: JOBS MATRIX BY PRODUCTION MODE

Status in employment	Corporations with balance sheet	Corporations only economic survey	Micro formal units	Households without economic data	Government	Non-profit institutions	Households non-market output	Total
Declared employees	3122	1076	746	75	1381	95	40	6536
Non-declared employees		0	0	1563	0	0	781	2344
Employers		137	0	214	0	0	0	351
Own-account workers		915	1456	3442	0	0	0	5813
Contributing family workers		0	0	211	0	0	0	211
Total	3122	2128	2202	5505	1381	95	821	15254

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