

**Economic and Social Council**Distr.: General  
15 June 2015

Original: English

---

**Economic Commission for Europe**

## Conference of European Statisticians

## Group of Experts on National Accounts

**Fourteenth session**

Geneva, 7-9 July 2015

Agenda item 3

**Country experiences in dealing with global production in economic statistics****Profiling in France: Implementation and results****Prepared by the National Institute for Statistic and Economics, France<sup>1</sup>***Summary*

In France, since 2008, all enterprise groups of any size have been taken into account in profiling. This is a dramatic change. Until now, business statistics still fully rely on legal units. This is the case for dissemination, data collection, data editing, and the processing of businesses accounts as an input for National Accounts. In the near future, all these operations are intended to rest on the “enterprise”, the economic unit newly defined through profiling. The presentation will sum up the reasons for this change and explain the French strategy for profiling.

---

<sup>1</sup> Prepared by Jean-Marc Béguin and Vincent Hecquet.

## I. Introduction

1. In France, since 2008, Insee has decided to take into account profiling for all groups of any size. This is a dramatic change. Until now, business statistics still fully rely on legal units. This is the case for dissemination, data collection, data editing, and the processing of businesses accounts as an input for National Accounts. In the near future, all these operations are intended to rest on the “enterprise”, the economic unit newly defined through profiling.

2. In a first part, we sum up the reasons for this change. The shift from legal unit to an economic unit (group or enterprise) provides a far better view of the concentration of the productive fabric. Beside, from a few examples, we show that this shift was necessary to ensure that the statistics are not disturbed by legal group restructurations. Some group restructurations, which are purely legal and without economic significance at all, have a large impact on the data collected in legal units. These purely legal restructurations could bring strong breaks in statistical series and in National Accounts, while the productive fabric remains unchanged from the economic point of view.

3. In a third part, we explain the French strategy for profiling, which is settled on the differential treatment of 3 targets of groups. (i) 42 of the largest groups operating in France are already profiled by face to face profiling, with a yearly meeting between groups’ managers and profilers. (ii) In contrast, about 40,200 small or median sized groups or simple groups will be automatically profiled by an algorithm, assuming that each of these groups corresponds to a single enterprise. (iii) Between these two targets, around 3,750 large or intermediate sized groups will be profiled automatically by the algorithm, but with more elaborate hypotheses, which could be even checked or ratified through surveys.

4. First results are available on each of the three targets. For larger groups, the way we identify their enterprises is largely consistent with the method that was defined by the EU ESSnet working group on Profiling. We then explain the principles of the two methods we use to build accounts of the profiled enterprises of the larger groups (on the scope of the national territory), using both administrative data and data collected from face to face profiling. For smaller groups, we sum up the principles of the algorithm we use to profile them automatically and to build the accounts of their enterprises. In the end, we present the main results regarding the representation of the French productive fabric, namely the sectoral distribution according to the three levels of units, legal unit, group and enterprise.

## II. INSEE has decided to move from a definition based on the legal unit towards a more appropriate statistical definition

5. In France, we used to equate the enterprise with the legal unit, and the whole system of business statistics was settled on the legal unit. The French system of business statistics is based on the two following pillars:

- Since 1973, INSEE has been managing the SIRENE register [1]. It lists all the legal units operating in France, and all the local units of the legal units. In non-agricultural market sectors, there are 3.1 million legal units. The SIRENE register is updated daily;
- INSEE produces Structural Business Statistics (SBS) through the ESANE process [2]. The first year of ESANE results is 2008. The aim of ESANE is to use as much as possible the administrative data in order to reduce the statistical burden. So the tax administration transmits to INSEE the tax declarations of all the 3.1 million legal

units. This is possible because in France all legal units, whatever their size, have to file a tax declaration according to the national gaap. Nevertheless, the only use of administrative sources is not sufficient: in particular, the breakdown of turnover of each legal unit according to the different activities undertaken by it is not available. So a statistical survey is conducted among a sample of enterprises to collect this supplementary information. The ESANE process conducts a specific phase to obtain consistency of the information available in both types of sources (administrative, statistical). Specific statistical procedures have been developed to produce estimates from this composite material. This ESANE process is the input to the processing of non-financial businesses in the national accounts.

6. Assimilating the legal unit to the enterprise is not relevant for group's affiliates and subsidiaries. This assimilation poses at least three problems.

- An enterprise is an economic concept and a legal unit is a legal, administrative or fiscal concept. It corresponds well to an enterprise when it is not controlled by another legal unit. This is the case of 94% of the legal units. However, those uncontrolled legal units represent only 30% of business value added. For other legal units, equating them to an enterprise is not relevant and does not give the right picture of what is going on.
- Assimilating the legal unit to the enterprise gives a wrong vision of the concentration of the productive fabric. Large groups with 10 000 + employees have on average 170 legal units in France. Reasoning in legal unit leads to underestimate the concentration of the productive fabric.
- Reorganizations of legal units within groups distort the developments we monitor. This well appears in the two following examples:
- In late 1990's, an automotive group decided to regroup the production of its vehicles while maintaining its two separate brands of cars. As part of this reorganization, each plant became identified through a legal unit. Whereas previously, flows between the plants did not appear in the accounts, they are now recorded by the legal unit's accounts and tax declarations. As a consequence, the sum of turnover and non-additive variables such as purchases dramatically increased from one year to the next. Similarly, the number of the units that we monitor in the automotive sector increased significantly, with a corresponding decrease in their size.
- A manufacturing group created two wholesale legal units to sale its products, one in France and one abroad. It appears in the statistics the two following changes: 1) appearance of two new major players in wholesale trade; 2) a margin is now assigned to these two wholesale units, while the selling prices of products have not changed. As a consequence, manufacturing production and manufacturing value added of the group are reduced. Here again, reorganizations of legal units within the group distort the developments we monitor, while nothing has changed in the economic reality.

7. INSEE has therefore decided to move from a definition based on the legal unit towards a more appropriate statistical definition. The French National Council for Statistical Information organised a workshop with statisticians and business representatives to implement this new definition, share it and disseminate it [3]. A decree to the 2008 French Law on Modernisation defines what an enterprise is, for statistical and study purposes. The enterprise is defined in the same terms as in European Regulation no. 696/93 of March 15, 1993: "the smallest combination of legal units producing goods and services with a certain degree of autonomy in decision making especially for the allocation of its current resources" and since then INSEE has been implementing this definition.

### III. Implementation of intra-group links allows a better description of a country's productive fabric

8. Currently, before profiling is completed in France, INSEE implements the definition of an enterprise by approaching each group as a single enterprise, with accounting variables simply being summed and not consolidated. In 2011, according to this approximation, there are 3.09 million enterprises in France operating in the non-agricultural and non-financial market sectors: Of that total, 3.04 million consist of a single legal unit each, and 50,000 comprise several legal units (Table 1). Of the latter, 36,000 are French-controlled groups and 8,000 are foreign-controlled groups.

9. This new definition reveals the extreme duality of the productive fabric, attributable to the importance of groups. [4] Groups account for only 2% of enterprises and 6% of legal units in France, yet they employ 63% of payroll workers (50% in French-controlled groups and 13% in foreign-controlled groups). Similarly, groups produce 66% of value added by business sector. The 2008 decree also defined four categories of company size on the basis of employment, sales (turnover) and total assets. These sizes are defined for the perimeter of France (definition). The concentration of the productive fabric is also visible in this classification. In 2011, 2.95 million enterprises in the non-agricultural and non-financial market sectors, or 95% of the total, are micro-enterprises. They employ 20% of payroll workers. At the opposite end of the scale, 214 large enterprises employ 27% of payroll workers. In the size categories in between, jobs are rather evenly distributed: some 136,000 small and medium-sized enterprises (SMEs, understood here as excluding micro-enterprises) and 4,800 intermediate-sized enterprises (ISEs) employ respectively 29% and 21% of payroll workers (chart 1).

10. The productive fabric is far more concentrated than it appeared when measured through legal units. Before the 2008 decree, economic concentration was usually measured by the economic weight of the units in different workforce-size categories. In 2011, in the non-agricultural non-financial market sectors, the number of legal units in France comes to 3.24 million. Only a hundred or so exceed the threshold of 5,000 payroll workers that defines large enterprises: they employ 13% of all payroll workers (Figure 1). When intra-group links are factored in, and with the addition of the sales and total-assets criteria, this concentration is far higher. Employing 28% of payroll workers, the 214 large enterprises weigh twice as much as legal units with 5,000+ payroll workers. They generate 33% of value added in the scope of coverage (17% of GDP), and also more than twice that of legal units of comparable workforce size. Large enterprises represent an even larger share of balance sheet variables: they alone account for 59% of total assets, versus 13% for legal units of 5,000 + payroll workers. Symmetrically, the weight of the other three enterprise categories is less significant, relative to legal units in the same workforce-size category. For most aggregates, the steepest decline in weight concerns SMEs. The reason is that a significant proportion of legal units of their size (10-249 payroll workers) consists of affiliates and subsidiaries of groups in larger categories (ISE or large enterprise). These affiliates and subsidiaries are now amalgamated with those groups under the new criteria, whereas in the legal unit approach, they were considered independent. This new image of the productive fabric has very great consequences in terms of economic policy and aid for businesses.

## Box 1

**The four categories of the 2008 Decree**

The four categories, as defined by Decree no 2008-1354, are as follows:

Micro-enterprises employ fewer than 10 people and their annual sales or total assets do not exceed €2 million.

Small and medium-sized enterprises (SMEs) employ fewer than 250 people and their annual sales do not exceed €50 million or their total assets do not exceed €43 million.

Intermediate-sized enterprises (ISEs) do not belong to the SME category, employ fewer than 5,000 people and their annual sales do not exceed €1,500 million or their total assets do not exceed €2,000 million.

Large enterprises are those enterprises not classified in the categories above.

All of these criteria are applied to the perimeter of France.

Table 1

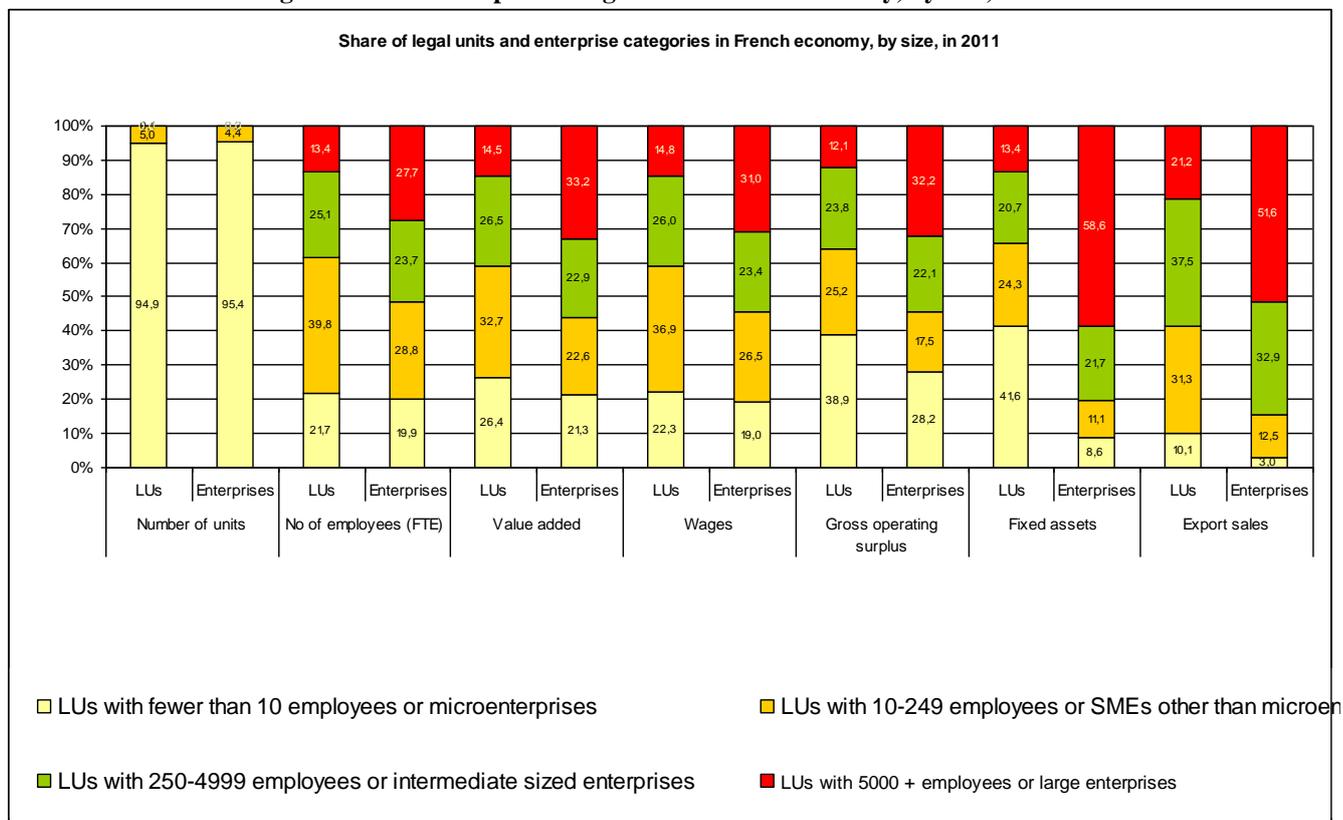
**Enterprises and legal units by category of Decree n° 2008-1354 (market sectors excluding agriculture and finance insurance)**

		<i>Large enterprises</i>	<i>ISEs</i>	<i>SMEs excl microenterprises</i>	<i>Micro-enterprises</i>
	<b>Total</b>	<b>214</b>	<b>4,794</b>	<b>136,068</b>	<b>2,951,600</b>
Number of enterprises	LUs excl groups	s	392	101,212	2,941,107
	French groups	143	3,155	30,167	8,685
	Controlled by foreign group	71	1,247	4,689	1,808
	<b>Total</b>	<b>3,847,250</b>	<b>3,289,382</b>	<b>4,114,627</b>	<b>2,883,727</b>
Paid employees of enterprises au 31/12	LUs excl groups	s	179,907	2,285,212	2,831,918
	French groups	3,266,916	2,156,241	1,595,422	44,022
	Controlled by foreign group	580,334	953,234	233,994	7,787
	<b>Total</b>	<b>3,480,291</b>	<b>2,981,034</b>	<b>3,619,367</b>	<b>2,501,206</b>
Paid employees (full time equivalent)	LUs excl groups	s	165,073	1,992,981	2,454,831
	French groups	2,949,119	1,935,917	1,409,998	39,233
	Controlled by foreign group	531,172	880,044	216,388	7,142
	<b>Total</b>	<b>19,400</b>	<b>46,689</b>	<b>207,383</b>	<b>2,963,702</b>
Number of LUs in France	LUs excl groups	s	392	101,212	2,941,107
	French groups	17,023	38,686	98,244	20,368
	Controlled by foreign group	2,377	7,611	7,927	2,227
	<b>Total</b>	<b>344</b>	<b>237</b>	<b>234</b>	<b>220</b>
Value added (billions of euros)	LUs excl groups	s	11	123	217
	French groups	271	144	92	3
	Controlled by foreign group	72	82	19	1
	<b>Total</b>	<b>87</b>	<b>60</b>	<b>47</b>	<b>76</b>
Gross operating surplus (billions of euros)	LUs excl groups	s	3	26	75
	French groups	73	37	18	0
	Controlled by foreign group	14	20	3	0
	<b>Total</b>	<b>87</b>	<b>60</b>	<b>47</b>	<b>76</b>

Scope of coverage : France, market sectors excluding agriculture and finance/insurance.

There are less than 3 legal units of ‘Large enterprise’ size, they were added to French groups for reason of statistical secret.  
 Source : Insee, É sane, Clap, Lifi 2011.

Chart 1  
**Share of legal units and enterprise categories in French economy, by size, in 2011**



How to read this chart: 94.9% of legal units have fewer than 10 employees. They employ 21.7% of all employees (payroll workers); 95.4% of enterprises/groups (uncontrolled legal units and groups) are microenterprises. They employ 19.9% of employees.

#### IV. INSEE has started the systematic profiling of all groups operating in France

11. INSEE has started the systematic profiling of all groups, approaching three targets of groups in different ways. The results presented in the previous part have been based until now on a double approximation: each group is treated as a single enterprise and accounting variables are simply summed and not consolidated. To take account of the real enterprise unit, since late 2009 INSEE has undertaken systematic profiling of all groups in France. The profiling strategy decided by INSEE is based on the differential treatment of 3 targets of groups:

- A hundred of the largest groups located in France will be progressively profiled by face to face profiling, with a yearly meeting between groups’ managers and profilers. There are notably in France 82 non-financial large groups which employ 10,000 + employees in 2011. They are the heart of this target;

- 40,200 small-and-medium sized groups or simple groups will be profiled through algorithm. There are in France 39,700 small-and-medium sized groups. We add to them 500 intermediate-sized groups consisting of just 2 legal units. These groups will be automatically profiled by an algorithm, assuming that each of these groups corresponds to a single enterprise;
- The rest of the groups will be profiled later with the learning of the work carried out on these two targets. They are 3,600 intermediate-sized groups and 131 large groups with fewer than 10,000 employees. These groups will be profiled automatically by the algorithm, but with more elaborate hypotheses, which could be even checked or ratified through surveys.

12. Face to face profiling of the largest groups was launched systematically by French business profiling team in late 2009.

- In face to face profiling, profilers meet group's managers (often the director of accounting consolidation) in order to identify within the group one enterprise or several enterprises in the meaning of the new definition. They try to identify market-oriented units with certain autonomy of management. Moreover, profilers will have to collect accounting information at the level of these enterprises. It is therefore necessary that accounting information could be collected at the level of these enterprises, such as income statement and balance sheet items;
- Profilers prepare face to face profiling of major groups according to the methods formalized in the European working group ESSnet profiling (see box 2). When the group publishes reports in IFRS standards, the segmentation presented with IFRS 8 is the entry point. However, it may happen that profilers deviate from this segmentation. This is particularly the case when the segments refer to markets of the group, and not to units with some managerial autonomy. Profilers may also depart from the IFRS segmentation if it is not possible to produce a sufficiently rich accounting information at the level of the segment.

Box 2

**The ESSnet Group on Profiling**

The ESSnet working group on profiling developed methods for face-to-face profiling of large groups. It included Eurostat and 7 countries from 2009 through to late 2013: Finland, France, Germany, Italy, the Netherlands, Switzerland and the United Kingdom. Other countries have joined since 2012 to participate in work and to test methods. The results of this ESSnet are:

1. Formalizing a common method for profiling, checking the accounting documents published by groups in a global approach: top-down profiling
2. Checking links between legal units, enterprises and groups for 150 of the largest groups in Europe
3. Common experience of profiling for several statistical institutes
4. Reports, guidelines and a handbook on profiling, shared experience of working together.

13. Mid-2014, all the profiling operations are achieved for 101 enterprises from 42 of the largest groups. These enterprises encompass 4,134 legal units. In the context of the French system of business statistics, profiling operations are the following:

- The enterprises have been identified within groups in collaboration with groups' managers. These enterprises are truncated on France's territory, since the aim is to produce national SBS and inputs to national accounts;

- For each enterprise, the legal units it encompasses have been identified;
- Income statement and balance sheets items have been reconstituted for each enterprise;
- The breakdown of turnover according to the different activities has been reconstituted for each enterprise.

14. Then, in the ESANE process, the enterprise will replace its legal units. Legal units are removed and the enterprise is introduced instead. In 2012, INSEE profiling team achieved all these operations for 30 enterprises profiled within 19 groups. These enterprises encompass 1,226 legal units. Profilers quantified the impact of profiling for these 30 enterprises (for the 2012 year). When we move from legal units to profiled enterprises, value added is unchanged, since it is an additive variable. Nevertheless, the sum of turnover decreased by 23%, since the internal flows within each profiled enterprise are now neutralized. In 2013, INSEE profiling team achieved the same operations for 71 new enterprises profiled within 23 new groups, which encompass 2,908 legal units.

15. In 2015, INSEE will disseminate data in profiled enterprises for the 2013 definitive results. Profiling is a long and difficult operation, so it is not possible to conduct it simultaneously for all major groups. However, we have to avoid too many breaks in series. So, for the 2012-year, although we have data in profiled enterprise for the first 30 enterprises we profiled, we have decided not to disseminate them. The data in profiled enterprises will be disseminated for the 101 profiled enterprises together. It will start with the 2013 definitive results that will be released in 2015. For smaller groups of the other targets, the results of profiling will be integrated later in the ESANE process. In particular, we still have to define how we will question the groups in the statistical surveys. This dissemination strategy shows that there are pragmatic solutions to avoid too many breaks in the series.

## **V. Enterprise profiling will increase the weight of the intermediate category slightly**

16. The first studies provide a measurement of the implementation of the enterprise unit, based on an automatic profiling and turnover consolidation algorithm. The method of automatic profiling that will be used to profile small and medium-sized groups has progressed considerably since 2013. This work has been done in the scope of several grant agreements launched by Eurostat on the impact of the new units on SBS.

17. In the first part, we have presented a comparison between the vision of the productive fabric in terms of legal units and another vision in which each group is treated as a single enterprise. We now add in the third intermediate vision in which each group is profiled according to the automatic profiling algorithm (box 3). According to the algorithm, 81% of groups consist of a single enterprise. However, this is the case of less than half (46%) of large groups. In addition to this, in the second vision with enterprises/groups, the aggregates are obtained by summing the aggregates of the legal units. In the latter case with profiled enterprises, an estimate of turnover is obtained by consolidating flows for legal units that are identified as auxiliary units.

## Box 3

**The algorithm of automatic profiling**

The algorithm for automatic profiling is based on the following principles [5]:

- A list of possible ancillary activities is first defined at the level of different digits of the French NAF classification. A great innovation of the method is that ancillary affiliates within the groups are not defined "a priori". They are determined through an analysis of their frequency among the 500 largest groups of France. If a group has an activity from the list heavier than the average for these 500 groups, it will be considered as market-oriented;

- Within each group, the algorithm identifies one enterprise or several according to the distribution of employment in legal units of different digits. This distribution is appreciated after ancillary activities previously defined have been removed. Thus, which is taken into account is really the diversity of market-oriented activities;

Once ancillary activities are removed, an enterprise is identified within a group if it exceeds at least one of these thresholds: more than 80 % of employment at 5 digit level, 90% at 3 digit level, 93 % at 2 digit level. The process is repeated until convergence, 9 is the maximum number of enterprises identified within in a group. These thresholds were not chosen by chance, but according to the distribution of the activities within groups.

The results of the algorithm show that 81% of groups are formed as one enterprise. 17% have 2 enterprises. Only 2% have 3 enterprises or more. The algorithm identifies on average of 2 enterprises for large groups, 1.4 for intermediate-sized groups and 1.2 for small and medium sized groups.

Table 2:

**Number of units of each type: legal units, enterprises/groups, enterprises defined through automatic profiling and consolidation**

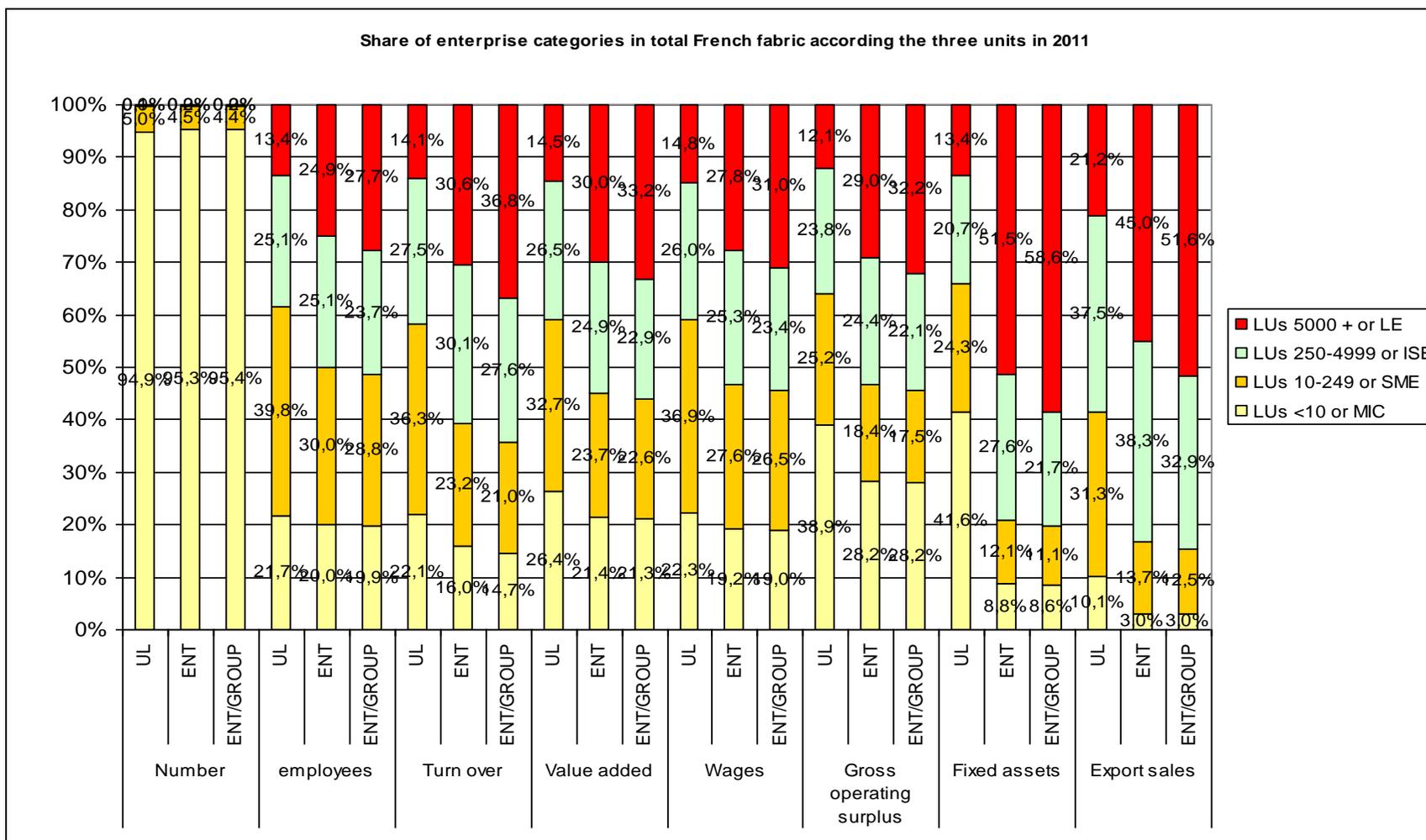
units :	Legal units	enterprises	enterprises/groups
category :		(automatic profiling and consolidation)	legal units outside groups and groups (each group = one enterprise)
LE or LU of 5 000 employees or more	108	222	214
ISE or LU of 250 to 5000 employees	4 753	5 084	4 794
SME or LU of 10-249 employees	169 991	140 341	136 068
MIC or LU of 0-9 employees	3 062 638	2 956 488	2 951 600
Total	3 237 490	3 102 135	3 092 676
	6 474 980	6 204 270	6 185 352

Source: INSEE, ESANE, Clap Lifi 2011.

18. Compared to the approach in which each group is treated as a single enterprise, the implementation of enterprises marginally modifies the number of units in the different categories. The most significant result concerns the intermediate-sized category, which rises from 4,800 to 5,100. Indeed, nearly half of large groups are profiled into several enterprises. This is the case of 67% of large groups with 10,000 + employees in France, and also of 48% of large groups with less than 10,000 employees in France. Some enterprises profiled from large groups fall below the size threshold of the largest category. However, even with this new processing, many enterprises profiled from large groups still remain above the size threshold. The number of units thus increases only slightly in the largest category, and a little more in the intermediate-sized category. Compared to the traditional vision through legal units, the visions through groups and through enterprises both dramatically reduce the number of SMEs (respectively -17% and -20%).

19. Implementation of profiled enterprises increases the weight of the intermediate-sized category, compared to the present categories defined in enterprises/groups. The impact of using each unit on the different aggregates is shown in chart 3. The comparison between legal units and the situation in which each group is treated as a single enterprise is exactly the same as in graph 1. We now also include the results for those enterprises profiled through automatic profiling. Like the number of units, the implementation of profiled enterprises increases the weight of the intermediate-sized category: its share in value added was 23% with enterprises/groups and it rises to 25% with profiled enterprises. Their share in export sales goes from 33% with enterprises/groups to 38% with profiled enterprises. Conversely, the share of the largest category is reduced, as large groups are now profiled into smaller enterprises. With enterprises/groups or enterprises, the results are both very different from those with legal units. Indeed, the key change is the inclusion of the financial control links between legal units: with the unit group or enterprise, it reveals the extreme concentration of the productive fabric.

Chart 3  
Share of enterprise categories in total French fabric according to the three units in 2011



20. Incorporating service-sector affiliates and subsidiaries increases the weight of manufacturing and construction. The change from one unit to another also changes the perception of the weight of each sector (table 3 and box 4). Large manufacturing groups comprise many affiliates and subsidiaries in their core business. However, they also often set up separate affiliates to perform sales/marketing or support functions, which are classified in the service sector. The inclusion of these legal units in the manufacturing sector increases the manufacturing workforce by 7% if we consider manufacturing-sector enterprises, by 8% if we consider manufacturing-sector groups. The impact on value added is even greater, with an increase by 12% from manufacturing-sector legal units to manufacturing-sector enterprises, and an increase by 19% to manufacturing-sector groups. The explanation is that service-sector affiliates and subsidiaries often generate higher profit margins. The same mechanism adds 0.4 points to the share of the construction industry in value added for construction-sector enterprises and 1 point for construction-sector groups. This refocusing on manufacturing and construction is even more visible for certain aggregates that are particularly affected by spin-offs as affiliates and subsidiaries, such as fixed assets. Most groups have affiliates and subsidiaries classified under specialised (scientific or technical) activities or administrative and support services (notably including head offices). The legal units classified in this sector hold 31% of fixed assets, versus 10% for enterprises in this sector and 9% for groups in this sector. In the same way, many manufacturing groups place their export sales in retail/trades affiliates and subsidiaries. In this way, the weight of manufacturing-sector legal units is just 54% of export sales, versus 64% for manufacturing-sector enterprises and 66% for manufacturing-sector groups.

Table 3

**Sector weight measured according to the three units: legal units, enterprises/groups, enterprises defined through automatic profiling and consolidation**

		Manufacturing, mining, quarrying and other industrial activities BE	Construction FZ	Wholesale/retail transportation, accommodation and restaurants GI	Real -estate activities LZ	Specialized activities, scientific and technical activities, administrative and support services MN	Other services	Total
Number of units	LUUs	7,1	14,0	31,7	4,6	17,1	25,6	100,0
	Enterprises	6,9	14,3	32,1	4,1	16,8	25,9	100,0
	Enterprises/Groups	6,9	14,3	32,1	4,1	16,7	25,9	100,0
Number of employees	LUUs	23,9	10,6	36,7	1,5	14,6	12,6	100,0
	Enterprises	25,5	10,9	36,6	1,5	13,3	12,3	100,0
	Enterprises/Groups	25,9	11,0	36,8	1,5	12,9	11,9	100,0
Turnover	LUUs	27,9	7,0	44,4	1,8	9,1	9,8	100,0
	Enterprises	31,2	7,9	42,1	1,7	7,8	9,3	100,0
	Enterprises/Groups	34,7	7,8	40,0	1,6	7,8	8,2	100,0
Value added	LUUs	24,4	8,6	31,1	3,5	16,1	16,2	100,0
	Enterprises	27,4	9,0	30,8	3,0	14,1	15,7	100,0
	Enterprises/Groups	29,1	9,7	29,3	3,0	13,9	14,9	100,0
Wages	LUUs	24,3	9,7	32,0	1,5	19,1	13,5	100,0
	Enterprises	27,0	10,1	32,0	1,5	16,5	12,9	100,0
	Enterprises/Groups	27,7	10,2	32,0	1,5	16,1	12,5	100,0
Gross operating surplus	LUUs	23,3	5,8	27,1	8,1	12,3	23,5	100,0
	Enterprises	26,5	6,2	26,6	6,4	11,1	23,1	100,0
	Enterprises/Groups	27,6	8,5	24,8	6,3	11,6	21,2	100,0
Fixed assets	LUUs	18,3	3,6	16,3	7,1	31,2	23,5	100,0
	Enterprises	40,8	6,1	27,1	5,8	10,0	10,2	100,0
	Enterprises/Groups	44,0	6,8	25,7	5,8	9,2	8,5	100,0
Export sales	LUUs	54,0	0,7	30,3	0,1	7,6	7,3	100,0
	Enterprises	63,8	2,3	25,9	0,1	4,8	3,2	100,0
	Enterprises/Groups	66,1	1,6	24,2	0,1	5,2	2,9	100,0

Scope of coverage: France, market sectors excluding agriculture and finance/insurance.

Source: INSEE, ESANE, Clap Lifi, 2011

## Box 4

**Industry and sector: what is the share of manufacturing?**

There are different ways of measuring the share of an economic activity in a country's total economy. One example is the measurement of the manufacturing (understood in this box as the one section C, manufacturing, excluding mining and quarrying (B) and other industrial activities (D,E)).

One approach, called the **industry-based approach** (in French: par branche), measures the share of a particular activity irrespective of the enterprises that engage in it. It is the approach of national accounts. In France, the value added by manufacturing activities represented 10,2% of GDP in 2011.

Another approach, called the **sector-based** (in French: par secteur) approach, measures the share of enterprises engaged in a given principal activity by aggregating all their activities:

- If we consider the **sector of legal units** whose principal activity is manufacturing, its share is slightly higher than in the industry-based approach, at 10.4% of GDP. The difference is due to the fact that some manufacturing legal units also engage in secondary activities in the tertiary (service) sector, whose value added is accordingly included in the manufacturing total.

If we consider the **sector of manufacturing enterprises/groups**—the approach emphasized in categories as calculated until now —the manufacturing share is an even greater 12.5% of GDP. Here, the service-sector subsidiaries of manufacturing groups are included in the total.

If we consider the **sector of manufacturing profiled enterprises**—as profiled in this study through automotive profiling —the manufacturing share is 11.7% of GDP. Here, the service-sector enterprises of manufacturing groups are not included. Symmetrically, manufacturing-sector enterprises of non-manufacturing sector groups are now included in the total.

21. INSEE will continue to observe the productive fabric through these four units: local units, legal units, enterprises and groups. It should be remembered that the implementation of profiling does not imply that the other units will disappear in favour of the sole enterprise unit. INSEE will continue to use the four units, because each of them has its relevance:

- Local unit is probably the most relevant unit to monitor the location of activities and employment on the territory;
- Legal unit is the level at which we face concerns related to particular types of legal forms (such as holdings, limited companies, unincorporated or corporate business...). Issues such as the impact of legal thresholds on firm size distortions have to be checked at the legal unit level;
- Enterprise is the most relevant unit for SBS statistics and for analysing the operating cycle: employment, turnover, value added, gross operating surplus and investment, etc. Approaches by sector are probably most relevant at the enterprise-sector level;
- Group taken as a whole is the most relevant unit for the financial and balance sheet variables. Variables such as debt or dividends make sense the most at the group level.

## Bibliography

[1] All about Sirene register (on Insee.fr)

[2] The new French System of Production of Structural Business Statistics, Ph. Brion - Fourth International Conference on Establishment Surveys (Montreal, June 2012)

[3] Structural statistics based on enterprise groups and subgroups, report of a working group of the French National Council for Statistical Information, 2008, E Salustro, C Ménard, R. Depoutot (on Cnis.fr)

[4] France's economic fabric more concentrated than it seemed. New definition and new categories of enterprises, J.M. Béguin, V. Hecquet, J. Lemasson, Insee-première N°1399, 2012, Paris (on Insee.fr)

[5] Report to Eurostat, Analysis of the impact of the changes in the definition of the statistical unit enterprise on SBS - Quantification in the break in series in national data Lot 2 Task 2 NoLI/LU/L1908/ J.M. Béguin, February 2014.

---