
***PART ONE:
GENERAL DESCRIPTION OF SURVEY***

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1.1. - Historical summary

INSEE conducted its first business survey in 1951¹. It was patterned on the surveys performed in the United States at regular intervals since 1947 by the magazine *Fortune*. The INSEE survey covered 3,000 enterprises, mainly in manufacturing, but also in retailing, banking, insurance, and transport. The questionnaire comprised two parts: the first concerned the respondent's sentiment on the overall French economy; the second focused on the situation of the enterprise surveyed. Thanks to its initial success, the survey was repeated twice a year until 1957, then four times a year. However, in light of the results obtained, two changes were subsequently introduced:

- an increase in the number of questions on the enterprise and a reduction in the number of those on the overall economy, the results of the former having been found to be more reliable than those of the latter;
- the development of questionnaires tailored to specific industries.

At the same time as in France, but independently at the outset, business surveys were launched in Germany by IFO, the Munich-based Institute for Economic Research, and in Italy by the Rome-based VISCO. In 1952, these two organisations began an informal cooperation with INSEE in the field of business surveys, which was progressively extended to institutes in many other countries.

One of the milestones was the June 1962 launch by the European Communities Commission—on the strength of the French, German, and Italian experience—of the harmonised monthly survey of industrialists in the Community. Two frequencies were adopted: monthly for questions on business activity; four-monthly for sector-specific questions such as productive capacity and workforce size.

In 1979, the four-monthly section of the Survey became quarterly. Of the ten business surveys currently managed by INSEE, the Industry Survey is the one that has remained most stable over time. The main changes have consisted in a gradual reduction in the share of questions on overall sentiment and a corresponding increase in the share of questions more directly focused on the enterprise's specific activity, thus allowing a more refined analysis. Since 1991, its scope of coverage has been harmonised, enterprises with fewer than 20 employees have been excluded from the sample, and the Survey's quarterly waves have been conducted in January, April, July, and October. In July 1997, the questions on total and export demand were simplified and new questions on competitiveness were added.

The Industry Survey has been part of the Harmonised European Programme of Business and Consumer Surveys since 1984 (see §4). Its slight recent changes have been driven by the advances in European business-survey harmonisation. One example is the January 2004 rewording of the question on productive capacity.

The Survey was submitted for review to the Quality Label Committee of the National Council for Statistical Information (Conseil National de l'Information Statistique: CNIS) on 19 June 2003. The Committee renewed the Survey's classification as a statistical operation "of public interest" and recertified its statistical quality. The Survey was also granted "compulsory" status in January 2004.

¹ Preceded by a pilot survey in November 1950.

1.2. - Purpose of Industry Survey

Like all business surveys, the Industry Survey is a component of the French system for preparing short-term economic analyses and forecasts. It supplies valuable, timely indications on industrialists' recent activity and short-term outlook. However, the qualitative nature of business-survey responses and their subjectivity make them delicate to interpret. The value of the survey results is therefore greater before the availability of the quantitative statistics.

Business surveys have another advantage besides rapid availability of information: they supply a fairly complete, consistent picture of an industry, shedding light on areas covered on a very lagged basis (if at all) by conventional statistics. For example, the monthly Industry Survey gives a view of activity in each sector tracked and explanations for the trends observed (production, stock levels, change in order books, etc.)—an essential input for short-term forecasting. As a result, the Industry Survey helps to track industrial production (see §3.1.4).

The Industry Survey is one of the components of the EU sub-annual statistical system. Because of its inclusion in the Joint Harmonised European Union Programme of Business and Consumer Surveys, its results can be compared with those of industry surveys conducted by other European Institutes participating in the system (identical questions, frequency, survey periods, and publication dates). INSEE's Industry Survey is thus the prime French source for analysing and forecasting industrial activity in the EU and the euro zone as a whole or on a country-by-country basis.

The latter aspect is becoming more valuable and important with the deepening and enlargement of the EU. Particularly since the implementation of the European economic and monetary union, decision-makers in both the public and private sectors have expressed a greater need for timely sub-annual economic indicators that are comparable between Member States and can be aggregated at the euro-zone level. This increased need, linked to new objectives (most notably, to provide aid for defining European monetary policy), creates a dynamic that fosters progress in harmonising EU business surveys and improving the statistical investigation system of which they are the components. However, the Industry Survey has undergone only relatively marginal changes as a result of these developments (see §1.1). Moreover, EU enlargement has led to a progressive increase in the number of countries joining the Harmonised Programme of Business and Consumer Surveys and has thus enhanced the potential for a significant expansion of the battery of European short-term economic indicators.

1.3. - Survey field

The Industry Survey covers business owners in manufacturing, the food industries, and oil refineries. The scope of coverage² is described in Table 1 below, showing the corresponding levels of the French Aggregated Economic Classification (Nomenclature Économique de Synthèse³: NES) and according to the groupings used in the publication of results. The corresponding headings of the French Classification of Activities (Nomenclature d'Activités Française: NAF) are given in Appendix 3. This is the scope of coverage for which the Survey was published at the time the present volume was completed.

² The Survey covers nearly all industrial enterprises with more than 20 employees (see Appendix 2).

³ The Nomenclature Économique de Synthèse (NES), adopted by INSEE in 1994, is a dual, aggregated national classification—of economic activities and products—relevant to economic analysis. The groupings are a common denominator for the presentation of aggregate economic statistics, valid for all fields. Their purpose is to reflect, as faithfully as possible, the behaviour of economic agents vis-à-vis their markets. By contrast, the structure of NACE (European Community Classification of Economic Activities: Nomenclature des Activités dans la Communauté Européenne) and NAF (French Classification of Economic Activities: Nomenclature d'Activités Française) are based on criteria involving production processes or production-channel organisation. The NES is divided into 3 levels with 16, 36, and 114 positions respectively.

Table 1: *Industry Survey scope of coverage in Aggregated Economic Classification (Nomenclature Économique de Synthèse: NES)*

ALL INDUSTRY	16-heading NES	36-heading NES	114-heading NES
	EB: FOOD PRODUCTS, BEVERAGES, AND TOBACCO	B1: Meat and dairy industries B2: Other food industries	B01: Production, processing, and preserving of meat and meat products B02: Manufacture of dairy products B03: Manufacture of beverages B04: Manufacture of grain mill products, starches and starch products, and prepared animal feeds B05: Manufacture of other food products
	EG: ENERGY	G1: Extraction of coal, crude petroleum, gas and uranium; manufacture of coke, refined petroleum products, and nuclear fuel	G14: Manufacture of coke oven products and processing of nuclear fuel (except manufacture of coke oven products) G15: Manufacture of refined petroleum products
MANUFACTURING INDUSTRY	EF: INTERMEDIATE GOODS	F1: Mining and quarrying except energy-producing materials, manufacturing of other non-metallic mineral products F2: Manufacture of textiles F3: Manufacture of wood, wood products, pulp, paper, and paper products F4: Manufacture of chemicals, rubber, plastic, and chemical products F5: Manufacture of basic metals and fabricated metal products F6: Manufacture of electric and electronic components	F12: Other mining and quarrying F13: Manufacture of glass and glass products F14: Manufacture of ceramic goods, products for construction purposes, and other non-metallic mineral products F21: Preparation and spinning of textile fibres, weaving and finishing of textiles F22: Manufacture of textile articles, except apparel F23: Manufacture of knitted and crocheted fabrics and articles F31: Manufacture of wood and wood products F32: Manufacture of pulp, paper, and paperboard F33: Manufacture of articles of paper and paperboard F41: Manufacture of basic inorganic chemicals F42: Manufacture of basic organic chemicals F43: Manufacture of agro-chemical products, paints and other chemical products F44: Manufacture of man-made fibres F45: Manufacture of rubber products F46: Manufacture of plastic products F51: First processing of iron and steel F52: Manufacture of basic precious and non-ferrous metals F53: Casting of metals F54: Industrial services for treatment of metals F55: Manufacture of fabricated metal products F61: Manufacture of electrical equipment and apparatus n.e.c. F62: Manufacture of electronic valves, tubes, and other electronic components

MANUFACTURING INDUSTRY	EE: CAPITAL GOODS	<p>E1 Building of ships and boats, manufacture of railway locomotives, rolling stock</p> <p>E2: Manufacture of metal products, machinery, and equipment</p> <p>E3: Manufacture of electrical and electronic equipment</p>	<p>E11: Building and repairing of ships and boats (except building of warships) E12: Manufacture of railway and tramway locomotives and rolling stock E13: Manufacture of aircraft and spacecraft (except military craft) E14: Manufacture of motorcycles, bicycles, and other transport equipment n.e.c.</p> <p>E21: Manufacture of structural metal products E22: Manufacture of metal tanks, reservoirs, and containers; manufacture of central-heating radiators, boilers, and steam generators E23: Manufacture of machinery for the production and use of mechanical power E24: Manufacture of other general-purpose machinery E25: Manufacture of agricultural and forestry machinery E26: Manufacture of machine tools E27: Manufacture of other special-purpose machinery E28: Manufacture of weapons and ammunition (except manufacture of armaments)</p> <p>E31: Manufacture of office machinery and computers E32: Manufacture of electric motors, generators, and transformers (except repair of electrical equipment) E33: Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy E34: Manufacture of medical and surgical equipment and orthopaedic appliances E35: Manufacture of industrial process control equipment, instruments and appliances for measuring, checking, testing, navigating</p>
MANUFACTURING INDUSTRY	ED: MOTOR VEHICLES	D0: Manufacture of motor vehicles	<p>D01: Manufacture of motor vehicles, bodies, and trailers D02: Manufacture of parts and accessories for motor vehicles</p>
MANUFACTURING INDUSTRY	EC: CONSUMER GOODS	<p>C1: Manufacture of clothing articles and leather products</p> <p>C2: Publishing, printing, and reproduction of recorded media</p> <p>C3: Manufacture of pharmaceutical products, perfumes, soap, and cleaning preparations</p> <p>C4: Manufacture of domestic equipment</p>	<p>C11: Manufacture of wearing apparel; dressing and dyeing of fur C12: Manufacture of leather and leather products and footwear</p> <p>C20: Publishing, printing, and reproduction of recorded media</p> <p>C31: Manufacture of pharmaceuticals, medicinal chemicals, and botanical products C32: Manufacture of soap and detergents, cleaning and polishing preparations, perfumes, and toilet preparations</p> <p>C41: Manufacture of furniture C42: Manufacture of jewellery and musical instruments C43: Manufacture of sports goods, games, toys, and other goods n.e.c. C44: Manufacture of domestic appliances C45: Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods C46: Manufacture of optical instruments, photographic equipment, watches and clocks</p>

1.4. - Sampling plan

The unit surveyed is the enterprise.

Two criteria are used to classify enterprises: (1) principal activity, at the NES 114 level; (2) workforce size and as an indicator of enterprise size⁴.

The sampling frame is the latest available Annual Enterprise Survey (Enquête Annuelle d'Entreprise: EAE).

The number of units surveyed is chosen for consistency with the weights of individual sectors in total French industry. More specifically, it is proportional to the shares of total turnover (sales) by the sectors in each corresponding grouping of the Annual Enterprise Survey. This sample-construction method is used only for enterprises in brackets 1 and 2 (fewer than 500 employees). All units in bracket 3 (500 or more employees) are surveyed, as are all enterprises with annual turnover exceeding €150 million, irrespective of size.

1.5. - Questionnaires

The Industry Survey is conducted every month except August. However, only some questions are actually asked monthly. One set of questions is asked on a quarterly basis in a fuller questionnaire, while a third set is asked once a year.

Two versions of the questionnaires have been developed to accommodate these specific monthly variations:

- A shorter questionnaire for February, March, May, June, September, November, and December. These are the months of the “monthly” survey. This version contains only the 11 monthly questions.
- A detailed questionnaire is sent in January, April, July, and October. In addition to the monthly questions, this version includes the quarterly questions.

All questionnaires contain a section to identify the surveyed enterprise. The section contains the business name and address of the enterprise, its SIREN (i.e., business register) number, and the name, title, telephone number, and email address of the person responding to the survey. The questionnaire also displays the NES 114 code for the enterprise’s principal activity.

The list of the main survey questions is provided in Appendix 4. Appendix 5 reproduces the full text of the two questionnaire models for 2006 (monthly and quarterly).

1.6. - Questions asked in the Industry Survey

1.6.1. - Two types of questions

As in nearly all other national business surveys, the Industry Survey comprises two distinct categories of questions: structural questions, asked once a year, and short-term questions, generally asked at a sub-annual frequency. The data obtained from the second category allow a monitoring of short-term trends in the surveyed sector, while the structural data serve for weighting and stratification.

- **Structural questions** are asked every April. The responses are then preprinted on the questionnaires until the following April. The questions are quantitative, and concern the enterprise’s total turnover and workforce size, and, for each product, total sales (France + export), as well as total export sales. These data are quantitative.
- **The short-term questions** cover one of the following areas:
 - the enterprise itself: workforce size, wages, productive capacity, etc.;

⁴ Size brackets are defined as follows for the specific purposes of the Survey: bracket 1: 20-99 employees; bracket 2: 100-499 employees; bracket 3: 500 or more employees.

- the individual products that it manufactures: changes in production (past and expected), demand (total and export), stocks, and prices;
- the enterprise's sentiment on the overall situation in French industry (question on general business outlook in French industry as a whole);
- the raw materials that the enterprise uses in its production process.

Most of the short-term questions are qualitative, in order to make easy the firm's answers responses⁵.

1.6.2. - Main topics addressed by short-term questions

- Business activity

Measured by data on the production and ordering intentions for each product, as well as product stocks.

Business owners are also asked about the likeliest change, in the three months ahead, in total French industrial production. This is also referred to as the general business outlook.

- Prices

Prices are addressed from two angles: past and expected selling prices. The price questions concern each of the enterprise's products.

- Employment

Business owners are asked about recent changes in employment in their enterprises (change in workforce size in past three months), and about their employment expectations (change in workforce size in months ahead).

- Competitiveness

Competitiveness is addressed by three quarterly questions on the enterprise's competitiveness in the domestic market and in export markets inside and outside the European Union.

- Factors limiting production

The Industry Survey includes quarterly questions on factors limiting production: bottlenecks and productive capacity utilisation. The goal is to identify the causes of restrictions in the enterprises' supply: slack demand and constraints on the factors of production.

1.6.3. - Some examples of short-term questions

Here are some examples, from the 2006 questionnaires, of qualitative questions asked in the Industry Survey⁶. Respondents are offered three choices for their answers: positive (increasing, above normal), intermediate (unchanged, normal) or negative (decreasing, below normal):

- Change in your production in past three months: increasing, unchanged, decreasing?
- Likely trend in your production in next three months: increasing, unchanged, decreasing?
- For the season, do you consider your current orders (or your current demand) to be: above normal, normal, below normal?
- For the season, do you consider your current stocks of manufactured products to be: above normal, normal, below normal?
- Likely change in your selling prices (excluding taxes) in next three months: increasing, unchanged, decreasing?

⁵ The exceptions concern the questions on production margins, productive capacity utilisation rates, and price and wage trends (see Appendix 4).

⁶ See also, in Appendix 5, the full text of the general-questionnaire models.

As we shall see in greater detail in Parts 2 and 3 (§2.4.3 and §3.1.1), the responses to each qualitative question are summarised in a single indicator called the *balance of opinion*. A balance of opinion is defined as the difference between the percentage of positive responses (increasing, above normal) and the percentage of negative responses (decreasing, below normal)⁷. From experience, this type of indicator is both very legible and very useful for short-term analysis. The dissemination of results of business surveys such as the Industry Survey largely consists in publishing the main opinion balances computed from the responses and in interpreting their changes.

As noted earlier, some questions in the Industry Survey were modified starting with the January 2004 questionnaires at the request of the European Commission, as a consequence of the development of harmonised questionnaires offering a greater degree of precision than previously for several business surveys⁸. To comply with these requirements, some questions in the Industry Survey have partly rephrased. For example, the questions now ask about “changes” rather than “trends”.⁹ Only one question was significantly rewritten: the question on the productive capacity utilisation rate. Until January 2004, the question concerned “production margins” (labelled “Margins”) that the enterprise could achieve by hiring additional workers, and the productive capacity utilisation rate (CUR) was deduced by applying the formula $CUR = 100/(1+Margins/100)$. Henceforth, business owners will be asked to assess their productive capacity utilisation rate directly. The question asked is the following:

- “Your enterprise is currently operating at % of its available capacity. (Indicate the ratio of your current production to the maximum production attainable if you were to hire additional workers.)”

The drawbacks entailed by the reworded responses are more than offset by the advantages of the convergence of the French Industry Survey with the other sectoral business surveys harmonised at the European level. More generally, the questionnaire changes will increase the comparability of responses in different countries but also in different industries. They will facilitate the preparation of industry-specific and macroeconomic synthetic indicators offering high legibility at the national and European levels.

⁷ As a rule, these percentages are weighed by sales or workforce size, depending on the question.

⁸ This greater precision was motivated by the search for closer harmonisation of European business surveys. Previously, the harmonised questions left some room for interpretation. This was a potential cause of discrepancies—most of them admittedly minor, with a few exceptions—between the wordings of national questionnaires. The margins of interpretation have been eliminated by choosing more literal wordings in the new harmonised questionnaires.