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

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

### **1.1. - Origins: a survey almost fifty years old**

INSEE conducted its first business survey in 1951<sup>1</sup>. It was patterned on the surveys performed in the United States at regular intervals since 1947 by the magazine *Fortune*. The survey was repeated twice a year until 1957, then four times a year. Two changes were gradually introduced:

- an increase in the number of questions on the enterprise and a reduction in the number of those on the overall economy
- the development of questionnaires tailored to specific industries.

In **1963**, INSEE launched the Investment Survey. From the outset, the Investment Survey featured a larger quantitative component than the other business surveys. The main aggregate tracked was total annual investment for three consecutive years. At the time, the Survey distinguished between “certain” investment and “conditional” investment in the current year. To round out the analysis of investment, the Survey also included questions on:

- conditions for undertaking conditional investment
- six-month changes—quantitative and qualitative—in total capital-expenditure orders, with a breakdown between equipment and construction expenditures
- changes in productive capacity
- investment financing methods
- quantitative changes in turnover, workforce, and investment prices.

The Survey was administered three times a year, in March, November, and June.

The Survey underwent a major redesign in **1991**. The timetable changed: industrial firms would be questioned in January, April<sup>2</sup>, and October. The questionnaire now included the notion of investment in leased assets, distinct from that of investment in non-leased assets. The form was streamlined by replacing certain quantitative questions with qualitative indicators on six-month changes in investment. New questions on equipment scrapping were added.

**In 1998**, the NAP (Nomenclature d’Activités et de Produits) classification was abandoned in favour of the NAF (Nomenclature d’Activités Française) classification. **In 2003**, with the introduction of a July wave, the Survey became quarterly. This shift provided an opportunity to revise the Survey. The questions on changes in prices and in the investment mix were removed. The distinction between investment in leased and non-leased assets was eliminated.

**Since January 2004**, the National Council for Statistical Information (Conseil National de l’Information Statistique: CNIS) has classified the Survey as “compulsory”.

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<sup>1</sup> Preceded by a pilot survey in November 1950.

<sup>2</sup> Except in 1991, when a May survey replaced the April survey.

## **1.2. - Purpose of the Survey: to measure industrial investment**

### ***1.2.1. - Definition: from national accounting to business accounting***

National accounting defines investment—also known as gross fixed capital formation (GFCF)—as “acquisitions minus sales of fixed assets undertaken by resident producers in the reference period, plus selected capital gains on non-produced assets generated by the production activity of production units or institutional units”.

Fixed assets are tangible or intangible assets generated by production processes and used repeatedly or continuously in other production processes for a year or more. GFCF includes investment in leased assets and in assets with a hire-purchase option. It excludes land and intangible assets except software, original works of art, geological and mine prospecting, architecture and engineering expenses, real-estate development expenses associated with the acquisition of a real-estate asset, and expenses associated with the transfer of property of new durable goods consisting of land, intangible assets, buildings, or other fixed capital assets.

This definition, which is hard to transpose to business accounting, was not adopted as such in the Investment Survey. Under its pragmatic approach, the Survey therefore uses a definition that is as consistent as possible with the national-accounting definition while facilitating the respondents’ task. The Survey accordingly covers the three main categories of GFCF defined in national accounting:

**1 - Acquisitions or creation for own account of tangible assets other than capital contributions**

**2 - Nominal value of goods (movable or fixed assets) covered by lease contracts in the calendar year**  
(i.e., value of goods at the time of the contract signature, not the total annual payments)

**3 - Software acquired or developed for own account**

**...excluding land.**

These are gross investments (with no deduction for write-offs), net of deductible taxes.

As the Survey concept of investment does not take account of any current asset disposals, it is a “gross” measure and not a “net” measure as in national accounting.

### ***1.2.2. - Survey field: industrial enterprises***

#### **1.2.2.1. - Unit surveyed: an enterprise in France**

As specified in the questionnaire (*see* Appendix 2), the unit surveyed is the enterprise (firm). The Survey’s scope of coverage may, however, occasionally differ from that of the accounts of the legal unit. This is because the Survey focuses on activity and investment in France. If an enterprise possesses local units (establishments) abroad, the Survey scope may thus diverge from that of the accounts of the legal unit.

There may also be a divergence when the enterprise comprises local units whose principal activity is not industrial. In this case, the enterprise should report only investment undertaken for its industrial local units.

For some large industrial groups, the Survey covers several enterprises with a single questionnaire. The unit surveyed is the group or the group’s industrial segment. This centralised approach offers two advantages: (1) simpler management and (2) elimination of potential double-counting due to intra-group activity flows.

#### **1.2.2.2. - Industrial enterprises with more than 20 employees**

The Survey covers the following sectors: food industries, manufacturing, and a portion of the energy sector (*see* Box 1).

The Survey's restriction to industrial enterprises is largely due to the sector's historical importance. Despite its declining weight, industry remains a significant component of the French economy. While industry (manufacturing + food, excluding energy) represented only 13% of the number of enterprises in 2005 (*see* Table 1), it still accounts for 31% of total turnover (sales) and 23% of total investment.

**Table 1:**  
Breakdown of number, workforce size, turnover, and investment (%)

	Number			Workforce size			Turnover			Investment		
	1995	2000	2005	1995	2000	2005	1995	2000	2005	1995	2000	2005
Food	2.7	2.2	1.9	4.5	4.1	3.8	6.3	5.0	4.9	3.4	3.9	3.1
Manufacturing	13.3	12.2	10.7	31.2	27.6	23.7	28.0	26.9	26.1	21.8	22.0	19.5
Energy	0.2	0.2	0.2	1.4	1.4	1.8	2.0	3.7	4.9	3.1	6.7	5.3
Building	9.3	9.6	10.3	9.6	8.0	8.3	5.4	4.5	4.8	2.3	2.0	2.4
Wholesale/retail	34.1	31.5	28.8	21.6	22.3	22.0	37.6	39.1	36.0	13.5	12.3	10.8
Transport	4.4	4.2	3.9	6.4	8.9	8.2	4.7	5.3	5.0	12.1	8.5	14.2
Services	36.0	40.1	44.2	25.3	27.7	32.1	16.0	15.7	18.3	43.7	44.7	44.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Sources:** standard corporate tax returns (Bénéfices Réels Normaux: BRN); INSEE; authors' estimates

Moreover, investment is far more concentrated in industry than in other activity sectors. In manufacturing, firms with 500+ employees represent less than 1% of the total number of enterprises but account for one-half of total investment (*see* Table 2). In services, large firms account for only 35% of total investment. Owing to this high concentration, a sample survey provides easier coverage of investment in industry than in other economic sectors.

**Table 2:**  
Breakdown of investment in 2005 by activity sector and enterprise size (%)

Enterprise size	Food		Manufacturing		Energy		Building		Wholesale/retail		Transport		Services		Total	
	No.	Inv.	No.	Inv.	No.	Inv.	No.	Inv.	No.	Inv.	No.	Inv.	No.	Inv.	No.	Inv.
< 20 empl.	74.8	7.8	72.8	15.9	85.5	3.0	85.5	35.7	90.2	27.7	76.8	14.9	92.4	31.6	88.0	22.9
20-99	19.1	17.8	21.4	14.1	13.2	4.3	13.2	30.9	8.5	26.6	19.1	18.7	6.3	17.7	10.0	20.0
100-499	5.1	29.7	4.9	20.5	1.2	3.3	1.2	18.1	1.2	21.0	3.6	18.6	1.1	16.0	1.7	19.3
>= 500	1.0	44.7	1.0	49.5	0.2	89.4	0.2	15.3	0.2	24.7	0.5	47.7	0.2	34.7	0.3	37.9
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**No.:** number - **Inv:** investment expenditures

**Sources:** tax returns (BRN); INSEE; authors' estimates

**Box 1:** Survey scope of coverage in terms of NAF Revs. 1 and 2 categories

The current scope of coverage of business surveys in industry in terms of NAF Rev. 1 categories comprises “other mining and quarrying industries” (NAF 14), the food industry (NAF 15), and nearly all manufacturing industries (NAF 17-36), for a total of 317 categories. The current scope excludes the tobacco industry (NAF 16), manufacture of coke-oven products (NAF 23.1Z), manufacture of weapons (NAF 29.6A), repair of electrical equipment (NAF 31.1C), and construction of warships (NAF 35.1A) . Also excluded are NAF 10-13 (mining of coal, lignite, peat, uranium ore, metal ore, etc.), as they account for less than 1% of total turnover of industrial enterprises with more than 20 employees.

The scope of coverage of business surveys in industry in terms of NAF Rev. 2 includes nearly all “other mining and quarrying industries” (NAF 08) and support services for mining and quarrying industries (NAF 09), the food industry (NAF 10-11), and nearly all manufacturing industries (NAF 13-33), for a total of 262 categories. Consistently with the current scope, the new scope excludes mining and quarrying of coal and lignite (NAF 05), hydrocarbons (NAF 06), metal ore (NAF 07), and peat (NAF 08.92), support activities for hydrocarbon mining (NAF 09.10Z), the tobacco industry (NAF 12), manufacture of coke-oven products (NAF 19.10Z), and the construction of military combat vehicles (NAF 30.40Z).

### ***1.2.3. - Common core: changes in investment***

INSEE conducts its Investment Survey every quarter, in January, April, July, and October. The questionnaires include a common core on changes in investment. This common core is supplemented by specific questions, of a more structural type, in April and October (*see* Appendix 2).

#### **1.2.3.1. - Box I: general data, enterprise identification**

Enterprises are asked to provide information on size by listing their turnover and the number of employees. These annual figures are updated in the April wave. For these data, the April questionnaire is therefore left blank. The responses are then reproduced in the questionnaires of the three later surveys (July, October, and January of the following year).

The second set of information collected in this box concerns changes in corporate structure. The purpose is to determine if the enterprise has experienced or will experience a structural change such as a takeover, merger, partial contributions of assets, or a partial or total spin-off. The reason is that investment in the three years of interest must be measured on a constant-structure (i.e., like-for-like) basis.

#### **1.2.3.2. - Box II: investment in France**

The main information gathered by the Survey consists of **annual investment expenditures** for three consecutive years, which allows the determination of two growth rates.

In the January, April, and July waves of year N, firms are asked to give their investment for years N-2, N-1, and N. In the October year-N wave, they indicate their investments in years N-1, N, and N+1. These questions serve two purposes: first, they yield information on current business conditions; second, they enable us to determine the size of the firm's investment. In turn, investment spending also serves to weight other questions on current conditions (*see* §2.3).

Firms will provide the year-N investment figure twelve times between the October N-1 and July N+2 waves (*see* Table 3), enabling INSEE to produce eight consecutive estimates of annual investment growth.

Starting in 2008, the investment figures will be pre-printed from the ninth wave onwards. Pre-printing offers several advantages:

- It reduces measurement errors inherent in “memory effects”. Respondents report problems in supplying year-N investment figures after July of year N+1, i.e., after the close of the accounting period.
- It gives respondents a clear indication of the October change in base year.
- It also reduces the statistical response burden.

The correlation between annual investment growth measured for a given survey-wave rank and the same rate computed for all non-financial enterprises (NFEs) in the national accounts is found to be highest for the eighth wave. After that, the quality of the information collected by the Survey does not improve and may even worsen slightly. Since 2008, therefore, the questionnaire is pre-filled with the response to the eighth wave or, in its absence, the response to the seventh wave.

**Table 3:**  
Twelve questions on year-N investment

Survey	Year of interest	N-1	N	N+1	N+2
July N-1		4th			
October N-1		5th	1st		
January N		6th	2nd		
April N		7th	3rd		
July N		8th	4th		
October N		9th	5th	1st	
January N+1		10th	6th	2nd	
April N+1		11th	7th	3rd	
July N+1		12th	8th	4th	
October N+1			9th	5th	1st
January N+2			10th	6th	2nd
April N+2			11th	7th	3rd
July N+2			12th	8th	4th
October N+2				9th	5th

**How to read this table:** Respondents are asked for the year-N investment figure for the first time in the October N-1 wave and for the twelfth and last time in the July N+2 wave.

In addition to annual investment for the three consecutive years, the questionnaire's common core includes two qualitative questions (i.e., with a choice of three answers: "increase", "stability" or "decrease") on **the change in investment in the past six months and the expected change in the six months ahead**. In the January and July waves, "past change" concerns the previous half-year; "expected change" concerns the current half-year. In the April and October waves, "past change" concerns the current half-year; "expected change" concerns the half-year ahead.

### 1.2.4. - Boxes specific to April and October waves

The common core is supplemented in the April and October waves by two and three question blocks respectively, which provide information for analysing equipment expenditures from a more structural angle (*see* Appendix 2).

#### 1.2.4.1. - April wave: two specific boxes

The first question block concerns investment purposes. Respondents are asked to classify past-year and current-year investment by purpose into five categories: replacement, modernisation, extension, introduction of new products, and other. The enterprise also specifies the main type of modernisation carried out in the two-year period, from a choice of three categories: automation of existing production processes, introduction of new manufacturing methods, or energy savings.

The second question block addresses productive capacity. The first question seeks to measure the approximate percentage change in capacity between the end of year N-2 and the end of year N-1. The second question measures expected change between the end of year N-1 and the end of current year N. This block also includes questions on equipment scrapping in the past and current years, grouped into three parts:

- Has the enterprise scrapped equipment, or is it planning to do so?
- If yes, the firm must specify the main purpose.
- Thirdly, it is asked to provide a qualitative assessment ("greater than", "identical to", "smaller than" the previous year) of the change in the gross book value of these scrapping operations in the previous year and current year.



#### **1.2.4.2. - October wave: three specific boxes**

The first block concerns investment purposes. The questions are identical to those asked in April but the horizons of interest are different, as they concern the current year (already covered in April) and the year ahead.

The second block seeks to measure the influence of each of the following nine factors on the investment decision:

- expected change in domestic demand
- change in foreign demand
- expected profit from new investment
- financing from cash flow
- indebtedness
- interest rates
- investment financing conditions
- technical factors
- other.

Influence is rated on a 5-level scale from “very stimulative” to “very restrictive”.

The third block concerns investment in productive capacity abroad<sup>3</sup>. Has the enterprise already proceeded to create or extend capacity abroad, in previous years or in the current year, or is it planning to do so in the current year? If yes, is the corresponding investment increasing, stable, or decreasing?

### **1.3. - Status of Survey in statistical monitoring of investment**

The Investment Survey serves a dual purpose: to supply sub-annual information on changes in annual equipment expenditures, and to supply data of a more structural kind on an annual basis. Other sources offer data for either purpose.

#### ***1.3.1. - Two annual sources: the Annual Enterprise Survey and tax returns***

There are two annual sources for determining investment in France: annual enterprise surveys (Enquêtes Annuelles d'Entreprise: EAEs) and tax returns (Bénéfices Réels Normaux [BRN], i.e., standard reporting of actual earnings—as against an overall estimate).

EAEs cover manufacturing, the food industry, energy, construction, transport, wholesale/retail trade, and other non-financial services. In the industrial sector, the EAE covers all enterprises with 20+ employees or more than € million in turnover. On these criteria, the EAE included approximately 24,000 industrial firms in 2006, as against the Investment Survey's 4,000. In fact, the EAE serves as the sampling frame for the Investment Survey (see §2.1). The EAE questionnaire collects information on the enterprises' non-consolidated accounts, including: tangible investment other than capital contributions; intangible investment; and new leasing contracts. However, the survey results are much less timely. As of now, preliminary figures for the industrial sector are not published until July of the following year.

Tax returns filed by enterprises opting for the “standard actual earnings” (Bénéfice Réel Normal: BRN) system are a particularly rich source of information. They comprise a profit-and-loss statement, a complete balance sheet, and additional schedules providing a breakdown of fixed assets, depreciation, provisions, allocation of earnings, and determination of taxable income. BRN information also makes it possible to measure investment across a far broader population of about 700,000 enterprises. However, the source is available on an even less timely basis than the EAE. Processing the collected data is a cumbersome task, requiring a costly cleaning operation prior to all dissemination.

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<sup>3</sup> This question block was included in the July wave from 2003 to 2006. Since 2007, it has been shifted to the October wave.

### ***1.3.2. - Other sub-annual surveys***

The Investment Survey is confined to industrial enterprises. Other short-term sources provide information on investment in the productive sector.

At INSEE, the monthly business survey on the service sector gathers enterprise opinions on investment through two qualitative questions<sup>4</sup>:

- “Change observed in the past 3 months”
- “Likely change in 3 months ahead”.

Questions on investment are also included in the monthly survey on the building industry. In October of year N-1 and January, April, and July of year N<sup>5</sup>, two types of information are gathered:

- investment expenditures in year N-1
- for year N, respondents’ opinions on whether their investment expenditures will be “higher than”, “comparable to” or “lower than” those of year N-1.

The two-month survey on the wholesale trade can also supply indirect information on investment. Among other items, it asks wholesalers for their opinion on changes in ordering intentions for capital goods.

The Bank of France has been conducting a quarterly “investment, cash position, and margins” survey in industry since 1997. Two qualitative questions cover changes in investment expenditures in previous quarters and in the coming quarter.

Several national trade organisations perform business surveys in their sectors. For example, the monthly survey on the National Federation of Road Hauliers (Fédération Nationale des Transports Routiers: FNTR) collects hauliers’ opinions on the use of vehicle stock and on investment plans. The monthly survey by the National Public-Works Federation (Fédération Nationale des Travaux Publics: FNTP) collects figures for projects completed in the previous month. This information constitutes a public-works investment indicator used in the quarterly national accounts.

## **1.4. - Survey integration into the harmonised EU statistical system of business and consumer surveys**

### ***1.4.1. - History of the system***

In 1952, INSEE, IFO (the Munich-based Institute for Economic Research), and VISCO in Rome began an informal cooperation in the field of business surveys, which was progressively extended to institutes in many other countries. In June 1962, this cooperation was materialised by the launch of the harmonised monthly survey on industrial firms in the European Community. The Investment Survey has been part of the Harmonised European Programme of Business and Consumer Surveys since 1984.

The EU system is supervised by the European Commission, specifically the Brussels-based Directorate-General of Economic and Financial Affairs (DG-Ecfin). It is the framework for harmonisation of business and consumer surveys. The system sets very comprehensive rules for the content of harmonised questionnaires, including the wording of questions, survey frequency and sector coverage, data-gathering periods, and publication dates. The producer institutes joining the system undertake to comply with these rules by a contract signed with the Commission<sup>6</sup>.

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<sup>4</sup> This qualitative question block was introduced in 2005. Previously, the business survey in the service sector included quantitative questions on changes in investment.

<sup>5</sup> As in the Investment Survey, the base year is changed in the October wave.

<sup>6</sup> For more details on the EU system, see *European Economy, the joint harmonised EU Programme of Business and Consumer Surveys, special report n°5/2006*.

### 1.4.2. - Surveys concerned

The Harmonised EU Programme currently concerns the following seven sub-annual business surveys conducted by INSEE:

- monthly business survey on industry
- quarterly survey on industrial investment
- monthly business survey on the service sector
- monthly business survey on the retail trade and trade and repair of motor vehicles
- monthly business survey on the building industry
- quarterly business survey on the public-works industry
- monthly survey on households (called “consumer survey” in EU terminology).

At the request of the European Commission, some *ad hoc* surveys may be carried out by institutes producing business surveys that are members of the Harmonised Programme.

Sectoral results are sent to the Commission, which performs seasonal adjustments on the national series, then aggregates them in order to publish data on the entire EU.

### 1.4.3. - EU results

EU results are supplied in accordance with an aggregation of primary strata defined by means of the NACE classification. With regard to enterprise size, the European Commission prescribes a specific classification for disseminating harmonised results at EU level (*see* Table 4).

**Table 4:**  
Aggregated classification by NACE activity and SIZ size category

Activity under NACE revision 1		Activity under NACE revision 2		Size by SIZ category	
<b>34</b>	Motor vehicles	<b>29</b>	Motor vehicles, trailers, and semi-trailers	<b>SIZ1</b>	Enterprises with fewer than 50 employees
<b>CONS</b>	Consumer goods, of which:	<b>CONS</b>	Consumer goods, of which:	<b>SIZ2</b>	Enterprises with 50-249 employees
<b>CDUR</b>	durables	<b>CDUR</b>	durables	<b>SIZ3</b>	Enterprises with 250-499 employees
<b>CNDU</b>	non-durables	<b>CNDU</b>	non-durables	<b>SIZ4</b>	Enterprises with 500+ employees
<b>FOBE</b>	Food	<b>FOBE</b>	Food	<b>SIZ5</b>	Enterprises with fewer than 250 employees
<b>INTM</b>	Intermediate goods (excluding extractive)	<b>ENER</b>	Energy (excluding extractive)	<b>SIZ6</b>	Enterprises with 250+ employees
<b>INVE</b>	Capital goods	<b>INTM</b>	Intermediate goods (excluding extractive)		
<b>TOTA</b>	Manufacturing industry (excluding extractive)	<b>INVE</b>	Capital goods		
		<b>TOTA</b>	Manufacturing industry (excluding extractive)		

**Note:** NACE Rev. 2 will be the classification adopted, in all likelihood, with effect from May 2010

