

Industrial investment survey

Note: Business surveys are published according to the French economic activities and products classification, NAF rev. 2, since May 2010. This new classification became national classification in January 2008 and replaced the French economic activities and products classification, NAF rev. 1, dating back to 2003.

Survey description

INSEE's Department of Short-Term Economic Analysis conducts a quarterly investment survey of industrial firms. The scope of coverage includes :

- Manufacturing industrie, which contains:
 - Manufacture of food products and beverages
 - Manufacture of coke and refined petroleum products ⁽¹⁾
 - Electrical and electronic equipment; machine equipment
 - Manufacture of transport equipment
 - Other manufacturing
- Mining and quarrying. ⁽¹⁾

The survey sample comprises about 4,000 enterprises with 20 or more employees.

The survey results offer an assessment of current trends in industrial investment. In this connection, it should be recalled that industrial investment, although a key driver of economic change, accounts for about a quarter of productive investment in France. ("Industrial investment" is defined as gross fixed capital formation by non-financial corporations and unincorporated enterprises in the goods-producing industries; "productive investment" is defined as total gross fixed capital formation by non-financial corporations and unincorporated enterprises.)

The survey analysis is based on unequal-probability stratified sampling without replacement. The sample is composed of strata, each corresponding to one activity sector (a group of economic activities defined in accordance with the the French NAF rev.2 since May 2010) and to one size category (20-99 employees, 100-499 employees, 500 and more employees).

The survey forms part of the harmonized European system of business surveys.

Questionnaire

The main questions are quantitative and cover the annual investment amounts. Most of the other questions are qualitative.

In this description, N+1 denotes the year ahead, N the current year, N-1 the previous year, and N-2 the year before that. Likewise, H+1 is the half-year ahead, H the current half-year, H-1 the previous half-year, and H-2 the half-year before that.

Total amounts invested in France (quarterly questions)

In the January, April, and July surveys in year N, the enterprise is asked to report its investments in N-2, N-1, and N. In October of year N, it is asked to give the amounts for years N-1, N, and N+1.

(1) Results for these sectors are not published in order to respect statistical secret, but are included in the global results.

“Investment” in this survey includes the following items:

- 1 - acquisitions of tangible assets excluding capital contributions
- 2 - the value of leased movable and immovable fixed assets
(value at the signing of the contract, not the amount of annual installments)
- 3 - software purchased or developed for own account.

Land and dwellings are excluded.

Half-year changes in investment in France (quarterly questions)

Business owners are asked about changes in their investment in three consecutive half-years.

For the April and October surveys, they are asked to describe their investment in half-year H relative to half-year H-1, and in half-year H+1 relative to half-year H.

For the January and July surveys, they are asked to describe their investment in half-year H-1 relative to half-year H-2, and in half-year H relative to half-year H-1.

For each of the two periods considered, business owners are asked the following question:

- Describe the past or future change in your investment:
increase (+) no change decrease (-)

Purposes of investment in France (half-year questions, April and October surveys)

In the April year-N survey, these questions cover the years N-1 and N. In the October year-N survey, they cover the years N and N+1. For each of the two years considered, business owners are asked the following questions:

- Please give the approximate share (in percentage terms) of your completed or planned investment mainly intended for:
 - replacement of used equipment, upkeep, and maintenance
 - modernization and rationalization
 - increase in productive capacity for existing products
 - introduction of new products
 - other purposes: safety, environment, working conditions, etc.(Percentages must add up to 100%.)
- Your completed or planned modernization investments are mainly intended for:
 - automation of existing manufacturing processes
 - introduction of new manufacturing methods
 - energy savings.

Productive capacity (annual questions, April survey)

Productive capacity is defined as the output that could be obtained from the maximal use of installed equipment (allowing for maintenance and safety constraints), by adjusting the workforce and work organization if needed (and disregarding profitability concerns).

For years N-1 and N, the business owner is invited to answer the following questions:

- Given your new investment, capital-goods retirement, and productivity gains, how has your productive capacity changed or how will it change?
increase (+) no change decrease (-)
- Have you scrapped capacity or do you intend to do so this year? (yes/no)
If yes, please state the main reason:
 - equipment wear and tear, obsolescence
 - installation of more efficient equipment
 - shut-down of capacity for old products
 - other (please specify):

- For the years examined (N-1 and N) relative to the previous years (N-2 and N-1), your equipment retirement, assessed at gross book value, was:
 - greater (+)
 - the same
 - smaller (-).

Factors influencing investment decisions (annual questions, October survey)

For years N and N+1, business owners are asked to rate the influence of the factors listed below, from a list of five possibilities: “very stimulative (+),” “stimulative (+),” “no influence,” “restrictive,” and “very restrictive.”

The factors listed are:

- domestic-demand outlook
- international-demand outlook
- outlook for returns on new investment
- cash flow
- indebtedness
- interest rates
- overall: terms of investment financing
- technical factors (technological change, without omitting need for workforce to adjust to the new technologies)
- other factors (such as investment tax subsidies).

Investment in production facilities abroad (annual questions, July survey)

If appropriate, the business owner reports the likely change in the enterprise’s creation or extension of capacity abroad between years N-1 and N:

increase (+) no change decrease (-)

Presentation of results

Rates of change in private-sector industrial investment in France

Rates of change are initially determined by stratum. Within each stratum, they are computed by weighting the individual growth rates by the individual investment amounts for the previous year as determined from the enterprises’ responses. As the question is quantitative, the results are particularly sensitive to the responses of certain enterprises. For this reason, a special method is used: the *large-investors method*. It consists in underweighting some enterprises when the change in their investment is atypical or when they exert too strong an influence on basic-stratum results.

The stratum results are then aggregated with the aid of the investment amounts compiled from the latest Annual Enterprise Survey.

Successive estimates obtained are published with each survey. The time series of the estimates show the revisions in respondents’ investment expectations from one survey to the next. The first published results for a given year N, from the October survey of year N-1 to the October survey of year N, called “forecasts,” should not be regarded as early estimates of actual changes in investment expenditures. By contrast, the successive revisions contain highly significant short-term information on changes in industrial firms’ expectations. From the January survey of year N+1 onward, the rates published for year N may be viewed as an estimate of the actual rate of change in investment by value.

Investment shares

For each basic stratum, the investment shares for year N are weighted by the individual investment amounts for that same year N. The aggregated results are obtained with the aid of the investment amounts given by the latest Annual Enterprise Survey.

Three-choice questions

For three-choice questions, a balance of opinion is published. In each basic stratum, the balance is the difference between the percentages of “increase (+)” and “decrease (-)” responses weighted by the individual investment amounts derived from the survey responses. The aggregate balances are obtained with the aid of the investment amounts given by the latest Annual Enterprise Survey.

The half-year balances of investment changes in France are published as raw series and seasonally adjusted series. The other balances are annual and therefore not seasonally adjusted.

Five-choice questions (factors influencing investment decisions)

For five-choice questions, a balance of opinion is published. In each basic stratum, the balance is the difference between the percentages of positive responses (“highly stimulative (+)” and “stimulative”) and negative responses (“restrictive,” and “very restrictive”), weighted by the individual amounts of investment reported by enterprises for the year to which the question applies. The aggregated balances are computed with the aid of the investment amounts given by the latest Annual Enterprise Survey.

Indicator of mean investment reevaluation

The mean reevaluation indicator summarizes from individual data the evolutions of reevaluations from companies between two successive investments surveys for the same year. From the answers of each survey of a given year (January, April, July and October) it is possible to calculate for each company the evolution regarding the previous survey. By aggregation at each survey weighted by the company turnover it gives an indicator of position for the distribution of individual revisions. The sign and the scope of the mean reevaluation depend strongly on the quarter of the given survey. In order to construct a quarterly indicator, the data are centered and reduced by quarter (January, April, July and October). The July survey exists only since 2003. Until having sufficient data, the value of October surveys are duplicated.

Before the beginning of the year (the survey of past year October), business managers give a priori the level and rhythm of their investment according to their project of internal development. The conjectural evolutions of the next year are then very uncertain. Evolutions of the forecasts concerning the current year are connected to the dynamism of future investments of the year. Thus, the indicator of reevaluation appears as a good tool in order to improve the forecasts of quarterly variations of investments of non financial corporations.

Changes in the questionnaire

In 2003, INSEE improved its arrangements for gathering data on investment and the factors of production in the goods-producing industries, while taking care not to increase the response burden for enterprises. The half-year survey on the factors of production was eliminated, and the business survey on industrial investment was substantially redesigned in January 2003. It has become quarterly, with the addition of a July survey, in order to achieve greater consistency with the frequency of INSEE reports on current economic conditions. Some questions were added, others removed or simplified.

In 2007, July survey was simplified. Questions about half-year change in investment by type, changes in information-technology spending and change in research and development (R&D) spending were eliminated. Questions about annual balances of changes in investment in production capacity abroad were removed on the October survey.

The description above applies to surveys conducted from January 2007 onward.

The series about , annual balances of changes in investment in production capacity abroad (July survey from 2003 to 2006 and October survey since 2007), have not yet been published.

These series will be published as soon as the number of observations is sufficient to yield relevant information on current economic conditions.