

# French economy



Press kit



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#### INSEE in brief

The *Insee Références* collection offers a periodic overview of the major social and economic issues. The data and commentaries are based on public statistical sources and analysis methods.

**In the same collection**

**Published**

France, social portrait, edition 2015

Couples and families, edition 2015

Reference tables for national accounts, edition 2016

**Forthcoming in 2016**

Household Income and Wealth, edition 2016

Employment, unemployment, earned income, edition 2016



## Introduction: The French economy picked up in 2015

Every year, the “French Economy” report provides a portrait of the state of the country’s economy, recalling the main events of the previous year and the key indicators.

This publication is also an opportunity for INSEE to put forward **in-depth analyses of salient economic facts**. The 2016 edition includes 3 files:

- **The role of the Internet in describing and analysing the economy**: What are the main activities to have developed with the Internet? What is the impact of the Internet in terms of economic activity, prices and well-being?
- **Changes in household purchasing power before and after the crisis**, in France and also in Japan, Germany, the United States, Spain, Italy and the United Kingdom.
- **The nature of expenditure related to the environment** and its impact on the different types of pollution.

It also contains around **twenty themed information sheets** presenting the fundamentals of household, business and general government accounts seen from different angles.

### Key figures for the French economy in 2015

**Strongest growth since 2011: +1.3%** in volume after +0.6% in 2014, driven by

- **household consumption**: +1.5% in 2015, against +0.7% in 2014
- **corporate investment**: +2.8% in 2015, against +1.6% in 2014

**This consumption benefited from the increase in purchasing power: +1.6%** in 2015 after +0.7% in 2014. The main reason for this increase in purchasing power was **zero inflation in 2015**, linked with the downturn in **energy prices**: -4.7% in 2015 after -0.9% in 2014.

**Investment** has taken advantage of **low interest rates and the improvement in the margin rate**: **31.4%** for non-financial corporations, its highest level since 2010.

**Exports accelerated: +6.1%** in volume after +3.3%.

And **imports** were still **very buoyant**: +6.6% against 4.7%.  
Trade therefore continued to affect growth.

**Employment and unemployment remained stable as an annual average but employment did increase**: **102,000 jobs** were created in the non-farm market sector **between the end of 2014 and the end of 2015**.

**Drop in public deficit**: **3.6%** of GDP in 2015, against 4.0% in 2014.

**While debt** continued to **increase**: **96.1% of GDP** after 95.3% in 2014.

### **Focus on revisions made to the national accounts in 2013 and 2014**

INSEE publishes an estimate of the quarterly GDP growth rate 30 days after the end of the quarter. These estimates are based on limited data, often from surveys. These estimates are then **gradually refined as INSEE obtains more and more accurate data**. In particular, corporate tax returns provide essential information, especially on the size of inventories. **The annual accounts are not fully stabilised until two and a half years after the end of the year under consideration.**

**Hence, in 2015, INSEE revised growth for 2013 and 2014:**

#### ***Definitive accounts 2013***

- . GDP in volume terms increased 0.6% against +0.7% in the semi-definitive accounts.
- . Household consumption expenditure was revised very slightly upwards in volume: +0.5% against +0.4%.
- . Change in gross disposable income (GDI) was revised downwards to +0.3% (+0.7% in the semi-definitive accounts).

#### ***Semi-definitive accounts 2014***

- . GDP in volume terms grew +0.6% in the semi-definitive accounts 2014 against +0.2% in the provisional accounts.
- . Household consumption expenditure in volume was a little more vigorous: +0.7% against +0.6%.
- . Household GDI increased by +0.8% in value in 2014 against 1.1% in the provisional accounts.

# Files







## The role of the Internet in describing and analysing the economy

The Internet provides services based on a very wide range of economic models, from the strictly market model (e-commerce) to a production model of services providing no immediate compensation. Notably, the collaborative economy covers some highly varied activities, many of which are not counted in GDP.

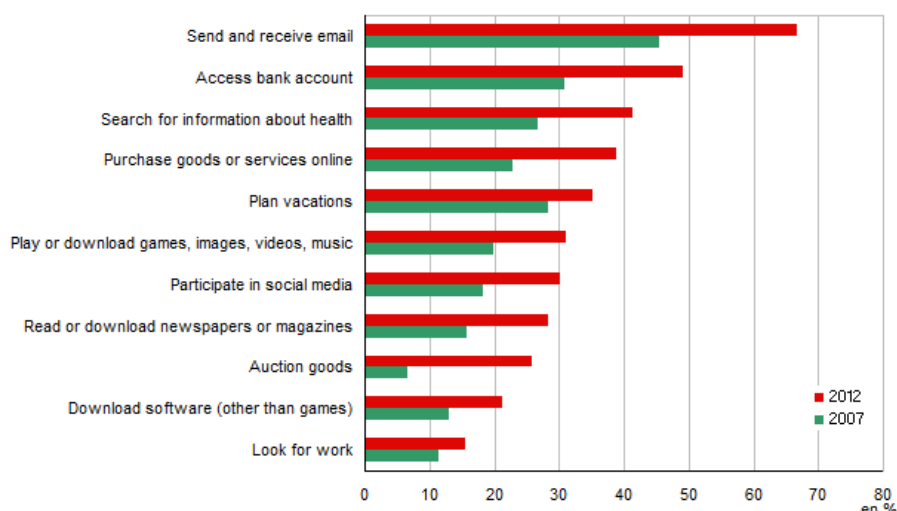
The Internet does not systematically lead to a reduction in prices: offers and search costs are highly customised and increasingly complex, and this limits the effect.

Thus the Internet seems to have a more significant impact on well-being than on GDP. The Internet allows for a more intensive use of goods (goods can be resold between private individuals, car-pooling, etc.), and gives access to a more diversified range of goods, which is therefore better able to meet the needs of each individual.

### Highly varied economic models

On the Internet, households can buy goods or services via a traditional market transaction (e-commerce). These transactions are listed in household consumption, even though the commercial margins in online sales sites do not always feed into national production when they are produced by pure players located outside France.

The most common Internet activities in the past three months



Scope: People aged 15 or older living in Metropolitan France in ordinary households.

How to read the chart: 25% of the inhabitants of Metropolitan France sold goods on the Internet in 2012 as compared to just 6% in 2007.

Source: INSEE, 2007 and 2012 surveys on Information and Communications Technologies.

Households can also consult websites providing free services such as information provision or linking up with people who share the same interests. However, many of these sites also operate according to market logic: traditionally, they earn money by selling advertising space or selling on personal data provided by users. This activity is recorded in the GDP of the countries where these sites are located.

Households can also use sites specialising in transactions with other households such as selling second-hand goods, sharing travel costs by carpooling, renting and exchanging apartments, etc. These sites are practising a market activity (they often earn money from commissions on transactions) which is tracked in the GDP of the countries where they are located. However, transactions by households via these sites are not systematically recorded in GDP because they do not always correspond to production (exchange of goods) or because the transaction does not cover the cost of production of the service (e.g. carpooling).

**Finally, households can consult free information sites** (e.g. online encyclopaedias) **which do not follow a purely market logic** and whose content is supplied by voluntary contributions from internet users. Activity on these sites is tracked in the GDP of the countries where they are located but only their fairly limited production costs. These activities do not exclude effects that are positive but which cannot be recorded in GDP – for example, if easier access to information increases employee productivity.

### **Drop in prices, but not systematically**

The Internet enables businesses to make substantial savings, for example by reducing manpower requirements for carrying out transactions, by using centralised storage of products or by increasing competition... **In principle, therefore, e-commerce should bring down not only price levels but also price dispersion.**

However, studies suggest that the reality is more nuanced. Price comparison becomes difficult due to the complexity of the offers available and not all consumers always identify the best offer.

The increase in online offers also makes it a more complex matter to observe price changes in the consumer price index (CPI). They are more difficult to measure on the web as product rotation is higher than in traditional selling, and the nature of the different offers varies so much (e.g. shipping included or not).

### **A more favourable impact on well-being than on GDP**

**Surges in the e-commerce boom often correspond to the creation of a new sales channel replacing physical sales. Thus its impact on GDP is ambiguous,** especially as several major players in online sales locate most of their business abroad.

Similarly, the upturn in transactions between households cannot always be seen in GDP (carpooling) and the growth in selling second-hand goods can be detrimental to the production of new goods. However, **the extensive use of shared goods as part of the collaborative economy can generate very substantial savings for households,** who are then likely to reinvest these savings in the consumption of other goods and services. The impact on GDP of the development of the collaborative economy is therefore also ambiguous.

Nevertheless, **the growth of the Internet clearly has a favourable impact on consumer well-being** as it means that much more extensive catalogues and more personalised commercial offers can be produced, which are therefore better able to meet the needs of households. The Internet also improves the well-being of users by bringing them into contact with people who share the same interests.

## Purchasing power since the crisis

Between 2000 and 2014, purchasing power per capita grew 14% in France. However, most of this growth was achieved before the crisis erupted in 2008, as in most developed countries.<sup>1</sup>

This change can be broken down into two main effects: an “activity” effect measured by GDP per capita (which is itself the result of productivity and the employment rate); and a “distribution” effect measured by the ratio of household purchasing power to GDP.

**Between 2000 and 2007, growth in household purchasing power was driven by strong labour productivity.**

Between 2000 and 2007, purchasing power per capita increased in all the countries studied. This increase was very sustained in the United Kingdom (2.7% per year on average) and the United States (2.0%), slightly weaker in France (1.6%) and Spain (1.4%). In Italy, Germany and Japan it was less than 1.0%.

### 1. Accounting breakdown of change in purchasing power per capita over the 2000-2007 period

		France	Germany	Italy	Spain	United Kingdom	United States	Japan
								% per year
Purchasing power per capita	(1)	1,6	0,7	0,9	1,4	2,7	2,0	0,5
Output per employed person	(2)	1,1	1,2	-0,3	0,0	1,8	1,5	1,3
Employment / population	(3)	0,1	0,2	1,0	2,0	0,4	0,0	0,0
Purchasing power / GDP	(4)	0,5	-0,7	0,2	-0,6	0,6	0,5	-0,7

How to read it: there is a mathematical equality: (1) = (2) + (3) + (4).

Note: average annual growth rate.

Source: OECD, authors calculation.

In most of the countries, **growth in purchasing power per capita was possible mainly via the “activity” effect, and primarily through the dynamism of labour productivity.** Productivity per employee increased at a strong pace in the United Kingdom (1.8% per year), at a slightly slower pace in the United States (1.5% per year) and at more than 1.0% per year in Japan, France and Germany. In contrast, it was stable or even decreased in Italy and Spain. In these two countries, the low level of momentum in productivity was linked with strong growth in the employment rate. In the other countries (France, Germany, United Kingdom, United States and Japan) the employment rate was much more stable.

In addition to the “activity” effect, which gives a partial vision of the change in purchasing power per capita, is a “distribution” effect: **in France, the United Kingdom and the United States, household purchasing power grew more quickly during the 2000-2007 period than GDP in volume terms, at around 0.5 points per year, whereas the opposite was the case in Germany, Japan and Spain.**

### Diverging changes in purchasing power since 2007

**The overall trend in purchasing power between 2007 and 2014 was very different from that in the pre-crisis period.** The decline in activity following the crisis affected the countries studied to different degrees and the “distribution” effect also evolved in very different ways between the two periods. Across this entire period, according to the momentum of purchasing power per capita, three groups of countries emerge.

<sup>1</sup> Here, the change in purchasing power per capita is analysed in seven developed countries: five European countries (Germany, France, Italy, Spain, United Kingdom), the United States and Japan before and after 2007.

## 6. Accounting breakdown of change in purchasing power per capita over the 2007-2014 period

		France	Germany	Italy	Spain	United Kingdom	United States	Japan
<b>Purchasing power per capita</b>	<b>(1)</b>	<b>0,3</b>	<b>1,0</b>	<b>-2,0</b>	<b>-1,4</b>	<b>-0,5</b>	<b>0,5</b>	<b>0,9</b>
Output per employed person	(2)	0,2	-0,1	-0,5	1,5	0,1	1,0	0,3
Employment / population	(3)	-0,3	0,8	-1,3	-2,7	-0,1	-0,8	-0,1
Purchasing power / GDP	(4)	0,4	0,2	-0,2	-0,1	-0,5	0,3	0,7

How to read it: there is a mathematical equality: (1) = (2) + (3) + (4).

Note: average annual growth rate.

Source: OECD. authors calculation.

### Germany and Japan where the change was more favourable than before the crisis (+0.5 points annually on average)

Growth in purchasing power was 0.5 points higher per year on average than before the crisis.

Purchasing power increased in Japan and Germany by around 1.0% as a yearly average. In the case of Germany, this change derived from the very sharp rise in the employment rate, whereas in Japan, it was the considerable distortion in the purchasing power to income ratio and GDP that were the reason for this increase. GDP growth rates per capita fell back in these countries, but this decline was more moderate than in Spain, Italy and the United Kingdom. In addition, in Japan and Germany, the change in the distribution effect was favourable for purchasing power (very much so in Japan).

### France and the United States where it was less favourable (-1.5 points annually)

Growth in purchasing power was 1.5 points lower per year on average than before the crisis.

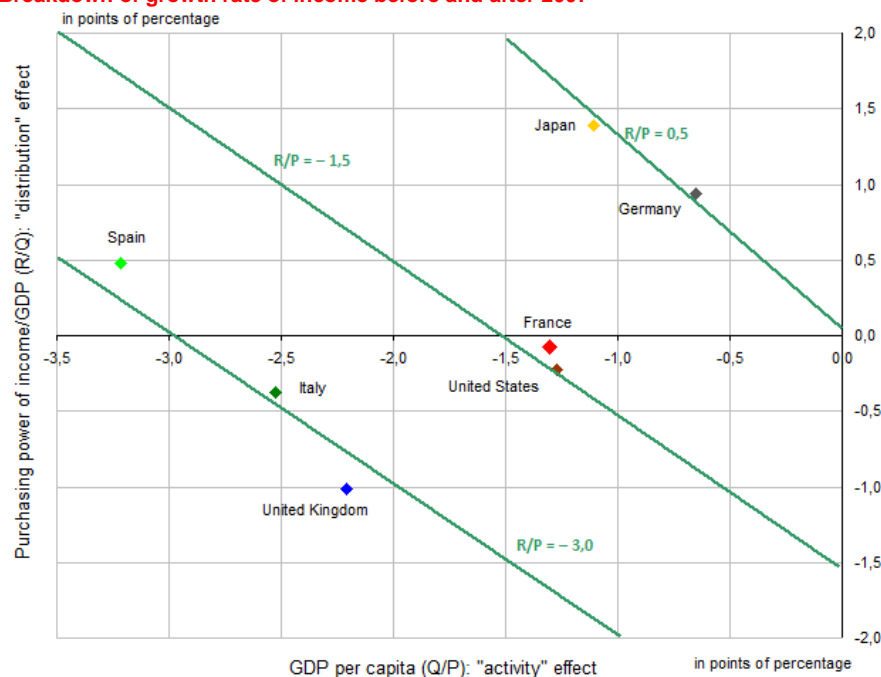
In France and the United States, the change in purchasing power in relation to GDP was favourable for household purchasing power and this accounts to a significant extent for the change. In the United States labour productivity was very vigorous and there was a drop in the employment rate. The GDP growth rate per capita declined more moderately than in Spain, Italy and the United Kingdom.

### United Kingdom, Spain and Italy where it was substantially less favourable (-3 points annually).

Growth in purchasing power was 3 points lower per year on average than before the crisis.

In Italy and Spain, purchasing power declined significantly (-2.0% and -1.4% per year respectively). This decrease was due to the drop in the employment rate: in Italy unemployment increased from 6% in 2007 to 13% in 2014, and in Spain from 8% to 24%. Between 2007 and 2014, GDP growth rate per capita fell sharply in Spain, Italy and, to a lesser extent, the United Kingdom. In Italy and especially the United Kingdom, the change in the distribution effect was unfavourable.

### Breakdown of growth rate of income before and after 2007



How to read the graph: in Germany, between 2000-2007 and 2007-2014, the variation in the growth rate of GDP per capita was -0.7 points (x-axis); the variation in the pace of growth of the ratio (income/GDP) was +0.9 points (y-axis). An oblique straight line indicates a set of situations where the variation in the pace of growth in purchasing power per capita (R/P) is constant: the closer the straight line to the top right of the graph, the more positive the variation.

Note: this graph gives differences between annual average growth rates for 2007-2014 and 2000-2007, for the three variables Q/P, R/Q and R/P.

Source: OECD, authors calculations.

## 67.2 billion euros of expenditure related to the environment in 2013

In France, expenditure on environmental protection and the preservation of natural resources rose to 67.2 billion euros in 2013. Driven by European or national regulations, the main expenditure was on water management and waste management. The resources spent in these areas over many years have brought about improvements in the treatment of wastewater and waste.

Expenditure related to protection of the air also helped to reduce pressure on the environment. Atmospheric pollutant emissions decreased, although regulatory thresholds were not always respected. Greenhouse gas emissions from France decreased, but those associated with imports rose sharply.

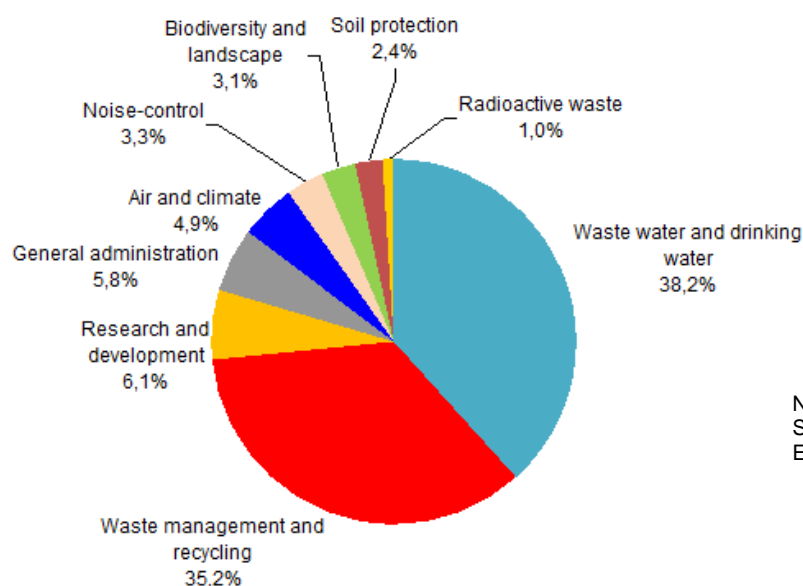
**Waste and water management constitute the main components of expenditure related to the environment**

**38% of environment-related expenditure in 2013 concerned the treatment of wastewater and the production and distribution of drinking water.**

**Waste management** represented **35%** of expenditure via the public household waste management service, specific treatment processes in some sectors of activity, and also the recycling market.

Such a level of spending in these areas is due to the importance of environmental issues and the corresponding legislation.

### 1. Breakdown of environment related expenditure in 2013



Note: provisional data.  
Source: SOeS, 2015 Satellite Account of Environment.

### Waste and water: improved treatment

**Concerning waste, the environmental targets were to reduce pollutant emissions** into the surrounding environment and to extend recycling in order to preserve natural resources.

Waste production in France reached 345 million tonnes, predominantly from the construction sector. Household waste represented 10% of the total. While selective waste collection has grown, investment in waste processing **has improved the recycling rate**. This increased from 12.5% in 2000 to 21.5% in 2013, although the European target is 50% by 2020. **The recycling market has also grown**, producing a trade surplus of over 2 billion euros.

These improvements in services **have been financed mainly from taxes or the domestic refuse removal charge** (TEOM and REOM) paid by users, which provided around 6.9 billion and 660 million euros respectively in 2013, an average annual increase of more than 5% since 2000.

**Regarding water, public health issues and the limiting of pollutant emissions** have notably resulted in action plans for upgrading wastewater treatment plants to comply with regulations. In 2013, 90.9% of sewage treatment plants met regulatory standards. Investment was switched to spending on household consumption, which increased, despite the volume consumed overall remaining stable. The price of water therefore increased by 2.7% per year on average between 2000 and 2014.

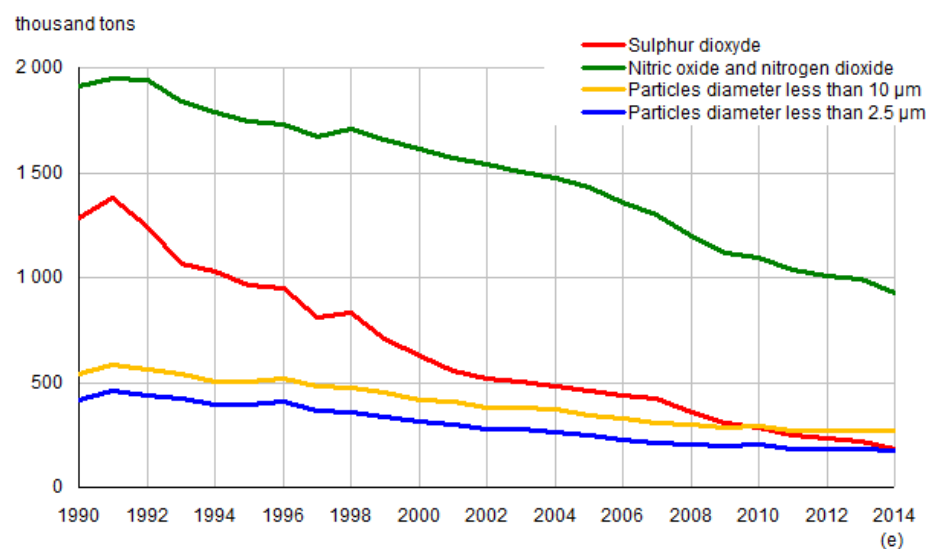
**Industrial companies also invested in both these areas, water and waste**, (240 and 160 million euros respectively in 2013) in order to reduce their impact on the environment. Businesses in other sectors of activity also financed these two areas, via their water bills, special charges or management costs.

### Protection of air and climate: reduction in atmospheric pollutants, but a rise in greenhouse gas emissions in transport and the residential/tertiary sectors

Regarding emissions into the air, the main issues concern air quality and its impact on health and the reduction of greenhouse gas emissions in order to limit global warming.

**Emissions of atmospheric pollutants in France fell during the period 1990-2013** due partly to technological developments and to the strengthening of regulations. This was the case, for example, for emissions of particles and heavy metals which decreased by -50% and -87% respectively over this same period. The situation also improved for concentration levels of these pollutants in the air, although there was not compliance with all the regulatory thresholds.

#### 5. Evolution of main air pollutant emissions



Scope: metropolitan France.

Source: Citepa, format Secten, update april 2015.

**Over the period 1990-2013, greenhouse gas emissions across France fell by about 11%**; however, levels associated with imports increased. Despite the reduction that began in the middle of the 2000s, emissions of greenhouses gases in the transport sector and residential/tertiary remained higher than in 1990.

Within environment-related expenditure, air and climate protection accounted for 3.3 billion euros. The main expenditure related to: additional costs linked with the purchase of vehicles with low CO<sub>2</sub> (automobile bonus); condensing boilers; the use of biofuels; curbing industrial emissions. All these costs do not include expenditure linked with climate change such as public transport, heat insulation, renewable energies, etc. According to I4CE (Institute for Climate Economics), in 2013, this stood at almost €30 billion.



# INSEE in brief







## INSEE and official statistics

### A prime goal: to shed light on the economic and social debate

INSEE collects, produces, analyses and disseminates information on the French economy and society. This information is relevant to public officials, government bodies, social partners, businesses, researchers, the media, teachers and private individuals. It helps them to deepen their knowledge, conduct studies, prepare forecasts and take decisions.

### INSEE is ...

- A public agency, whose personnel are government employees. INSEE operates under government accounting rules and receives its funding from the State's general budget.
- An independent institute working in total professional independence. No external authority has inspection rights on the statistical results that it publishes. This professional independence is enshrined in law: the Economic Modernisation Act (Loi de modernisation de l'économie) of August 4, 2008 established the Official Statistical Authority (Autorité de la Statistique Publique), to oversee compliance with the principle of professional independence in the design, production and dissemination of official statistics.

### INSEE coordinates the work of the official statistical service

The official statistical service comprises INSEE and the ministerial statistical offices (services statistiques ministériels - SSM), which conduct statistical operations in their areas of expertise. INSEE and the SSMs, under the coordination of the Institute, decide which methods, standards and procedures to apply in preparing and publishing statistics.

### INSEE in EU and international bodies

INSEE works on a daily basis with Eurostat (the Statistical Office of the European Communities) and its EU counterparts. It thus contributes to the construction of the EU's statistical space. INSEE also participates in the statistical activities of the UN (United Nations), the IMF (International Monetary Fund), the OECD (Organisation for economic cooperation and development) and the World Bank. INSEE is a member of the UN Statistical Commission, the UN Economic Commission for Europe, and the OECD Committee on Statistics.

### A brief history ...

The National Institute of Statistics and Economic Studies (Institut national de la statistique et des études économiques) - INSEE – was created by the Budget Law of 27 April 1946 (art. 32 and 33). This new institution took over responsibility for public statistics, work that had been carried out continuously since 1833.

### Today, INSEE is organised into five main directorates:

- Methodology, Statistical Coordination and International Relations Directorate
- Business Statistics Directorate
- Demographic and Social Statistics Directorate
- Economic Studies and National Accounts Directorate
- Dissemination and Regional Action Directorate

INSEE is also present in the regions, with its regional offices.



## Press office

### Press office opening times

Monday to Thursday: 9:30-12:30 / 14:00-18:00

Friday: 9:30 -12:30 / 14:00-17:30

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