

FRENCH PHARMACEUTICAL INDUSTRY

KEY DATA
2018



KEY FIGURES OF THE PHARMACEUTICAL

→ €54.1 Billion

Revenue (expressed as manufacturer's price before tax) generated in France by pharmaceutical companies in 2017, of which €25,1 Billion from exports.



→ €4.5 Billion

Amount invested in France by pharmaceutical companies in research and development in 2015.



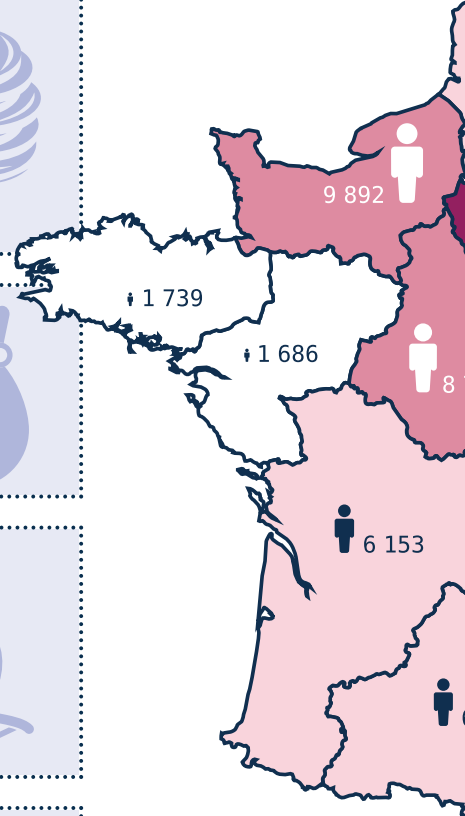
→ 9.8%

Share of revenue generated by pharmaceutical companies invested in research and development in 2015.



→ 98,786 people

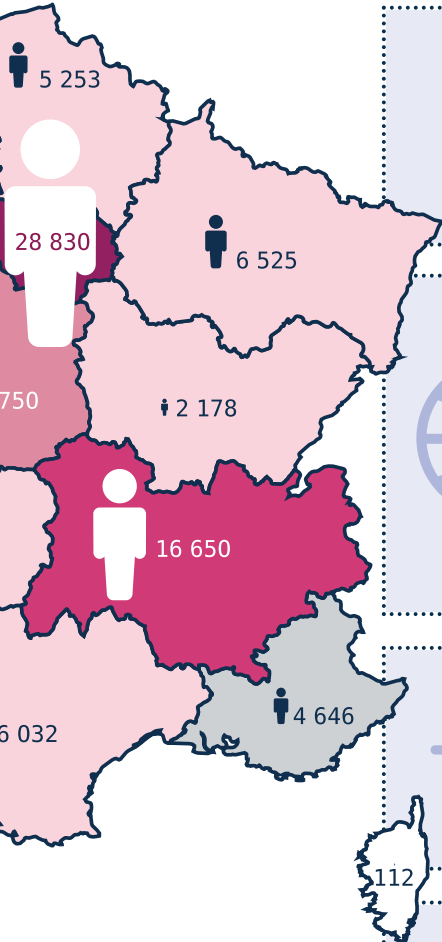
Workforce directly employed by pharmaceutical companies in France as at 31st December 2016.



Workforce (place of residence)

- More than 20 000 employees
- From 10 000 to 20 000 employees
- From 7 500 to 10 000 employees

INDUSTRY



- From 5 000 to 7 500 employees
- From 2 000 to 5 000 employees
- Less than 2000 employees



➔ **19,109 people**

Research and development workforce in pharmaceutical companies in 2015. 50% of them are researchers.



➔ **€6.8 Billion**

Trade surplus (exports - imports) in medicines in 2016, versus €7,6 Billion in 2016. France's balance of trade stands at €-62,3 Billion.



➔ **€510**

Average consumption of medicines per year per capita in 2016.



➔ **3.7%**

France's share of the global pharmaceutical market in 2017, versus 5.9% in 2007.

SALES



In 2017, sales of reimbursable and non-reimbursable medicinal products in retail pharmacies totalled EUR 20.3 Billion (at the pre-tax manufacturer price), reflecting a 0.2% increase for 2016.

- The reimbursables market saw sales rise by 0.1% between 2016 and 2017, while volumes fell back by 1.4%.
- Sales in the non-reimbursable medicinal products market were up by 1.1% at EUR 2.1 Billion, while unit sales fell by 3.7%, compared with 2016.

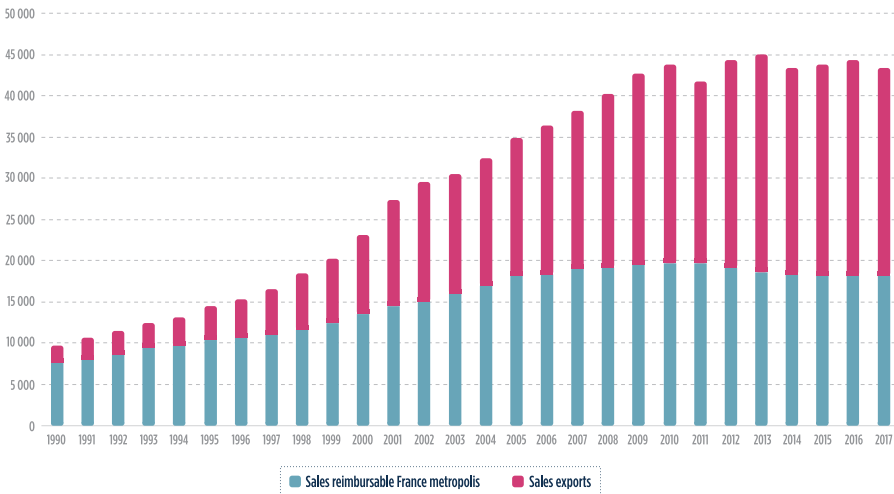
The hospital pharmacy market grew by an estimated 1.6% in 2017 to a value of approximately EUR 8.2 Billion. This attenuation of growth in what has been a highly dynamic market in recent years is explained by two factors: a market for Hepatitis C treatments that began to shrink in Quarter 2 of 2017 and the stabilisation seen in the total amount of ATUs (Temporary Authorisations for Use) since the start of the year.

Exports of medicinal products were down by 3.7% to an overall total of EUR 25.1 Billion.

1. CHANGING TRENDS IN REVENUE FROM MEDICINES

(Manufacturer's prices before tax and in Millions of Euros)

Source : Leem according to Gers (Group for the Development and Production of Statistics) and customs statistics



EXPORTS AND IMPORTS



French exports of medicinal products in 2017 were down on those for the previous year, with a total of EUR 25.1 Billion (-3.7%), after the 2.0% year-on-year growth seen in 2016. This reduction returned the level of export sales to the one seen in 2012 (EUR 25.3 Billion).

In 2017, France imported EUR 18.3 Billion worth of medicinal product; a level very similar to that of 2016. These imports came mainly from Germany (17.1%), the United States (16.1%), Switzerland (12%) and Ireland (9.6%).

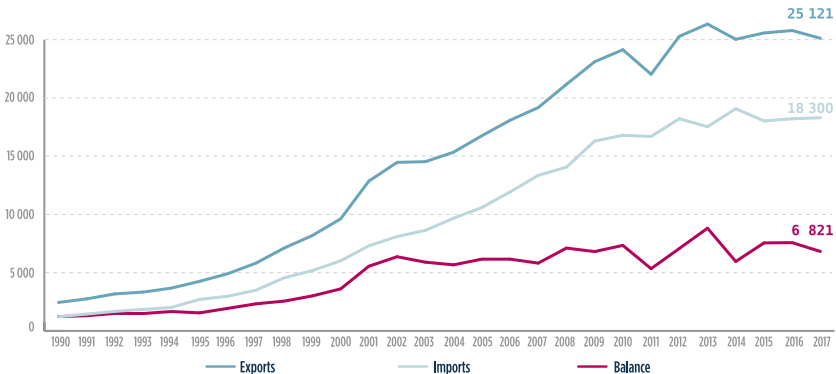
France's overall trade balance showed a deficit of EUR 62.3 Billion in 2017, reflec-

ting a deteriorating balance that was EUR 14 Billion further into the red than in 2016. The increasing price of energy driven by recovery in oil prices was the main reason for this deterioration. Exports of pharmaceuticals accounted for 6.4% of all French exports, behind aircraft/aerospace (12%) and automotive industry products (7.1%). Pharmaceuticals accounted for 4.8% of all French imports, behind - notably - automotive industry products (7.8%) and aircraft/aerospace (7%). In the same period, pharmaceuticals ranked as the number 4 industry sector (excluding military equipment) in terms of trade surplus generated.

2. TREND IN FRENCH EXPORTS AND IMPORTS OF MEDICINES

(in Millions of Euros)

Source : Customs statistics



JOBS



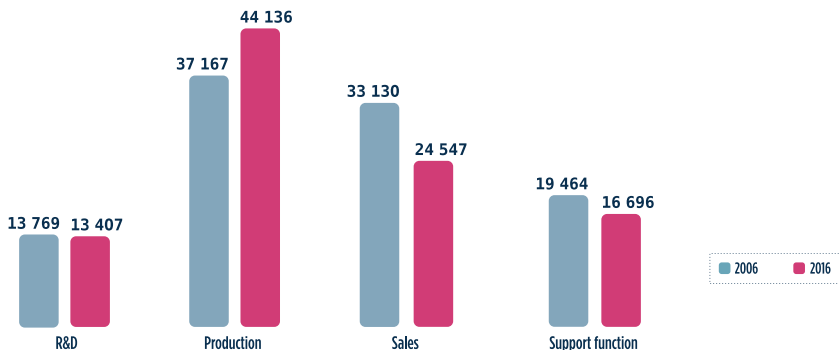
After seven uninterrupted years of staff downsizing, the jobs market appears to be stabilising. Overall, the professional sector workforce of 98,786 in 2016 (compared with 98,690 in 2015) appears to have settled below the 100,000 mark. However, the pharmaceutical industry still has 128,300 employees, according to 2016 data from DARES⁽¹⁾, which include companies whose operations are not exclusively related to the medicines market.

We note an increase in the number of pharmaceutical industry jobs in 2016, compared with 2015 (+0.1%, i.e. 96 more jobs), with recruitment numbers (permanent and fixed-term contracts) continuing the previous dynamic trend to total 6,767 in 2016. In 2017, 14 job protection plans (PSE) were announced in France, affecting 1,136

jobs. This reflects a reduction on 2016, when the number of jobs impacted was 1,715. More than 4,600 people (5% of the workforce) will retire from the pharmaceutical industry between now and 2023, in addition to around 11,000 employee departures (11.1%) as a result of natural turnover.

The pharmaceutical industry has the ability to bounce back, but the conditions needed to attract and retain staff will have to be met in order to boost employment in France. Consolidation of biomanufacturing capacity, improved forward visibility, regulatory stability or even a lightening of the French tax burden are needed to expand the national presence of the industry, with an associated knock-on benefit for jobs.

3. EVOLUTION OF THE NUMBER OF EMPLOYEES BY PROFESSIONAL GROUP BETWEEN 2006 AND 2016



(1) The French Directorate for Research, Studies and Statistics.

RESEARCH AND DEVELOPMENT



The pharmaceutical industry is one of the most research-intensive of any economic sector. Although its total research budget is lower in absolute terms than that of the automotive and aircraft/aerospace industries, it represented 9.8% of total pharma-

ceutical company revenue in 2015, compared with just 4.8% for the automotive industry. It totals approximately EUR 4.5 Billion, of which EUR 47 Million comes from public funding, i.e. 1% of the overall R&D commitment.

4. BREAKDOWN OF RESEARCH AND DEVELOPMENT INVESTMENT IN 2015 BY PHARMACEUTICAL COMPANIES IN FRANCE

Source : Ministry of Research - most recent data published in February 2018

	R&D spending in € Million	Breakdown	As % of total revenue*
Domestic spending	3 023	67,9%	6,6%
<i>Fundamental research</i>	308	6,9%	0,7%
<i>Applied research</i>	1 346	30,2%	3,0%
<i>Experimental development</i>	1 369	30,8%	3,0%
External spending**	1 428	32,1%	3,1%
Total budget	4 451	100,0%	9,8%
<i>Public funding</i>	47		

* Total revenue = revenue in France + export revenue of surveyed companies. / ** Subcontracts.

In 2015, just over 19,000 people were employed in research and development by pharmaceutical companies in France. However, these data do not fully reflect the

reality, since they do not include public-sector jobs in universities or under research contracts funded through public-private partnerships.



ECONOMIC ENVIRONMENT AND SOCIAL WELFARE ACCOUNTS

France delivered stable and consistent GDP growth of 2.0% during the year, which is the highest level since 2011. Lower unemployment, moderate price increases and increased corporate investment all contributed to this good result against the background of a favourable global economy. In December 2017, the business climate reached its highest level in ten years, sending a clear sign of renewed confidence in the French economy among company chief executives. This trend is expected to continue in 2018.

The balance of the general social security system and of the old age solidarity fund (FSV) was - EUR 5.1 Billion in 2017, reflecting an improvement of EUR 2.7 Billion on 2016 (-EUR 7.8 Billion). This is the lowest deficit recorded over the past fifteen years. This result is slightly above the target adjusted by the Social Security Finance Act for 2018 (-EUR 5.2 Billion).

The general social security system deficit in 2017 was EUR 2.2 Billion, while the healthcare deficit was running at EUR 4.9 Billion. These good performances are explained by two facts: the national health insurance expenditure target was met, with growth of 2.2%, and the increase in the national payroll was above target, generating an additional EUR 1.2 Billion in income.

5. MACROECONOMIC FORECASTS OF THE FRENCH ECONOMY FOR 2016-2017

(rate of volume change, unless otherwise indicated)

Sources : Insee, COE-Rexecode, LFSS 2018

FRENCH ECONOMY	2014	2015	2016	2017	2018*
GDP and its components (% change)					
GDP	0,2	1,2	1,1	2,0	1,9
Household consumption	0,7	1,3	2,1	1,3	1,7
Productive Investment	2,0	2,7	3,4	4,4	5,4
Exports	2,4	6,0	1,9	3,3	4,0
Imports	3,9	6,4	4,2	4,1	3,3
GDP by value					
Amount (€ Billion)	2 132	2 181	2 229	2 274	2 317
Consumer prices**					
Including tobacco	0,5	0,0	0,2	1,0	1,6
Savings rate (% of disposable income)	15,1	14,5	14,0	14,3	13,8
Private payroll					
Changes in value	1,6	1,7	2,0	3,2	3,0
Unemployment (as defined by the ILB)					
Rate (%)	9,9	10,1	9,8	9,1	8,3
Trade balance (€ Billion)	-62,1	-57,7	-45,7	-48,1	-58,0
General government (% of GDP)					
Government deficit***	-4,1	-3,6	-3,4	-2,7	-2,4
Government debt***	94,9	95,6	97,5	97,4	96,7
Compulsory contributions	44,6	44,4	44,4	44,3	44,1
International environment					
GDP of the European Union (at 28)	1,4	2,2	2,0	2,7	2,3
GDP in the Euro area	0,9	2,0	1,8	2,5	2,2

* Forecasts. / ** Yearly average. / *** According to the Maastricht Treaty norms.

CONSUMPTION



The annual national healthcare accounts measure the individual items that together constitute the total value of medical goods and services consumed, as well as ongoing health-related expenditure (total healthcare-related expenditure by public and private funding sources). Medical care and goods to the total value of EUR 198.5 Billion were consumed in France during 2016, which is equivalent to EUR 2,975 per head of population.

On this basis, consumption rose by 1.5% compared with 2015. Across the population, the consumption of medicines and other pharmaceutical products averaged EUR 510 per head of population in 2016.

This average conceals a very significant variation, since the highest consumers are the elderly and the seriously ill.

6. BREAKDOWN OF CONSUMPTION OF HEALTHCARE AND MEDICAL GOODS IN 2016

Source: national health accounts published in September 2017

	Total consumption (in M€)	Consumption per person (in €)
Hospital care and medical wards	92 350	1 384
Ambulatory care	52 216	782
<i>Physicians, dentists and midwives</i>	31 716	475
<i>Medical auxiliaries, analysis, spas and other care</i>	20 500	307
Patient transport	4 807	72
Drugs*	34 002	510
Other medical goods**	15 163	227
Consumption of medical goods and care	198 538	2 975

* Including other pharmaceutical products, blood products, magistral formulas, special fees to dispensing chemists, but excluding hospital medicines.

** Optical products, prostheses, orthoses, vehicles for the physically disabled, minor equipment and dressings.

HEALTHCARE SYSTEM



The current Social Security system was introduced by the French government ordinances of 4 and 19 October 1945. In France, the term 'social security' encompasses all statutory social welfare schemes (sickness, old age and family support), which together protect beneficiaries against almost all the risks of everyday life, regardless of age, income and state of health. It also covers occupational accidents. Reviewed and revised in 1967, 1996 and 2004, these ordinances establish the principle under which social security institutions are managed by organisations representing both employees and employers. In reality, and even more so since the so-called 'Douste-Blazy' reform of 2004, the social welfare system - including health insurance - is supervised by the French state. More than 60% of the Social Security budget is funded from employer and employee contributions made on a full-salary

basis. The balance is funded through taxation, and chiefly via the CSG (Contribution Sociale Généralisée, or General Social Contribution), which is calculated on the basis of total earned and unearned income, the social debt repayment contribution (RDS), and various other taxes and levies which account for an increasing proportion of this funding.

The contribution made by medicines to healthcare economies (in the form of reimbursement for medicines provided through retail or hospital pharmacies as a proportion of all services provided as general health insurance benefits to around 86% of the population) bears no relation to the proportion of expenditure it attracts: in 2017, medicines represented 16.6% of expenditure, but contributed 43% of the economies required by the National Healthcare Spending Target (ONDAM). The imbalance of this ratio has remained constant for a number years.

7. GENERAL HEALTH INSURANCE BENEFITS IN 2017

Source : CNAMTS (1st and 2nd column), Leem (3rd column)

	Benefits in 2017 (in € Billions)	Growth 2016-2017	AAGR* 2007-2017
Payments to public and private hospitals	81 205	3,2%	3,0%
Private fees	18 957	2,7%	2,4%
<i>Including self-employed doctors</i>	15 480	2,7%	
<i>Including dentists</i>	2 794	1,3%	
Medical auxiliaries	9 532	3,9%	5,8%
Health products	25 276	1,9%	
<i>Including medicines**</i>	19 771	1,2%	1,2%
<i>Including medical devices</i>	5 505	4,6%	
Other ambulatory care	14 051	2,9%	
<i>Including labs</i>	2 778	0,6%	
<i>Including travel costs for patients</i>	3 702	3,8%	
<i>Including benefits in cash</i>	7 317	3,7%	
Other	2 865	0,8%	
Total general health	151 886	2,9%	3,1%

* Average Annual Growth Rate. / ** Including the onward sale of medicines by hospitals and medicines for exceptional use.

2017 AT A GLANCE

Publication by Leem of the 8th survey
"Attractiveness of France for international
clinical research"

FEBRUARY
28TH

MARCH
16TH

Signature of the **agreement on minimum wages** for 2017 and the **amendment to the collective agreement on professional training**.

Meeting Leem-International Organization of the Francophonie in Geneva, devoted to the challenge of the reappearance of the infectious risk.

MAY
21ST

JUNE
20TH

Publication of the 2016 Observatory of Productive and Biotechnological Investments in France.

Signature of the **collective agreement on professional equality between women and men**.

JULY
6TH

OCTOBER
20TH

Preparation of the 8th Strategic Council of Health Industries (CSIS) on the theme: "Make France a territory of excellence to attract and develop the health solutions of tomorrow".

Publication in the Official Journal of the **Social Security Financing Act**: the rate of increase of the National Health Insurance Expenditure Target (Ondam) is set at 2.3% for 2018.

DECEMBER
31ST