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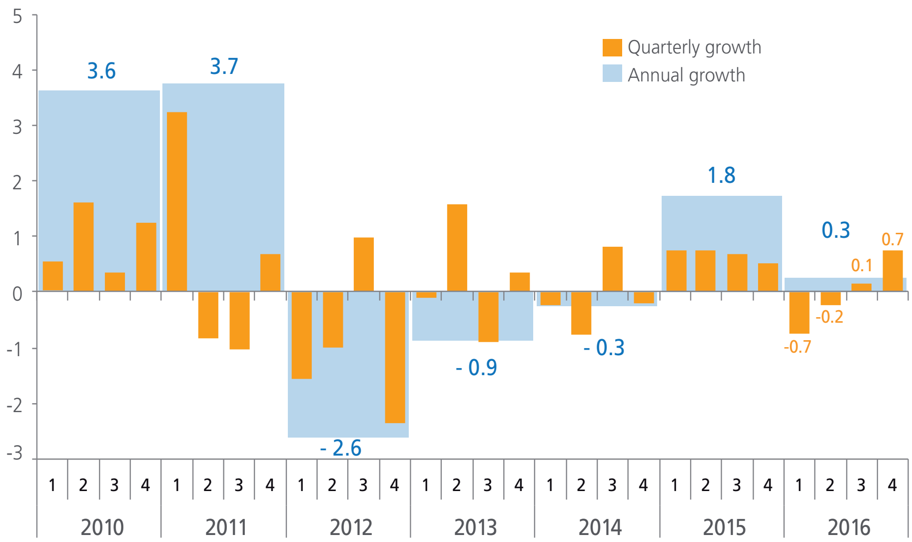
In 2016, French manufacturers saw higher margins but weaker external trade

French manufacturing output rose slightly in 2016 (up 0.3%), fuelled chiefly by the automotive, aerospace and chemical industries. France's manufacturing trade deficit ballooned by €7.3bn amid a €4.9bn fall in the aerospace industry's trade surplus. There was a modest drop in direct manufacturing jobs in 2016 (down 25,400, against a post-2000 annual average of 59,000 losses), while temporary employment rose sharply again. Hourly labour costs continued to grow at a slower pace than in Germany. This increase was more than offset byproductivity gains, pushing unit labour costs down by 0.4%. The margin rate of the manufacturing sector hit a post-2002 peak last year.

Figure 1: Manufacturing output

Volume, as a % (seasonal and working day adjustment)



Source: Insee, industrial production index.

French manufacturing output grew at a slower pace last year (up 0.3%) than in 2015 (up 1.8%) *(Figure 1)*. Output was nevertheless up for the second year running – a situation seen on only two other occasions since 2001 (at the peak of the pre-crisis boom in 2006-2007, and during the post-crisis bounce in 2010-2011), and a relatively unusual phenomenon given the underlying downward trend (down 14% overall since 2000). The quarterly figures show that output fell by 0.7% and 0.2% respectively in Q1 and Q2, flat-lined in Q3, and jumped by 0.7% in Q4.

In 2016, the output growth rate was well below the European Union and eurozone averages (up 1.7% and 1.6% respectively). Germany (up 1.3%) and Italy (up 2.1%) saw growth accelerate, output continued to grow strongly in Spain (up 2.7%), and growth picked up again in the United Kingdom (up 0.7%). French manufacturing output remained below its Q1 2011 peak, which marked the end of rebound phase that followed the 2008-2009 crisis, unlike Germany, the EU and the euro zone.

The automotive, aerospace and chemical industries were the main drivers of manufacturing output

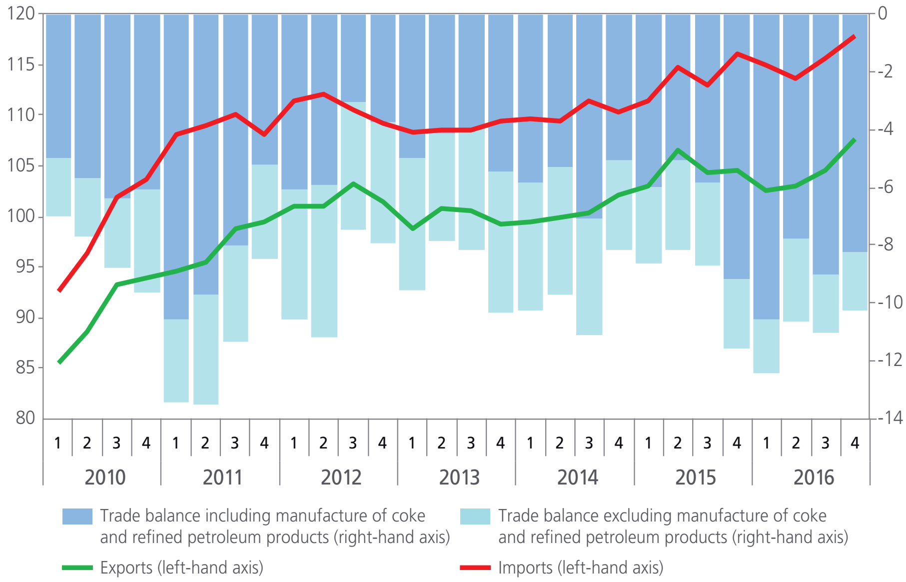
In 2016, automotive output increased by 4.6% – the highest figure across all industries *(Table 1)* – amid resurgent demand in Europe Automotive output has risen by28% from its Q4 2013 low point after a 47% slump post-2005. Output bounced back in the aerospace sector (up 3.7% after a 2.7% drop in 2015), fuelling a 3.5% rise across non-automotive transport equipment (after a 1.8% fall the previous year). Aerospace is France's best-performing industry and recorded the strongest post-2010 growth (up 23%), ahead of chemicals (up 17%), where output also rose sharply last year (up 2.4%). Several industries that have struggled since 2000 managed to trim losses in 2016, while some even returned to growth. The electrical equipment sector grew by 0.7% after a four-year decline, while the wood, paper and printing industry saw output fall by just 0.4% – the slowest rate since 2004.

Output declined in the pharmaceutical industry, and in manufacture of coke and refined petroleum products

The pharmaceutical industry – the best performer in 2015 (up 17.0%) after nine year of stagnation – saw the sharpest dip in output (down 2.8%) across all sectors in 2016. There was also a steep decline in output in manufacture of coke and refined petroleum products (down 2.5%), which followed a strong rebound in 2015 due to more favourable conditions (falling crude oil prices and increased demand for road fuels). Output, which has declined by 33% since 2008, fell further on the back of structural difficulties (excess production capacity and increased competition) and the effects of industrial action in Q2, during which output dipped by 11%.

Figure 2: Exports, imports and manufacturing trade balance

Exports (FOB), exports (CIF) and trade balance (in nominal terms), in billions of euros



Source: Directorate General of Customs and Excise.

The manufacturing trade deficit widened

France added €7.3bn to its manufacturing trade deficit (excluding energy commodities but including manufacture of coke and refined petroleum products) in 2016. The worsening of the manufacturing trade deficit was spurred by rising imports (up 1.5%) and flat exports (down 0.1%) and marks the end of a four-year recovery period during which the trade deficit wastrimmed by €9.8bn (including a €2.1bn cut in 2015) *(Figure 2)*. At €44.3bn, the deficit is now close to the 2011 low point of €46.8bn.

Table 1: Output by sector

Volume, as a % (seasonal and working day adjustment)

	2016	2010-2016
Manufacturing (headline figures)	0.3	1.9
Automotive	4.6	2.5
Other transport equipment (aerospace, rail, shipping, etc.)	3.5	22.5
Chemicals	2.4	17.3
Plastic, rubber and other non-metallic mineral products	2.2	-2.3
Electrical equipment	0.7	-10.9
Metallurgy and metal products	0.0	-4.5
Machinery and equipment	-0.1	3.1
Wood, paper and printing	-0.4	-14.4
Computer, electronic and optical products	-0.6	3.4
Repair, installation and other manufactured products	-0.9	1.0
Food	-1.2	0.7
Textiles, clothing, leather and footwear	-1.3	-7.1
Manufacture of coke and refined petroleum products	-2.5	-15.2
Pharmaceuticals	-2.8	11.6

Source: Insee, industrial production index.

The aerospace industry's trade surplus dropped sharply

The widening trade deficit was driven chiefly by a steep decline in the aerospace industry's trade surplus (down €4.9bn), which resulted from a spike in imports (up 11.6%) and weaker exports (down 1.4%). Aerospace remains France's biggest export sector and has the largest trade surplus of any manufacturing sector, at €17.5bn *(Figure 3)*. The automotive trade deficit increased by €3.2bn to €9.7bn as imports grew at a faster pace than exports (up 10.3% and 4.4% respectively). The deepening trade deficit also reflects an upswing in investment, fuelling an additional €1.5bn in imported machinery and equipment – third only to the automotive and aerospace sectors in terms of manufacturing import growth. The worsening trade balance may also be attributed to a spike in food products imports (up 2.4%), although the sector retains a healthy surplus of €5.6bn, due primarily to an €11.4bn surplus in the beverages segment.

The refined petroleum products deficit narrowed

The refined petroleum products deficit shrank for the fourth year running (down €2.3bn) owing to the fall in oil prices, which affected both imports (down 19.7%) and exports (down 18.3%). Excluding manufacture of coke and refined petroleum products, France's manufacturing trade deficit now stands at a record €35.7bn. The delivery of the Harmony of the Seas cruise ship to the United States helped wipe out the deficit in non-automotive and non-aerospace transport equipment, where the balance is now in equilibrium. The pharmaceutical industry's trade surplus rose by a modest €0.5bn, while a 7.8% rise in sales of leather goods, bags and footwear trimmed the structural trade deficit in the textiles, clothing, leather and footwear sector. The chemical industry maintained its trade surplus of €11.1bn – the second-highest figure across the French manufacturing sector –, which mainly reflects the a €9.4bn positive balance in fragrances, cosmetics and cleaning products.

France manufacturing trade balance improved with Europe but worsened with the rest of the world

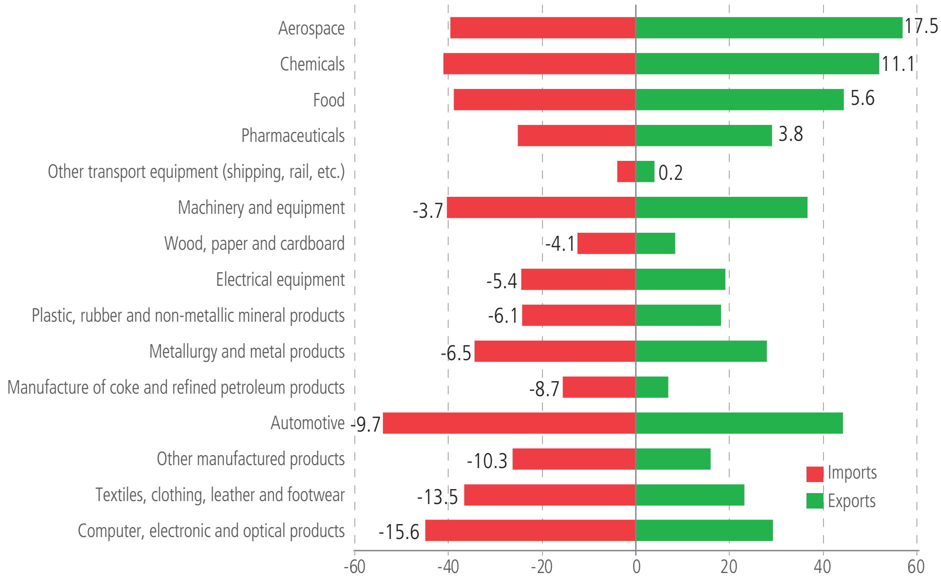
Despite a sharp rise in exports to Poland, Italy and Spain in 2016, France's manufacturing sector continues to have a structural trade deficit with the European Union (- €26.4bn), and with Germany in particular (€14.0bn). France still runs its biggest trade surplus with the United Kingdom (€11.9bn), despite a contraction of trade flows in the context of Brexit. An improvement in the manufacturing trade balance with Russia and Switzerland helped cut France's deficit with the European continent as a whole by €1.6bn in 2016. France also saw a €1.5bn downturn in its trade balance with the Americas arising from a 10.1% drop in exports to Brazil – where, according to the OECD, domestic demand slipped by 4.8% in 2016 after a 5.4% fall the previous year – and a 2.4% rise in imports from the United States. France structural manufacturing trade surplus with the Middle East and Africa dropped respectively by €1.0bn and €2.7bn as a result of a sharp fall in exports. French exports to South Korea, China and Japan also decreased by value in 2016, contributing to a modest €0.8bn deterioration in the manufacturing trade deficit with the Asia and Oceania region.

Oil prices stayed low and the euro remains weak…

The oil price bottomed out at $31 a barrel in January 2016 before settling at around $45 and recovering to $54 by year-end – still less than half of the 2011-2014 average.
The exchange rate between the euro and the dollar remained stable in 2016 (down 0,1%), fluctuating between 1.09 and 1.11 dollars for most of the year. This exchange rate remains20% below its early 2014 level. In 2016, the single currency also lost 10% of its value against the yen, but strengthened against sterling (up 13%) and other currencies (Chinese yuan, South Korean won and Brazilian real), pushing up France's nominal[1] effective exchange rate by 1.6% year-on-year (compared with a 2.0% rise in Germany).

Figure 3: Trade in manufactured products (2016)

Exports (FOB), exports (CIF) and trade balance (in nominal terms), in billions of euros



How to read this chart: in 2016, the food processing industry ran an external trade surplus of €5.6bn, with exports at €44.4bn and imports at €38.8bn.
Source: Directorate General of Customs and Excise

…bolstering extra-EU exporters' margins

French producer prices rose in the second half of 2016 after an early-year dip, reflecting variations in the oil price. Over the year, producer prices fell more rapidly in the domestic market (down 2.0% – a sharper decline than among intra-EU and extra-EU exporters (down 1.7% and 1.6% respectively). Intra-EU and extra-EU producer prices diverged significantly in 2014 and 2015 as extra-EU exporters benefited from the depreciation of the euro to raise their euro-denominated prices and boost margins. Conversely, these same firms had granted major margin concessions in the 2000s as the euro gained strength.
Despite improving extra-EU exporter profit margins and pushing up prices across many manufactured goods (textiles, clothing, wood, paper, chemicals, machinery and equipment), the depreciation of the euro against the dollar seems to have had a time-limited effect on trade volumes. France recorded a 0.4% drop in extra-EU exports by volume in 2016, against a 5.7% increase in the previous year. On the contrary, intra-EU exports were up for the second consecutive year (3.1% in 2016 and 3.7% in 2015).

Table 2: Hourly labour cost in manufacturing (in euros)

	Euro zone	Germany	Spain	France	Italy
2010	28.6	33.2	21.6	33.4	25.3
2011	29.5	34.4	21.9	34.7	26.0
2012	30.2	35.0	22.4	35.7	26.8
2013	30.8	36.1	22.7	36.0	27.3
2014	31.4	37.1	22.8	36.5	27.4
2015	31.9	38.0	22.7	37.0	27.5
2016	32.4	39.0	22.8	37.6	27.2

Source: Eurostat, LCS and LCI.

Direct jobs recorded only a modest drop

In 2016, direct manufacturing jobs fell slightly by 0.9% (25,400 fewer jobs) *(Figure 3)*, compared with a 1.3% drop in 2015. These figures reflect a structural downward trend – 59,000 jobs lost each year on average since 2000 – as above-average productivity gains are causing output growth to outperform job growth in the manufacturing sector. The pace of job losses has slowed since 2011, falling to 1.1% per year on average, compared with 2.2% in 2001-2008 and 4.2% in 2009-2010. This improvement was observed throughout 2016, and particularly in the second half of the year.
The sector-by-sector breakdown reveals sustained increases in pharmaceuticals (up 1.4%, compared with a 1.2% rise in 2015) and in non-automotive transport equipment (up 1.2%, compared with a 0.8% rise in 2015), which added jobs for the sixth year in succession. Direct jobs were also up 0.7% in the food industry (after flat-lining in 2015). For the first time in 27 years, there was a modest 0.2% increase in the textiles, clothing, leather and footwear sector, whichhas shed 59% of its jobs since 2000. Direct jobs were down in other manufacturing sectors, including electrical equipment (down 3.2%) and automotive (down 2.8%, against a 3.4% drop in 2015) despite a spike in output.

Temporary employment rose sharply

The decrease in direct employment was partially offset by increased recourse to temporary employment (up 7.5% in 2016, after 6.2% in 2015), which has been growing sharply since 2012 Q4. Firms uncertain about upcoming business volumes are seeing greater flexibility in hiring temporary workers, who accounted for a record 8.8% of all manufacturing sector jobs in Q4 2016. This form of employment is becoming especially prevalent in transport equipment (up 18.8% in 2016) and in textiles, clothing, leather and footwear (up 15.0%).

The hourly labour cost continued to grow at a slower pace than in Germany

In 2016, the hourly labour cost (gross wages plus employer's contributions) in the manufacturing sector stood at €37.60 per hour *(table 2)*. It increased at roughly the same rate observed since 2013 - + €0.60 year-on-year. The hourly labour cost is rising at a slower pace than in 2000-2012 (in average + €0.90 per

[1] The nominal effective exchange rate is a trade-weighted average rate at which the euro exchanges against all other foreign currencies. It differs from country to country within the euro zone.

hour per year) due to low consumer price inflation and recent cost-cutting measures. The hourly labour cost in France remains lower than in Germany (€39.00 per hour),where it has been rising at €1.00 per hour since 2013, but is still significantly higher than in Spain and Italy.

Unit labour costs fell slightly

Hourly productivity gains of 1.9% in 2016 (3.8% in 2015) more than offset rising labour costs in manufacturing. In France, unit labour costs – the ratio of hourly cost to productivity – fell by 0.4% in 2016 and 2.2% in 2015. Unit labor costs have decreased by 3.7% since 2012, fuelled by relatively high hourly productivity gains and a moderate increase in the hourly labor cost. By contrast, unit labour costs have declined by only 1.9% across the euro zone have increased by 5.4% in Germany in the same period.

Hourly productivity gains have slowed in the French manufacturing sector since 2012 (+2.0% per year on average in 2011-2016, compared with +3.4% per year in 2000-2011). However, French productivity growth remains higher than in the whole euro zone or of Germany, where productivity gains amounted in average to +0,7% per year between 2011 et 2016.

The margin rate of the manufacturing sector hit a post-2002 peak

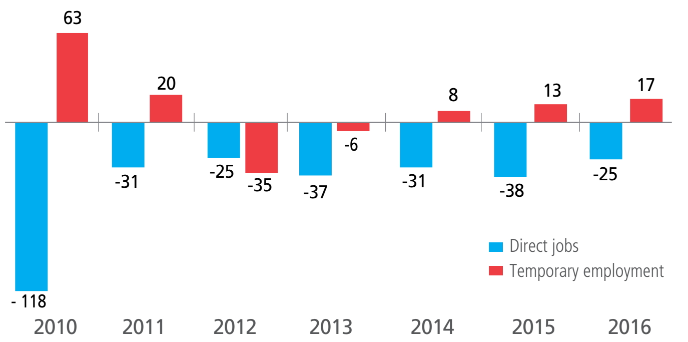
The margin rate of french manufacturing firms increasedin 2016 for the fourth year running (up 0.3 percentage points), although the uplift was less marked than in 2015 (up 2.1 percentage points). The annual average of the margin rate hit a post-2002 record of 35.3%. This increase was partly explained by the stabilization of the domestic terms of trade (the ratio of the value-added price index to the consumer price index), the fluctuation of which reflect the international context and margin concessions granted by firms.. In 2001-2008, the domestic terms of trade accounted on average each year for a 1.6 percentage point drop in the margin rate as the euro strengthened against the dollar, the oil price increased and international competition intensified. Since 2012, however, this negative contribution has been cut to just 0.1 percentage points on average per year, as global conditions have improved (weaker euro, falling oil prices) and competition has intensified at a slower pace, thereby helping to halt the decline in the value-added price index.

Table 3: Margin rate in the manufacturing sector – contributing factors (in percentage points)

	2013/2012	2014/2013	2015/2014	2016/2015	2016/2012
Variation in the margin rate	**0.5**	**0.1**	**2.1**	**0.3**	**3.0**
Contribution to the variation in the margin rate:					
Productivity gains	0.7	0.7	2.4	0.8	4.5
Real wages per capita	-0.2	-0.2	-1.1	-0.8	-2.2
Rate of employer's contribution	-0.2	-0.3	0.2	0.1	-0.3
Domestic terms of trade (ratio of the value-added price index to the consumer price index)	0.3	-0.7	-0.1	0.0	-0.5
Operating subsidies (including CICE)	0.0	0.7	0.5	0.1	1.2
Tax on production	-0.1	-0.1	0.2	0.1	0.2

Source: Insee, quarterly national accounts.

Figure 4: Manufacturing jobs – annual trend* (in thousands)



* in number of people.
Sources: Insee (direct jobs) and Dares (temporary employment).

The slowdown in the margin rate reflected smaller productivity gains, which accounted for 0.8 percentage points of margin growth in 2016 (compared with 2.4 percentage points in 2015). The effects of productivity gains were fully offset by an increase in real wages per capita, the contribution of which amounted to 0.8 percentage points (compared with -1.1 percentage points in 2015). Operating subsidies[2] pushed up margin by 0.1 percentage points, namely less than in 2014 (+0,7 percentage point) and 2015 (+0,5).

[2] Operating subsidies include the Competitiveness and Employment Tax Credit (CICE), which is recorded one year in arrears (i.e. in the year in which the receiving company submits its claim to the government).

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