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Country Report France 2016

Including an In-Depth Review on the prevention and correction of macroeconomic imbalances

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EXECUTIVE SUMMARY

This country report assesses France's economy in the light of the European Commission's Annual Growth Survey published on 26 November 2015. The survey recommends three priorities for the EU's economic and social policy in 2016: re-launching investment, pursuing structural reforms to modernise Member States' economies, and responsible fiscal policies. At the same time, the Commission published the Alert Mechanism Report that initiated the fifth annual round of the macroeconomic imbalance procedure. The Alert Mechanism Report identified France as warranting a further in-depth review.

In France, growth is expected to remain moderate, as investment is projected to pick up only gradually and net exports to remain a drag on growth. After three years of weak activity, GDP growth improved to 1.1 % in 2015, supported by favourable external factors. In particular, growth benefited from reduced oil prices, the euro's depreciation and policy measures to reduce the cost of labour and strengthen competitiveness. France's economy is expected to gradually further accelerate, driven by private consumption on the back of a dynamic households' purchasing power. However, France's growth rate remains below the euro-area average. In recent years, GDP growth has been held back by investment. The recovery in investment is expected to only take hold in 2017, as policy measures to reduce the cost of labour and strengthen competitiveness are expected to foster business confidence with a lag. Inflation has fallen to 0.1 % in 2015 and is expected to increase only moderately to 0.6 % in 2016. Moreover, the slowdown in emerging markets and the recent financial market turmoil might weigh on the economic outlook.

While France's current account balance has recently improved, its competitiveness remains a source of concern. The contribution of net exports to GDP has been negative in the past few years and is expected to remain so until 2017. External debt sustainability is less a concern for France. Weak competitiveness reflects both cost factors, in part due to accumulated real wage increases in a context of low productivity growth, and non-cost factors, in particular linked to past depressed profit margins and their effects on investment strategies.

Since the beginning of the crisis, France has reduced its deficit more slowly than the rest of the euro area which results in diverging debt developments. The general government deficit and debt, expected at 3.7 % and 96.2 % of GDP respectively in 2015, remain high. The public debt-to-GDP ratio continues increasing while it declines in the euro area. Moreover, the economic environment, characterised by a decline in potential growth and low inflation, complicates the reduction in public debt.

In the long term, growth is expected to remain weak, as French potential growth has slowed down since the 2008 financial crisis. While averaging 1.8 % from 2000 to 2008, French potential GDP growth is estimated at 1.0 % on average from 2009 to 2017. Labour and product market rigidities, slow resource reallocation and technology adoption limit total factor productivity growth. Productivity growth has also been hampered by the regulatory burden facing French firms and by size-related thresholds. The overall tax burden on the economy continues to increase and its composition is not growth-friendly. Potential growth also crucially depends on the labour force's skills and on the innovation capacity of the French economy, which is lower than that of some of its main competitors.

The unemployment rate, at 10.5 % in 2015, is not expected to decline in the short term. The high unemployment rate is an indirect result of France's imbalances. With the recovery underway still being gradual and a dynamic growth rate of the labour force, the measures to reduce the costs of labour are likely to have only a limited impact on employment up to 2017. Moreover, the structure of the labour market appears more and more segmented and educational inequalities are widening. Jobseekers have only limited access to training, the access of the low-qualified to apprenticeships is decreasing and the educational results of low achievers are dropping.

Overall, France has made some progress in addressing the 2015 country-specific recommendations. In the past year, an agreement among social partners has enhanced the long-term sustainability of complementary pension schemes and the fiscal framework for local authorities has been strengthened. The measures to reduce the cost of labour are ongoing as planned, although they

may only have a one-off effect on the competitiveness of the French economy if not accompanied by a package of labour market measures aimed in particular at reforming the wage-setting process and containing minimum wage developments. Limited progress has been made in improving the tax system, alleviating size-related thresholds for firms, increasing incentives to hire on open-ended contracts, making the annual process of spending reviews linked to the budgetary procedure more effective and removing unjustified restrictions to the access to and exercise of regulated professions. The budgetary strategy has not been reinforced and the expenditure cuts planned until 2017 have not been fully specified yet. Finally, the adoption and implementation of the announced reform of the labour code remains key to facilitate the take-up of derogations from general legal provisions as well the planned reform of the unemployment benefit system to enhance its financial sustainability and to provide more incentives to reinsert unemployed workers back into the labour market.

Regarding the progress in reaching the national targets under the Europe 2020 Strategy, France is performing well in reducing greenhouse gas emissions, improving energy efficiency and decreasing early school leaving, while more effort is needed in increasing the employment rate, the R&D intensity, the use of renewable energy, the tertiary education and in reducing poverty.

The main findings of the in-depth review contained in this report, and the related policy challenges, are as follows:

- **France's potential GDP growth has declined since the onset of the crisis, despite having strong demographic dynamics.** Both capital accumulation and total factor productivity growth have declined significantly. The decline in productivity growth is contributing to a further deterioration in France's competitiveness and is exacerbating the challenges posed by the high public debt.

- **The recent improvement in French export performance is not a sign of structural improvement but mainly driven by the euro's depreciation.** Since the end of 2014, exports have accelerated sharply in France. However, this improvement is concentrated in a few key sectors, in particular transport equipment. The sum of the contributions from transport equipment and energy, whose improvement is mainly due to lower oil prices, is larger than the overall improvement of the French trade deficit since 2011.

- **The recent wage moderation, in a context of low inflation and high unemployment, remains insufficient to regain competitiveness given the slowdown in productivity growth.** Real wage growth was lower than productivity growth only in 2015. The minimum wage indexation mechanism is contributing to a delay in average wage adjustments. The wage-setting process also contributes to the increase in wage pressures and the working time limits weigh on labour costs.

- **The improvement in profit margins observed since the end of 2014 is not projected to translate into a higher investment rate before 2017.** Profit margins have recently been supported by the depreciation of the euro, the decrease in the oil price and the measures to decrease the cost of labour. Despite this increase in profit margins, the investment growth rate declined in 2014 due to a lower growth of economic activity. Moreover, companies' expenditure remains targeted towards less productive investments. Specific challenges remain regarding private R&D activities and in the energy sector.

- **Barriers to private investment are moderate.** The high regulatory burden and high corporate tax rates are among the main obstacles to investment.

- **High and growing public debt coupled with deteriorated competitiveness and productivity growth could be a source of significant risks looking forward**. There are no immediate short-term risks, as interest rates are low and the management of public debt is sound. Nonetheless, there are significant consolidation needs in the coming years to bring down the deficit and the high public debt. In the long term, risks are more contained due to favourable demographic developments

compared to the rest of the EU. However, under more adverse circumstances, such as a lower productivity growth than currently envisaged, fiscal risks would be increased. While the debt burden for the private sector is low and the profitability of companies has improved, the combination of high public and private debt is an additional risk factor.

- **The efficiency of public spending remains limited.** Public expenditure in France is one of the highest in the euro area and has decreased more slowly since 2010. Spending is high as is the level of services provided, e.g. for pensions and health care. Nonetheless, other Member States achieve the same or better outcomes with fewer resources.

- **The consolidation strategy is more focused on across-the-board than selective measures.** France's consolidation strategy is expenditure-based. However, the focus is more on across-the-board expenditure cuts and less on a selective strategy to reap efficiency gains, in particular on housing and local authorities spending.

- **Given its central position in the euro area, France is the source of potential spillovers to other Member States while external conditions affect its recovery.** Its modest recovery and structural weaknesses adversely impact the European recovery and growth potential. Conversely, the recovery of the French economy is dependent on favourable external conditions. The inflation environment in the euro area is also crucial to reducing the debt-to-GDP ratio and helping competitiveness recover.

Other key economic issues analysed in this report which point to particular challenges facing France's economy are the following:

- **The French business environment continues to be middle-ranking in comparison to major competitors.** Despite ongoing simplification efforts, a high regulatory burden and fast-changing legislation are an issue and size-related thresholds continue to weigh on firms' growth. Competition in services has improved for some professions, but barriers remain in place, with a significant number of professions unaffected by recent reforms and bottlenecks are preventing the development of the digital economy.

- **The labour market performance remains unsatisfactory and educational inequalities have been widening during the last decade.** In 2015, the unemployment rate increased and the labour market remained segmented, in terms of both the education of the employed labour force and contract length. The deficit and the debt of the unemployment benefit system are planned to further increase. In addition the strict legislation of dismissal for open-ended contracts increases their complexity and uncertainty. Educational inequalities linked to the socio-economic background are among the highest in the OECD countries. The link between education and the labour market is still weak and the access to apprenticeships is decreasing, especially for the low-qualified. Although the social situation remained generally stable since 2008, some population groups are now more exposed to the risk of poverty, social exclusion and poor housing conditions.

- **Despite strong government support, innovation capacity is middle-ranking.** Private R&D remains relatively weak compared to the best innovation performers in Europe and structural changes in the French economy are weighing on its growth prospects. The proliferation of support schemes raises concerns about their overall coordination and consistency and may compromise their effective take-up by SMEs.

- **The overall tax burden continues to increase and its composition is not conducive to economic growth as it weighs significantly on production factors.** Taxes on corporations have started decreasing modestly in 2014 but taxes on consumption, including VAT, remain low as compared to the rest of the EU. The tax system remains very complex, with a limited tax base. Finally, the bias towards debt financing induced by the corporate tax system remains high.

1. SCENE SETTER: ECONOMIC SITUATION AND OUTLOOK

Growth drivers and outlook

According to the 2016 winter forecast, GDP growth is expected to gain momentum after having stagnated over the last three years. The expected gradual economic recovery in 2016 and 2017 (1.3 % and 1.7 % GDP growth) is set to be mainly driven by private consumption (Graph 1.1), as low inflation and sustained wage growth should support consumer spending. The steep fall in oil prices should improve the financial position of households and businesses, hence stimulating activity growth in 2016 and 2017.

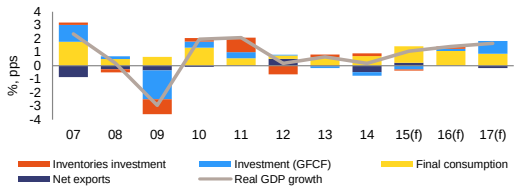
Acceleration in investment is projected from 2017 onwards. Investment will mainly be supported by the gradual recovery of aggregate demand, against a background of favourable credit conditions, reinforced by the European Central Bank (ECB) monetary policy. Measures to reduce labour costs and improve firms' profit margins, i.e. the EUR 20 billion '*Crédit d'Impôt pour la Compétitivité et l'Emploi'* (CICE) (tax credit for competitiveness and employment) and the EUR 10 billion additional cuts in employers' social contributions planned under the '*responsibility and solidarity pact*' (RSP), are expected to further boost investment only from 2017 onwards. However, equipment investment is not expected to return to its pre-crisis level in the medium term, so the extent of the recovery will be limited.

Despite a rebound in external demand, net exports are set to dampen growth in the medium term. The expected increase in foreign demand is projected to boost exports slightly from 2015, while the continued depreciation of the euro, together with the CICE and the RSP, is expected to push up somewhat export market shares. However, net exports will continue to weigh on GDP growth, as the rise in domestic demand leads to more imports.

In a time of weak job creation, unemployment remains high. The slow recovery and the measures to reduce labour costs referred to above are likely to have only a limited positive impact in the short term, while the package of measures to reduce unemployment announced in January 2016 was not taken into account in the winter forecast published on 4 February 2016. The employment gains would not be large enough to absorb the growth of the labour force, and unemployment is therefore expected to remain high (see Section 3.2). This long-lasting deterioration in the labour market has put into question the sustainability of the unemployment benefit system, as new negotiations between social partners are set to start in the first quarter of 2016 and a new agreement is planned for the first half of 2016. The link between education and the labour market is still weak with the low qualified experiencing difficult transition, which might be explained by the inefficient governance of the vocational education and training and of the apprenticeship systems. In that respect, the future personal activity account (*compte personnel d'activité*), due to enter into force in January 2017, may help reduce disparities by attaching training rights directly to workers.

Recent price developments in France reflect external factors and weak aggregate demand. Inflation has fallen since the end of 2012 to reach 0.1 % for the year 2015 as a whole. Inflation is then projected to rebound moderately to 0.6 % in 2016 and 1.3 % in 2017, as the rebound in domestic demand puts upward pressure on consumer prices. These price developments are thus unlikely to represent an immediate deflationary risk, but they make it more difficult to achieve the deleveraging necessary to ensure the sustainability of public and private finances.

Graph 1.1: **Contribution to GDP growth (2007-2017)**



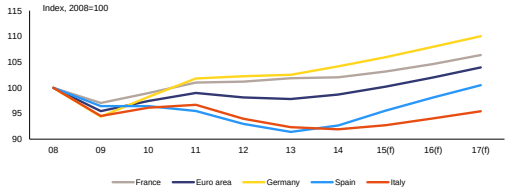
Source: Commission 2016 winter forecast

Growth prospects and potential growth

A growth model mainly driven by resilient consumption helped the French economy weather the global economic crisis relatively well, but may now appear fragile, as a lack of investment has weakened the supply side of the economy to the benefit of imports. The absence

of a credit boom and the relatively limited weight of exports in nominal GDP (27 % in 2007 compared with 46 % in Germany and 33 % in Spain) helped to limit the impact of the credit crunch and of the sharp slowdown in international trade on the French economy. Consumption (public and private) increased steadily from 2007 to 2010 at an average rate of 0.8 % and acted as an automatic stabiliser. As a result, the fall in French GDP was more modest and it rebounded above its 2008 level as early as 2011 (Graph 1.2). However, economic growth has come to a standstill since the second quarter of 2011 while the share of imports to GDP has increased from 28 % in 2010 to 31 % in 2014. As a result, unemployment has soared to three million in early 2013, business and household confidence declined while public and private debt increased rapidly to 96 % and 143 % of GDP respectively by 2014, on the back of large general government deficits and a weak financial situation for corporations.

Graph 1.2: **GDP in volume (2008=100)**



Source: European Commission

In the long term, growth is expected to remain weak, as France's potential growth has slowed down since the 2008 financial crisis (see Section 2.1). While averaging 1.8 % from 2000 to 2008, France's potential GDP growth is expected to remain at 1.0 % on average from 2009 to 2017. This decline is observed in all major euro-area economies, except Germany. However, in the case of France, the trend is blurred by the dynamic demographics, which explains much of the potential GDP growth. The non-demographic determinants of French potential GDP growth depict a different picture. If the decrease in the contribution of capital accumulation remains relatively limited from an international perspective, growth in total factor productivity has significantly declined since 2000 (from 1.3 % in 2000 to 0.2 % in 2015). As a result, potential total factor productivity growth in France has decoupled from Germany. Labour and product market rigidities limit total factor productivity growth. France's efforts to reduce rigidities have yielded relatively modest results, as they have mostly focused on product markets without addressing labour market rigidities.

Productivity developments have also been hampered by the regulatory burden facing French firms and by size-related thresholds. The French business environment continues to be middle-ranking according to the World Bank and the World Economic Forum surveys, pointing in particular to the regulatory burden as a major area of concern (see Section 3.1). Notably, the relative slowness and cost of property registration, together with frequent changes in legislation, continue to negatively affect the perception of the French business environment. The simplification programme ('*choc de simplification*') launched in 2013 is being implemented as planned, but there are still major bottlenecks for firms' growth, including size-related thresholds, in particular at the levels of 10 and 50 employees, in spite of the recent relaxation of these thresholds. Moreover, SMEs are found less prone to invest in innovation and adopt new technologies, thereby hampering productivity growth.

Competition in the services market has improved, but the benefits of the digital economy have not been fully exploited. Addressing barriers to competition that have been traditionally higher in France than among some of its main competitors, the Macron law of 6 August 2015 is easing the burden of anti-competitive regulations in several sectors, such as legal services. However, the impact of the legal professions reform, in particular as regards tariffs, will crucially depend on pending decrees, and regulation remains strict in some other services sectors, such as the healthcare sector. In addition, the take-up of digital technologies by the overall economy is weak, and France is lagging behind in terms of digitisation and internationalisation of existing firms, notably SMEs.

The overall tax burden on the economy continues to increase and its composition is not growth-friendly. Rising year-on-year since 2009, it reached 45.9 % of GDP in 2014, the second biggest tax burden in the EU (see Section 3.4). Taxes weighing on corporations have started to decrease modestly in 2014, but divergences remain

with France's main competitors. On the other hand, taxes on consumption, including VAT, are low as compared to the rest of the EU and increasing at a very low pace. Besides, the tax system remains extremely complex and little effort has been made to simplify it or to broaden the tax base.

Drivers of growth are not diversified enough in particular towards investment. In a globally competitive environment, consumption alone cannot support long-term growth, if not accompanied by a stronger supply side of the economy. Manufacturing industry, the main tradable sector contributing to exports, has seen its share of total value added fall from 16 % in 2000 to 11 % in 2014, compared with a steady 20 %-23 % over the same period in Germany. This shows the fragility of French manufacturing firms and their decreasing ability to capture aggregate demand for goods, in spite of the recent turnaround following the depreciation of the euro. Productive investment in France is too low to support productivity, competitiveness and growth.

The weakness of equipment investment points to the fragility of the recovery. Equipment investment remains 8 % below its pre-crisis level and lower than in other Member States. Several studies highlight the structural weakness of equipment investment, which declined as a percentage of total gross fixed capital formation from 28.5 % in 2000 to 21.5 % in 2013. Weak profit margins of firms, particularly in manufacturing, have weighed on investment. The ongoing measures to lower labour costs, namely the 'tax credit for competitiveness and employment' (CICE) and the 'responsibility and solidarity pact' (RSP), together with lower oil prices and the depreciation of the euro, have recently improved the financial position of companies, without having yet triggered any turnaround in investment.

French export performance

The recent improvement in France's export market shares is fragile. Since 1999, France has suffered severe export market share losses, which have somewhat recently stabilised (see Section 2.2). However, this recent stabilisation relies on three well performing sectors — 'air, spacecraft and related machinery', 'motor vehicles', and 'jewellery, bijouterie and related articles' — characterised by the leadership of a few firms with a strong brand image. Excluding these three sectors, exports of goods have been broadly flat since 2012, at a level close to their pre-crisis peak. Besides, the stabilisation in export performance is not expected to prevent net exports to continue to weigh on economic activity.

Cost competitiveness and labour market rigidities

The losses in market shares over the last decade have coincided with a weakening in cost competitiveness that may partly be explained by labour market rigidities (see Section 2.3). The difference between unit labour cost developments, which also take into account productivity, in France and in Germany since 2000 shows a weakening in France's cost competitiveness vis-à-vis Germany, equivalent to 17 % of France's unit labour costs. While this gap has been closing over recent years, France remains one of the euro-area countries with the highest hourly cost of labour mainly due to the high labour tax wedge and resilient wage growth. In a context of low inflation, real wages have only slightly decelerated, and the gap between real labour costs and falling productivity growth has not been bridged, in spite of ongoing measures to reduce the tax burden on labour, notably the CICE and the RSP.

Non-cost competitiveness and profit margins

Non-cost factors are also important in explaining the weakening of France's export performance since 2000. Non-cost competitiveness encompasses a variety of micro-economic factors such as product quality, innovation, design, after-sale service and distribution networks (see Section 2.4). In France, companies' ability to perform well in these areas was hampered by their low profit margins, which continued to decline to 30.2 % of their value added in 2014, the lowest level in the euro area, before starting to improve again since end 2014.

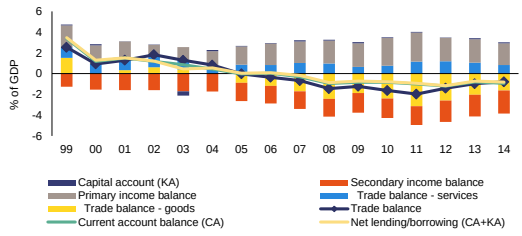
Despite major public support, R&D intensity is not sufficient to keep up with best performers. It remains below the standards of EU innovation leaders, notably Germany, Austria and the Nordic European countries (see Section 3.3). This

performance is modest given the massive public support to private R&D activities, mainly through the stabilisation of the research tax credit (*Credit d'Impôt Recherche*) that is relatively effective in providing incentives for companies to invest in R&D. However, the overall coordination and consistency of innovation policy tools remain weak and the evolution of the French economy is structurally unfavourable to R&D spending, as the share of the most R&D intensive sectors is shrinking in the total value added of the economy. As a consequence, the country is an innovation follower and it is ranked tenth, just above the EU average, according to the 2015 Commission's Innovation Union Scoreboard.

Trade balance and external deficits

The current account balance has improved since 2013, following the slowdown in domestic demand and recent improvement in the terms of trade. The trade balance account had deteriorated from a surplus of 2.5 % of GDP in 1999 to a deficit of 2.0 % in 2011 (Graph 1.3), due to the deterioration in the balance for goods. Since then, the trade balance deficit decreased to 0.8 % of GDP (+1.2 pp.) in line with a deceleration in imports following sluggish domestic demand, but the improvement of the euro-area trade balance was larger (4.5 pps. in Italy and 2.7 pps. in Spain). According to the winter forecast, the external deficits are expected to have improved further in 2015 on the back of favourable terms of trade following the fall in energy prices, but are likely to deteriorate again in 2016.

Graph 1.3: **Composition of the external position**

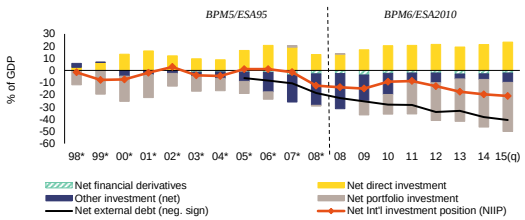


Source: European Commission

Income from foreign investments has weighed on the current account balance. The reduction in the surplus of the primary income balance has increased the current account deficit. Indeed, the lower profitability of direct investments abroad and the slump in net revenue from debt securities brought the primary income balance from a record 2.8 % of GDP in 2011 to 2.1 % in 2014. Meanwhile, the persistent decrease in the secondary income balance, which records the amounts transferred abroad by resident workers and contributions to the EU, steadily lowered the current account.

In spite of some recent improvement, the persistently negative current account is mirrored by a sharp decrease in the net international investment position over the past eight years (Graph 1.4). The net international investment position, which measures the difference between external financial assets and liabilities, recorded a slump in 2008 due to changes in valuation and has deteriorated further since then due to the persistent current account deficit. In 2014, the net investment position posted a deficit of 19.6 % of GDP, while the net external debt represented 38.2 % of GDP. In terms of composition, the net stock of foreign direct investments continues to remain positive as, in the past, net flows of French investment abroad have been consistently higher than net flows of investment in France. Accordingly, most of the negative net international investment position is financed by portfolio investments.

Graph 1.4: **Composition of the net international investment position**



Note: Figures before 2008 are expressed in BPM5/ESA95, resulting in a slight breaking point in levels, but general trends remain consistent.
Source: European Commission

Government deficit and public debt

Based on the 2016 winter forecast, the general government deficit is expected to remain above 3 % of GDP between 2014 and 2017. More specifically, the deficit is expected to amount to 3.7 % of GDP in 2015 and 3.4 % in 2016, close to

the government target (3.8 % and 3.3 % of GDP in 2015 and 2016 respectively). According to the economic and financial report accompanying the draft budgetary plan of 2016, the general government deficit would come below the 3 % of GDP benchmark by 2017.

The general government debt has increased almost continuously since 1990, and has accelerated since the crisis, with a debt-to-GDP ratio of 95.6 % in 2014 (see Section 2.5). This was slightly above the euro-area average of 94.0 %. Despite this trend France has weathered the euro-area sovereign debt crisis without experiencing major tensions on sovereign yields, and the latter have actually fallen below historical levels. This has helped contain interest expenditure and has so far prevented negative spillover effects in the financial sector and the real economy. According to the winter forecast, the debt ratio is still increasing and is set to reach 97.1 % of GDP in 2017 in France while it is projected to decline to 91.3 % in the euro area, implying a growing divergence in indebtedness between France and the rest of the euro area.

Quality of public expenditure

Fiscal consolidation remains a significant challenge for France. At 57.5 % of GDP, France had the second highest ratio of government expenditure in the EU in 2014. This can be associated with a slower budgetary adjustment compared to the euro-area average (see Section 2.6). Expenditure as a percentage of GDP is higher in France than in the euro area, in particular with regard to pensions, healthcare, education and housing (see Section 2.7). A part of this additional expenditure is related to factors such as demography, but there is also some evidence that other Member States reach better outcomes with less public resources.

Private debt

The level of consolidated private debt has continuously increased over the past decade to reach 143.2 % of GDP in 2014. This ratio exceeds that of the euro-area average for the first time. Household debt, which rose during the years leading up to the crisis, has not fallen since then as adjustments in the real estate sector are still ongoing in France. The increasing debt service and potential deleveraging pressures could potentially affect private consumption. Finally, the continuous rise in unemployment and sluggish GDP growth will weigh on household credit-worthiness over the medium term. While the level of debt to GDP of French non-financial companies has kept rising over the past few years, their leverage is not particularly high compared to euro-area peers. In 2012, the debt-to-GDP ratio of French non-financial companies increased to a level above the euro-area average. In contrast, the debt-to-equity ratio (54 %) fell below the euro-area average (66 %) in 2014. However, the moderate potential for further private consumption growth combined with the poor profitability of French companies is a potential source of concern.

Imbalances in France and spillovers to other Member States

The size of the French economy makes it a potentially important source of spillovers in other euro-area Member States (see Section 2.8). France accounts for around 21 % of overall euro-area output, and the links between trade, finance and financing from the banking sector have the potential to cause spillovers in neighbouring countries and other big EU Member States. The French domestic market represents a major export destination for several other EU Member States, and in particular for smaller neighbouring countries. Due to the high integration into global value chains, exports to France remain significant for many EU countries geographically close to France. Conversely, French exports depend to a large extent on external demand from other major EU Member States, and especially Germany. In addition, modest growth, prolonged low inflation and insufficient policy coordination within the euro area make the adjustment in France more challenging. Moreover, financial integration between France and other EU countries is also significant. Many EU Member States, such as the Netherlands, have large financial and banking exposures to France, creating the possibility for significant outward spillovers.

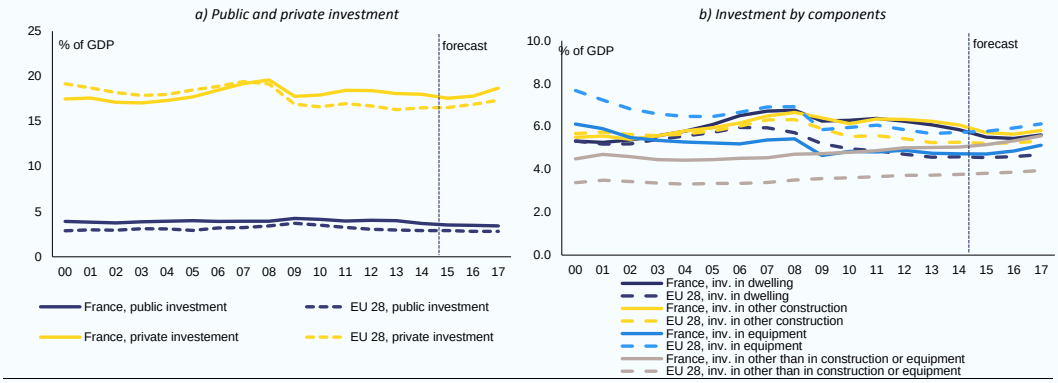
Box 1.1: Investment challenges

Section 1: Macroeconomic perspective

Total investment in France (measured as gross fixed capital formation) proved to be fairly resilient to the crisis. As a percentage of GDP, total investment in France increased at an average annual growth rate of 1.1 % over the period 2000-2007. This growth rate was above both the euro-area and the EU average, respectively being 0.3 % and 0.4 %. Between 2008 and 2014, total investment continued to increase, but more slowly than during the period 2000-2007, so that the share of total investment in GDP slightly decreased from 23.6 % in 2008 to 21.7 % in 2014. For the period 2015-2017, the share of investment in GDP is projected to remain stable until 2016 and to start to increase again in 2017.

In 2014, both private and public investment stood above the EU average. In particular, Graph 1 breaks down total investment by sector and by component. Between 2000 and 2008, the share of private investment in GDP increased more rapidly in France than in the EU, catching up the EU threshold by the end of this period. At the onset of the crisis, private investment dropped less in France than in the EU and since then has remained above the EU average. As for public investment, its ratio over GDP was above the EU average over the whole period 2000-2014. However, after having slowly increased between 2000 and 2009, public investment started to progressively decrease after 2009.

Graph 1: **Public and private investment and investment by component, % of GDP, 2000-2017, FR and EU average**



(1) Forecasts for 2015-2017 based on a no-policy-change assumption
Source: European Commission

Due to the stabilisation of investment in equipment and the relative deceleration of investment in construction, the differences among investment components are shrinking over time. At the beginning of the 2000s, investment in dwellings and other construction tended to increase faster than GDP, while the share of investment in equipment in GDP decreased. However, from 2009 these trends reversed and a process of convergence among different investment components was observed. On the one hand, the growth rate of investments in dwellings and other construction decelerated, similarly to what happened in the EU as a whole. On the other hand, investment in equipment stabilised. As a result, in 2014, the level of each investment component was about 5 % of GDP. As for the upcoming years, all investment components are expected to contribute in 2017 to the acceleration of the share of investment in GDP growth rate, with a slightly stronger role played by investment in equipment.

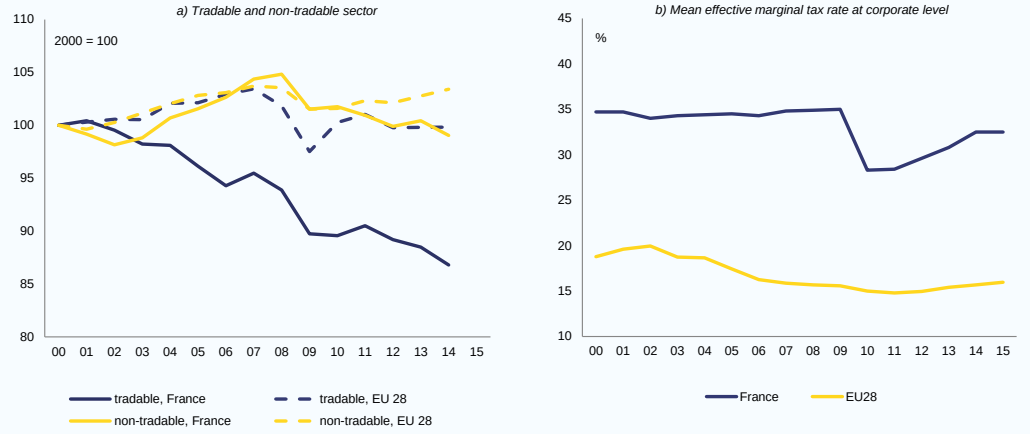
The relative good investment performance in France is in contrast with the decrease in profit margins observed over the last 15 years. This fall does not concern equally all the sectors of the French economy. Distinguishing between the tradable and non-tradable sectors, Graph 2 shows that profit margins in the non-tradable sector have remained almost constant since 2000 and have evolved similarly to what was observed in the euro-area countries as a whole. By contrast, profit margins have decreased in the tradable sector, mainly due to the downward pressure exerted by increasing competition on prices. The same downward

(Continued on the next page)

Box (continued)

trend holds true when looking at the profit margins both in the manufacturing and the market service sector, excluding financial activities.

Graph 2: **Profit margins (2000-2014) and effective marginal tax rate at corporate level (2000-2015)**



Source: European Commission

Section 2: Assessment of barriers to investment and ongoing reforms

Barriers to private investment in France are overall moderate as confirmed by the European Commission assessment ([1]). According to the World Bank's Doing Business survey, France scores 27th out of 189 countries worldwide, as was the case in 2015, and 13th out of the EU-28 Member States. As regards starting a business, France ranks 32nd, above the EU average (51st) and the average of the OECD high income countries (45th). A similar picture is offered by the Global Competitiveness Index in the 2015-2016 edition of the World Economic Forum Global Competitiveness Report, where France ranks 22nd out of 140 countries.

The decrease in profit margins described above has started to reverse since the end of 2014, but the level of taxation remains high. The increase in profit margins has been mainly led by lower energy prices and the measures taken to reduce the cost of labour (see Section 2.4). Yet, high effective average and marginal corporate tax rates, as well as the overall labour tax wedge, continue to restrain firms' resources that could be otherwise dedicated to investments. Moreover, the tax structure implies a debt bias, hampering the development of a stronger equity market to facilitate investment (see Section 3.4).

A high regulatory burden still weighs on the framework conditions relevant for investment decisions. The government announced a reform of the labour market to be tabled in 2016, which would aim at reducing the complexity of the labour regulations (see Section 2.3), while the ongoing simplification programme may reduce administrative hurdles to investment. By contrast, barriers to competition remain higher in France than in its main competitors; in particular, the access to and exercise of some regulated activities still hampers competition in the services sector and the investment attractiveness for the whole of the French economy (see Section 3.1).

The development of infrastructure networks, renewable energy and the digital economy may be fostered, also in the context of the investment plan for Europe ([2]). In the energy field, new investments would be fostered thanks to cutting red tape and further integration to the grid. As of telecommunications, the deployment of superfast packages is linked to the regulatory approach of avoiding local monopolies and retaining investment incentives. Furthermore, regulatory bottlenecks still prevent the development of new digital actors and the take-up of the digital economy. In the same vein, firms tend to be smaller than in other countries (see Section 3.1) and the intensity of private research and development (R&D) activities in France is lower with respect to EU innovation leaders (see Section 3.3).

([1]) See 'Challenges to Member States' Investment Environments', SWD (2015) 400 final (http://ec.europa.eu/europe2020/challenges-to-member-states-investment-environments/index_en.htm).
([2]) http://ec.europa.eu/priorities/sites/beta-political/files/ip-france_en.pdf

Box 1.2: **Contribution of the EU Budget to structural change**

France is a beneficiary of the European Structural and Investment Funds (ESIF) and can receive up to EUR 26.7 billion for the period 2014-2020. This is equivalent to 4.5% of the expected national public investment in areas supported by the ESI funds.

A number of reforms were passed as ex-ante conditionalities in areas to benefit from the Funds to ensure successful investments. In the metropolitan regions, actions plans will assure the completion of the smart specialisation strategies in the area of research and innovation. In the ultra-peripheral regions, waste management and the water sector actions plans have also to be completed by end-2016 to fulfil the rest of the ex-ante conditionalities. Where ex-ante conditionalities are not fulfilled by end 2016, the Commission may suspend interim payment to the priorities of the programme concerned.

The programming of the Funds includes a focus on priorities and challenges identified in recent years in the context of the European Semester, notably reinforcing active labour market policies for the most vulnerable, reinforce initial and continuous education and training. Regular monitoring of implementation includes reporting in mid-2017 on the contribution of the funds to Europe 2020 objectives and progress in addressing relevant structural reforms to maximise the use of EU financing, notably on progresses made on early-school leaving, reducing poverty and social exclusion, improving access and quality of training and increasing the investments in research and innovation. France also benefits from EUR 310 million under the Youth Employment Initiative (matched by the same amount from the European Social Fund) to support young people to find their way to the labour market, get involved into traineeship projects or continue their education.

Financing under the new European Fund for Strategic Investments (EFSI), Horizon 2020, the Connecting Europe Facility and other directly managed EU funds would be additional to the ESI Funds. Following the first rounds of calls for projects under the Connecting Europe Facility, France has signed agreements for EUR 6 million in the energy field and EUR 2 billion for transport projects. For more information on the use of ESIF in France, see: https://cohesiondata.ec.europa.eu/countries/FR.

Table 1.1: **Key economic, financial and social indicators — France**

	2003-2007	2008	2009	2010	2011	2012	2013	2014	forecast 2015	forecast 2016	forecast 2017
Real GDP (y-o-y)	2.0	0.2	-2.9	2.0	2.1	0.2	0.7	0.2	1.1	1.3	1.7
Private consumption (y-o-y)	2.5	0.4	0.2	1.8	0.5	-0.2	0.4	0.6	1.4	1.3	1.3
Public consumption (y-o-y)	1.7	1.1	2.4	1.3	1.0	1.6	1.7	1.5	1.1	0.7	0.6
Gross fixed capital formation (y-o-y)	3.5	0.9	-9.1	2.1	2.1	0.2	-0.6	-1.2	-0.6	1.6	4.6
Exports of goods and services (y-o-y)	3.2	0.4	-11.3	9.0	6.9	2.5	1.7	2.4	5.7	4.6	5.7
Imports of goods and services (y-o-y)	4.9	1.3	-9.4	8.9	6.3	0.7	1.7	3.8	5.7	4.9	5.8
Output gap	1.8	1.6	-2.3	-1.3	-0.3	-1.0	-1.2	-1.8	-1.7	-1.5	-1.0
Potential growth (y-o-y)	1.8	1.5	0.9	1.0	1.0	0.9	0.9	0.9	0.9	1.1	1.2
Contribution to GDP growth:											
Domestic demand (y-o-y)	2.3	0.7	-1.5	1.8	1.0	0.3	0.5	0.5	0.9	1.2	1.8
Inventories (y-o-y)	0.1	-0.2	-1.1	0.3	1.1	-0.6	0.2	0.2	0.2	0.2	0.0
Net exports (y-o-y)	-0.5	-0.3	-0.3	-0.1	0.0	0.5	0.0	-0.5	-0.1	-0.1	-0.1
Contribution to potential GDP growth:											
Total Labour (hours) (y-o-y)	0.3	0.3	0.0	0.2	0.2	0.1	0.1	0.2	0.3	0.4	0.4
Capital accumulation (y-o-y)	0.7	0.8	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5
Total factor productivity (y-o-y)	0.7	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3
Current account balance (% of GDP), balance of payments	0.2	-1.0	-0.8	-0.8	-1.0	-1.2	-0.8	-0.9	.	.	.
Trade balance (% of GDP), balance of payments	0.2	-1.4	-1.2	-1.6	-2.0	-1.4	-1.0	-0.8	.	.	.
Terms of trade of goods and services (y-o-y)	-0.5	-0.6	2.6	-1.4	-2.4	-0.3	1.0	1.5	3.0	0.2	-1.3
Capital account balance (% of GDP)	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	.	.	.
Net international investment position (% of GDP)	-1.5*	-13.8	-14.8	-9.3	-8.7	-12.9	-17.5	-19.6	.	.	.
Net marketable external debt (% of GDP) (1)	-6.4*	-17.4*	-20.2*	-23.5*	-23.1*	.	.	.	.	.	.
Gross marketable external debt (% of GDP) (1)	129.3*	169.9	181.6	190.5	182.9	179.4*	174.3*	.	.	.	.
Export performance vs. advanced countries (% change over 5 years)	-4.8	-9.6	-7.2	-10.7	-7.8	-8.9	-6.4	-7.19	.	.	.
Export market share, goods and services (y-o-y)	-3.6	-2.8	0.4	-10.2	-2.2	-4.6	2.4	1.3	.	.	.
Net FDI flows (% of GDP)	1.5	2.2	2.6	1.3	0.7	0.5	-0.6	1.0	.	.	.
Savings rate of households (net saving as percentage of net disposable income)	10.1	9.5	10.8	10.4	10.0	9.5	9.1	9.5	.	.	.
Private credit flow (consolidated, % of GDP)	7.7	9.8	3.3	4.6	6.4	4.4	2.5	3.3	.	.	.
Private sector debt, consolidated (% of GDP)	109.1	122.2	130.4	131.9	135.3	138.6	138.0	143.2	.	.	.
of which household debt, consolidated (% of GDP)	41.6	48.5	52.5	53.7	54.8	55.2	55.6	56.1	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	67.5	73.7	77.9	78.2	80.5	83.4	82.4	87.1	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-0.1	-0.9	1.0	0.9	-1.0	-1.8	-1.9	-2.2	-1.6	-1.8	-2.3
Corporations, gross operating surplus (% of GDP)	18.0	18.2	17.0	17.8	17.5	16.8	16.7	16.5	17.3	17.6	17.9
Households, net lending (+) or net borrowing (-) (% of GDP)	3.0	2.7	4.6	4.2	3.9	3.5	3.3	3.8	4.1	4.1	3.9
Deflated house price index (y-o-y)	9.9	-1.8	-4.8	3.6	3.9	-1.9	-2.7	-1.5	.	.	.
Residential investment (% of GDP)	6.1	6.8	6.3	6.3	6.4	6.2	6.1	5.9	.	.	.
GDP deflator (y-o-y)	2.0	2.4	0.1	1.1	0.9	1.2	0.8	0.6	1.0	1.0	1.0
Harmonised index of consumer prices (HICP, y-o-y)	2.0	3.2	0.1	1.7	2.3	2.2	1.0	0.6	0.1	0.6	1.3
Nominal compensation per employee (y-o-y)	3.0	2.6	1.8	3.1	2.5	2.4	1.6	1.4	0.8	1.3	1.7
Labour productivity (real, person employed, y-o-y)	1.3	-0.3	-1.8	1.8	1.3	-0.1	0.7	-0.1	.	.	.
Unit labour costs (ULC, whole economy, y-o-y)	1.7	2.9	3.5	1.0	1.0	2.3	0.9	1.5	0.1	0.6	0.8
Real unit labour costs (y-o-y)	-0.4	0.5	3.4	-0.1	0.0	1.1	0.2	0.9	-0.9	-0.4	-0.2
Real effective exchange rate (ULC, y-o-y)	1.7	1.3	0.5	-1.6	0.5	-1.9	2.9	1.3	-4.6	-0.4	.
Real effective exchange rate (HICP, y-o-y)	1.2	1.5	0.4	-4.1	-0.7	-3.2	1.6	0.4	-4.4	0.9	-0.8
Tax wedge on labour for a single person earning the average wage (%)	28.7	27.8	27.7	27.8	28.0	28.2	28.4	28.7	.	.	.
Taxe wedge on labour for a single person earning 50% of the average wage (%)	18.6*	17.5	17.5	18.4	20.1	20.3	20.8	19.5	.	.	.
Total Financial Sector Liabilities, non-consolidated (y-o-y)	12.3	-0.1	1.6	5.7	0.7	2.1	1.1	7.0	.	.	.
Tier 1 ratio (%) (2)	.	8.4	10.1	10.7	10.9	13.3	13.1	13.1	.	.	.
Return on equity (%) (3)	.	2.2	4.6	8.3	5.6	3.4	6.0	4.6	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (4)	.	3.1	4.3	4.5	4.6	4.5	4.6	3.6	.	.	.
Unemployment rate	8.6	7.4	9.1	9.3	9.2	9.8	10.3	10.3	10.5	10.5	10.3
Long-term unemployment rate (% of active population)	3.5	2.8	3.2	3.7	3.8	3.9	4.2	4.4	.	.	.
Youth unemployment rate (% of active population in the same age group)	20.3	19.0	23.6	23.3	22.7	24.4	24.9	24.2	25.1	.	.
Activity rate (15-64 year-olds)	69.7	69.9	70.3	70.3	70.1	70.7	71.1	71.1	.	.	.
People at-risk poverty or social exclusion (% total population)	19.1	18.5	18.5	19.2	19.3	19.1	18.1	18.5	.	.	.
Persons living in households with very low work intensity (% of total population aged below 60)	9.4	8.8	8.4	9.9	9.4	8.4	8.1	9.6	.	.	.
General government balance (% of GDP)	-3.1	-3.2	-7.2	-6.8	-5.1	-4.8	-4.1	-3.9	-3.7	-3.4	-3.2
Tax-to-GDP ratio (%)	44.3	44.3	43.9	44.1	45.2	46.5	47.4	47.9	47.8	47.6	47.4
Structural budget balance (% of GDP)	.	.	.	-5.8	-5.1	-4.3	-3.6	-2.9	-2.7	-2.3	-2.5
General government gross debt (% of GDP)	65.2	68.1	79.0	81.7	85.2	89.6	92.3	95.6	96.2	96.8	97.1

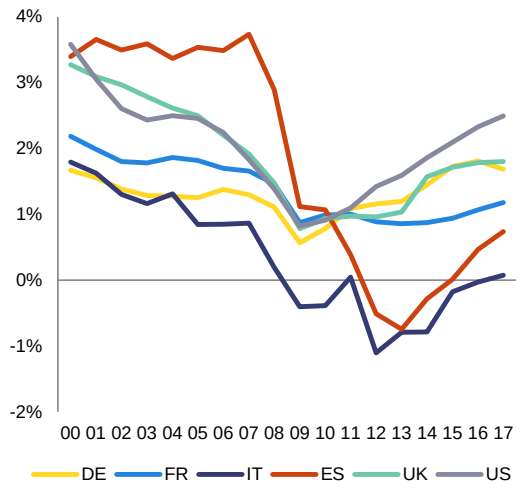
(1) Sum of portfolio debt instruments, other investment and reserve assets
(2,3) domestic banking groups and stand-alone banks.
(4) domestic banking groups and stand alone banks, foreign (EU and non-EU) controlled subsidiaries and foreign (EU and non-EU) controlled branches.
(*) Indicates BPM5 and/or ESA95
Source: European Commission 2016 winter forecast; ECB

2. IMBALANCES, RISKS, AND ADJUSTMENT ISSUES

This section provides the in-depth review foreseen under the macroeconomic imbalances procedure (MIP) ([1]). It focuses on the risks and vulnerabilities flagged in the Alert Mechanism Report 2016. The section analyses the reasons behind the deteriorated competitiveness and the high and rising public debt. It first focuses on productivity developments, which affect both competitiveness and the public debt trajectory. The analysis then focuses on competitiveness issues. First, the most recent improvement in exports is investigated to assess its sustainability. Cost competitiveness is then analysed, focusing on wage developments and labour market rigidities. Finally, non-cost competitiveness is examined in relation to the quality of investment. The section is then devoted to debt issues. Private and public debt sustainability is first assessed. Then, public expenditure is analysed from both a quantitative and a qualitative perspective. Finally, the section examines the cross-border relevance of the vulnerabilities associated with France's risks of imbalances. The section concludes with the MIP assessment matrix which summarises the main findings.

2.1. POTENTIAL GROWTH

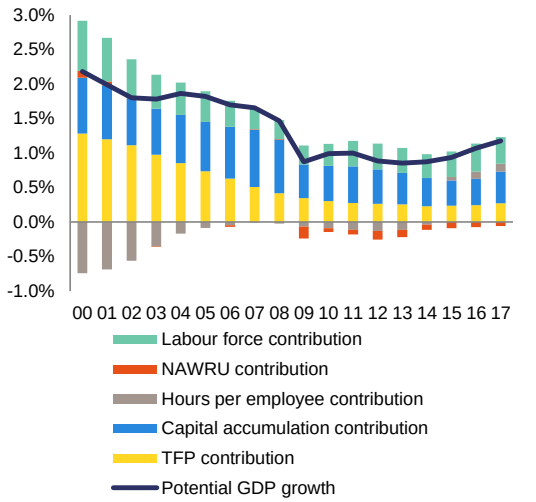
Graph 2.1.1: **Potential GDP growth in selected countries**



Source: European Commission 2016 winter forecast

French potential growth ([2]) has declined since the onset of the 2008 financial crisis. It is expected to remain at 1.0 % on average from 2009 to 2017, while averaging 1.8 % from 2000 to 2008 (Graph 2.1.1). This decline in potential growth is generalised to all major euro-area economies, as well as the United Kingdom and the United States. However, the extent of the slackening varies considerably among countries. It is more pronounced in Italy, in the United Kingdom, and especially in Spain. The decrease in French potential growth has also been less important than in the United States up to 2009, but there has been a marked rebound in the United States since then. Only Germany has had its potential growth relatively unaffected by the financial crisis.

Graph 2.1.2: **Potential GDP growth breakdown in France**



Source: European Commission 2016 winter forecast

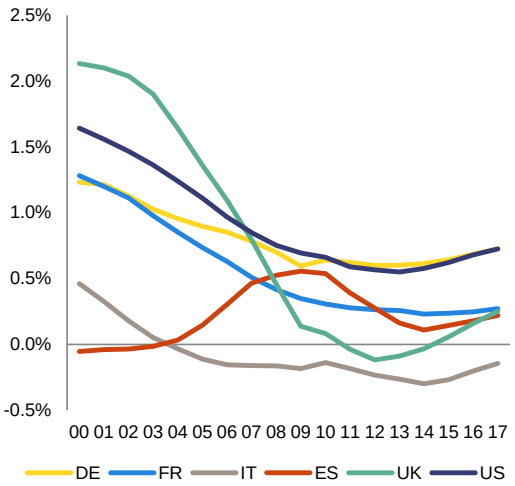
An important part of French potential growth results from its dynamic demographics. The potential labour force growth has remained quite buoyant in France recently, at around 0.6 %, and contributes as much as one third to the French

([1]) Article 5 of Regulation (EU) No 1176/2011.

([2]) Potential GDP is defined as the maximum level of output that an economy can produce at a constant inflation rate. Although an economy can temporarily produce more than its potential level of output, that comes at the cost of rising inflation. Potential GDP depends on the potential labour force (which depends on demographic factors and on participation rates), the non-accelerating wage rate of unemployment (NAWRU), the potential level of hours per employee, the capital stock, and the potential level of total factor productivity (TFP).

potential growth (Graph 2.1.2). The decline in potential growth is largely explained by the decline in the capital accumulation contribution, and by the decline in the potential total factor productivity (TFP) ([3]) growth rate.

Graph 2.1.3: **Potential TFP growth in selected countries**



Source: European Commission 2016 winter forecast

Excluding demographic factors, other determinants of French potential growth depict a much more negative picture. Capital accumulation is contributing less to the potential growth of the economy since the crisis, but is relatively strong from an international perspective. France's capital accumulation was relatively robust before the crisis and has since come down. Yet the current contribution of capital accumulation remained higher in France than in Germany, Spain and Italy in 2015. TFP growth has however significantly declined since 2000 (Graph 2.1.3). French potential TFP growth has declined from 1.3 % in 2000 to 0.2 % in 2015. As a result, potential TFP growth in France has decoupled from Germany. In 2015, potential TFP growth was somewhat identical in France, Spain and the United Kingdom.

The decline in productivity growth contributes to a further deterioration of French competitiveness and exacerbates the challenges associated with the high public debt. Although the wage dynamics has moderated in recent years, the decline in productivity growth has more than offset the competitiveness gains stemming from this wage moderation (see Section 2.3). The trend decline in productivity is also at the core of the deterioration in French non-cost competitiveness (see Section 2.4). The decline in potential GDP makes it also more difficult for France to bring down its public debt (see Section 2.5).

Labour and product market rigidities and slow resource reallocation and technology adoption limit total factor productivity growth. At the aggregate level, the high overall level of rigidities in France weighs on productivity growth. In particular, the interaction and combined effect of product and labour market rigidities have a very significant negative effect on total factor productivity growth. France has made some progress to reduce rigidities. However, this progress remains relatively modest and mostly focused on reducing rigidities in product markets rather than on labour markets (see Section 3.1), thereby limiting the resource reallocation towards higher productive sectors and regions.

Potential growth is also linked to labour force's skills. In France, the link between education and the labour market is still weak with the low qualified experiencing difficult transition. The governance of the vocational education and training and of the apprenticeship systems is not optimal (see Section 3.2). The quality of the training provided is decisive, notably as regards the matching between vocational training and firms' needs.

Moreover, potential growth crucially depends on the innovation capacity of the French economy. Despite major government support, R&D intensity is not sufficient to keep up with best performers and structural changes in the French economy risk weighing on R&D spending in the long term (see Section 3.3). Also, France ranks average among European countries, despite a wealth of publicly funded instruments.

([3]) Total factor productivity measures the capacity to produce more with the same amount of labour and capital inputs. As there are limits to augmenting the capital and labour intensity of the economy, the endogenous growth theory argues that in the long run total factor productivity is the main determinant of the growth potential of an economy. TFP growth depends not only on the capacity to innovate and use new technologies, to improve the quality of products and to enter new markets, but also on the capacity of the most productive firms to attract workers and investment from less productive firms.

Finally, the tax structure is not favourable to potential growth. The overall tax burden continues to increase in France and weighs importantly on production factors (see Section 3.4). Recently, households have borne the brunt of tax increases, whereas the burden of corporate taxation is stabilising. The tax system remains extremely complex and the tax base relatively narrow.

Social partners and the national Parliament play a crucial role in adopting reforms in line with national practices. Structural reforms are key to address the economic challenges associated with the declining French potential growth. This has important implications in terms of competitiveness and the French public debt trajectory.

Box 2.1.1: Macroeconomic impact of selected structural reforms

Structural reforms can boost potential GDP, both through higher productivity and higher employment. Notwithstanding the usual caveats on the uncertainty of these estimates, recent simulations of the actual reforms point to their sizeable potential macroeconomic impact (European Commission (2016, forthcoming)). By 2020, the quantified reform measures from the 2015 National reform programme are estimated to raise GDP by 0.4 % in France, implying on average a 0.1 pp. higher GDP growth over a 5 year period. The GDP effects become larger over the long run. Reforms also improve employment, though to a lesser extent than GDP growth, and government balances, as higher growth boosts tax revenues.

An important share of the total impact stems from the tax credit for competitiveness and employment (CICE) and the Responsibility and solidarity pact. These measures would boost GDP by 0.11 % in 2020 and employment by 0.17 %. In calculating these estimates, the reductions in the tax wedge on labour and capital were compensated by increases in other taxes, so as to report only the impact of the reform on the structure of the tax system. However, these tax measures are in fact financed through VAT increases and public expenditure cuts. Simulations taking into account this actual funding scheme provide higher results (DG ECFIN Economic Brief, 'Recent reforms on the cost of labour in France — An assessment of the *Crédit d'impôt pour la compétitivité et l'emploi* and the *Pacte de responsabilité et solidarité*', forthcoming).

Product market reforms also explain a large share of the results. The quantification includes the partial privatisation in the gas and telecom sectors, the reform of Sunday and evening opening times, the reform of the regulated professions included in the Macron law, and the reform of regulated electricity tariffs. These product market reforms were translated into a reduction in the final goods price mark-up and an increase in labour productivity, which would boost GDP by 0.11 % in 2020 and employment by 0.06 %.

R&D subsidies and public investments have the potential to foster innovation and increase productivity. The authorities have launched the innovation tax credit for SMEs, exemptions for innovative start-ups to stimulate research and development activity, as well as the extension of the Investment for future programme (PIA2), which finances strategic projects in research, energy transition and manufacturing. These measures would increase GDP by 0.08 % in 2020 but have a negligible effect on employment.

Active labour market policies have a strong effect on employment. Actions to foster the employment of young and low-skilled workers include the *emplois d'avenir* programme and the Youth guarantee scheme. These measures were introduced as an additional increase in active labour market policies spending, which would have a positive impact both on employment (+0.07 %) and GDP (+0.06 % in 2020).

Education reforms have a major effect on both employment and productivity, although their effects would take longer to be felt. The French authorities, through a series of measures, have announced the creation of 60,000 additional posts in education. These measures would contribute to increasing the skills of the labour force, and boost productivity in the long run. However, their effects would be negligible by 2020, as the skill structure of the labour force would only be affected in the longer term.

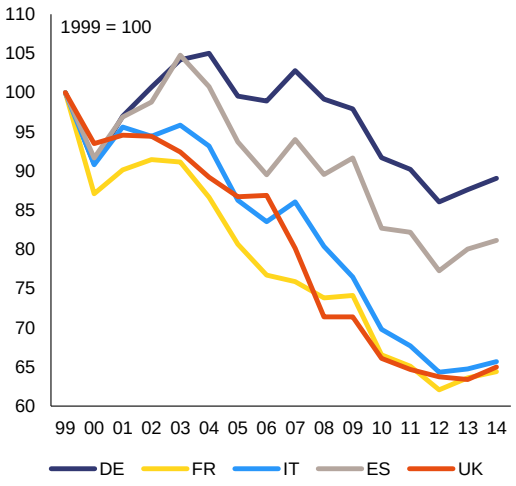
Only a selection of the reforms included in the 2015 National reform programme have been translated and assessed quantitatively in this report. There is a clear trade-off between the number of reforms quantified and the quality and reliability of the estimates. Many reforms fostering competition in the goods and services market were not quantified (e.g. coach travel, further reforms in the legal, health and retail sectors etc.), as appropriate methodologies to translate these reforms into model shocks were lacking. Also, many labour market reforms were not quantified, but this does not mean that the effects of these reforms are negligible. Finally, the territorial reform, not considered in this report, has the potential to significantly improve the efficiency of French territorial organisation. This suggests that the estimated GDP impact reported here may underestimate the total impact of the reform effort undertaken in France.

2.2. RECENT DEVELOPMENTS IN FRENCH EXPORT PERFORMANCE

French export market shares

Since 1999, France has suffered severe export market share losses (Graph 2.2.1): out of the 15 countries ([4]) for which export market shares in value ([5]) are available since 1999, France ranks first in terms of cumulated export market share losses. The cumulated market share losses since 1999 amount to 35.6 % in 2014.

Graph 2.2.1: **Export market shares in value**

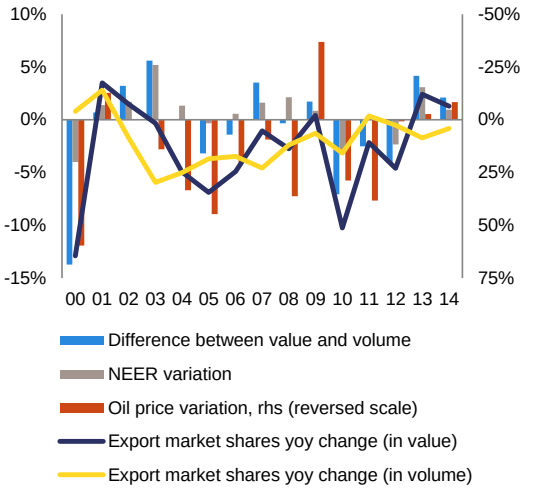


Source: Eurostat

However, export market shares have somewhat stabilised in recent years. French export market shares in value have even registered small positive year-on-year gains in 2013 and 2014 ([6]).

Export market shares in value are affected by valuation effects. An appreciation of the euro against other currencies will lead to a mechanical increase in the short run in the share of French exports in total world exports in value, since the price of euro-denominated exports from France to other euro-area Member States will increase when expressed in foreign currencies. Similarly, a decline in the price of oil decreases world total exports in value, but will affect French exports to a lesser extent, since French exports of oil products are relatively limited. A simple way of addressing this issue is to compute export market shares in volume ([7]). A different narrative then appears: French export market shares in volume deteriorated in both 2013 and 2014.

Graph 2.2.2: **Differences in evolution of export market shares in value and in volume (% and pp.)**



Source: Eurostat, AMECO, IMF

The breakdown of the differences in the evolution of the two indicators allows a better understanding of the differences between the evolution of export market shares in value and in volume. This difference is strongly linked to both nominal effective exchange rate (NEER) variations and oil price variations (Graph 2.2.2). For instance, in 2010 the decline in export market shares in value is far more pronounced than in volume. This coincides with a strong depreciation of the euro and with a sharp increase in oil prices. On the contrary, the fact that export market shares increased slightly in value in 2013 and 2014, while they declined in volume, is to be linked with the appreciation of the euro and the decline in oil prices observed in those two years. This suggests

([4]) Czech Republic, Germany, Estonia, Spain, France, Italy, Luxembourg, Hungary, Portugal, Romania, Slovenia, Finland, Sweden, United Kingdom, and Iceland.

([5]) Export market shares in value are defined as the ratio of exports of goods and services in value over global exports of goods and services in value. This indicator is computed by Eurostat. Data for French exports of goods and services in value are from the balance of payments statistics, while data for global exports of goods and services in value are computed by the IMF.

([6]) Note from the French authorities of 5 February 2016.

([7]) Ratio of French exports of goods and services in volume from national accounts (source: ESA 2010, ESTAT) over global exports of goods and services in volume (source: IMF).

Table 2.2.1: **Revealed comparative advantages (RCA) index**

Rank	Sector	RCA
1	Air and spacecraft and related machinery	28.8
2	Beverages	12.8
3	Soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations	10.6
4	Pharmaceutical preparations	10.3
5	Non-perennial crops	7.2
6	Dairy products	4.2

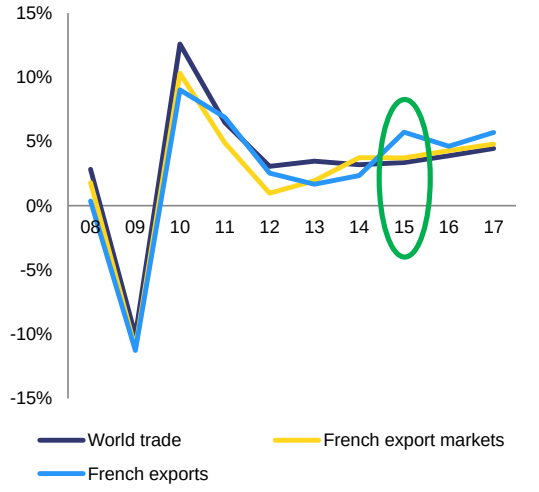
Source: Commission services

that the improvement in export market shares observed in France over the past few years is not resulting from a structural improvement, but is rather due to temporary valuation effects linked to exchange rate and oil price developments.

In most recent quarters, French export market shares in volume have however considerably improved. French export growth picked up sharply over the most recent quarters, starting from Q4-2014. A strong increase in export market shares in volume is taking hold in 2015. While French export performance continued to deteriorate in 2013 and 2014, it seems that a recent improvement is under way.

A question that can be raised is whether France is currently benefiting from a favourable geographical positioning, in the context of declining trade in China and other emerging economies. From 2010 to 2013, French export markets ([8]) have increased less than total global trade, weighing on the evolution of French exports. However, since 2014, against a background of import recovery in the euro area and of trade weakness in emerging economies, French export markets have evolved more in line with total global trade. This geographical composition effect contributes somewhat to the acceleration of French exports in 2015. However, it cannot explain the improvement of French performance (Graph 2.2.3), since French exports are forecast to increase at a significantly higher rate than both world trade and export markets, though at a more moderate pace in 2016 and 2017 than in 2015, leading to better export performance. In addition the current account deficit has been reduced.

Graph 2.2.3: **Trade in goods and services (growth rate in volume, %)**



Source: AMECO, European Commission, IMF

Moreover, the share of SMEs among exporters has increased over recent years and their productivity caught-up with larger firms ([9]). This increase seems to have occurred in most sectors. In addition, while productivity of small exporters remains in general lower than the productivity of larger exporters, the gap has somewhat diminished. This positive evolution could foster a more sustainable stabilisation of export market shares in the future, in particular if it is associated with further reforms aiming at boosting productivity and entrepreneurship.

([8]) Export markets are defined as the weighted average of imports of French trading partners, weighted by their share in French exports.

([9]) According to Bpifrance and a sample of exporters based on ORBIS data. "Exporters" is understood here as firms that had exports revenues for at least one year between 2007 and 2014.

Box 2.2.1: Concentration of French exports

French exports have been further concentrated around an increasingly stable pool of firms. In 1994, the 100 largest exporters (representing less than 0.1 % of all exporting firms) represented 36 % of all exports in value. In 2014, they represented 39 %. The trend since the 1990's has been that there are fewer new exporters, but also that fewer firms exit the exporting business at least until 2012. The share of first-time exporters among all exporters has decreased from around 20 % in 1999 to slightly more than 15 % in 2014. The concentration of exporting firms is particularly high in the area of services.

The overall decrease reflects a decrease in the number of exporting firms in the industrial sector. It decreased by 21 % since 2002, while the number of exporters grew in the retail and services sectors. The share of micro-, small, and medium enterprises in the total value of all exports is also decreasing. While the number of exporting SMEs is substantial and continues to increase, notably in the area of business services where size effects seem less important than in manufacturing, particular difficulties remain for SMEs to identify and access export markets, or once active abroad, to diversify export destinations. Furthermore, their export activity may depend on the (changing) degree of servitisation of manufacturing. Medium-sized companies ([1]) are important players in French exports, and although they represent only 4 % of exporting firms, their sales abroad represent a third of all French exports. Yet, it should be noted that 58 % of their exports are made by affiliates of foreign groups.

The concentration of exports is very strong in many key exporting sectors that contribute a lot to the trade balance. In 2014, the 10 largest exporters in the aerospace industry were responsible for 99 % of all exports in that sector. The sales of Airbus aircraft contributed EUR 25 bn to the French trade balance, representing alone 15 % of all exports. Similarly high concentration rates are also found in other sectors like automotive (98 %), cosmetics (90 %), leather (85 %) and other transport equipment (85 %). In the leather and aerospace industries, concentration increased by respectively 17.8 pps. and 5.6 pps. since 2004. The pharmaceutical exports are less concentrated (65 %) thanks to the presence of several foreign groups in France (8 out of the 10 largest pharmaceutical exporters are foreign groups).

The concentration of exports among a few players exposes the trade balance to the outcome of strategic decisions made by them. The French car industry's specialisation in small cars, in part due to tax incentives, resulted in the partial relocation of large parts of their production facilities to other Member States such as Spain, Romania, Slovenia, and Slovakia, where production costs are lower. Similarly, important players like Airbus have been opening new aircraft plants in China and the US to tap into those markets. However, rules of origin and the prestige of the 'Made in France' give better prospects to the continuous presence of the leather and cosmetic industries in France. This question remains central as transport equipment industries are undergoing important technological changes such as digitalisation and transition to sustainable sources of energy which may impact on their business models.

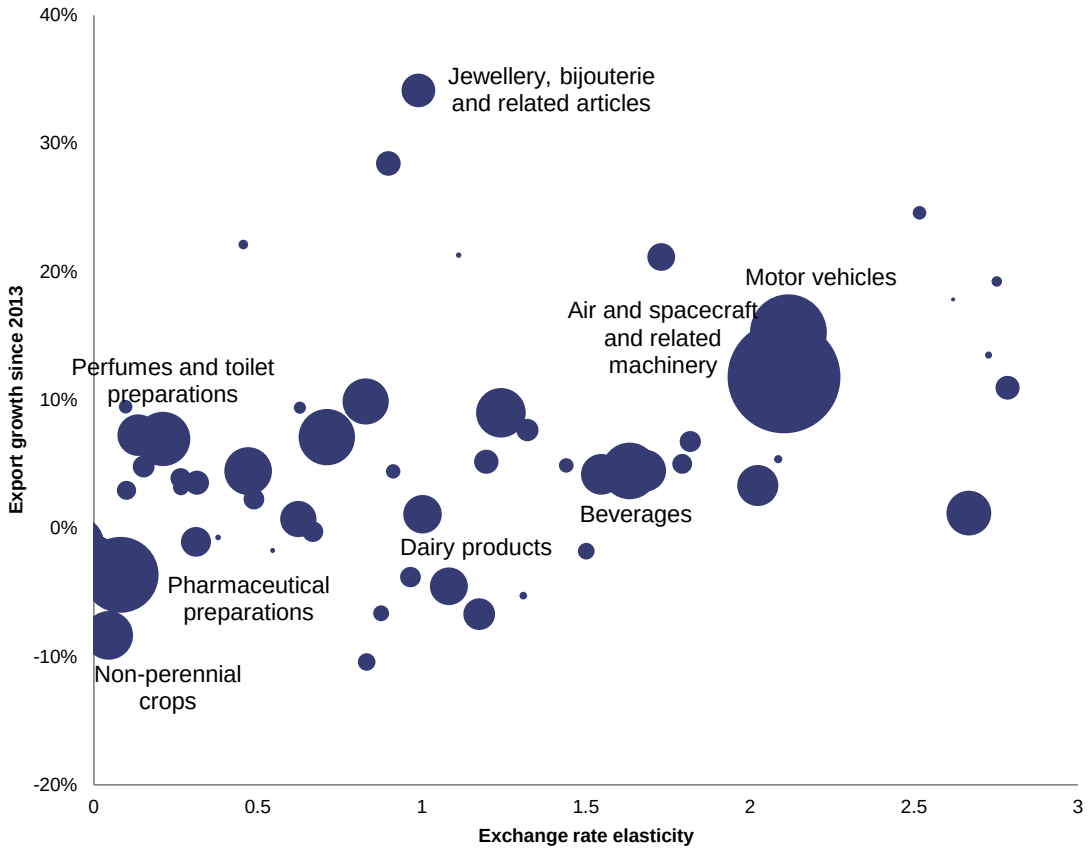
([1]) The medium-sized companies ('*entreprises de taille intermédiaire*' or ETIs) have between 250 and 4,999 employees, and a turnover below EUR 1.5 bn or assets below EUR 2 bn.

French export performance has thus improved significantly over recent quarters, reversing the declining trend observed in the last decade. To assess whether this improvement in export performance is temporary or if it is related to a sustained stabilisation of French export market shares, the export performance is further investigated at a sectoral level.

A sectoral analysis of French exports in goods

Although French export performance has been overall deteriorating, some specific sectors have still been successful in foreign markets. First, an overview of the French historical comparative advantages are presented, using the revealed comparative advantage index developed by Balassa (1966). This index indicates the France's relative advantages or disadvantages in exports of goods by sector. It corresponds to the contribution to the trade balance of each sector, scaled by total trade in goods in value, and corrected by the overall trade balance. A comparative advantage is 'revealed' if the index is positive. Table 2.2.1 gives the corresponding index of the six best performing sectors.

Graph 2.2.4: **Export growth (%) and exchange rate elasticity**



Note: The size of the bubbles reflects the share of the sectoral exports in total exports of goods.
Source: Comext, Commission services

The well-performing sectors identified are primarily 'air and spacecraft and related machinery', 'beverages', and cosmetics. These results are broadly in line with the findings of Bas, Fontagné, Martin and Mayer (2015), whom identify aeronautics, leather goods, and wine as the three best-ranking exporting sectors for France ([10]). While a different classification of goods is used, the strong comparative advantage in aircraft and beverages is confirmed.

These sectors are characterised by the leadership of a few firms with a strong brand image (Box 2.2.1)**.** These findings are in line with those of a recent study by the economic analysis council ([11]), which concludes that, except for the luxury, aeronautical and electrical distribution goods sectors, French exports continue to suffer from their poor quality/price ratio.

The sectoral analysis in this report is consistent with the findings of last year's report, namely, that France had specialised in the high-tech sector. During the 2008-2013 period, France experienced large product-market losses in low- and medium-tech against a small increase in the high-tech sector due to the aircraft industry. According to Stehrer *et al.* (2015), the global market share of France in high unit value export segments is the second highest in the EU and exceeds the global market export share in total

([10]) Bas M., Fontagné L., Martin P. and Mayer T. (2015): '*La France en mal de qualité ?*', *La Lettre du CEPII*, n° 355 — July 2015.

([11]) Bas M., Fontagné L., Martin P. and Mayer T. (2015): 'In Search of Lost Market Shares', *Les notes du conseil d'analyse économique*, n° 23 — May 2015.

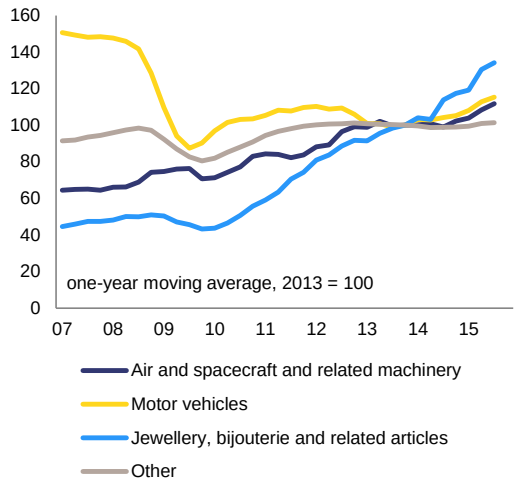
manufacturing, thus indicating a stronger external competitiveness position in high unit value segments. This is an export pattern shared by few Member States only, notably Germany, Austria, the UK and the Nordic Member States, and is different notably for Belgium and the Netherlands, which both have significantly lower shares in high unit value export segments compared to export shares in total manufacturing.

Sectoral evolutions in exports of goods

Since 2013, a strong correlation between the exchange rate elasticity and the export growth rate is found at the sectoral level. In order to analyse the recent performance of key identified sectors, examine the underlying causes of improvements in French exports, and assess the durability of this improvement, the export growth rate in these key sectors since 2013 is plotted against the estimated exchange rate elasticity ([12]) (Graph 2.2.4). This allows the identification of sectors contributing most to the increase in total exports of goods in recent years, as well as the assessment of the relevance of exchange rate developments in export developments. The sectors identified as being highly elastic are 'motor vehicles, air and spacecraft and related machinery', and 'beverages', while 'non-perennial crops', 'pharmaceutical preparations', and 'perfumes and toilet preparations' are less sensitive to exchange rate fluctuations. These findings are in line with Imbs and Méjean ([13]), who also find that aircraft and spacecraft, and motor vehicles have a higher elasticity than other sectors. These two sectors are among those contributing most to the increase in total exports of goods. This sectoral analysis thus confirms that the improvement in French export performance is somewhat related to the recent depreciation in the euro. Indeed, export volumes rise in connection with lower export prices (denominated in foreign currencies). This effect is different from the purely statistical one described above and goes in the opposite direction. Most importantly, the sectoral analysis highlights the fact that the improvement in French exports is concentrated in a few key sectors, while other sectors are still experiencing sluggish growth.

Excluding the three sectors that contribute most to export growth since 2013, exports of goods have been broadly flat since 2012, at a level close to their pre-crisis peak. More specifically, two thirds of the increase in French exports of goods in value is explained by three sectors representing only a sixth of French total exports of goods, namely: 'air and spacecraft and related machinery', 'motor vehicles', and 'jewellery, bijouterie and related articles' (Graph 2.2.5). The motor vehicle industry has suffered dramatically from the crisis, and is currently benefiting from the recovery of the European market in this sector. On the contrary, exports in the aircraft industry and in 'jewellery, bijouterie and related articles' have recorded strong growth rates since 2010 and now largely exceed their pre-crisis levels. These two sectors have considerably contributed to the improvement of the French overall export performance since the crisis. The improvement in French exports since 2013 is thus largely due to very specific developments in a few key sectors, and is not broad based.

Graph 2.2.5: **Exports of selected sectors (in value)**



Source: Comext

Implications for trade balance and economic growth

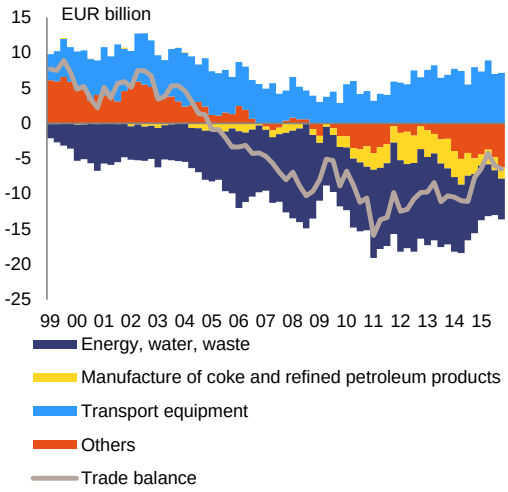
The sum of the contributions of the decline in oil prices and of the relatively good

([12]) Commission services' calculations: the exchange rate elasticity is the long-term coefficient of the nominal effective exchange rate in an estimated sectoral equation of French exports.

([13]) Imbs J. and Méjean I. (2009): 'Elasticity optimism', IMF Working Paper, n° 279 — December 2009.

performance in the transport equipment sector, identified above, is larger than the overall improvement of the French trade balance in goods and services. As seen above, French transport equipment exports have improved significantly, in particular in the aircraft and the motor vehicle sectors, benefiting most strongly from the depreciation of the euro. In terms of trade balance, the sectoral trade balance in transport equipment has historically been positive in France. It has somewhat increased in recent years, contributing to the improvement of the French trade balance in goods and services since 2011. Another factor that has largely contributed to the improvement of the French trade balance in goods and services is the sharp decline in oil prices. The trade balance for energy, water and waste and manufacture of coke and refined petroleum is negative in France, and is closely related to oil price developments. This sectoral trade deficit has been largely reduced in recent years, owing to the sharp decline in oil prices. Excluding energy, water, waste, manufacture of coke and refined petroleum products, and transport equipment, the trade balance of remaining sectors has continued its trend deterioration (Graph 2.2.6).

Graph 2.2.6: **Trade balance breakdown**



Source: Insee

Last but not least, net exports continue to be a drag on economic activity. The contribution of net exports of goods and services has been negative in 2013 and 2014, and remained negative in 2015, despite the sharp depreciation of the euro. The acceleration of exports in transport equipment has been more than offset by the acceleration of total imports of goods and services, following the pick-up in internal demand.

The recent improvement in export performance remains insufficient so far to allow for a sustainable reduction in the French trade deficit. The increase in export market shares in 2013 and 2014 is due to valuation effects. However, since 2015, the French export performance has improved. Yet, this improvement is concentrated in a few key sectors and is not broad based. France still faces stiff competition from Germany in higher quality products and from Spain and Italy in terms of price ([14]). It also remains insufficient to allow for a sustained improvement in the French trade balance and to foster higher GDP growth.

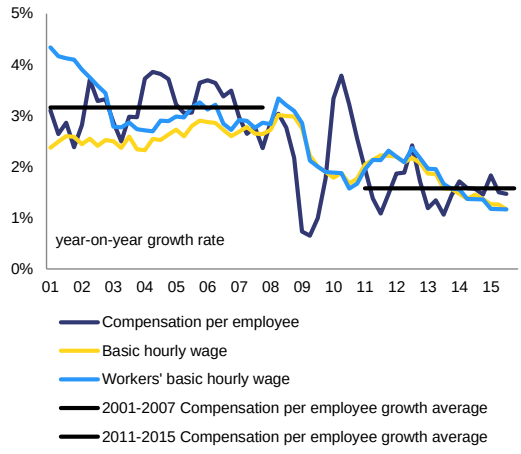
([14]) COE Rexecode: 'Bilan en demi-teinte pour la compétitivité française en 2015'.

2.3. COST COMPETITIVENESS AND LABOUR MARKET RIGIDITIES

Recent wage and productivity developments

Since 2008, the weakness of the labour market has been gradually reflected by a moderation of nominal wage growth. In spite of the high and rising unemployment rate, expectations about the 2010 recovery were initially accompanied by more dynamic developments of compensation per employee relative to the base wage ([15]). The increase in unemployment was thus only to a minor extent reflected in the compensation per employee. Since 2011, both measures show moderation in nominal terms (Graph 2.3.1).

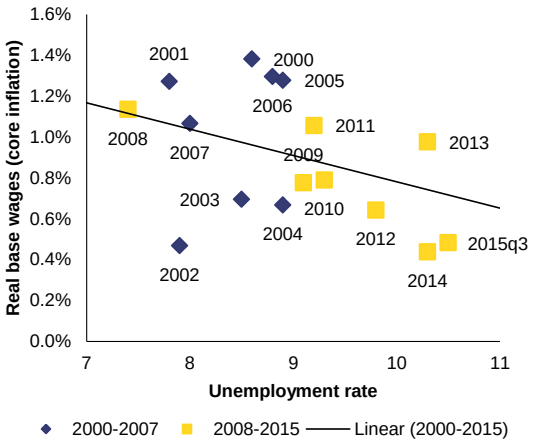
Graph 2.3.1: **The moderation of nominal wage growth has been very gradual in France**



Source: Insee, Dares

However, in a context of low inflation, real wages have only slightly decelerated. The Phillips curve, which exhibits the historical inverse relationship between wage growth and unemployment, provides an indication of the responsiveness of wages to labour market conditions. Graph 2.3.2 suggests that the dynamics of base wages has been consistent with a standard Phillips curve which, however, appears relatively flat — i.e. implying a low responsiveness of wages to unemployment. The increase in unemployment following the 2008 crisis was matched by a decline in real base wage growth, especially since 2014. The higher unemployment rate has led to more intense competition for vacancies among suitable workers and more moderate wage claims, which suggests an insufficient labour demand.

Graph 2.3.2: **Real base wage Phillips curve**



Note: 2015q2: year-on-year growth rate for real base wages.
Source: Eurostat

The recent deceleration of real wages remains nonetheless insufficient to fill the gap between real labour costs and falling productivity growth. Between 2008 and 2012, compensation per employee increased by about 2.5 % per year while GDP deflator inflation hovered around 1 %. These developments implied a growth of real compensation per employee of 1.5 % per year, while labour productivity slowed down markedly, with negative implications in terms of employment and profit share. Only from 2015, the dynamics of wages adjusted for inflation has been consistent with productivity growth. Unit labour costs have been on average less dynamic than in the rest of the euro area since 2012 ([16]). However, the competitiveness losses accumulated in previous years remain. Overall, since 2000, wage developments have been more moderate in other euro-area countries than in France (Graph 2.3.3).

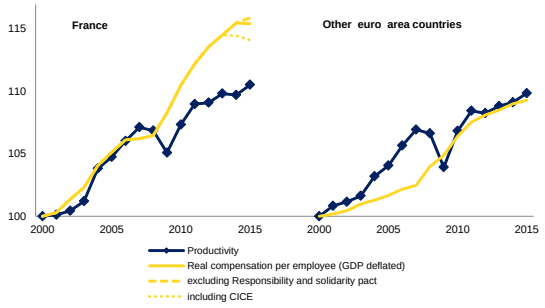
French labour costs remain among the highest in the euro area, mainly owing to high employers' social security contributions. In 2014, the hourly labour cost, at EUR 35.20, was well above the EU average of EUR 29.20. In 2014,

([15]) The base wage (*salaire mensuel de base de l'ensemble des salariés*) does not include flexible components of pay (eg bonuses or supplementary hours); it refers to a constant level of qualification and is not affected by changes in the composition of the workforce. The composition effect explains ¼ of the increase in wages (Askenazy, 2013).

([16]) Note of the French authorities of 5 February 2016.

France's total hourly labour costs are among the highest in the EU, after Belgium, Denmark, Sweden and Luxembourg. There were no major changes from the ranking observed 10 years earlier, despite the deceleration in labour costs in France since 2012 ([17]). Labour costs are high mainly because of the high fiscal contribution, accounting for more than 30 % of total hourly labour costs, compared to an EU average of 24 %.

Graph 2.3.3: **Labour productivity and real compensation per employee: France and rest of the euro area (whole economy, 2000=100)**



Source: Eurostat

Measures have recently been introduced to reduce the tax burden on labour. The government has taken measures to reduce labour costs, notably through the tax rebate for competitiveness and employment (CICE) of December 2012 (which entered into force from 2013) and the cut of employers' social security contributions announced as part of the Responsibility and Solidarity Pact (RSP) of January 2014 (implemented in 2015 and 2016). All in all, these measures will result in a cut in the tax wedge of 1.5 % of GDP — EUR 30 billion — between 2013 and 2017 ([18]). The CICE is a tax credit linked to payroll excluding wages above 2.5 times the minimum wage (4 % of payroll in 2013 and 6 % for subsequent years, accounting for 1 % of GDP). The Responsibility and Solidarity Pact includes a 1.8 pp. reduction in family contributions targeting wage earners up to 3.5 times the minimum wage. The effectiveness of these measures on competitiveness and employment is higher with moderate wage developments.

The minimum wage indexation mechanism

The recent deceleration of wages mirrors more moderate minimum wage developments. The deceleration in nominal wages is to some extent related to the limited increases in the minimum wage (s*alaire minimum interprofessionnel de croissance* or Smic) and in wages at the branch level ([19]), to some extent also driven by the Smic. Between 2003 and 2008, the Smic rose by about 5 % annually, well above the CPI inflation of 2 %. It gradually decelerated between 2008 and 2012 to reach a yearly growth rate of 2 %, above the growth rate of consumer prices (1.6 %). Since 2012, the Smic further decelerated, while inflation fell further. The deceleration of the Smic contributed to moderating the increase of wages at branch level. The Smic indeed plays an important role in wage bargaining, setting a floor for subsequent negotiations at branch or firm level.

Increases in the Smic induce wage increases for all categories of workers, particularly for blue collars and clerks. Minimum wage changes influence the structure of wages, with the impact being lower at higher levels of wages. The effect of minimum wage hikes on wage growth is high for blue collars and clerks and low for professionals and managers (Graph 2.3.4). The significant effect on the basic hourly wage for blue collars (*salaire horaire de base des ouvriers* or SHBO) — one of the former components of the Smic indexation rule — hints at the risk that an increase in the minimum wage is reinforced through feedbacks on subsequent minimum wages setting ([20]). The effect of inflation also differs across groups, with wages being more responsive to variations in the consumer price index for intermediate professions and clerks. Thus, although the impact on wage growth is lower at higher income levels, an increase of the Smic may

([17]) Note of the French authorities of 5 February 2016.

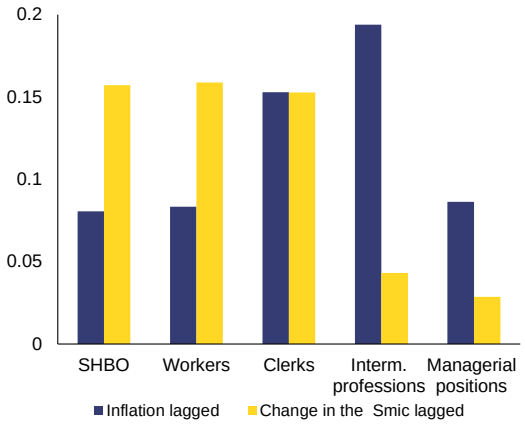
([18]) They will top up the Fillon reductions of social security contributions paid by employers (*allègements généraux des cotisations sociales patronales*) for workers paid up to 1.6 Smic.

([19]) For the 2009-2012 period, an increase by 1 % of negotiated wages (s*alaires conventionnels*) leads to an increase of the base salary by 0.12 %, low but twice as much as the effect over the period 2003-2008 (Dares, May 2015, N. 33).

([20]) The effect of the Smic on the growth of the nominal SHBO is higher than the effect on the average wage; as concerns the components of the Smic indexation rule, the impact of the change in the growth of the real SHBO is higher than that of inflation in the long-term (Verdugo, 2011).

spillover to other wages, in light of the relation between wage growth and inflation.

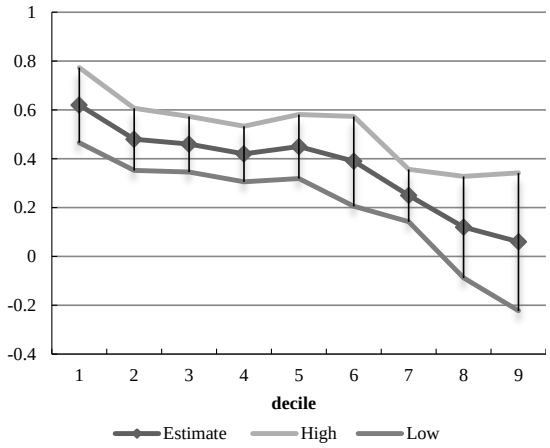
Graph 2.3.4: **Effect on wage growth of a 1 % increase in inflation and the Smic for different categories**



Note: Estimate from a regression of the growth rate of wages for different categories of workers on lagged inflation, lagged Smic and lagged aggregate unemployment rate; Sample Q4 2002 – Q1 2015.
Source: Commission services

Increases in the Smic also induce upward wage compression. At the micro level, an increase in the Smic raises also wages for levels well above the minimum wage, reflecting firms' wage policy of keeping some wage differential within firms to keep high incentives to work. Graph 2.3.5 shows estimates of the response to changes in the minimum wage for different deciles of the wage distribution. The minimum wage has an impact on the wage distribution up to the eighth decile, i.e. it does not affect wages of the highest 20 % income groups. A 1 % increase in the minimum wage has an effect on the lower deciles of the distribution that is about 0.6 %. However, this effect declines over the income distribution, leading to wage compression following increases in the Smic, which may exert negative effects on job creation for workers with income close to the Smic, although mitigated by lower employers' contributions.

Graph 2.3.5: **Impact on the distribution of wages of a 1 % increase in the minimum wage (%)**

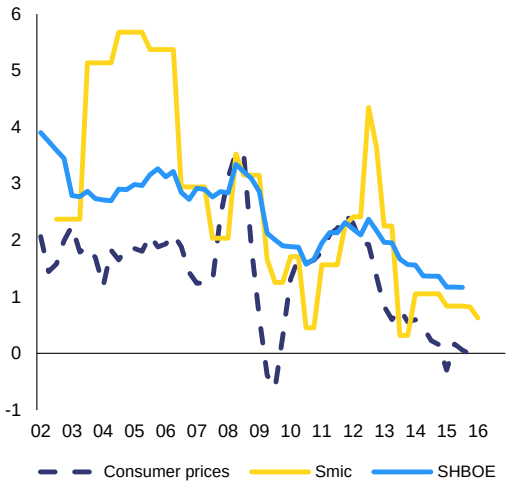


Note: Quantile regression based on EU-SILC database of log wages on log minimum wage lagged controlling for age, age squared, occupation, education sector and skills, temporary and part-time contracts, firm size, gender.
Source: European Commission

In periods of low inflation, the minimum wage adjustment rule is a source of wage rigidity, since it is partly indexed to real wage developments. The Smic is updated annually on 1st January on the basis of a double indexation rule. A first indexation is on the evolution of the consumer price index for low income households; a second adds half of the growth of real hourly base wage for blue collar workers and clerks (*SHBOE*). The indexation may be triggered during the year when the consumer price index increases by at least 2 % compared to the index observed when setting the previous Smic level. Finally, discretionary hikes (*coups de pouce*) by the government are also possible. Because of this indexation mechanism, there are feedback loops between increases in average wages and changes in the minimum wages, which delay the necessary wage adjustment in response to a weak economic situation. Graph 2.3.6 reports the evolution of the Smic, together with its determinants. The discretionary hikes of the minimum wage have led, on some occasions, the Smic to grow faster than the SHBOE. The weak labour market conditions

and the low inflation exacerbate the effects of the automatic increases of the minimum wage ([21]).

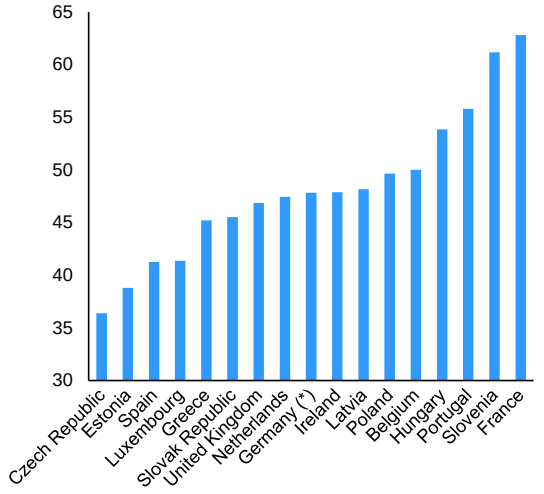
Graph 2.3.6: **Smic and variables used for its update (% change with respect to same quarter in the previous year)**



Note: SHBOE: wages for blue collar workers and clerks; consumer prices is the index (except tobacco) for households that belong to the lowest equivalised disposable income quintile.
Source: Insee

The minimum wage may also have an impact on employment outcomes. Relative to the median, the gross minimum wage at 63 % is the highest in the EU (Graph 2.3.7). Even in net terms, it remains the fifth highest in the EU, with employers' contribution accounting for 22 % of total gross wage. In 2014, the employment rate of the low skilled, at 41.2 %, stood below the EU average (43.3 %). The minimum wage is the most effective tool at the disposal of governments to influence the level of wages of workers with low bargaining power. When not too high, it has no major consequences on employment and hours worked, and wage compression is accompanied by lower inequality in earned incomes and lower poverty rates ([22]). The independent expert commission reviews the labour market situation and gives advice for minimum wage policy. Over the past years, it has consistently advised no discretionary hikes to the Smic.

Graph 2.3.7: **Minimum wage as a share of the median wage in EU Member States**



Note: Levels refer to full-time workers, 2013 data
(*)Germany: Minimum-wage level 2015 is expressed in percentages of the projected 2015 median wage. Projections are based on earnings data from the OECD Economic Outlook database.
Source: OECD Earnings and Minimum Wage

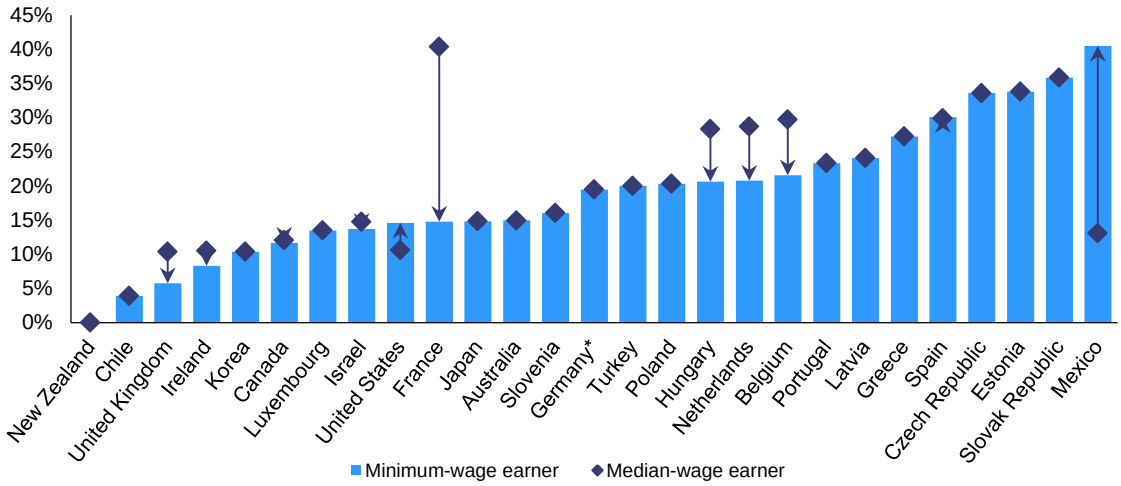
Sizeable tax exemptions offset the effect of minimum wage hikes on labour costs of minimum wage workers. To avert the negative effects of the high cost of labour on labour demand, payroll tax exemptions are granted to firms hiring workers at the minimum wage, which brings the tax burden on labour for low wage levels below that of several EU countries (Graph 2.3.8). Exemptions planned under the CICE and the RSP are also partly offsetting the high tax burden on median wage earners. The tax exemptions granted to offset the high labour cost for minimum wage earners come along with the highest social levies for those in the middle of the wage spectrum.

Wage setting process and collective bargaining

Collective bargaining in France is characterised by national and firm-level bargaining. In France, the obligation to negotiate on specific items (Auroux Act of 1982) — even if agreements are not compulsory — led to an increase in firm-level negotiations. This framework has a potential

([21]) In periods of weak labour demand (i.e. low growth of the SHBOE) and low and abating inflation, the updating rule may lead the Smic to increase faster than the SHBOE (Cette and Wasmer 2010).
([22]) 'Minimum wages after the crisis: making them pay', OECD, May 2015.

Graph 2.3.8: **Employers' social security contributions for minimum and median wage earners**



Source: Commission Services, OECD (2015)

to foster collective agreements at firm or branch level (Box 2.3.1). However, firms with a high percentage of minimum wage workers negotiate less ([23]).

There has been a gradual shift towards a decentralisation of collective bargaining. The framework introduced in 2004 (Fillon law on social dialogue) extended the scope for firm-level negotiation. Firm-level or sectoral agreement were allowed to deviate from sectoral or inter-sectoral agreement even *in pejus* (i.e. temporary conditions less favourable to the worker). Nonetheless, the favourability principle, which states that no downward revision of employment conditions can occur, remained valid for minimum wages (Smic or sectoral), job classifications, supplementary social protection measures and multi-company and cross-sectoral vocational training funds. Since only derogations provided in higher level agreements may be used in lower level agreement, this has seriously limited the use of derogation clauses ([24]). In 2013, following a social partners inter-professional agreement, firm-level collective agreements (*accords de maintien dans l'emploi*) — approved by unions representing together at least 50 % of expressed ballots in latest professional elections — were allowed to modify wages and working time for a maximum of 2 years, in exchange for a guarantee of employment for signing employees. Should an employee refuse, he is subject to individual economic dismissal. This framework upheld the favourability principle. However, it allowed reducing wages up to a level of 20 % higher than the Smic (i.e. accounting for about 2/3 of the median wage) and/or modifying working time without authorisation of higher bargaining levels; it is not allowed to re-assign workers to different tasks if justified by technical, organisational or economic reasons as in Spain.

The number of firm-level agreements to support employment so far remains limited. Since 2013, only 10 firm-level collective agreements (*accords de mantien de l'emploi*) have been signed covering less than 2000 employees ([25]). To address these limitations, which are apparent in the lack in up-take of firm-level collective agreements (*accords de mantien de l'emploi*), the Macron law modified the conditions for their use. The Macron law extended the life of the agreement to 5 years and introduced the 'real

([23]) Avouyi-Dovi et al (2011) and Aghion, P., Y. Algan and P. Cahuc, 'Civil Society and the State: the Interplay between Cooperation and Minimum Wage', *Journal of the European Economic Association* 9 (2011), 3-42.

([24]) Meriaux, O. Kerbourc'h J. and Seiler, C. (2008): Evaluation de la Loi du 4 Mai 2004 sur la Négociacion d'accords dérogatoires dans les entreprises, DARES Documents d'études N. 140; Eurofund (2009) 'Sector-level bargaining and possibilities for deviations at company level: France'.

([25]) Bilan de la loi de sécurisation de l'emploi du 14 juin 2013 au 3 avril 2015.

serious cause' as a reason to dismiss employees refusing the terms of the agreement, thereby reducing uncertainty in litigation cases. In addition, the agreements can define clauses for their suspension in view of the evolution of the economic activity. The effectiveness of the adjustment of wages is constrained in sectors where a large share of employees is working for wages close to the Smic, in particular catering, hotels and SMEs. In addition, it is not possible to derogate from sectoral agreements to trade-off at company level wage cuts with other innovative solutions to improve competitiveness and employment.

The Combrexelle report, published in September 2015, paves the way for developing more efficient bargaining outcomes. It proposes a bargaining framework where employers and trade unions negotiate simultaneously on employment, wages, and working conditions — the so-called efficient bargaining model, shown to allow for higher employment than a framework where bargaining is only on wages (Mcdonald and Solow, 1981). Developing further the autonomy of the firm-level bargaining would allow wages and other elements of compensation and employment (hiring and hours) to be negotiated consistently at the firm level, while confirming the necessity of a common national minimum wage as a basis. This orientation towards a reinforcement of decisions made through collective bargaining requires a strengthening of the social dialogue, which would be obtained through generalising majority agreements signed at branch and company level and through limiting the duration of agreements to 4 years. The stability of agreements would also be increased, by limiting the timespan allowed to introduce recourse against newly signed decisions.

Following the Combrexelle report, the government expressed its intention to gradually reform the labour code to increase the autonomy of firm-level bargaining. The French government announced that a bill should be tabled in that regard covering *inter alia* working time. A group of legal experts chaired by former Justice Minister Robert Badinter has published a report on 25 January 2016 determining the fundamental principles that should be included in the labour law.

The laws establishing the 35-hour working week have been made more flexible enabling the organisation of work to better reflect firms' needs. By law, firms must remunerate employees working beyond 35 hours per week with a negotiable extra payment equal at least to 25 % of the normal salary ([26]). In addition, overtime work exceeding 8 hours per week (from the 44th hour worked) is paid 50 % above the normal salary. Yet, firms can derogate through a company-level agreement from working time provisions even when this is less favourable to the workers. However, branch agreements regarding bonus rate of pay for extra hours worked can prevent firm-level derogations. Hence, derogations have been seldom used, as the average additional cost per extra-hour of work, at about 26 % is slightly higher than the one established by law (25 %) for additional costs from 36 to 43 of extra hours, despite the average working time per employee working full time in France being at 39 hours in 2014. Equally, firms can modify the time frame of the working week so that working time may be measured in terms of days per year or hours per month instead of hours per week. However, the 35 hour working week still weighs on labour costs.

Employment protection

Recent reforms have started to tackle the rigidities in the dismissal procedure for open-ended contracts and reduce their complexity and uncertainty. Strict, complex, and unpredictable employment protection legislation has negative implication for the capacity of the economy to reallocate resources and to respond smoothly to shocks. Early resolution of labour disputes reduces the cost of dismissal, leaving judges the possibility of focusing on the most difficult cases. Globally, France ranks among the countries with the strictest legislation of dismissal for open-ended and temporary contracts ([27]). Reforms implemented since 2008 have gradually simplified and reduced the uncertainty in the

([26]) The premium for extra hours is 50 % in Belgium, Denmark, Austria and Finland, but with longer standard duration of working week. In Germany, Italy, the Netherland and Spain, the premium is defined by collective agreements.

([27]) For a critical review of OECD EPL indicators, see Dalmasso R. (2014). 'Les indicateurs de législation protectrice de l'emploi au crible de l'analyse juridique.', IRES, n 82.

dismissal procedure. The mutual agreement for termination of open-ended contracts (*rupture conventionnelle*) has represented an increasing share of termination cases, reducing the overall number and costs of litigation cases brought before employment tribunals, and associated uncertainties for companies.

Successive laws have improved the framework for both collective and individual dismissal. The 2013 law on securing employment simplified the procedures, reduced the limitation period (*délai de prescription*) from 5 to 2 years and gave more certainty to the amounts to be paid by the employer to the employee in case of conciliation. The dispute is now pleaded before the administrative court whereas it was previously the competence of the commercial court. Over 60 % of plans are now signed by a union majority securing legally the system, improving the negotiation within firms and reducing uncertainties. Yet, in 2013 only 5.5 % of litigation cases ended up in conciliation (Yazidi and Darmaillacq, 2014), while the duration of the cases brought before the court of first instance (*Conseil des Prud'hommes*) increased continuously up to 15.4 months in 2014, according to judicial statistics. The measures taken by the Macron law aim at reducing the length and uncertainty of the litigation procedure, thereby improving the effectiveness of employment dispute settlement and increasing workers' security.

The recent wage moderation, in a context of high unemployment, remains insufficient in view of the slowdown in productivity growth. Wage growth is declining in France, both in nominal and in real terms. However, the decline in productivity growth has more than offset the competitiveness gains stemming from this wage moderation. In periods of low inflation, the minimum wage adjustment rule is a source of wage rigidity, since it is partly indexed to real wage developments. The wage setting process also contributes to wage pressures.

Box 2.3.1: **Collective bargaining and labour law in France and selected EU countries**

Collective bargaining in France is a mix of industry (*branche*) and firm-level bargaining with a specific role played by the minimum wage, as a reference for negotiation for each category of employee in professional branches agreements. Minima at the branch level set the floor for collective wage bargaining at company level. Union density is low (about 8 % of total employees in 2014) but coverage high (98 % for the whole economy), due to automatic extensions of collective agreements. Legislation also plays an important role in setting the parameters for collective agreements (e.g. as compared to Germany and Italy).

In France, decentralisation has been accompanied by firm level derogations within a framework where labour law prevails over social partner agreements Collective bargaining varies strongly across EU countries in terms of rules establishing the scope of the agreements, the conditions for renewals, and the hierarchy between different bargaining levels. Bargaining may take place at different levels. Decentralisation differs across countries with regard to the type of industrial relations systems and the relation between law and agreements. For instance, in Italy it refers to geographical relocation of bargaining from national to lower levels; in Germany it denotes an increasing influence of work councils relative to industry-level collective bargaining.

In France and many EU Member States, the industry level plays an important role. In France, the definition of industry is narrower than in Italy, implying a more decentralised bargaining. Industry level bargaining is associated to different modes of coordination across sectors. In France, the minimum wage sets the context for wage bargaining. In other countries, coordination is more formal through interaction between different bargaining units (e.g. Germany or Austria, where agreement in one sector acts as a reference for negotiations in other sectors) or *via* guidelines set by peak associations (Spain). In Germany and Spain, sectoral contracts are signed at regional level. Coordination has been shown to be a key determinant of economic outcomes and resilience to shocks.

In France, higher level agreements establish the issues that can be derogated by lower bargaining levels. The hierarchy between different bargaining levels differs across EU Member States. According to the 'favourability principle' lower levels of bargaining can only improve the conditions established at higher level. In Germany, collective bargaining is mainly conducted at industry-level between trade unions; work councils are not entitled to negotiate collective agreements. In Italy, the relationship between different bargaining structures is set by inter-sectoral framework agreements and the same subjects cannot be negotiated at different bargaining levels.

Mandatory extension of collective agreements to non-signatory parties is rarely automatic. Through extension, a sector-level agreement becomes legally binding for employers who are not a member of the association that has signed the agreement. Extension of a collective agreement can be requested by one (France), both parties (Germany) that signed the agreement, or derive through administrative notice (the Netherlands, Portugal or Spain). It is based on the representativeness of the parties that signed the collective agreement (*inter alia* Belgium, Spain, France) or mainly automatic (Belgium, France and, only if the parts agree, Spain). Otherwise, the extension needs to be justified on the basis of public interest (Portugal or Poland). Extension is usually associated to high coverage but, when automatic, reduces the adjustment of the labour costs to intra-sectoral shocks.

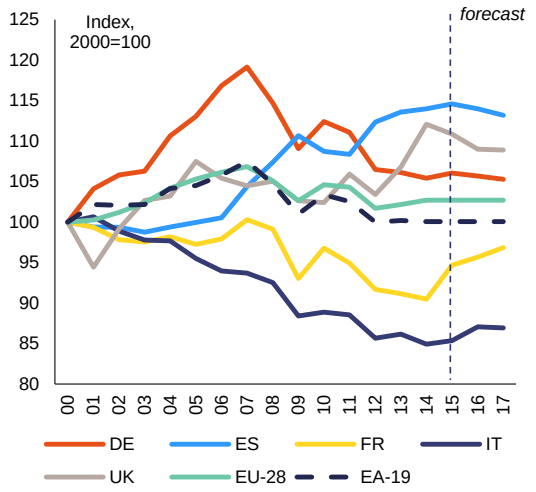
The duration of collective agreements and the conditions for their validity on expiry influence the incentives to revise agreements. In France and Spain, the duration of a contract is one year; in Germany and Italy about two to three years. The conditions that regulate the validity of an expired contract influence the speed at which contracts are renewed and the scope of bargaining. An expired but not renewed contract could last indefinitely (Austria, Germany, Italy) or be applicable for a limited time period (in France up to 5 years after expiration).

2.4. PROFIT MARGIN, INVESTMENT AND NON-COST COMPETITIVENESS

Profit margins

The profit margins of French corporations reached a trough at 30 % of value added in 2014. The profit share is the ratio between the gross profit and the gross value added generated by a company. The profit margins of French and Italian companies were on a downward trend over the whole period 2000-2014, while they remained relatively stable in the EU and the euro area (Graph 2.4.1). In 2014, profit margins in France reached their lowest level since 2000, at 30.2 % of value added, compared to 42.8 % in Spain, 40.7 % in Germany and Italy, while the average value in the EU and the euro area was respectively equal to 39.9 % and 39.7 % ([28]).

Graph 2.4.1: **Profit margins of corporations**



(1) This graph uses the gross operating surplus to capture the gross profits made by a company.
Source: European Commission

In 2015, profit margins of French corporations increased for the first time since 2010. The average level of profit margins for French corporations increased to 31.5 % last year. Although profit margins have not yet returned to their pre-crisis level (33.4 % in 2007), the increase observed in 2015 compensated for half of the loss observed between 2008 and 2014. Profit margins of French companies remained stable at about 33.0 % over the period 2000-2007 and then decreased by 8.7 % between 2008 and 2014, while the estimated growth rate of profit margins for 2015 is equal to 4.6 % (Graph 2.4.2).

The recent increase in profit margins can be mainly attributed to the fall in oil prices, the depreciation of the euro and the measures to reduce the cost of labour. According to the breakdown of profit margins done by the French National Institute of Statistics and Economic Studies (Insee), these elements have already been at play since 2014 when, however, real wages in non-financial companies rose by 0.3 pp. faster than labour productivity. This eroded the largest part of the increase in profit margins due to an improvement in the terms of trade ([29]), mainly driven by the oil price decrease and the depreciation of the euro, and other external factors, such as the introduction of the tax credit for competitiveness and employment. By contrast, in the first three quarters of 2015, the dynamism of real wages was more than offset by the positive developments in the other determinants of profit margins. In particular, over this period, the negative contribution of real wages to profit margins was equal to 0.2 pp. only, while the positive contributions from labour productivity and the other factors mentioned above were respectively equal to 0.2 pp. and 0.6 pp.

In light of past experiences, the recent deceleration in wages might lead to a stronger recovery of profit margins in the near future. According to recent studies ([30]), the recent behaviour of profit margin determinants can be compared with what was observed over the second half of the last century and, in particular, with the period around the 1970s oil shocks, i.e. between 1974 and 1982. Up to the beginning of the 1970s,

([28]) Note that as similar figures for profit shares may be coupled with different regimes of corporate taxation and capital remuneration, the analysis of the corporates' saving rate should always complement the assessment of profit margins. However, as for France the analysis of gross savings brings to similar conclusions to the analysis of profit margins, this section assesses only the latter.

([29]) The terms of trade are represented by the ratio between the value added price index and the consumer price index.

([30]) Baghli, M., Cette, G. and A. Sylvain (2003), 'Les déterminants du taux de marge en France et quelques autres grands pays industrialisés : analyse empirique sur la période 1970-2000', *Économie et prévision*, No. 158. Cette, G. and J-P. Villetelle (2015), 'Situation financière et financement des sociétés non financières françaises', *Bulletin de la Banque de France*, Banque de France, issue 199, pp. 53-65.

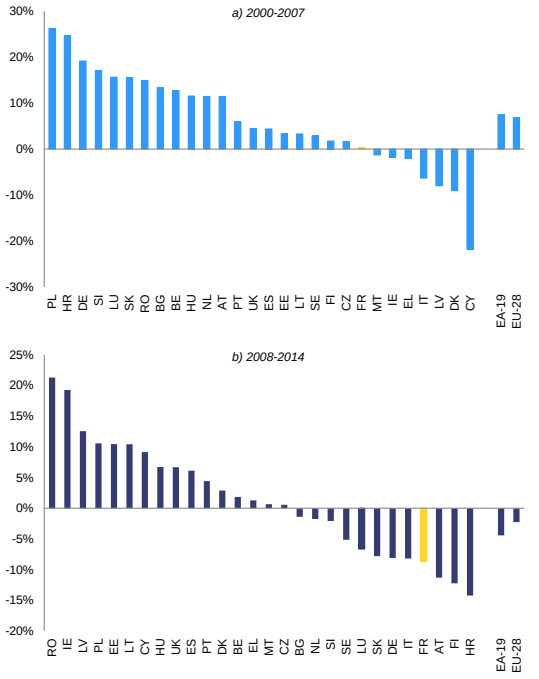
the contribution of real wages and labour productivity to profit margins was symmetrically opposed and far more significant than that of other elements. As a result, no significant change in the level of profit margins was observed for about 20 years. Between 1974 and 1982, the sudden rise in the oil price deteriorated the terms of trade for French non-financial corporations and caused a drop in their profit margins. After that period, the positive contribution from labour productivity outweighed the negative contribution from labour costs, leading to the recovery in profit margins over the 1980s. Finally, since the 1990s developments in real wages and productivity balanced each other up to 2008, when the former began dominating the latter. Therefore, the recent deceleration in real wages and increase in productivity would imply a recovery of profit margins after the 2008 crisis.

Investment and non-cost competitiveness

Notwithstanding relatively low profit margins, the investment rate in France was among the highest in the EU in 2014. France has the highest ratio between profit margins and the investment rate in the EU. In particular, in 2014, investment stood at 23.4 % of the value added produced by French corporations and represented 77.5 % of their profit margins. Moreover, the investment rate in France was higher than the EU or euro-area aggregates, respectively equal to 20.9 % and 20.7 %. In particular, the investment rate in France was even higher than in peer EU countries. For example, the investment rate was 17.9 % in Germany, 17.0 % in Italy and 16.6 % in the United Kingdom, while Spain presented a rate higher than France, at 26.2 %.

The relatively high level of investment in France has been accompanied by a relatively high degree of resilience to the last crisis. The persistent downward trend in profit margins has not been followed by an equally strong and persistent fall in the investment rate (Graph 2.4.3). Rather, the investment rate of non-financial corporations in France decreased in the course of 2009, reaching 21.3 % in the last quarter of 2009 compared to 22.8 % at the end of 2008. It then slowly regained the lost ground over the following years, hitting 23.2 % of value added at the end of 2013. Such increase was made possible mainly by a compression in the net interests and dividends paid out by firms, whose net amount decreased respectively by 2.5 pps. and 2.1 pps. between the beginning of 2009 and the end of 2013.

Graph 2.4.2: **Change in profit margins of corporations, 2000-2014**



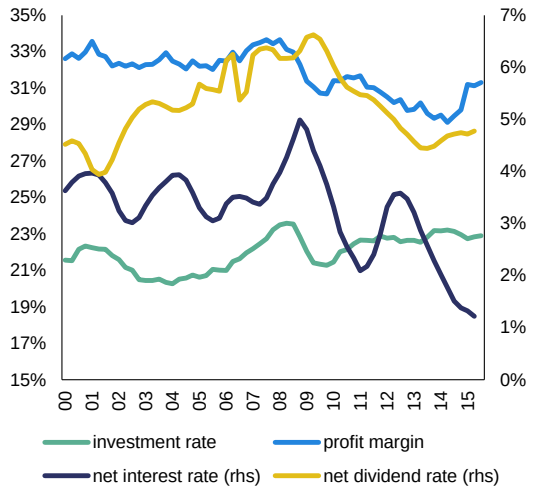
Source: European Commission

However, a slowdown in the investment growth rate can be observed over the most recent quarters and a new acceleration is not projected to take place before 2017. Since 2014, the investment rate first stabilised around 23 % and then slightly diminished (up to 22.9 %), mainly due to the lower growth rate of economic activity ([31]). Indeed, firms keep indicating the presence of a constraint on the number of orders they receive. As a result, the indicator representing the difficulties perceived by a firm on the demand side, already above normal in 2014, has continued to increase in 2015. This may explain why, while the production capacity utilisation rate (*'taux d'utilisation des capacités de production', TUC*)

([31]) Insee (2015), 'Note de conjoncture', December 2015. See also Insee (2015), 'Note de conjoncture', June 2015; Barkbu et al. (2015), 'Investment in the euro area: why has it been weak?', IMF Working Paper, WP/15/32; Bussière et al. (2015), 'Explaining the recent slump in investment: the role of expected demand and uncertainty', Banque de France, Working Paper No. 571.

increased from 81.0 % in 2014 to 81.9 % in 2015, production facilities in the manufacturing industry continue to be used less than in the period 1994-2007 average (84.5 %).

Graph 2.4.3: **Investment rate developments, non-financial corporations, France, 2000-2015**



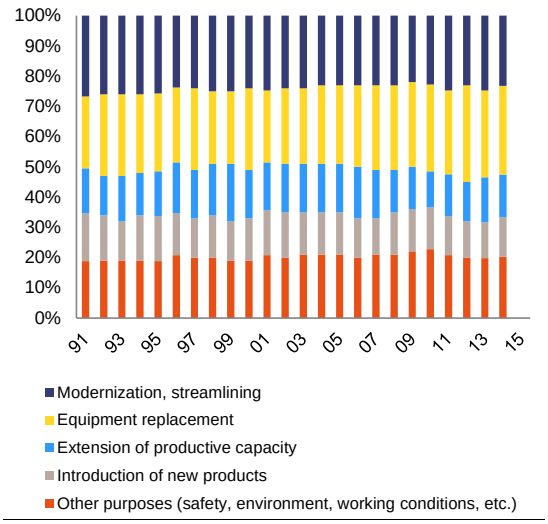
(1)Investment rate and profit margins data series are available up to Q3-2015, while net interest and net dividend data series are available up to Q2-2015. Net interest and net dividend are defined as the difference between paid and received interest or dividend. They are both divided by the value added produced by non-financial corporations.
Source: Insee

French companies' expenditure remains targeted towards less productive investments. Investment of the French industry in equipment has been relatively dynamic over the past years. At 11.1 % of the value added produced by the industrial sector in 2014, it is higher than in Germany (9.2 %). Investment in intellectual property of the industry is also more dynamic than in Germany. However, a large part of companies' investments remains oriented towards the construction sector, while only a low share of companies' investments is used for the purchase of machinery and capital goods, including robotics and information and communication technology-intensive products. Equally, expenditures for intangible investments are mainly directed towards software and databases than research and development activities. Moreover, when considering tangible productive investments, expenses related to intangible innovative goods would represent 25 % of the total investment envelope. This percentage is twice as important as the observed share of intangible investments in the total investment of French companies, excluding the real estate sector.

The main motivation to invest remains the replacement of outdated equipment. In 2014, 29 % of the investments planned by French non-financial corporations for that year were devoted to the renewal of the old equipment (Graph 2.4.4). The need to modernise and streamline production processes explained 23 % of firms' total investment need. By contrast, the extension of the productive capacity and the introduction of new products appeared among the least cited reasons, explaining 15 % and 13 % of the total investment need. Moreover, over the last 15 years, a positive trend can be observed in firms' investment made for replacing the existing equipment. This trend may be explained by the decrease in the average lifespan of capital assets, which may have led to an increase in the cost of capital and ultimately exerted a downward pressure on the investment rate ([32]).

([32]) Eudeline, J.-F., Gorin, Y., Sklénard, G. and A. Zakhartchouk (2013), 'Will corporate investment take off again in France in 2014?', Insee, Département de conjuncture, December 2013.

Graph 2.4.4: **Investment motivation, manufacturing industry, France, 1991-2015**



(1) Data refer to the manufacturing industry. They represent the forecast of the investment need made by firms each October for the current year.
Source: Insee

The preference for replacing existing equipment instead of investing to improve the range of produced goods and services is linked to the overall average non-cost competitiveness performance of French exports. The non-cost dimension of the French external competitiveness issue is linked to the variety and quality of products, which in turn depend on the resources invested by a company into both the development of new products and the improvement of the existing ones. While France has maintained a high global market share in trade of high unit value segments ([33]), the absence of an increasing trend in investments for introducing new products is correlated with the average poor quality/price ratio of French exports ([34]). This has been indicated as one of the main reasons behind the loss of competitiveness shown by French exporters in the 2000s ([35]).

Differences in the rate of investment related to the size of a firm have widened. The share of investment within the value added produced by a firm is positively correlated with the dimension of non-financial corporations (Graph 2.4.5). In other words, the larger the firm, the bigger is the part of value added dedicated to investment and the more considerable the advantage in terms of non-cost competitiveness. In 2014, small and medium-sized enterprises (SMEs) were able to spend 16.0 % of their value added in investment, contrary to 24.6 % for large enterprises. In particular, the low investment rate of SMEs seems to derive from the difficulties to invest faced by smaller companies, as medium-sized enterprises alone could assign 25.0 % of their value added to investment that is 0.4 pp. more than large firms. Moreover, these differences seem to have increased after 2011, when medium-sized enterprises were dedicating to investment 3.0 pps. more than large enterprises and only 6.6 pps. was separating the investment share of SMEs from that of medium enterprises. This ultimately leads to a situation where investment is highly concentrated around a limited number of firms (1 % of firms account for 75 % of investment) ([36]).

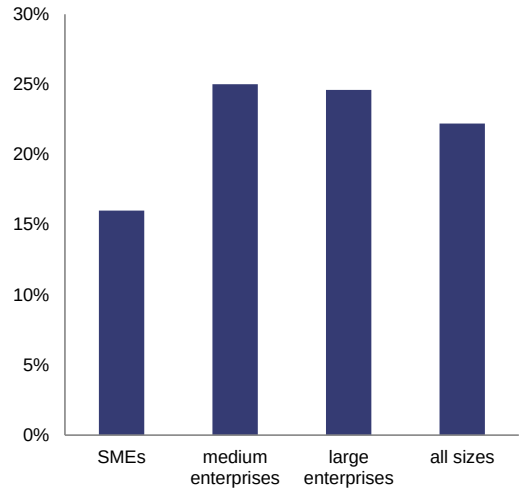
([33]) Stehrer, R., Leitner, S., Marcias, M., Mirza, D. and R. Stöllinger (2015), 'The future development of EU industry in a global context', study for the European Commission, September 2015. This is an export pattern shared by few Member States only, notably Germany, Austria, the UK and Nordic countries. See also European Commission (2015), Macroeconomic imbalances - Country Report – France 2015, *European Economy*, Occasional Papers No. 217, June 2015.

([34]) Bas M., Fontagné L., Martin P. and T. Mayer (2015), 'La France en mal de qualité ?', *La Lettre du CEPII*, No. 355, July 2015. Bas M., Fontagné L., Martin P. and T. Mayer (2015), 'In search of lost market shares', *Les notes du conseil d'analyse économique*, No. 23, May 2015.

([35]) Bas M., Martin P. and T. Mayer (2014), Report on main directions od research towards better assessment of competitiveness, *Work Package 5 of the Mapcompete project*, http://mapcompete.eu/main-directions-of-research-towards-better-assessment-of-competitiveness.

([36]) Bacheré H. (2014), '2012 : une année difficile pour les entreprises, particulièrement pour les plus petites', *Les entreprises en France*, Insee Références, November 2014.

Graph 2.4.5: **Investment rate by firm size, non-financial corporations, France, 2014**



Source: Banque de France

Investment policy

A French investment plan was presented in April 2015 by the French Prime Minister. The main measures in this package are the exceptional capital depreciation for equipment investments, the strengthening of the public investment bank (*'Banque Publique d'Investissement'*, BPI France), France's actions to sustain investment, and some measures to better link investment funds to the capital market.

The effect of the exceptional capital depreciation may be lessened by the temporary nature of the measure. The investment plan has given firms the possibility to absorb an additional 40 % for equipment investments in the period included between mid-April 2015 and mid-April 2016. In the second and third quarter of 2015, the wholesale trade indices in capital goods suggest that the purchases of equipment most affected by the exceptional capital depreciation were the most dynamic. At the same time, the restricted field of coverage of this measure may have distorted investment decisions, introducing disincentives to invest in goods not subject to the exceptional capital depreciation. Moreover, although the exceptional capital depreciation is currently supporting manufacturing and in particular some equipment investment, the effect of this measure is likely to fade away due to its temporary nature and the uncertainty surrounding its follow-up ([37]).

The strengthening of the public investment bank's co-financing actions for tangible and intangible investment projects might help the modernisation of French companies. The investment plan has also reinforced the BPI France budget by EUR 2.1 bn in order to increase from EUR 5.9 bn to EUR 8 bn the amount of resources available for the 'development loans' over the period 2015-2017. These loans are granted for seven years, without requiring collateral from the company applying for financing. The scope of these loans is to facilitate the modernisation of companies, for example by encouraging energy saving investments in traditional industries, companies developing green growth or even projects to make the transition towards a digital economy.

Actions to reinforce firms' access to equity for the financing of longer-term projects have been taken. While the share of shareholders' equity out of total resources is fairly similar for all categories of companies, SMEs tend to be more reliant on financial debt, using loans rather than securities, and are less able to retain financial reserves. These disparities have increased between 2007 and 2013, so that in 2013 SMEs appeared to rely almost exclusively on banking borrowing ([38]), although smaller companies do not seem to be financially constrained ([39]). For longer-term projects, instead, the other measures contained in the investment plan would guarantee further access to equity. Indeed, the measures to reinforce the orientation of savings collected by private funds, such as pension and life insurance funds, towards investment in the private sector would better link such funds to the capital market.

Moreover, the implementation of the European investment plan is advancing rather smoothly in France. The government has rapidly endorsed the Juncker plan initiative and set up a general

([37]) Insee (2015), 'Note de conjoncture', December 2015.
([38]) See Cette, G. and J-P. Villetelle (2015), 'Situation financière et financement des sociétés non financières françaises', *Bulletin de la Banque de France*, Banque de France, issue 199, pp. 53-65.
([39]) Villeroy de Galhau (2015), 'Financing Business Investment', Final Report, September 2015.

investment commission (*'Commissariat Général de l'Investissement'*) to identify possible projects for the European Fund for Strategic Investments (EFSI). Moreover, there is strong stakeholder involvement from both the public and private sectors. Several public sector actors have been mobilised: National Promotional Banks (BPI France and '*Caisse des Dépôts et Consignations'*), general investment commission, and the Association of French Regions *('Association des Régions de France')*. Stakeholders' awareness of the plan has been steadily increasing since the signature of the first projects. This holds particularly true for trade unions and French companies that are stock market indexed (CAC 40).

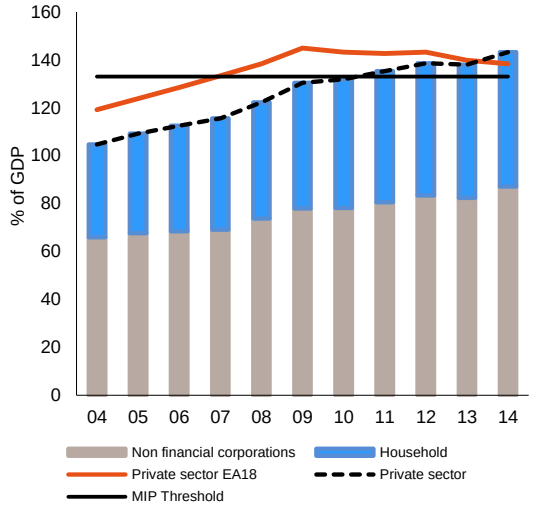
Notwithstanding the aforementioned actions undertaken to stimulate investments, specific challenges remain regarding private research and development activities and in the energy sector. Private sector performance in terms of research and development (R&D) activities is modest compared with EU innovation leaders (see Section 3.3). Moreover, subdued investment in renewable energy put the country at risk of missing its EU2020 target (see Section 3.1).

2.5. PRIVATE AND PUBLIC INDEBTEDNESS

Private indebtedness

The level of consolidated private debt, which exceeded in 2011 the threshold set in the Alert Mechanism Report of 133 % of GDP, continued rising to reach 143.2 % of GDP in 2014, which is above the level for the euro area as a whole for the first time. While a number of European economies have experienced significant deleveraging since 2009, private indebtedness in France has continued to grow at a relatively rapid pace throughout the crisis and beyond.

Graph 2.5.1: **Household and NFC indebtedness**



Source: Eurostat

The French banking sector is very concentrated with well-capitalised institutions that remain dependent on wholesale funding. Large domestic banks in France hold 98 % of the total assets compared to 67 % in the euro area. The four largest French banking institutions are considered of global systemic importance by the Financial Stability Board. Overall, French banks appear somewhat more profitable than their counterparts in the euro area, with a return on equity which amounted to 4.5 % in 2014 compared to 2.3 % on average in the euro area. With a Tier 1 ratio of 13.1 %, the capitalisation of French banks appears in line with that of their euro-area counterparts (13.3 %). Their loan portfolio is also slightly less risky, with non-performing loans representing 3.6 % of the total portfolio in 2014. However, while progress has been made, French banks continue to rely on short-term wholesale funding as their loan-to-deposit ratio was 118 % end 2014 (versus 140 % in the beginning of 2009). Such dependence can prove a weakness when interbank markets experience difficulties.

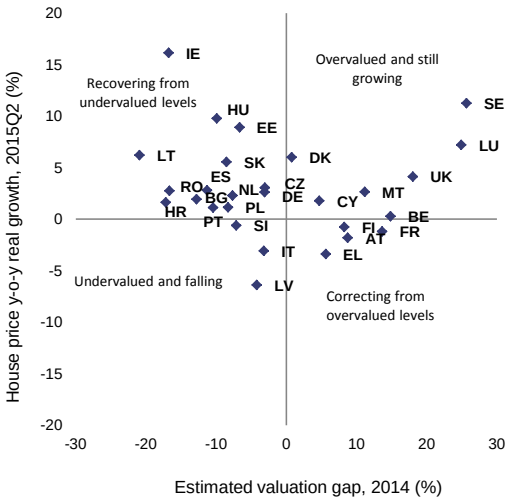
The indebtedness of French households has continued to increase, but at a reduced pace since 2010. Household debt represented 56.1 % of GDP in 2014. The increase in the household debt ratio has been slowing down in recent years, with an increase of 0.4 pp. per year on average between 2010 and 2014, compared with 2.1 pps. between 2007 and 2010. By contrast, the household debt ratio in the euro area peaked in 2009, and has been falling since then, to 59.6 % of GDP in 2014.

The increasing household indebtedness should be seen in the context of a relatively sound net financial asset position and low interest burden on households. In 2014, net financial assets, which comprise financial assets and liabilities, have reached 152.6 % of GDP, more than 10 pps. above their pre-crisis level and above the level in the euro area (144.3 %). Moreover, the interest burden, measuring the affordability of household debt, represented 1.1 % of gross disposable income on average, which is less than that in the euro area (1.5 %). Overall, the credit worthiness of French households remains unproblematic at this stage when compared to European peers.

The real estate market is cooling off and the expected correction of real estate prices is sizeable. The driving force behind household indebtedness dynamics over the last 10 years has been the growth in real estate credit sustained by rising house prices and low interest rates. Prices in France rose by about 120 % from 1997 to 2007. Since then, prices have corrected by a mere -8 %, whereas in the previous house price cycle the correction was of 30 %. Consequently, the outstanding volume of loans for house purchase (41.7 % of GDP in 2014) has gradually decelerated from a growth rate of +12.8 % in 2007 to -2.7 % in 2014. The real estate price correction is expected to proceed smoothly (Graph 2.5.2) and the risks for household deleveraging are relatively contained, in the absence of excess housing supply, while positive demographic trends still support strong demand for housing and banking institutions have conservative criteria in providing credit to households (83 % at fixed interest rate, indebtedness rate limited to a third of revenues). However, a more active deleveraging of

households cannot be excluded should the overall economic conditions worsen in France, for instance because of a change in market perception of the sustainability of public finances.

Graph 2.5.2: **Valuation levels and latest house price growth (2014)**



Source: Eurostat, ECB, BIS, OECD, European Commission

Although limited and passive, household deleveraging weighs on economic growth and residential investment, already hampered by regulation and distorted incentives. The correction in housing market weighs on residential investment, which is projected to further decrease in 2015 after three years of contraction, and holds back economic recovery. Besides, distortions caused by rent control regulation, tax breaks and subsidies are found to limit the responsiveness of house supply to measures targeting it and may tend to hinder a fluid and transparent market development ([40]). In this context, French housing policies seem too demand-oriented and tend to exacerbate unnecessarily the consolidation in residential investment and the impact on growth.

The non-consolidated debt of non-financial corporations increased in 2014 to reach 124.8 % of GDP, above the euro-area average (96.2 %). After netting out intercompany loans, the consolidated debt level of non-financial corporations reached a peak of 87.1 % of GDP in 2014 (compared to 79.4 % in the euro area). Despite the somewhat higher level of debt, the leverage of companies, measured through the debt-to-equity ratio (54 %) remains below the euro-area average (68.9 %). The leverage of companies spiked in 2008 as a result of a sharp decrease in equity but has decreased in recent years despite the continuously growing debt. In 2014, net assets of non-financial corporations represented 102.4 % of GDP in France and 92.6 % of GDP in the euro area.

The recent developments in the profitability of non-financial companies may also improve companies' ability to service their debt. The turnaround in profitability of French non-financial corporations observed in 2015, consequence of the ongoing measures in their favour such as the competitiveness and employment tax credit (*Crédit d'Impôt pour la Compétitivité et l'Emploi - CICE*) and the Responsibility and Solidarity Pact and of the reduced energy bill, points to a reduction in potential vulnerabilities if this evolution continues.

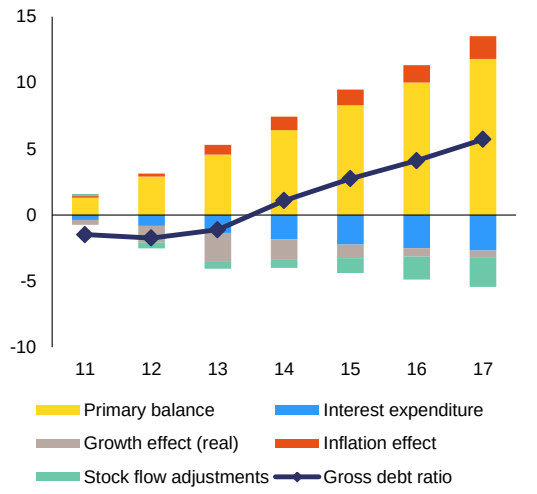
Public indebtedness

While the combination of high public and private debt is a factor of risk, France does not appear to face considerable sustainability challenges in the short term. Risks of fiscal stress are low but some fiscal variables such as the primary balance and gross financing needs (14.5 % of GDP) point to possible short-term challenges. The structure of public debt financing, both in terms of maturity and diversification, does not give rise to short-term risks. Indeed, France is currently able to issue long-term debt at very low rates, in line with favourable funding conditions and investor appetite. According to the latest data released by the French treasury agency (*Agence France Trésor*), the average maturity of French debt has increased slightly to 7.1 years, reflecting the increase in issuance of medium to long-term debt as well as a decrease in short-term debt (10.4 % in November 2015 from 18.6 % in 2009). Inflation-linked bonds represent around 10 % of total French debt and allow for savings on the debt charge in the current low inflation and low rates environment, diversify the debt instruments issued by France and widen its investor base. However,

([40]) Boulhol H. (2011) 'Making the French Housing Market Work Better,' OECD Economics Department Working Papers 861, OECD Publishing. A similar analysis is made by Enderlein, H. and Pisani-Ferry J (2014) 'Reforms, investment and growth: An agenda for France, Germany and Europe', 27 November 2014.

with more than half of its public debt held by non-residents, the French sovereign creditor base could be a source of short-term fiscal vulnerability although the widely diversified French debt investor base in terms of type of investors (insurers, banks, central banks, asset managers) as well as geographical location could be an additional mitigating factor. Moreover, the high level of foreign ownership reflects the attractiveness of French public debt seen as a safe haven.

Graph 2.5.3: **Difference in debt dynamics between France and the euro area**



Source: European Commission

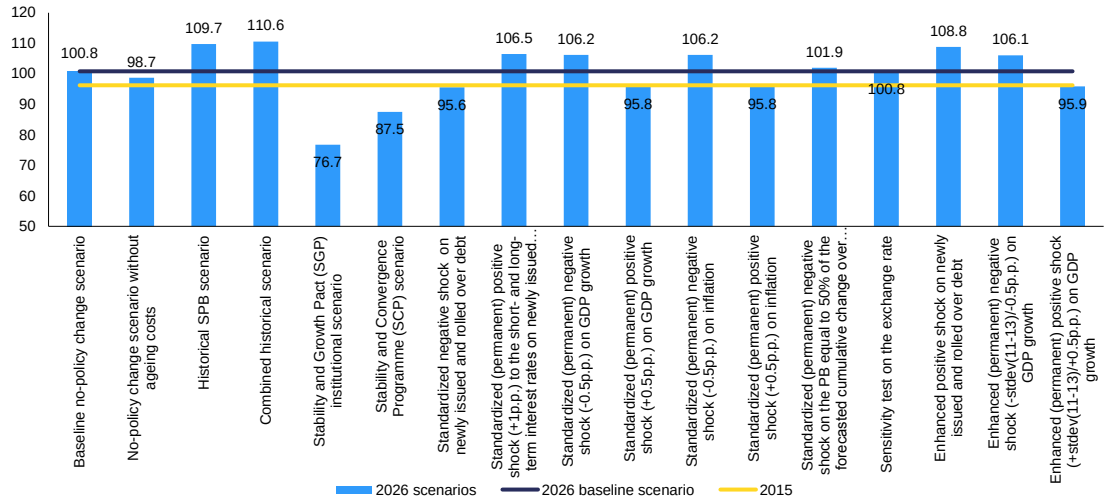
However, debt dynamics in France and in the rest of the euro area are diverging, mainly due to the higher French primary deficit. At the outset of the crisis, France and the euro area had a similar government debt-to-GDP ratio (Graph 2.5.3). Until 2013, the evolution of public indebtedness was similar in France and in the euro area, although general government indebtedness in the euro area was somewhat higher. However, since 2014 the debt ratio in the euro area has reached a peak, whereas in France public indebtedness has continued growing, albeit at a decelerating pace. Based on the Commission 2016 winter forecast, the general government debt in France is expected to reach 97.1 % of GDP by 2017, i.e. about 8 pps. above the level in the rest of the euro area, representing a substantial source of vulnerability for the French economy. A comparison of the debt dynamics in France and the euro area as a whole for the period 2011-2017 shows that the slower deficit adjustment in France explains most of the differences, whereas real economic growth, interest expenditure and stock-flow adjustments partly compensated for the higher primary deficits for the period as a whole.

Challenges highlighted by the debt sustainability analysis and by the sustainability gap in 2030 point to high indebtedness risks in the medium term. By looking beyond the short-term to medium-term sustainability challenges, a debt sustainability analysis for France shows that in the baseline no-fiscal policy change scenario, public debt would be roughly stable until 2022 (reaching 97.2 % of GDP that year), before rising again until the end of the projection period, to 101 % of GDP in 2026 (last projection year, Graph 2.5.4). This high and still increasing level (4.5 pps. of GDP higher than in 2015) points to an insufficient fiscal effort, under this no-fiscal policy change scenario ([41]) to compensate for increasing ageing costs, as well as unfavourable snow-ball effects towards the end of the projection period. A set of jointly simulated shocks to growth, interest rates and the primary balance points to a probability of nearly 50 % of the French debt ratio in 2020 being greater than in 2015, which entails risks given the high starting level. Moreover, the sensitivity of public debt to interest rates stands out as debt would reach one of the highest levels in all the scenarios considered (Graph 2.5.5) in case of a 2 pps. increase in short- and long-term rates for 3 years and a subsequent 1 pp. sustained increase until 2026.

The sustainability gap indicator S1 complements the analysis of public debt projections, confirming the overall conclusion of high risk over the medium term. The S1 indicator implies that a cumulated gradual improvement in the French structural primary balance of 4.3 pps. of GDP, relative to the baseline no-fiscal policy change scenario, would be required over 5 years, if the objective were to reach the reference value of 60 % debt-to-GDP ratio by 2030. This would require an ambitious structural primary balance, such that only 11 % of

([41]) This level of deficit is associated with a percentile rank of 64 %, meaning that over the period 1980-2015, in 64 % of the cases, EU countries were able to reach a structural primary balance value greater than -0.5 %.

Graph 2.5.4: **Gross public debt as % of GDP in 2026 - France**

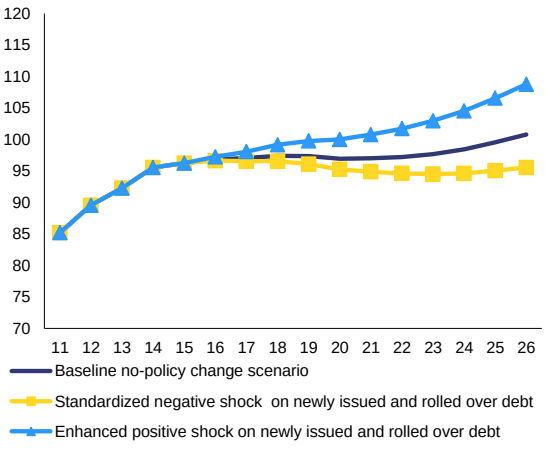


Source: European Commission

the structural primary balances recorded for the EU-28 countries between 1980 and 2015 would be greater than that. There is therefore a high risk according to the S1 indicator. The very significant required fiscal adjustment for France is mainly due to the distance of the debt ratio to the 60 % reference value (2.8 pps. of GDP required fiscal adjustment due to this), and, to a lesser extent, to the unfavourable initial budgetary position defined as the gap to the debt-stabilising primary balance (responsible for 1.2 pp. of GDP required fiscal adjustment) and projected age-related public spending ([42]) (0.3 pp. of GDP).

In the long run, France is at low risk as the long-term sustainability gap indicator S2 measured at horizon 2060 has a relatively low value. The S2 indicator, calculated under a baseline no-fiscal policy change scenario, indeed points to a relatively small required fiscal adjustment (0.6 pp. of GDP), to ensure that the debt ratio remains on a sustainable path over the long run horizon. This is primarily due to the projected decrease of age-related spending (contribution of -1.0 pp. of GDP to S2), mitigated by the unfavourable initial budgetary position (1.5 pp. of GDP). It is in particular the projected decrease of public pension expenditure that drives down ageing costs (-1.7 pp. of GDP), given the reforms implemented in this area in the past. However, long-term risks could arise under more adverse scenarios, such as in the lower total factor productivity growth scenario for pension expenditures, or the Ageing Working Group risk scenario for health-care and long-term care expenditures ([43]).

Graph 2.5.5: **Gross public debt as % of GDP**



Source: European Commission

([42]) See European Commission (2015) Fiscal Sustainability Report 2015.

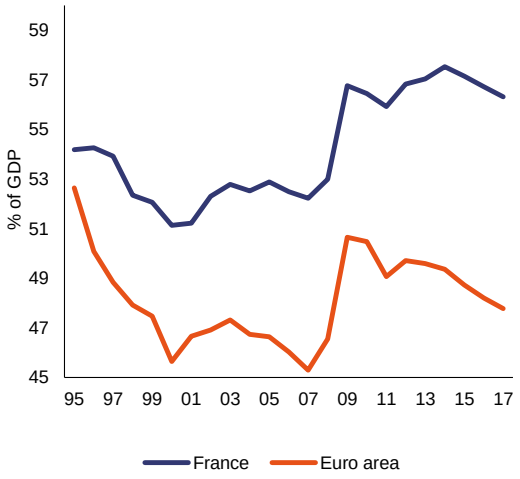
([43]) European Commission (2015) Ageing Report 2015.

2.6. EVOLUTION OF PUBLIC EXPENDITURE

At 57.5 % of GDP, France has the second highest ratio of government expenditure in the EU in 2014. Government expenditure in France is 8.2 pps. higher than the average in the euro area (49.4 % of GDP) and only Finland has a higher expenditure-to-GDP ratio (with 58.3 % of GDP). In 1996 French government expenditure was already 4 pps. of GDP higher than in the euro area and since then expenditure trends have diverged further. Between 1996 and 2015 the expenditure-to-GDP ratio increased by 3 pps. in France, whereas it declined by 1.5 pp. in the euro area as a whole. These diverging trends have been relatively persistent and have been stronger most recently. In 1996-2000, the French expenditure ratio decreased less than in the euro area. Most recently (2010-2015), French expenditure continued increasing whereas it started decreasing again in the rest of the euro area, after a sharp increase in 2009, resulting in a further divergence of 2.6 pps. ([44]).

The high expenditure ratios in France can be associated with a slower budgetary adjustment compared to the euro-area average. Since 1996, the deficit in France has been nearly always higher than the average in the euro area. One reason could be that it has been more difficult in France to adjust expenditure. The slower adjustment of the expenditure ratio in France compared to the euro-area average over the period 1996-2000 and 2010-2015 can be associated with a slower improvement in the deficit over these periods. Indeed, the deficit in France decreased by respectively 3.1 pps. and 3 pps. respectively over the periods 1996-2000 and 2010-2015 compared to 4.4 pps. and 4.1 pps. respectively in the euro area over the same periods. Most successful consolidation phases in the past relied on spending containment implemented by targeting in priority large spending items. In this context, the Scandinavian Member States have been able to adjust their expenditure ratios more with ratios declining from 61 % of GDP on average in 1995 to 49 % in 2007. This led to a major turnaround in their budgetary situation with a deficit of 5.5 % in 1995 being converted into a surplus of 4.5 % in 2007. Over the same period the French deficit was only reduced by 2.6 pps. The prudent Scandinavian policy approach allowed these member states to avoid excessive deficit in the aftermath of the 2008 crisis. France and the Scandinavian Member States had similar debt levels in the mid-90s but debt ratios diverged afterwards. The French debt ratio has been on an upward trend, which accelerated in 2008, whereas the Scandinavian Member States saw their debt ratios decline until 2008 and observed only a moderate increase since. As a result, the French debt is projected to reach 97.1 % of GDP in 2017 whereas the debt ratios of the Denmark, Sweden and Finland would be respectively 38.8 %, 42.3 % and 66.2 %.

Graph 2.6.1: **Evolution of government expenditure to GDP**



Source: European Commission

France relied on-across-the-board spending containment measures, which appear insufficient to bring down the ratio of public expenditure to GDP. France has had the least selective spending containment strategy of all EU countries since 2010, with the expenditure side consolidation being driven by across-the-board spending containment measures such fiscal rules or norms or the zero growth norm for the state level ([45]). Recently, these spending containment measures have been well respected, yet from a

([44]) As we are looking at ratios to GDP, a slower growth of nominal GDP in France could be an explanatory factor for the divergence in the ratio. This is not the case however. Over the period 1995-2000, the average nominal growth in France was 3.9 % versus 4.1 % in the rest of the euro area. Also over the recent period (2010-2015), French growth is similar to that of the euro area (1.7 % in both).

([45]) Hallaert, J and Queyranne M. (2016) From Containment to Rationalization: Increasing Public Expenditure Efficiency in France, IMF Working Paper No. 16/7 2016.

fiscal governance perspective the level of strictness in terms of respecting the plans set out in the medium-term planning documents is relatively weak as ceilings and targets can be changed at the discretion of the government (although it needs to explain the changes). The across-the-board spending cuts employed by the French authorities seem insufficient to achieve a significant reduction in public expenditure. The multi-annual plan aims to reduce public spending compared to the trend growth of expenditure by EUR 50 bn (2.2 % of GDP) between 2015 and 2017 on all levels of the French administration. However, since the reduction in public spending is computed against a conventional trend, the ratio of public expenditure to GDP would still remain high compared to other EU countries.

The process of identifying specific expenditure cuts has not been effective until now. The government launched its general review of public expenditure in 2007. This approach was followed in 2012 by the *Modernisation de l'Action Publique* (MAP) which sought to increase efficiency in all subsectors of public administration. The MAP was strengthened at the end of 2013 and saving targets were set. However, the MAP process does not deliver clear, operational recommendations and has not generated much savings. Equally, the existing committees and councils do not sufficiently support a more systematic approach to spending containment ([46]). In addition to the MAP, the programming law for public finances of 2015 introduced spending reviews as part of the budgetary cycle.

The spending reviews have a number of positive features compared to previous processes but start with low budgetary yields. The first round of spending reviews conducted in 2015 with a view to underpinning the spending targets of the budget for 2016 eventually resulted in the identification of about EUR 500 million savings. This amount is small compared to the overall expenditure savings target of EUR 16 bn for 2016 as part of the multi-annual plan to reduce public spending, but also in light of the savings potential in the domains that were analysed. The spending reviews have a number of positive features compared to the previous processes. They are fully embedded in the budgetary cycle, concern all the sub-sectors of the general government and have a stronger focus on generating savings but remain relatively non-transparent making their assessment difficult.

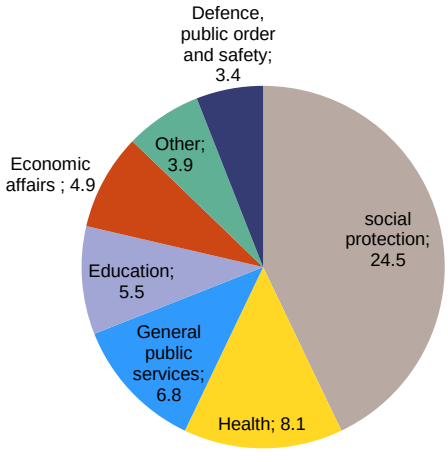
The transparency of fiscal policy is hampered by revisions in potential growth estimates and the non-availability of timely in-year budgetary execution data for some government sectors. The creation of the High Council for Public Finances (HCPF) has increased the credibility of the fiscal framework. The task of this Council is to assess the plausibility of the macroeconomic scenario underlying the various budgetary plans and check that draft budgets are consistent with the structural deficit reduction path set in the current multiannual programming law for public finances. Nonetheless, the government has revised its potential growth estimate in April 2015, which makes it harder for the Council to analyse the evolution of the structural component of the general government balance and hampers the transparency of the fiscal policy. Fiscal policy is also harder to monitor as timely in-year budgetary execution data for the social security sub-sector and the local government sector is not publicly available.

Social protection and healthcare expenditure are the most important spending items in France. Social protection expenditure amounts to 24.5 % of GDP (Graph 2.6.2) and accounts for more than 40 % of total government spending, while health expenditure at 8.1 % of GDP is the second biggest expenditure item. Other important expenditure items are general public services, education and economic affairs. In 2013, the latest year of available data, French government expenditure was about 8 pps. of GDP higher than the euro area (Graph 2.6.3). Expenditure on social protection and healthcare accounted for two thirds of this difference (Graph 2.6.4) and 'other' expenditure – which includes expenditure on housing and community amenities, environment and culture – is also 1.3 pp. of GDP higher in France than in the euro area. Over the last 10 years, the dynamics of the government expenditure ratio has been mainly driven by social protection

([46]) Comité de Suivi des Retraites and Conseil d'Orientation des Retraites for pensions, Haut Conseil pour l'Avenir de l'Assurance Maladie for health, Haut Conseil de la Famille for family, Haut Conseil du Financement de la Protection Sociale for social protection, Conseil des Finances Locales for local governments

and healthcare expenditure and to a lesser extent by 'other' expenditure, mainly due to housing, whereas expenditure on general public services and education has decreased in percent of GDP ([47]).

Graph 2.6.2: **Composition of government expenditure in France**



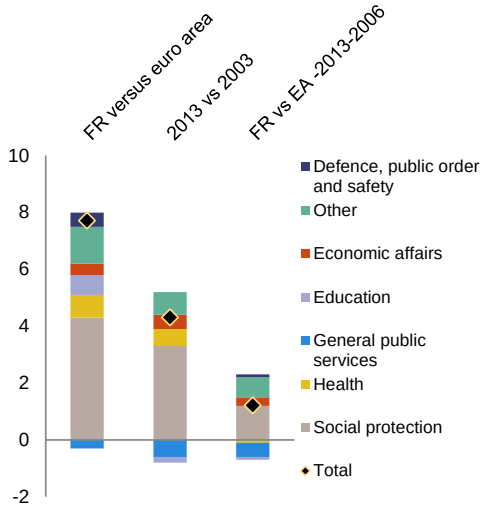
% of GDP; total 57.1%

Source: European Commission

Local authorities play a relatively important role in expenditure on economic affairs, housing and recreation & culture expenditure. Local authorities' expenditure amounts to 11.9 % of GDP in France in 2013. Over the period 2003-2013, expenditure at local level increased by 1.8 pp. of GDP, of which half was due to an increase in social protection spending. Compared to the euro area, local government expenditure in France is about 1.5 pp. of GDP higher, but is comparable with the average share of total public spending in the euro area (20 %). Nevertheless, the responsibilities of local authorities can differ widely from country to country. In France, the main expenditure functions are economic affairs, social protection and general public services (Graph 2.6.4). French local authorities spend more than the euro area on economic affairs, on housing and community amenities and on recreation and culture but considerably less on health.

([47]) 2006 is the earliest year for which the disaggregate statistics on expenditure by function for the euro area are available.

Graph 2.6.3: **Comparison of government expenditure with the euro area and Scandinavian Member States and over time**

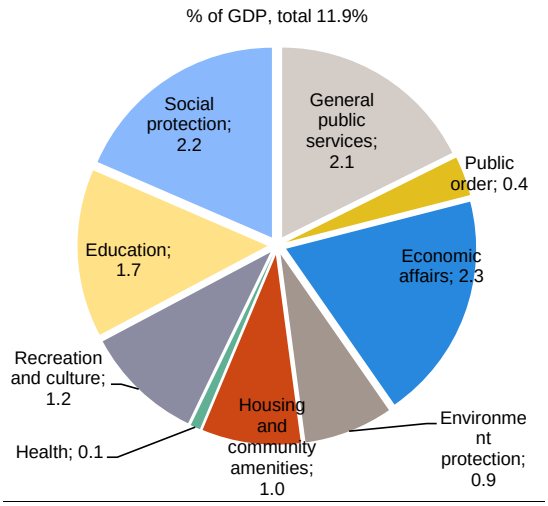


Source: European Commission

The increase in local government spending is partly explained by the 1980 decentralisation and partly by the structure of the French local administration. The increase by 3.3 pps. of GDP in local government spending between 1983 and 2013 can be explained ([48]) up to 60 % by the transfer of responsibilities from the State to the local level such as social protection. The remaining 40 % are due to the local governments, as the number of civil servants increased, unrelated to transfers of responsibility. The number and variety of layers of sub-national governments (State, 22 regions until 2015, 101 departments, more than 36 000 municipalities) is however higher than in other EU countries and creates the risk of building inefficiencies by duplicating functions.

([48]) OECD (2012) Public Governance Reviews: France: An international perspective on the General Review of Public Policies, OECD Publishing 2012.

Graph 2.6.4: **Composition of local authorities' expenditure in France in 2013**



Source: Eurostat

The spending by local authorities is not efficient. Research on the efficiency of spending by local authorities using the efficiency frontiers ([49]) found spending by the intermediate government level (*departments*) to be inefficient on average by -12 %, meaning that on average departments were below the benchmark of input-output combinations set by the efficiency frontier. By contrast, a department is fully efficient if the performance of other departments does not show that some of the inputs or outputs can be improved without worsening some of its other inputs or outputs. The government has taken steps to optimise local authorities' activities with the territorial reform initiated in 2014 and pursued in three stages ([50]) whereby the number of local authorities is streamlined to some extent and the overlap of certain functions is also limited. For example, the general competency clause has been scrapped for the departments and the regions (but not for the other local authorities). Implementation of this reform is now key to ensure the envisaged efficiency gains. Moreover, measures to rationalise the administrative functions and the fusion of the groupings of communes and the merger regions (from 22 to 13 in 2016), have been taken.

A new indicative spending norm for the local authorities, although indicative, completes the existing local government spending rules setting. The objective of local government spending (*objectif d'évolution de la dépense publique locale*, ODEDEL), introduced by the 2014-2019 law on public finances programming can become a powerful tool to steer spending at the local level, especially because as of 2016, the overall target for local authorities will be further sub-divided with targets for regions, departments and municipalities. This spending norm complements the contribution of local authorities to the French savings plan of EUR 50 bn over 2015-2017 which will translate into a EUR 10.7 bn reduction in government transfers to local authorities over the same period. This reduction in the government transfers is changing the spending patterns of local authorities, in particular on investment (as shown by the stronger reduction in local investment than what the electoral cycle would imply for 2014). Local authorities will not be however able to increase their debt in order to compensate the fewer resources, a rule known as the golden rule (*règle d'or*), whereby they can issue debt only to finance investment.

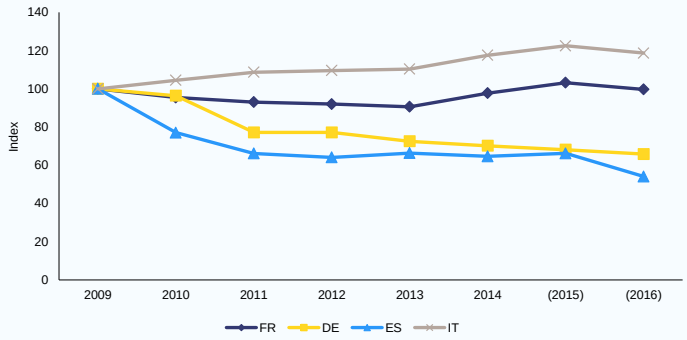
([49]) Seifert, S. and M. Nieswand, (2014) 'What Drives Intermediate Local Governments' Spending Efficiency: The Case of French Départements', Local Government Studies, Vol. 40(5), pp. 766-790.
([50]) MAPTAM, the new map of the regions and NOTRe.

Box 2.6.1: Completing the picture: Tax expenditure

Like other EU Member States, France also resorts to tax expenditure to complete its already high direct spending to achieve certain public policy objectives. Reported tax and social expenditures (including tax exemptions, tax deductions, tax credits and preferential tax rates) in France added up to a share of 8 % of public expenditure in 2013 (RESF 2016). This share is higher in some areas of public policy, like those related to family (9 %), the cultural sector (10 %) and the housing sector (83 %). For public spending related to economic affairs, the amount of tax expenditure exceeded the amount of direct expenditure in 2013 (118 %).

Although some tax expenditures may follow a useful goal, they are often budgetary costly and inefficient. Tax expenditures may be justified by market failures, for example R&D related tax expenditure generates knowledge spillovers. However, tax and social expenditure are often insufficiently targeted and they may therefore turn out to be inefficient and budgetary costly. Moreover, they can give rise to rent seeking behaviour, which distorts investment and consumption choices and can lead to tax avoidance and evasion. Finally, tax expenditures weigh on the complexity of the tax system, increasing taxpayers' compliance costs and collection costs for public administration. The 2014-2019 public finance programming bill highlighted the need for a regular assessment and monitoring of tax expenditures and a comparison of their efficiency with other public support measures.

Graph 1: **Trend of tax expenditures, 2009-16**



Source: For France, Projet de loi des Finances; for Germany, Subventionsbericht; for Spain, Memoria de Beneficios fiscales; for Italy, Allegato technico.

As compared to its large neighbouring countries, the trend of using tax expenditure in France is overall on the rise ([1]). Taking 2009 as index year, a tax expenditure trend is computed for France, Germany, Spain and Italy, based on national tax expenditure data (in % of GDP). While Graph 1 shows a slightly decreasing level of tax expenditure for France from 2009 to 2013, the level increases in 2014 to decrease again as of 2016. This temporary trend to a wider application of tax expenditures is explained by the aim of the French Government to encourage investment, employment and growth in a period of economic downturn, although further constraining public finances. A similar trend is seen for Italy over the period 2009-16. Constrained public finances in Spain, however, pushed the country to lower its level of tax expenditure over this period. Germany follows a similar decreasing trend.

([1]) A caveat of cross-country analysis of tax expenditures is the lack of a commonly defined benchmark tax system which substantially affects the tax expenditure reporting.

2.7. QUALITY OF PUBLIC EXPENDITURE

Pensions

Pension spending in France is among the highest in the world. Based on Eurostat COFOG data, public pension expenditure in France appears high both as a share of GDP (14.7 % over the period 2009-2013 compared to the euro-area average of 12.4 % of GDP, Table 2.7.1), and as a share of total public expenditure (close to 26 % over the period 2009-2013 compared to the euro-area average of 24.8 %, Table 2.7.2). Its weight has increased more rapidly than in the euro area since the 2009 financial crisis and this development can be related to the relatively high sensitivity of French public pension expenditure to macroeconomic conditions. Indeed, the price-indexation of pensions implies that the dynamic of pension expenditure to GDP ratio depends strongly on the prevailing macroeconomic conditions ([51]).

Table 2.7.1: **Public expenditure (as % of GDP)**

Pensions (old-age and survivors)	2004-2008	2009-2013	Change
FR	12.9	14.7	1.8
EA	11.2	12.4	1.2
DE	11.5	11.3	-0.2
ES	7.9	10	2.1
IT	14.3	16.1	1.8
SE	10.8	11.3	0.5

Source: European Commission

Table 2.7.2: **Pensions expenditure (as % of total public expenditure)**

Pensions (old-age and survivors)	2004-2008	2009-2013	Change
FR	24.5	25.9	1.4
EA	24.3	24.8	0.5
DE	25.8	24.8	-1
ES	20.3	22	1.7
IT	30.3	32.1	1.8
SE	21	21.8	0.8

Source: European Commission

The low effective legal retirement age and structural factors, such as the length of the life expectancy, explain part of the differences with other European countries. The share of the population aged 65 or above in France is relatively low by European standards and lower than in Germany, but the public pension spending in France (14.7 % of GDP) is higher than in Germany (11.3 % of GDP). For generations born after 1955, the legal retirement age in France is 62, among the lowest in OECD countries, but the automatic full State pension rights (base and complementary) are achieved only at 67 years. The average effective exit age from the labour market of 61 in France in 2014 is still among the lowest of the European countries (euro-area average of 63) ([52]) but the successive reforms and the recent *bonus-malus* scheme introduced by the October 2015 Agirc-Arrco agreement on complementary pensions seek to increase it progressively to 63 in 2060 (against an euro-area average of 65). This latter measure implies that from 2019 onwards and in the general case, a full complementary pension could only be taken at the age of 63 instead of 62, an earlier retirement meaning a penalty of up to 10 % for 3 years and a delayed retirement leading to a bonus of 10 % to 30 % during one year. Moreover, life expectancy after retirement (22.1 years for men and 26.5 years for women) is higher than the OECD average.

The French pension system is relatively generous. The benefit ratio, which is defined as the average pension benefits as a share of the economy-wide average wage, and the at-risk-of poverty or social exclusion rate for people aged 65 and above are both favourable in France. The benefit ratio is at 51 % in 2013 against an EU average of less than 44 % and the at-risk-of-poverty or social exclusion rate is at 10.1 % against the EU average of more than 17.8 % in 2014. However, France performs less well in terms of income distribution for the elderly based on the ratio of total income received by the 20 % of the population aged 65 and above with the highest income to that received by the 20 % of the population aged 65 and above who have the lowest income. Moreover, the gender gap in pensions reached 38 %, with only limited prospects for improvements ([53]). According to the adequacy ratio which is a composite indicator taking into account the benefit ratio, the at-risk-of-poverty rate and the income distribution discussed above, France is relatively well positioned. However, the comparison with other European countries and when taking into account the level of pension expenditure in 2013 suggests France has a relative

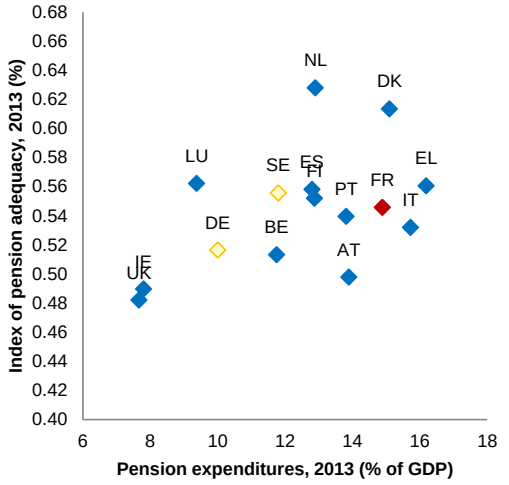
([51]) Conseil d'Orientation des Retraites Document No4, December 2014.

([52]) European Commission, 2015, Ageing Report 2015.

([53]) European Commission and Social Protection Committee, (2015), Pension Adequacy Report http://www.gouvernement.fr/sites/default/files/document/document/2015/07/2e_avis_du_comite_de_suivi_des_retraites_v14_vdef.pdf.

low efficiency as compared with countries such as Spain, Luxembourg, Finland, Portugal and Sweden (Graph 2.7.1). The changes in pension formula introduced since the 1993 reform and in the price indexation (including for minimum pensions) introduced in 1993 as well as the temporary under-indexation of complementary schemes in 2014 and 2015 will significantly reduce this generosity in the long-term.

Graph 2.7.1: **Efficiency of public pension expenditure**



(1) When relevant / possible, private pensions are taken into account (both in pension expenditure and in the benefit ratio, which enters in the pension adequacy index). This is the case in particular for DK, NL and SE.
Source: Ageing report 2015, Eurostat, European Commission calculations

Pension reforms have been the policy response to the increasing sustainability and equity challenges posed by the French pension system. Pension reforms were adopted in 1993, 2003, 2008, 2010 and 2014 seeking to lengthen the retirement age and the contribution period. Taking into account these reforms, the report of the retirement guidance council (*Conseil d'Orientation des Retraites*, COR) updated in June 2015 forecasts a surplus or balance in 2030 for the pension system only in the three most optimistic scenarios out of the five considered in the analysis. Regarding the complementary pension scheme, the end October 2015 agreement between social partners should improve its financial situation, according to social partners' estimations, as a slight deficit would persist in 2030 only under the two most pessimistic COR scenarios. The favourable demographic trends in France and the efforts to reform the pension system contribute thus to its long term sustainability. Despite these reforms, the 2015 Ageing Report forecasts a decline in public pension spending only after 2025, thus the main issue related to pensions is the *current* and medium-term level of public pension spending.

Health care

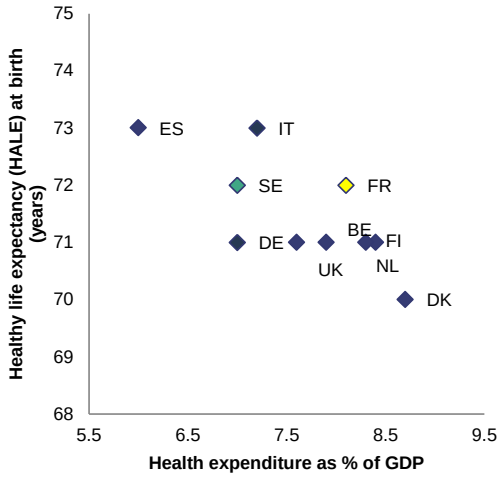
French public expenditure on health is among the highest in the euro area. Health expenditure in France reached 8.1 % of GDP in 2013, above the euro-area average of 7.3 %, among the highest as a share of GDP in the euro area. Healthcare expenditure has increased with longer life expectancy, higher occurrence of chronic diseases and use of modern expensive treatments.

The French population has generally good access to healthcare at a limited cost for patients. About three quarters of healthcare spending (77.5 %) is covered by public sources (i.e. the health insurance branch of social security). Private expenditure on health is split between the complementary health insurance (15.1 %) and the rather low out-of-pocket expenses (7.4 %). In line with the 2013 law on securing employment, as of January 2016 all employers will propose a complementary health insurance for employees and the former will have to contribute to at least half of the health insurance subscription. Compared to other European countries, France has one of the lowest out-of-pocket health expenses (0.86 % of GDP) paired with the highest expenditure for compulsory complementary health insurance (1.54 % of GDP).

The health system performs well in a European comparison, but some countries achieve similar results while spending less. France ranks as one of the top spenders on health in a European perspective, above Member States such as Sweden (which spends around 7 % of GDP), with a similar healthy life expectancy at birth (Graph 2.7.2). OECD quantitative and qualitative health indicators such as life expectancy in good health, men life expectancy or the perceived health status confirm that France performs well, but also that in comparison with other countries it spends more. Research by the Commission and working papers

by France Strategie and the IMF arrive at similar conclusions ([54]).

Graph 2.7.2: **Healthy life expectancy at birth versus public spending (2013)**



Note: The relationship suggested in the graph cannot be taken as a causal relationship but only as a statistical correlation. In addition, healthcare outcomes depend on other factors beyond health expenditure.
Source: WHO, Eurostat

The multi-year plan for the 2015-2017 ONDAM associates specific actions spanning over several years with the achievement of the ONDAM targets. The government plans to achieve EUR 11 bn savings — computed against a conventional trend of 3.6 % — on health spending between 2015-2017 through an increase in outpatient services, tighter hospital spending, a greater use of generic drugs and cutting back on irrelevant expenditure.

France is aiming to increase efficiency by improving outpatient services and access to health care. The healthcare law of 26 January 2016 aims to promote the settlement of general practitioners and of health centres according to local needs (territorial pact — *pacte territoire*). However, the increase in the number of general practitioners which contributes to the development of outpatient services is not yet achieved as half of the medical students still opt to specialise. Finally, the geographic imbalances are related to the density of health care professionals with significant shortages in rural and remote areas. The second phase of health territorial pact ('*pacte territoire santé*') seeks to address this issue with a targeted increase in the 'numerus clausus' but no accompanying mechanism to ensure that future doctors will practice in areas where there is a scarcity of health professionals is planned.

Actions in the areas of public hospitals and prevention could have a leverage effect to the measures already taken to rein in public spending on health. French public hospitals appear to face overcapacity (6.4 hospital beds per 1000 people available in France against 4.8 in OECD countries), hospital stays are longer and a third of maternity wards have occupancy rates below 60 %. The new healthcare law creates the hospital cluster groupings ('*groupements hospitaliers de territoire')* and aims to rationalise the hospital offer although a more integrated approach of both public and private hospitals and activity-based financing would reinforce the link between costs and fees. The growth rate of hospital expenditure under the national health spending objective known as the ONDAM seems too mild as the objective is overachieved (Box 2.7.1). Concerning prevention, spending in France is below the OECD average (2 % vs 2.8 % of GDP).

The use of generics is not widespread. According to the OECD, the generics represented a quarter of volume of the pharmaceutical market in France in 2013. The prescription of generics still lags behind other countries in both reimbursed value (15.5 % vs 37 % in Germany) and volume (30.2 % vs 79.5 % in Germany) potentially because the list of approved generics is too short.

([54]) See European Commission (2015) Comparative efficiency of health systems, corrected for selected lifestyle factors, Final report. Mareuge C. and C. Merckling, (2014) 'Pourquoi les dépenses publiques sont-elles plus élevées dans certains pays?', La note d'analyse, France Strategie, and Hallaert, J and Queyranne M. (2016) – full reference in footnote 2.

Box 2.7.1: **ONDAM (Objectif National de Dépenses d'Assurance Maladie)**

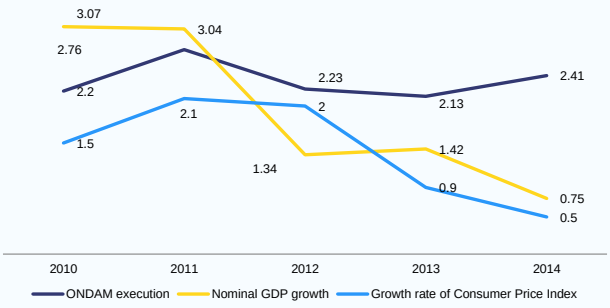
Healthcare expenditure growth has slowed down somewhat, but the health insurance branch of the social security is expected to stay in deficit. Despite the ONDAM being overachieved since 2010, the 2016 law on social security financing does not project a return to balance of the health insurance branch before 2019.

Since 2012 the ONDAM has progressed faster than GDP. Since its introduction in 1997, the ONDAM has allowed reining in growth in healthcare expenditure. Compared to the beginning of the years 2000 when it was above 5 %, since 2012 the effective ONDAM has been below 2.5 %. However, although the increase of health expenditure under the ONDAM has been in line with the target, in 2014 it reached 2.4 %, its highest level since 2011. This increase was three times higher than the nominal GDP growth (+0.75 %).

The disconnection between the ONDAM and GDP growth is explained by some expenditure items. As pointed out in the September 2015 report of the French Court of Auditors on social security ([1]), in 2014 hospital expenditure (EUR 74.7 bn) growth was contained (+1.7 %) while non-hospital care (EUR 80.8 bn) increased by +2.9 %. Paramedical expenditure (nursing care and physiotherapy), daily allowances and medical devices have all increased by more than the ONDAM (+2.4 %), and this evolution was not correlated to the factors driving it (population ageing, chronic diseases occurrence). No significant measure to address this issue has been put forward by the authorities in the meantime.

The 2016 and 2017 targets of 1.75 % for the ONDAM would mark a turning point in the containment of health expenditure. For the first time since 2008, health expenditure growth would be lower than GDP growth and this should translate into a decreasing share of health expenditure in GDP. The targets for the next two years are much more ambitious and the authorities would not benefit from a large room for manoeuver. Even the execution of the 2014 ONDAM was achieved on the back of late adjustments amongst sub-objectives (as explained above, the hospital expenditure target was overachieved and the non-hospital care target was underachieved) to compensate health expenditure overruns in other areas, showing that the containment strategy is running out of steam.

Graph 1: **ONDAM vs GDP vs Inflation**



Source: Cour des Comptes

([1]) https://www.ccomptes.fr/Accueil/Publications/Publications/La-securite-sociale3

Education

Spending in education is uneven between the different education stages. Expenditure on education as a proportion of GDP is above the euro-area average (5.5 % in 2013 compared to 4.8 %). In comparison to the OECD average, spending per student in France is slightly higher (2 % above the OECD average) suggesting that most of the extra expenditure in percentage of GDP compared to the euro area is due to the number of students. However, there are important differences in spending per student across the different stages of education compared to the OECD average. Spending per student is low in early childhood education, primary education (15 % below), average for higher education (2 % above) and significantly higher for upper secondary education (35 % above).

France scores average on the PISA scores but inequalities linked to socio-economic background have risen. In the 2012 OECD Programme for International Student Assessment (PISA), French students had a score in line with the OECD average. In some fields, such as mathematics, this is a deterioration compared to a decade ago. At the same time, educational inequalities linked to socioeconomic background have been widening for more than a decade, results of low achievers worsened and their proportion is somewhat higher than the EU average. In addition, national and other analysis suggest that competences differentials are also highly pronounced, depending on the diploma obtained during one's schooling. Finally, Mareuge and Merckling (2014) demonstrate that the higher spending on upper secondary education is not due to a higher number of students in France and conclude based on a composed quality indicator for secondary education - based on the share of early school leavers, the share of students with a secondary education degree and the PISA scores - that other Member States spend less on secondary education while achieving a better quality. Against this background, the September 2015 report of the Court of Auditors on the cost of secondary schools *('lycées')* recommends to lower expenditure on upper secondary education expenditure and improve its governance.

The ongoing reform of compulsory education aims to invest more and better at an early stage starting with preschool education. Many surveys highlight that prevention contributes to more efficient spending. According to PISA, France is one of the four OECD countries where participation in early childhood education benefits the most to pupils with a migrant background. The objectives to fight educational inequalities and to reduce the number of young people leaving education without qualification is supported on one hand by the provision of additional means and on the other hand by a comprehensive reform ranging from early childhood education to lower secondary education (college). In addition, great attention is paid to specific measures to address inequalities with a new 'Priority Education' policy and the action plan against early school leavers. The latter is in line with the evaluation results of past measures which called for improving efficiency through a stronger focus on prevention and greater coordination between actors.

According to the first November 2015 report ([55]) of the follow-up committee of the reform, whilst most of the decrees have been issued, a key challenge is to ensure an effective and coherent implementation. Past experiences have shown that systematic follow-up is important for the success of the reform and the set-up of a committee tasked with the overall follow-up of this education reform is a positive step. The report calls for a strong appropriation of the reform by the teachers and for national authorities to continue to support the teachers. According to the report, implementation in three key areas analysed — (pre)primary education, initial teacher training, the involvement of the parents — is far from being achieved on the ground.

The reform is expected to improve the efficiency of public spending in the medium term but this might be more challenging than expected. Despite a strong priority given to the creation of 54 000 teaching posts between 2013-2017, the increase in resources per student may also be lower than anticipated due to higher than expected growth of the school population and to unfilled posts. Moreover, the priority given by the

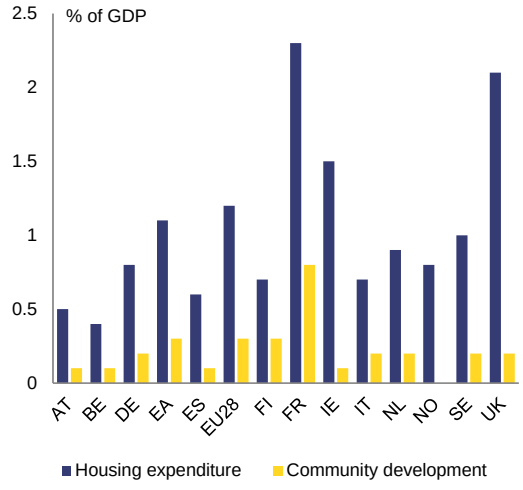
([55]) Comité de suivi (2015) de la Loi de refondation de l'école, Rapport annuel au parlement, 13 novembre 2015.

reform to primary education is currently not reflected in the effective increase in posts ([56]).

Housing

France spends significantly more on housing than its European peers. After two decades of sustained growth (4.6 % on year average), total public spending for housing in France reached 2.3 % of GDP in 2013, significantly above the euro-area average of 1.1 % and only comparable to the United Kingdom (2.1 % of GDP) (Graph 2.7.3). More specifically, the 2.3 % of GDP expenditure on housing are split between housing benefits seeking to improve access to housing rental or ownership and targeting housing demand and representing 40 % of public spending for housing (0.9 % of GDP) and subsidies to housing supply and renovation as well as to the social rental sector (1.4 %). In comparison with other European countries, France allocates significantly more resources to community development (0.5 % of GDP more) reflecting the importance of social housing in France (17 % of total rental market), twice the European average (8.6 %) and only slightly less than the United Kingdom (18 %).

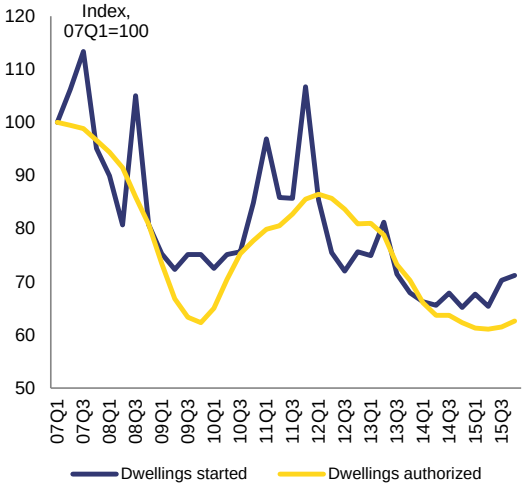
Graph 2.7.3: **Housing expenditure in 2013 (% of GDP)**



Source: European Commission

([56]) Comité de suivi (2015) de la Loi de refondation de l'école, Rapport annuel au parlement, 13 novembre 2015.

Graph 2.7.4: **Number of dwellings authorized and started**



Source: Insee

Despite higher spending than other European countries the housing market situation in France has not improved significantly since the years 2000. New housing projects have hit a new low in 2014 (Graph 2.7.4) and the housing offer has not improved (530 dwellings per 1000 inhabitants in 2014 against 501 in 2004). Moreover, the housing supply is not adapted to the geography of demand as 2.6 million dwellings were empty all over France in 2014 (+37 % in a decade based on 2005 statistics). Institutional and regulatory rigidities hamper housing investment and the spin-off benefits of tax incentives for housing investment are high (85 % of beneficiaries would have made the same decision in the absence of such incentives). The average individual housing benefit amount has increased from the equivalent of EUR 110 in the 1980s to EUR 212 in 2012 according to the latest data available, but it has been more than compensated by the increase in rents and house prices. Indeed, existing research ([57]) on housing benefits concludes they have an inflationary effect on rents. Overall, the households' net average effort rate, expressed as housing expenditure net of housing allowances divided by net household income, has increased for the low income households from 12.9 % in 1988 to

([57]) Laferrère and le Blanc (2012), G. Fack (2005), Grislain-Letrémy and Trévien (2014).

16.1 % in 2002 ([58]) and even more for tenants in the private sector (from 19 % to 25.7 %).

The objective of the housing policy in France to ensure decent housing to all according to their means is only partially achieved. The French housing policy is not progressive as well-off families can benefit both from social transfers for working-age dependent children (students) and tax deductions. Not all the housing benefits are means-tested and this creates a bias in the redistribution role of the housing policy in France. Moreover, the housing supply issue remains unsolved and is aggravated by the definition of the housing policy objectives at the national level, while their implementation is delegated to the lowest administrative level (*commune*), which grants building permits and takes the decisions to build. Recently, the decision to build has been moved to the higher level of administration (inter-municipality) which has a better overview on the ongoing projects and future local needs for housing. It is difficult at this stage to assess whether this initiative contributes to alleviating housing tensions though.

Family and childcare

Spending on family and childcare accounted for 4.4 % of total expenditure in 2013. At 2.5 % of GDP, spending was 0.9 pp. higher than in the euro area. Even controlling for the number of children (2 children in France vs 1.55 in the EU), expenditure is higher than in the euro area. France performs well in a number of important dimensions of work-life balance (OECD, 2011) ([59]): the employment rate of women aged 25 to 54 is above the OECD average and despite a recent slight increase, the at-risk-of-poverty rate of 17.7 % for children aged 0 to 17 is well below the euro-area average (20.3 %). These positive outcomes go hand-in-hand with high investment in family policies across the different stages of childhood.

Like most Member States, France provides tax allowances and reductions for family and childcare via the personal income tax system. This support may take the form of a tax credit (e.g. in Germany), a tax reduction (e.g. in Spain) or a special tax feature, like the quotient familial in France. Moreover, France provides a tax exemption for services related to family and childcare, which is ranked among the most costly tax expenditures, amounting to EUR 2.2 billion in 2014 (2016 budget). In addition, the French personal income tax system provides a tax credit for low-age childcare (EUR 1.1 billion). In total, tax breaks for families account for 0.7 % of GDP which is the second highest in the OECD, after Germany (OECD, 2011).

The ongoing reforms of the family policy seek to improve the efficiency of family and childcare benefits. The French family policy has partly succeeded in meeting its objectives – to reduce poverty, to compensate for family charges and to improve work-life balance for French families. Investment in childcare facilities has contributed to ease the work-life balance and to improve women's position in the economy although the employment rate of women is still well below men's and 29.2 % of women aged 25-54 years old work part-time (compared to 5.6 % for men). Motherhood still has an impact on lifelong earnings, and the gender pay gap stands at 15.3 %.

The government has taken measures to improve the cost efficiency of the family policy with the introduction of means testing for family benefits, a modulation which will produce EUR 800 million savings each year. The outcome of the family benefits modulation will be however compensated by the increase of other means tested allowances. The reform of the revaluation of family benefits has been introduced in the 2016 social security financing law and aligns the indexation date for all benefits except for pensions to April 1st while changing the reference index from expected inflation to actual inflation.

([58]) Rapport 2003-2004 de l'Observatoire national de la pauvreté et de l'exclusion sociale, à partir des enquêtes Logement de l'Insee.

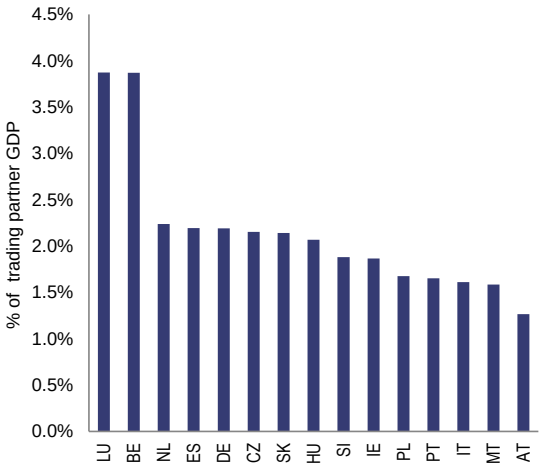
([59]) OECD (2011), Doing Better for Families; OECD (2012), Closing the gender gap: act now, European Commission (2015), Report on equality between women and men in 2014.

2.8. EURO AREA SPILLOVERS

Trade linkages between France and other EU countries

The French domestic market represents an important export destination for several other EU Member States, and in particular for smaller neighbouring countries. French-bound exports are of major significance to the neighbouring countries of Luxembourg and Belgium, accounting for approximately 13 % of their respective GDPs. France is also a big market for Ireland and Malta, with exports amounting to over 5 % of national GDP. The larger euro-area Member States — Germany, Italy, Spain and the Netherlands — all show export linkages in the range of 3 % to 5 % of GDP.

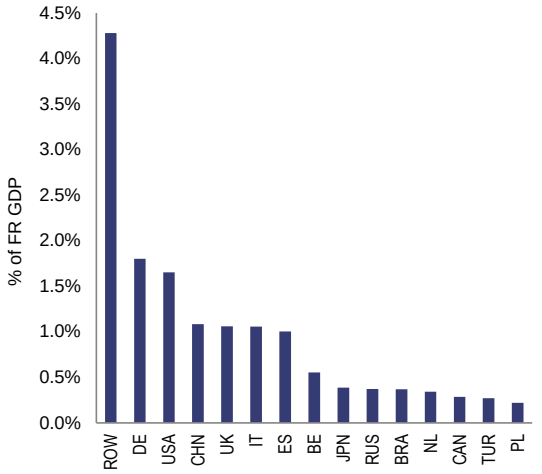
Graph 2.8.1: **Exports to France in value added as a percentage of exporters' GDP (in %; top 15 EU countries)**



Source: World Input-Output database (2011). International Monetary Fund, World Economic Outlook database. European Commission based on the methodology of Koopman, Wang and Wei (2014), 'Tracing Value-Added and Double Counting in Gross Exports', American Economic Review 104:2, pp. 459-494.

When measured in exported value added ([60]), exports to France remain significant for many EU countries geographically close to France, reflecting the high integration of France into global value chains. In value-added terms, exports to France represent approximately 4 % of GDP for Luxembourg and Belgium, while for six other EU Member States ([61]) exports in terms of value added account for more than 2 % of their GDP (Graph 2.8.1).

Graph 2.8.2: **French exports in value added as a percentage of French GDP (in %)**



Source: World Input-Output database (2011). International Monetary Fund, World Economic Outlook database. European Commission based on the methodology of Koopman, Wang and Wei (2014), 'Tracing Value-Added and Double Counting in Gross Exports', American Economic Review 104:2, pp. 459-494. ROW denotes the residual trading partner from a dataset comprising 39 trading partners.

Conversely, French exports depend to a large extent on external demand from other major EU Member States, and especially Germany. Total exports of goods and services account for approximately 29 % of French GDP, with exports to Germany alone representing 4.5 % of French GDP. In terms of exports in value added, total exports of goods and services in value added still represent 17 % of French GDP, while exports in value added to Germany account for 1.8 %. Exports in value added to the United Kingdom, Italy and Spain are worth approximately 1 % of French GDP. Outside the EU, the United States (1.7 %) and China (1.1 %) are also sizeable export markets (Graph 2.8.2).

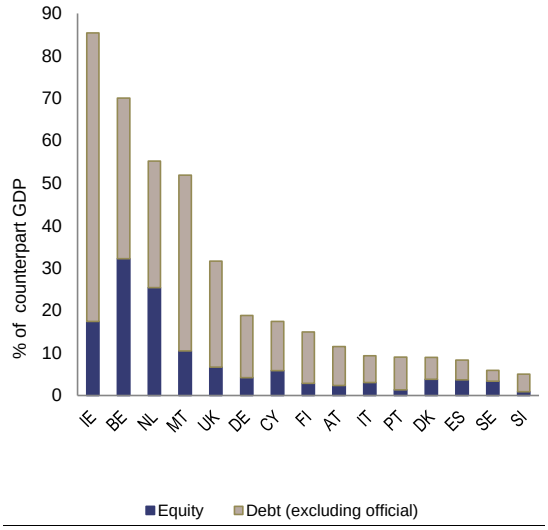
([60]) Exports in value added exclude the value of imports embedded in gross exports. Exports in value added refer to the value of exports that is added by the respective country.

([61]) The Netherlands, Spain, Germany, the Czech Republic, Slovakia, and Hungary.

Financial integration between France and other EU countries

Other EU Member States have large financial and banking exposures to France creating the possibility for significant outward spillovers. In 2012, gross financial exposures to France *via* equity and debt instruments accounted for over 50 % of their respective GDP for Ireland, Belgium, the Netherlands and Malta (Graph 2.8.3). Gross financial exposure to France is also large for the United Kingdom (32 %) and Germany (19 %). EU Member States' financial exposure to France mostly takes the form of debt instruments, rather than foreign direct investment or portfolio investment in equity. As regards the exposures of the banking sectors of EU Member States to France, Belgium, followed by the Czech Republic, Ireland, Italy, and the Netherlands recorded the largest exposures to France (over 10 % of their GDP).

Graph 2.8.3: **Partners' exposures to French liabilities (top EU 15, excl. LU)**



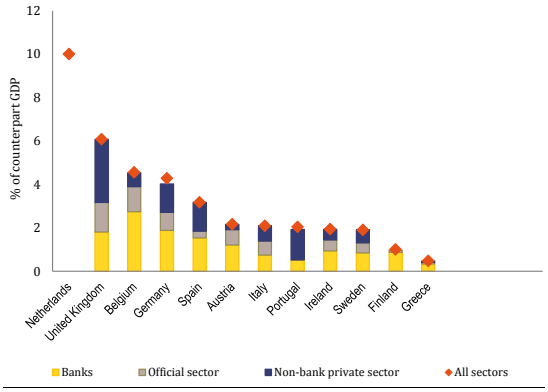
Source: European Commission calculations based on Hobza, A., Zeugner, S., 'Current accounts and financial flows in the euro area', Journal of International Money and Finance, 2014.
Debt excluding official equals other investment (e.g. loans) plus portfolio investment in debt securities, minus official amounts linked to TARGET2, the European Central Bank's Securities Markets Programme and euro-area financial assistance programmes. 2012 data.

France is also a major funding partner and investor in several Member States. France is significantly financially exposed to the United Kingdom (approximately 25 % of French GDP in 2012), the Netherlands, the United States, Italy, and Germany (over 15 % of French GDP each).

Data on banks' cross-border exposure show France's crucial importance for the Dutch banking sector. Dutch banks' exposure to the French economy ([62]) amounted to approximately 10 % of Dutch GDP in the second quarter of 2015. Four other EU Member States had exposures to France higher than 3 % of their respective GDP, namely the United Kingdom, Belgium, Germany, and Spain (Graph 2.8.4). As for France's exposure to other countries, in the second quarter of 2015, the French banking sector was significantly exposed to the United States, with claims worth approximately 17 % of French GDP, mainly in the American non-bank private sector. French banks are also significantly exposed to Italy (10 %), the United Kingdom (8 %), Belgium, and Japan (both around 6 %).

([62]) Data on bank claims differs from data on gross financial exposures as the latter covers the claims of the entire economy, whereas the former covers the banking sector specifically. Furthermore, the two data sources may not be entirely consistent as i) gross financial exposures are based on 2012 data while bank claims are based on data for the second quarter of 2015, ii) the countries in sample differ across datasets and iii) data on bank claims is based on the country of ultimate risk (the country where the guarantor of a claim resides) and includes claims of banks' own foreign affiliates, while gross financial exposures are based on a locational notion of counterpart that is consistent with balance of payments statistics.

Graph 2.8.4: **France — EU bank claims, by sector**



(1) Based on a EU sample of 12 countries; sum of sectors may not add to total due to unallocated claims.
Source: BIS consolidated banking statistics (ultimate risk basis, 2015Q2), IMF, European Commission's calculations

France's high public indebtedness could have adverse effects on other euro-area countries. The transmission channel here is financial markets' sentiment and risk perception. The high debt level and the challenge the government faces in getting it onto a downward path in a context of low growth and low inflation could create market uncertainty if fiscal adjustment fatigue set in and/or reform action was delayed. Changes in French sovereign CDS spreads appear to carry a significant potential to negatively impact on spreads of periphery and southern Member States ([63]).

Economic spillovers and euro-area macroeconomic policy prospects

In a context of low growth, nearly zero inflation and very accommodative monetary policy in the euro area, tackling imbalances is challenging. Low inflation, much below the 2 % target for price stability, makes reducing France's debt-to-GDP ratio more challenging. It also reduces the room for using price adjustment to recover competitiveness and makes the rebalancing within the euro area more difficult. The European Central Bank has launched a quantitative easing programme, which helps anchor inflation expectations while keeping the cost of sovereign financing low. This accommodative monetary policy provides a favourable context to forcefully implement structural reforms in order to increase potential growth and enhance the adjustment capacity of the economy to shocks. The product market rigidities remain high in France, despite recent efforts to address them (see Section 3.1). Given the potential beneficial effect of those reforms on the functioning of the Single Market, they could contribute to growth and rebalancing in other euro-area partners. It is also to be noted that for France to implement reforms that enhance productivity, foster job creation, raise competitiveness and improve the business environment, would be in line with the current Council Recommendation on the economic policy of the euro area.

Addressing existing economic challenges would primarily benefit France, but is also in the interest of the euro area as a whole. It would help maintain a coordinated stance to boost output and employment at the euro-area level. The ongoing moderate recovery in the euro area is projected to continue but it remains fragile and subject to increased external risks, making structural reforms all the more vital. Strengthening the French potential growth would contribute to making the recovery more self-sustainable.

Given the strong trade linkages analysed above, French import demand has a potentially large impact on growth and employment in other Member States. Concerned EU partners would thus benefit from an increase in France's potential growth. Model simulations show a non-negligible impact of structural reforms in France on the euro-area demand.

In turn, improved economic conditions in the EU are crucial for France. As discussed, euro-area and EU economies remain key export destinations for France. Contributing to a boost to euro-area growth would in turn imply positive spillovers for growth in France.

Simulations show significant spillover effects of structural reforms in France. The Commission's simulations based on the QUEST model show that a 1 pp. reduction in mark-ups in the services sector would boost French GDP by 0.41 % and employment by 0.16 % after 5 years, compared to the baseline, after a negative initial impact. Structural reforms to enhance competition would

([63]) 'Cross-border spill-overs in the euro area', *Quarterly Report on the Euro Area* Vol 13 No 4, 2014.

raise productivity and potential employment, shifting the French economy to a more dynamic growth path. At the same time, spillovers to the rest of the euro area would be positive, even in the short run. In particular, GDP in the rest of the euro area would increase by 0.04 % relative to the baseline after two years, while employment would increase by 0.03 %. These positive spillover effects would remain in the longer run.

Box 2.8.1: Specific monitoring report

In the 2015 European semester cycle, France was found to experience excessive imbalances which require decisive policy action and specific monitoring. To this end, the Commission published a specific monitoring report in December 2015 ([1]). This box concludes the 2015 specific monitoring cycle by summarising the findings of the latter report and the latest policy developments relevant to the correction of macroeconomic imbalances.

All the Council country-specific recommendations (CSRs) addressed to France on 14 July 2015 ([2]) are considered as relevant under the Macroeconomic Imbalances Procedure. These CSRs concern the following policy areas:

Ensuring stable public finances. In October 2015, an agreement between social partners improved significantly the sustainability of the complementary pension schemes, while enhancing incentives to work longer. Also, the completion of the legislative process related to the territorial reform and the improvements in the indicative spending norm for local governments introduced in the draft budgetary plan for 2016 improved the fiscal framework for local authorities. The first round of spending reviews linked to the budgetary procedure has shown that these reviews can potentially lead to substantial savings, although the savings generated so far have been limited. By contrast, the budgetary strategy has only been marginally reinforced in the draft budget for 2016 through the further specification of the additional measures for 2016 announced in the Stability Programme.

Enhancing competitiveness. The tax credit for competitiveness and employment (CICE) and the reductions in social security contributions included in the Responsibility and Solidarity Pact were confirmed by the 2016 budget. Moreover, while the law to reform the labour code, whose draft is announced for 9 March 2016, could impact the wage-setting process, no action to reform the minimum wage indexation mechanism seems envisaged beyond the avoidance of ad-hoc increases in the minimum wage index ('*coups de pouce*').

Improving the business environment. The Macron law of 6 August 2015 reduces the regulatory barriers to the exercise of and access to some regulated legal professions, although unjustified regulatory restrictions remain in place for a large number of regulated professions despite on-going simplification efforts. Similarly, some measures have been adopted with a view to reducing regulatory barriers to companies' growth, but they have a limited degree of ambition (9 and 10 employee thresholds raised to 11) or a temporary nature (additional fiscal and social levies linked to reaching thresholds up to 50 employees frozen for 3 years).

Improving the tax structure. The 2016 budget implements the planned reduction in corporate taxation. By contrast, little effort has been made to simplify the tax system beyond technical measures to implement a withholding tax system for the personal income tax by 2018. Tax expenditures are not significantly being removed, neither are inefficient taxes. As a result, the tax system continues to suffer from a lack of clarity and predictability weighing on the effectiveness of fiscal measures.

Fostering the functioning of the labour market. The Macron law modified the employment conservation agreements ('*accords de maintien de l'emploi*'), but no new agreement has been concluded since the adoption of the law. As regards labour market segmentation, higher social contributions for very short-term contracts have failed to provide more incentives for employers to hire on longer-term contracts. Also, the overall effect of the measures contained in the French small business act presented by Prime Minister Manuel Valls on 9 June 2015 and adopted as part of the 2016 budget is a priori unclear, while the recent

([1]) European Commission (2015), France – Review of progress on policy measures relevant for the correction of macroeconomic imbalances, December 2015. http://ec.europa.eu/economy_finance/economic_governance/documents/201512_fr_imbalances_epc_report_en.pdf

([2]) European Council (2015), Council recommendation of 14 July 2015 on the 2015 National Reform Programme of France and delivering a Council opinion on the 2015 Stability Programme of France (2015/C 272/14). http://ec.europa.eu/europe2020/pdf/csr2015/csr2015_council_france_en.pdf

(Continued on the next page)

Box (continued)

bonus of EUR 2,000 per year for two years, introduced for all firms with fewer than 250 employees, concerns not only permanent contracts but also fixed-term contracts of more than six months. Concerning company-level derogations, the French authorities have announced the presentation of a draft law in March 2016. The draft law follows the publication of the September 2015 report of the working group chaired by Jean-Denis Combrexelle, the so-called 'Combrexelle report', which proposed a new architecture of the labour code articulated over three levels (public social order regulated by law, fields of the employment relationships that can be defined through a firm or a branch agreement, and provisions that can be used to regulate the employment relationship in the absence of a firm or a branch agreement) and provided the government with a set of proposals to improve the functioning of the collective bargaining system, by giving priority to company-level agreements in establishing the rules governing working time, wages, working conditions and employment. In turn, the 'Combrexelle report' was followed on 26 January 2016 by the report of the Badinter Commission, nominated by the Minister of Labour on 24 November 2015. This report lists the fundamental principles of the new labour code, i.e. it defines the first set of norms (the public social order regulated by law) of the new code. Finally, concerning the unemployment benefit system, its reform is planned for mid-2016 and negotiations among social partners are planned to start in the first quarter of 2016, but the content of this reform is not known yet.

Overall, France has made some progress in addressing the 2015 country-specific recommendations. Substantial progress has been recorded as regards the reform of complementary pension schemes and the implementation of the measures to reduce the cost of labour. Some progress has been made as regards the implementation of the annual spending reviews, the control of the rise in local authorities' administrative expenditure, the reform of the wage-setting system, the removal of unjustified restrictions on the access to and exercise of regulated professions, the reduction of taxes on production, and the revision of the '*accords de maintien de l'emploi*'. Limited progress has been instead achieved in reinforcing the budgetary strategy and specifying the expenditure cuts planned up to 2017, ensuring that minimum wage developments are consistent with the objectives of promoting employment and competitiveness, removing regulatory impediments to companies' growth, reducing the segmentation of the labour market, facilitating the take-up of derogations from general legal provisions and reforming the unemployment benefit system. Limited progress has also been made in simplifying and improving the efficiency of the tax system and in broadening the tax base on consumption, with no progress made in abolishing inefficient taxes.

This is broadly consistent with the findings of the December 2015 specific monitoring report. Since then, on 18 January 2016 the main features of a plan to fight unemployment, including training initiatives for jobseekers, a reinforcement of the apprenticeship system and incentives for SMEs hiring with contracts longer than six months, were announced (see Section 3.2) and the commitment to fully undertake and then implement all announced reforms reiterated. By contrast, and contrary to the announced schedule, limited progress was made in adopting the decrees implementing the Macron law of 6 August 2015 (see Section 3.1), while some crucial aspects of the reform remain to be set up by decree. The measures announced in the context of the ongoing simplification programme ('*choc de simplification*') are promising, but their implementation remains to be completed. The healthcare law of 26 January 2016 somewhat eases access to healthcare professions and relaxes shareholding requirements for pharmacies. Shareholding requirements for medical test laboratories have also been relaxed through a recent decree (decree n°2016-44 of 26 January 2016).

2.9. MIP ASSESSMENT MATRIX

This MIP assessment matrix summarises the main findings of the in-depth review in this report. It focuses on imbalances and adjustment issues relevant for the MIP.

Table 2.9.1: **MIP Assessment Matrix (*) - France**

	Gravity of the challenge	Evolution and prospects	Policy response
	Imbalances (unsustainable trends, vulnerabilities and associated risks)		
Competitiveness	France lost export market shares by 26 % between 2000 and 2014 (see Section 2.2). External sustainability is not a concern for France in the near term as its NIIP is relatively contained (-19 % of GDP in 2015Q3). However, the persistence of a current account deficit reflects a deteriorated competitiveness. ULC increased at a slightly higher pace in France relative to other EA countries over the past ten years (see Section 2.3). Potential TFP growth amounted to 0.2 % in 2015 while it was 1.3 % in 2000 (see Section 2.1). This trend decline in productivity growth reinforces the challenges associated with a deteriorated competitiveness. The low profitability of non-financial corporations also weighs on French exporters (see Section 2.4). The corporate profit share of the French non-financial companies reached a trough at below 30 % of value added in 2014. This ratio has worsened since 2007 due to an increase in the price of intermediate consumption of goods and services, which companies have accommodated through a reduction of profit margins, not being able to pass it onto the final price.	Similarly to other EU economies, export market shares gains were recorded since 2013 (+3.7 % in cumulated terms), the durability of this improvement being unclear at this stage. The annual current account balance is expected to remain negative in the near future. The NIIP recently deteriorated at a faster pace than the current account deficit. Net external debt has contributed to this aggravation with a worsening by 5 pps. Annual ULC growth accelerated slightly in 2014 (1.5 %), on the back of negative labour productivity growth. In 2015, the depreciation of the euro, combined with subdued HICP inflation developments, will lead to a renewed decrease of the REER headline indicator. Despite a recent pick-up in firms' profitability, past weak profit margins may have curbed entrepreneurs' confidence and appetite to invest, especially in riskier activities or more technology intense sectors. This development may have dented French businesses' ability to increase the quality of their products.	The French authorities implemented the CICE and the Responsibility and Solidarity Pact (RSP). Both measures should lower labour taxes by EUR 30 bn by 2017 and corporate taxes by EUR 10 bn. The CICE and the RSP could contribute to an improvement in NFCs' profitability, if nominal wage growth and the cost of intermediate inputs remain contained, ultimately allowing a deleveraging of the private sector. Real wage growth remains rather dynamic and reacts only to some extent to higher unemployment or lower inflation. The real wage increases erased part of the gains in cost-competitiveness stemming from the implementation of the CICE and the RSP. France has not yet taken measures to address the rigidity of the wage setting process. The Government has commissioned two reports, the Combrexelle and Badinter reports, which propose some measures to address this issue. No measures have been taken to align the minimum wage to productivity developments, beyond a stop to the ad-hoc increases observed in the past.

(Continued on the next page)

Table (continued)

Public debt	Already at a very high level, government debt continued to increase to 95.6 % of GDP in 2014. Such a high debt level and the upward trend constitute a major vulnerability which reduces the fiscal space available to respond to future shocks (see Section 2.5). It also weighs on growth prospects by crowding out productive public expenditure and requiring a higher tax burden. The combination of high public and high private debt is an aggravating risk factor. The government has used low government bond yields to lengthen the maturity of sovereign bonds, which is a mitigating factor for refinancing problems. The widely diversified French debt investor base in terms of type of investors as well as geographically could be a mitigating factor.	Public debt is projected to increase to 97.1 % by 2017. The structure of public debt financing, both in terms of maturity and diversification, does not give rise to short-term risks. France is able to issue long-term debt at very low rates, in line with favourable funding conditions and investor appetite. However, in a somewhat longer perspective, debt dynamics between France and the rest of the euro area are diverging, mainly due to the higher French primary deficit. The debt trajectory and the sustainability gap at horizon 2030 point to high indebtedness risks in the medium term. The Commission 2016 winter forecast projects the headline deficit targets to be met both in 2015 and 2016. However, under the usual no-policy-change assumption, the headline deficit in 2017 is projected to be above the 3 % of GDP threshold.	The French authorities have announced a multi-annual plan to reduce public expenditure by EUR 50 billion over 2015-2017 on all the levels of the general government. However, the reduction in public spending is computed against a conventional trend and the ratio of public expenditure to GDP would still remain high compared to other EU countries. Moreover, the impact of the expenditure plan on the deficit is attenuated as most of the plan serves to finance the social contribution and tax cuts of the CICE and the Responsibility and Solidarity Pact (EUR 41 bn in total). As the consolidation strategy pursued by France relies primarily on the better-than-expected deficit outcome for 2014, the improving cyclical conditions and a continuation of the low interest rate environment, it is therefore subject to risks. The consolidation strategy is not selective enough. France consolidation strategy is expenditure-based. However, in a European perspective, the focus is more on across-the-board expenditure cuts and less on a selective strategy to reap efficiency gains. The spending reviews are a positive development in the process of identifying specific expenditure cuts, although they lack transparency.

Conclusions from IDR analysis

- France is characterised by a high and increasing public debt coupled with a deteriorated competitiveness, in a context of low productivity growth. Associated vulnerabilities have cross-border relevance.
- The recent improvement in export market shares may not be durable, being concentrated in a few sectors benefitting from the euro depreciation. The recent wage moderation is insufficient given the declining productivity growth. Although profit margins have recently increased, no recovery in investment is projected before 2017, weighing on non-cost competitiveness. Besides, public debt is projected to reach 97.1 % of GDP in 2017. The spending reviews have not contributed so far to significantly improve public spending efficiency, necessary to alleviate tax burden and improve the efficiency of the rest of the economy.
- Policy measures have been taken in recent years, in particular to reduce the labour tax wedge and policy commitments have recently been stepped up. However, decisive reform implementation remains key regarding structural reforms on product and labour market. Policy challenges remain, in particular as regards the collective bargaining system, the minimum wage setting process or the regulatory impediments to firms' growth. In addition, the spending review has not delivered the expected results to address the growing public debt-to-GDP ratio.

(*) The first column summarises "gravity" issues which aim at providing an order of magnitude of the level of imbalances. The second column reports findings concerning the "evolution and prospects" of imbalances. The third column reports recent and planned relevant measures. Findings are reported for each source of imbalance and adjustment issue. The final three paragraphs of the matrix summarise the overall challenges, in terms of their gravity, developments and prospects, policy response.
Source: European Commission

3. ADDITIONAL STRUCTURAL ISSUES

In addition to the macroeconomic imbalances and adjustments issues addressed in Section 2, this section provides an analysis of other structural economic and social challenges for France. Focusing on the policy areas covered in the 2015 country-specific recommendations, this section analyses issues related to the business environment, the labour market, social and education policies, as well as innovation and taxation.

3.1. BUSINESS ENVIRONMENT AND COMPETITION IN PRODUCT MARKETS

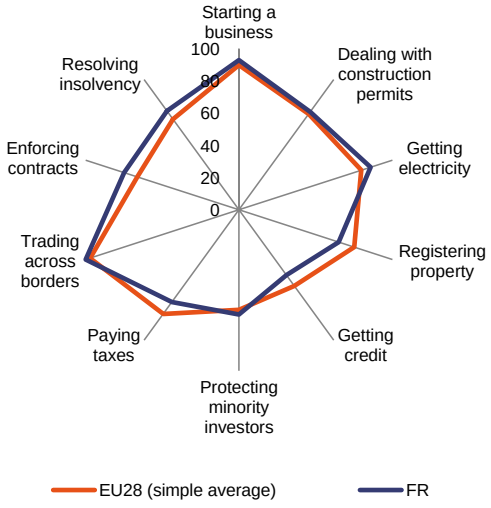
Business environment

The French business environment continues to be middle-ranking, with regulatory burden an important area of concern. According to the World Bank's 2016 Doing Business survey, France ranks 27th out of 189 economies and 13th among the EU Member States, unchanged from 2015 ([64]). France's good performance in trading across borders (1st) or contract enforcement (14th) is counterbalanced by poor performance in getting credit (79th), paying taxes (87th), or registering property (see below) (Graph 3.1.1). In addition, the 2015-2016 Global Competitiveness Report of the World Economic Forum ranks France 22nd of 140 countries overall, but 115th only as regards the burden of government regulation. In this area, France ranks much lower than some of its main competitors such as Germany or the UK.

Registering property is comparatively slow and expensive. It takes 49 days in France (EU average 25.6) and costs 6.1 % of the property value (EU average 4.5 %). Moreover, it requires eight procedures against an EU average of five. In 2013, France made the transfer of property easier by speeding up the registration of the deed of sale at the land registry, but since then no further actions have been planned to speed up the process and decrease the costs further.

Legislative instability linked to frequent changes in legislation continues to negatively affect the French business environment including through negative perception. 90 % of SMEs responding to a 2015 Commission survey (rank: 3rd in the EU, EU average: 70 %) believed that fast-changing legislation and policies were a problem for doing business in France ([65]). An example is the obligation to inform employees in the event of a business transfer, first introduced in the consumption law of 17 March 2014 and subsequently relaxed in the Macron law of 6 August 2015.

Graph 3.1.1: **World Bank Doing Business 2016 indicator - distance to the frontier of best performance**



Note: a score of 0 indicates the lowest performance among all countries in the sample, whereas 100 indicates the frontier of best practice.
Source: European Commission, World Bank

The simplification programme ('*choc de simplification*') in place since 2013 is being implemented as planned. The scrapping of burdensome regulations is continuing, with new batches of measures being adopted on a regular basis, usually every six months. The most recent reform package was published on 3 February 2016

([64]) World Bank (2016), Doing Business 2016: Measuring Regulatory Quality and Efficiency, Washington, DC.

([65]) European Commission (2015), Small Business Act Fact Sheet for France 2015.

and includes 170 actions, of which 90 target companies. Progress with implementation is uneven, with only 56 % of the 325 measures targeting companies already in effect at this stage. While measures simplifying the creation of new firms have been almost fully implemented, the easing of sectoral regulations is slower. As regards building permits, simplification efforts have been made to reconcile environmental and business concerns but, there still appear to be substantial difficulties as regards industrial plants.

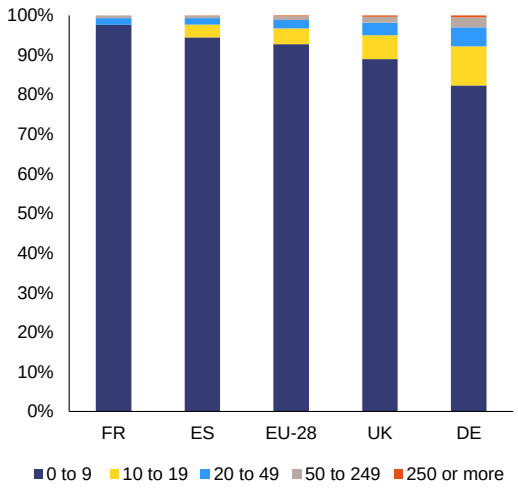
Policy evaluation is not systematically and consistently performed. Although impact assessments are a constitutional requirement, different requirements apply to project laws and to decrees or by-laws and there is no standard rule and methodology ensuring stakeholder involvement **(**[66]**)**. Moreover, *ex-post* policy evaluations are not widespread ([67]). Impact assessments making use of 'SME panel' to assess the impact of legislative proposals on SMEs are not yet widely used.

Public administration governance is not optimal. According to the World Bank 2015 Worldwide Governance Indicator, France scores modestly (1.09, compared to an EU average of 1.17 in 2014, well below Germany (1.70)) as regards the regulatory quality indicator. This indicator captures the perception of the quality of public services, the capacity and independence of the civil service and the quality of policy formulation ([68]). Governance is weakened by the coexistence of multiple layers of sub-central administration which reduce the effectiveness of public policies. The government has recently taken steps to improve the situation (see Section 2.6). Efforts to make contacts with the administration more efficient by introducing the rule that no reply means acceptance (*silence vaut accord)* (extended to local authorities in 2015) are being undermined by the high number of exemptions ([69]).

Firm growth and size-related thresholds

The French economy has a disproportionately high share of smaller businesses with fewer than 10 or fewer than 50 employees (Graph 3.1.2), much higher than Germany and the UK. Consequently, France has a relatively small share of medium-sized companies with 50-249 employees in total employment, especially compared with Germany and the UK, while being on a par with Spain.

Graph 3.1.2: **Break-down of firms by employee number**



Source: Eurostat

The predominance of small-sized firms is problematic as they typically have lower productivity levels (Table 3.1.1), which in turn affects internationalisation and competitiveness. In addition, smaller firms also tend to have lower profit margins, especially in the manufacturing sector, and consequently have more difficulty investing. It is also harder for smaller firms to apply to and meet administrative criteria for public support schemes to innovation (see Section 3.4). While the number of companies created is relatively high, the survival rate of new firms

([66]) Bertelsmann Stiftung (2015), *Sustainability Governance indicator 2015*. France scores 4 out of 10 as regards application and quality of regulatory impact assessments, much below the UK (9) and Germany (8).

([67]) OECD (2015), *Regulatory Policy Outlook 2015, France*, OECD Publishing, Paris, 28 October.

([68]) World Bank (2015), *Worldwide Governance Indicator*. The governance score denotes the governance measure on a scale from approximately -2.5 to 2.5. Higher values correspond to better governance. The percentile ranks locate the respective country among all 215 countries covered by the Worldwide Governance Indicators.

([69]) Portelli, H. and Sueur, J-P. (2015), *Le silence de l'administration vaut acceptation : rapport d'évaluation de la loi du 12 novembre 2013*, Rapport d'évaluation fait au nom de la commission des lois n°629, July.

remains subdued and their growth rate constrained. The fact that it is hard for French companies to survive and grow thus limits the potential productivity gains that could be generated by newly created and fast growing firms.

Table 3.1.1: **Productivity level in manufacturing by enterprise size class, 2013**

Size class	1-9	10-19	20-49	50-249	250+
FR	39.3	44.9	55.0	60.1	80.0
EA	32.1	42.8	51.2	61.1	85.0

Source: OECD entrepreneurship at a glance, 2015

Size-related thresholds continue to weigh on firms' growth. The 10 and 50 employee thresholds are particularly costly. The latter is estimated to represent an additional cost equivalent to 4 % of the wage bill at firm-level ([70]), and an aggregated cost of between 0.5 % and 4.5 % of GDP depending on the degree of downward wage rigidity ([71]). The existence of different size-related thresholds can be particularly disruptive for young innovative high-growth firms which pass through several size-related ceilings in a short period of time.

Two initiatives have been taken to smooth the impact of size-related requirements, but no significant effect is expected. The law on social dialogue of 17 August 2015 reduces the number of annual information, consultation and negotiation obligations on employee representatives in companies with over 50 employees, extends the 'single staff delegation' (*Delegation Unique du Personnel*) to firms employing up to 300 employees (from 200) and above (subject to a majority agreement in the latter case). This will contribute to streamlining social dialogue in companies. Crucially, however, the impact of the single staff delegation will depend on how it is applied, including the number of its members and the number of hours to be devoted to it which remains to be set by decree. The law also introduces new social dialogue arrangements for smaller businesses with fewer than 11 employees through the creation of the *Commissions Paritaires Régionales Interprofessionnelles* (CPRI).

Smaller businesses will benefit from a modest relaxation of size-related thresholds introduced in the 2016 budget. The budget for 2016 provides for a permanent increase of the 9 and 10 employee thresholds to 11. Moreover, the additional fiscal and social levies linked to reaching thresholds up to 50 employees included are temporarily frozen until 2018. While a grace period may smooth the transition for companies reaching a threshold, its temporary nature creates uncertainties for them. More generally, the permanent or temporary increase in the 9, 10 and 50 employee thresholds show that the authorities recognise the burden associated with reaching these thresholds, but does not address the core issue, i.e. to reassess all the requirements linked with exceeding these thresholds with a view to simplifying them where possible.

Competition in the services markets

Barriers to competition in business services in France are relatively high in comparison with other EU Member States (Graph 3.1.3). As a result, service providers are prevented from entering the market, which leads to higher mark-ups, with negative effects on prices and possibly on the quality of services. This is problematic given the high share of domestic services inputs in the value added of French manufacturing exports (Graph 3.1.3), and is therefore an additional factor weighing on France's competitiveness. Further improving the performance of business services would therefore also help industry as well. According to 2014 case studies by the European Commission, positive effects from service sectors liberalisation have been seen in Germany, Greece or Italy ([72]).

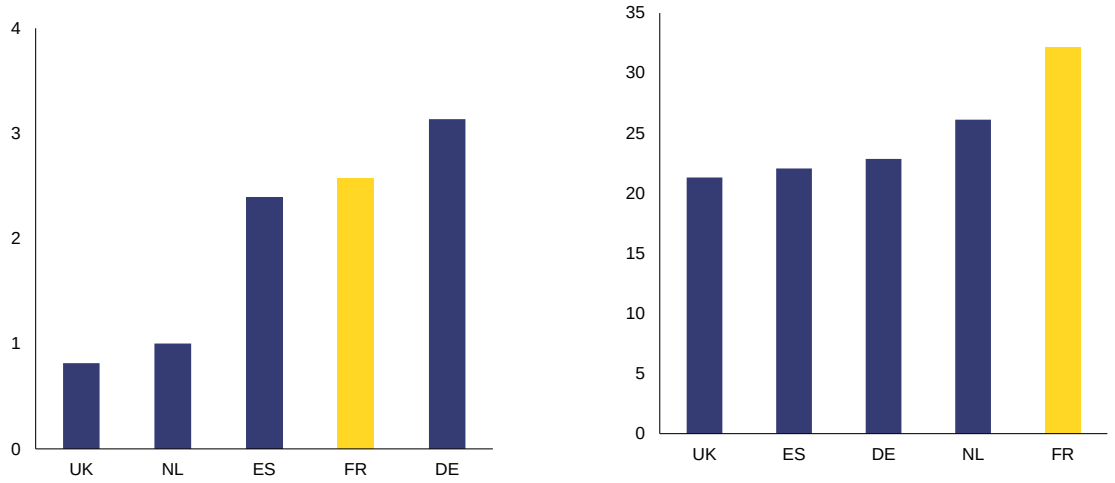
The Macron law is a step towards easing the burden of anti-competitive regulations for certain legal professions but its impact will depend on pending decrees. The professions covered by the law have an annual turnover of EUR 8 billion (0.4 % of GDP). Most importantly, the law aims to reduce tariffs in seven legal

([70]) Attali J. (dir), Rapport de la Commission pour la libération de la croissance française, 2008.

([71]) See for example Garicano et al. (2013), *Firm Size Distortions and the Productivity Distribution: Evidence from France*, NBER Working Paper No. 18841, February.

([72]) European Commission (2015), A Single Market Strategy for Europe – Analysis and Evidence, SWD(2015) 202.

Graph 3.1.3: **Barriers to competition in the business services sector* (2014, lhs) and Domestic services value added, share of gross exports in total manufacturing (2011, rhs)**



* 4 business services are covered (accountants, architects, engineers, lawyers)
Source: European Commission, A Single Market Strategy for Europe – Analysis and Evidence, SWD(2015)202 (2015, lhs) and OECD, WTO, Trade in Value Added (2015, rhs)

professions, but the level of tariffs remains to be laid down in a pending decree. In addition, the law reduces some qualification requirements, somewhat relaxes restrictions on the right of establishment, increases the number of employees that can be hired by practitioners and opens up the practice of legal professions to a wider range of legal forms. Shareholding and voting rights, however, continue to be strictly regulated despite relative relaxation.

Despite these developments and recent measures announced under the simplification programme, regulation remains strict in some services sectors. The professions concerned by the Macron law account for only a limited proportion of the total turnover of the professions 37 main regulated professions representing a total of annual turnover estimated at above 6 % of GDP ([73]). In the business services sector, problems stem from the restrictive application of authorisation requirements and lack of equivalence of foreing insurance requirements as well as from compulsory membership of chambers. Also, at 4.9 %, rates of entry into accounting services are significantly below the EU average (7.2 %).

([73]) Inspection Générale des Finances (2013), *Les professions réglementées*, Rapport n°2012, M057, March.

In addition, access to professions and services in the healthcare sector has been somewhat eased. The healthcare law of 26 January 2016 relaxes shareholding requirements for pharmacies and paves the way for easing the rules that apply to them and for liberalising the sale of certain drugs by pharmacists only. It provides for an extension of the remit of certain professions which are restricted by law (such as midwives and medical and dental assistants), pending the adoption of related decrees. On the other hand, reserved activities are extended for other professions such as orthoptists and opticians. In addition, despite the recent announcements of a small increase in the *numerus clausus* for medical studies in 2016 (see Section 2.6), no plans have been announced to review the methodology for setting the *numerus clausus* in a way that would adequately address future health labour market needs. Nor are there any plans to address the restrictiveness of the framework for home-care services, the opening of which could provide thousands of jobs in an ageing society.

Digital economy

The development of the digital economy is a potentially important lever for economic growth, but France is lagging behind. It is estimated that SMEs with a strong web presence

grow more than twice as quickly as those with a modest one, or none at all ([74]). However, the adoption of big data technologies in France remains low, with the ICT sector representing only 4.3 % of French GDP, against an average of 5.5 % in OECD countries. Only a minority of French firms have a website and use social media in their dealings with customers. These shortcomings are particularly pronounced for SMEs. According to the EU Digital Economy and Society Index, French SMEs seem to lag behind in many respects: only 15.8 % of SMEs sell online (ranked 13th in the EU; EU average: 16.28 %) and only 7.9 % of SMEs sell cross-border online (ranked 15th in the EU; EU average: 7.5 %).

Regulatory bottlenecks are preventing the entry of new digital market players, slowing down the digitisation of the French economy. For example, the development of online driving schools is hampered by the legal requirement for driving schools to have dedicated premises. Healthcare is another sector where bottlenecks limit the development of online services.

On the other hand, the opening up of data flows is beginning. Data collection and analysis can create value by refining firms' understanding of customer behaviour. This knowledge is used to develop next generation products or services. The Macron law has opened up transport data and data from the *Infogreffe* business registry (through the reform of the profession of g*reffiers*). The draft digital law (*loi numérique)* further proposes to extend open data to most of the government data, while the healthcare law opens the access to specific health data.

In addition, the development of self-employment is being hindered by the barriers to entering certain professions, while there is a high potential for creating low- or middle-skilled self-employed jobs as shown by the easing of restrictions on real-estate agents.

The development of high-speed broadband plays an important role in the take-up of digital innovation by companies. Next generation access (NGA) broadband, which enables high-speed downloads, was only available to 45 % of French households in 2015 (up from 23 % in 2011), well below the EU average of 71 %. Mobile broadband take-up, at 73 subscriptions per 100 people in 2015 is also below the EU average (75 %). To improve the coverage of high-speed broadband, the French government is implementing its '*Plan Très Haut Débit*' and has set up the '*Mission France Très Haut Débit*' with a view to ensuring nationwide NGA coverage by 2022.

Competition in the retail market

Steps have been taken to improve the functioning of the retail sector through the Macron law and the simplification programme. In particular, the Macron law provides for an extension of Sunday trading options, subject to an agreement between the social partners. However, provisions included in the draft law to allow the Competition Authority to be consulted before the adoption of planning documents did not make it into the final text. There are major economic benefits to be reaped from retail sector deregulation, a sector which represented 4.3 % of total added value in 2013 and featuring rather high mark-ups compared to the rest of the EU (for instance, 3 pps. higher than in the UK ([75])).

Transport policy

Barriers for intercity coach services have been relaxed, and to some extent also for hired vehicle with driver. The deregulation of coach services provided for by the Macron law has so far led to the creation of 150 lines, according to estimates by the French government. A complex legal framework still regulates taxis and hired vehicles with driver, in a context where on-line platforms are boosting the latter. Although entry requirements to obtain a hired vehicle with driver licence have been relaxed, this activity still faces restrictive rules on types of vehicles and routes.

Barriers remain in the area of passenger railway services. In spite of some efforts in terms

([74]) Dr. Bughin, J., and Dr. Manyika, J., (2012) *Internet Matters*, *Essays in Digital Transformation*, McKinsey, March.

([75]) Thum-Thysen, A. , Canton E. (2015), *Estimation of service sector mark-ups determined by structural reforms indicators*, European Commission, Economic Papers 547, April.

of transparency, the contracts for regional rail public services are still awarded directly to the incumbent without any public tendering. Although major investment is still taking place in the area of high-speed lines, these infrastructures remain closed to other railway undertakings wishing to provide competing domestic rail services.

Energy policy

While the electricity market remains highly concentrated, in gas the market is more dynamic. The market share of alternative suppliers was 9 % at the end of 2014 for electricity, and the switching rate is extremely low, despite a slight increase at the end of 2014 when it reached 1.2 % of both household and non-household consumers. The three largest electricity producers maintained a market share of 98 % of the number of sites and switching costs are high. In gas, competition is more advanced with new entrants reaching a share of 17.5 % of customers and 44.2 % of total consumption volume ([76]). This indicates significant competition for larger customers.

Some regulated tariffs ([77]) are being phased out, but a tariff deficit legacy remains. Regulated prices for large commercial customers were abolished at the end of 2015 following the application of the 2010 law on the new organisation of market in electricity (*loi NOME*) and the 2014 consumption law for the gas sector. This measure, along with new methodologies for setting the remaining regulated electricity prices to ensure full cost coverage should prevent the accumulation of a new deficit. However, in 2015 the value of the deficit previously accumulated stood at EUR 6.5 billion.

The framework is not entirely favourable to investment in next generation energy (including renewables). While the phasing-out of regulated prices for large commercial customers is improving incentives, the remaining regulated tariffs will continue to deter investment and the development of competition. This may conflict with the introduction of a capacity remuneration mechanism ([78]). France is not on track to meet its renewable energy target by 2020. Administrative complexity contributes to limiting investment in this sector, despite recent simplification efforts introduced by the energy transition law of 17 August 2015. In particular, projects are delayed due to long procedures for granting permits (up to 3 years) and various technical barriers.

France's interconnection capacity for electricity is not on track to meet its energy efficiency target ([79]). At 11 % in 2014, the interconnection capacity for electricity was above the Energy Union 2020 target (10 %). However, the interconnections with Spain in both electricity and gas are below their potential. The Commission has identified two key infrastructure projects for electricity and one for gas to eliminate existing bottlenecks. As regards energy intensity, its rate of improvement is below the EU average. Without additional efforts and accelerated policy implementation, France could fail to further reduce its current level of primary energy consumption.

By reinforcing its framework for the energy transition, France is addressing these weaknesses. The energy transition law aims to reduce the share of nuclear generation and increase the share of production from renewable energy sources to 40 % by 2040. The law also reforms the support framework for renewable energy to better integrate renewables into the market and create market-based incentives for allocating new generation capacity. The law also complements the energy efficiency policy framework, including through the renovation of 500 000 houses from 2017. The successful implementation of the law, which depends on the practicalities to be laid down in pending decrees, will be decisive in meeting these objectives.

([76]) Commission de Régulation de l'Energie (2014), Observatoire des marchés de détail du 4eme trimestre.

([77]) Regulated tariffs have been traditionally set at levels that cover neither distribution costs nor the costs of Public Service Obligation.

([78]) Capacity remuneration mechanisms provide stimulus to invest in energy infrastructure to ensure that a sufficient amount of capacity is available at all times.

([79]) European Commission (2015), Assessment of the progress made by Member States towards the national energy efficiency targets for 2020 and towards the implementation of the Energy Efficiency Directive 2012/27/EU, COM(2015) 574 final, 18 November.

3.2. LABOUR MARKET, EDUCATION AND SOCIAL SITUATION

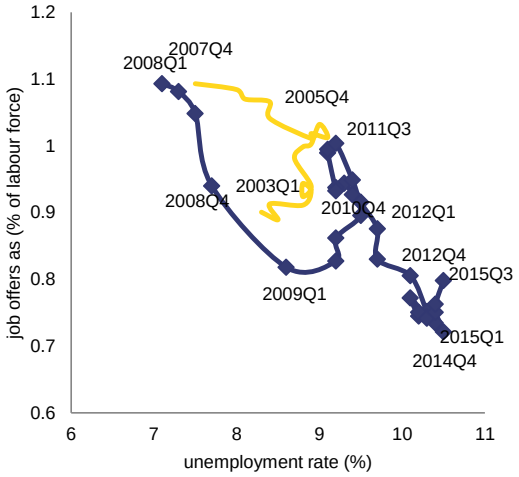
Labour market performance

In a time of weak job creation, unemployment remains high. The overall unemployment rate rose to 10.5 % in 2015 against 10.3 % in 2014. Unemployment is higher among young people, non-EU nationals and lower-qualified workers. In particular, the unemployment rate for workers under the age of 25 years reached 25.1 % in 2015. Also, non-EU nationals have particular difficulty accessing the labour market; for them the unemployment rate was 24.9 %, above the EU average of 18.1 %. Similarly, the unemployment rate for low qualified workers, with a level of education corresponding to ISCED ([80]) levels 0-2, i.e. below '*baccalauréat*', reached 16.8 % at the end of 2015.

Long-term unemployment has increased recently. The average duration of unemployment has been rising steadily since 2008. It rose from 270 days in 2013 to 290 days in 2014 ([81]). Moreover, as a percentage of total unemployment, long-term unemployment rose from 40.5 % in 2013 to 44.2 % in 2014. Despite this increase, the figure for France was still below both the EU and the euro-area average, at 49.6 % and 52.7 % respectively, in 2014. Older workers and those with the lowest levels of education were most affected by long-term unemployment. Six out of ten unemployed workers aged over 50 were unemployed for at least a year, compared with four out of ten workers aged 25-49, and three out of ten workers under the age of 25. Moreover, 56 % of unemployed workers with at most a lower secondary education diploma were unemployed for a year or more, compared with less than one in three workers with a higher school certificate or a university degree ([82]).

The increase in the unemployment rate was accompanied by weak labour demand, with no signs of deterioration in matching efficiency. The Beveridge curve, which represents the relation between unemployment and job vacancies, provides a broad assessment of whether the efficiency of the matching process has changed over the crisis (Graph 3.2.1). In the third quarter of 2015, vacancies remain low, but the combination of unemployment and vacancies lies along the pre-crisis segment of the curve highlighted in yellow. This suggests that the decrease is mainly due to weak demand for labour and not to major difficulties in matching.

Graph 3.2.1: **Beveridge curve, France**



Source: Eurostat and Dares.

The situation of people with a migrant background is especially challenging. Overall the employment rate of non-EU born, at 55.4 % in 2014, is well below the average among people born in France (71.1 %) aged 20-64. The gap is wider among women, as only 47.5 % of women born outside the EU have a job compared to 67.9 % of women born in France. The disadvantaged position of non-EU born on the labour market can be partly attributed to language difficulties, lack of recognition of foreign qualifications, and a lower level of education as 40 % of non-EU born aged 25-64 have not completed higher secondary education level compared to 20.7 % of French-born people. In 2015, discrimination on the grounds of ethnic origin was the most frequent type of complaint received by the Defender of Rights ([83]). Children born to migrant parents were less likely to be employed than other children by 15.7 pps. – one of

([80]) International Standard Classification of Education, developed by UNESCO.

([81]) Dares (2015), 'Demandeurs d'emploi inscrits et offres collectées par Pôle Emploi en Novembre 2015', *Dares Indicateurs*, No. 96, Décembre 2015.

([82]) Insee (2015), 'Une photographie du marché du travail en 2014', *Insee Première*, No. 1569, October 2015.

([83]) The Defender of Rights is the main equality body in France.

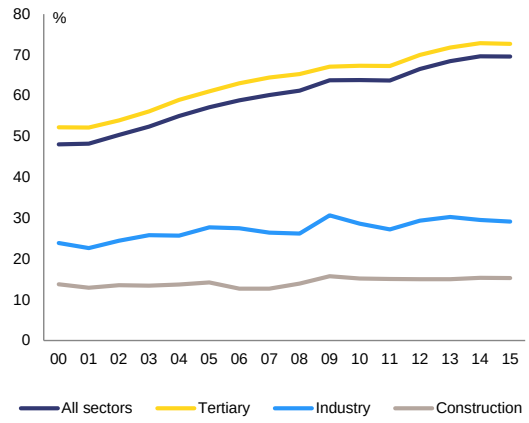
the most pronounced gaps in the EU countries – even after adjusting for individual characteristics ([84]). An estimated number of 75,020 asylum requests were filed in France in 2015. The final number of refugees will only become clear later in 2016 and in 2017.

Labour market segmentation

The structure of the labour market appears more and more polarised, with highly educated workers hired on open-ended contracts and a constant share of low-skilled jobs becoming more and more precarious in some tertiary sectors. The duality of the French labour market is reflected by a growing share of less than one month fixed-term contracts in total hires. This share has risen to close to 70 % in the three first quarters of 2015, from 48 % in 2000. This trend is fuelled by the tertiary sector (Graph 3.2.2) and notably by those sectors entitled to use more flexible labour contracts ('*contrats d'usage*'). While the share of open-ended contracts has remained roughly stable since 2003 (around 87 % all wage earners), the transition rate from a fixed-term contract to an open-ended contract is very low, at 11.1 % in 2013 compared with 22.7 % across the EU.

Incentives to persuade employers to hire on longer short-term or open-ended contracts have not reduced the labour market segmentation. The law on securing employment of June 2013 provides for an increase in social security contributions of 0.5 points for the '*contrats d'usage*' of less than three months. The very low premium paid by the '*contrats d'usage*' is not a deterrent from using them extensively. Moreover as seasonal and replacement jobs are totally exempted from the increase in contributions, firms may be tempted to declare new short-term contracts as seasonal employment or temporary replacement to avoid the extra burden. Since this law was implemented, there has been no reduction in the ratio of very short-term contracts to total short-term contracts. The new employment plan announced on 18 January 2016 strengthens incentives for SMEs to hire, on permanent or fixed-term contract longer than six months, employees paid up to 1.3 times the minimum wage, replacing the premium to encourage first hires introduced in July 2015.

Graph 3.2.2: **Share of up to one month length contracts in all new hires by sector, 2000-2015**



Source: Acoss

Unemployment benefit system

The long-lasting deterioration in the labour market has put a strain on the sustainability of the unemployment benefit system. A new convention regulating the unemployment benefit system entered into force on 1 July 2014 but is insufficient to reduce the system's deficit. Indeed, in October 2015 the deficit was still projected to rise from EUR 3.7 billion in 2014 to 4.4 billion in 2015. This would further increase in the system's debt from EUR 21.3 billion in 2014 to 25.8 billion in 2015 and 29.4 billion in 2016.

The unemployment benefit system is characterised by the duality between the economically balanced general arrangement for open-ended contracts and the deficit-prone specific arrangements (short-term contracts, temping and the specific arrangements for the entertainment sector). The system also makes it to add revenues from partial activity and benefits. However, the benefit calculation favours a succession of short-term full time jobs over a long-term part-time job, particularly in '*contrats*

([84]) The individual characteristics refer to age, literacy, gender and education level. Evidence from situation testing also shows that native-born children from North African and sub-Saharan African parents have to send out twice as many applications before they secure to a job interview (than others with exactly the same profile). See OECD, *International Migration Outlook*, 2014. See also the results of the survey INED (2015), '*Trajectoires et origins. Enquête sur la diversité des populations en France*'.

d'usages' sectors. This creates perverse incentives for employers to offer short-term employment to be complemented by in-work benefits.

The design of the unemployment benefit system during the unemployment spell may weaken the incentives to return to work. The net replacement rate declines only marginally over the unemployment spell. For example, in 2013, the net replacement rate for a single parent with two children who earned 67 % of the average wage in a previous job was comparable to the EU average (68 % against an EU average of 71 %) over the first two months of unemployment. However, this is not the case after a year, when the net replacement rate in France remains unchanged, while for the EU average it drops to 41 %. The contribution period to be eligible for unemployment benefits is also shorter than in other Member States, while the maximum duration of the benefits is comparatively high.

The mechanism of 'rechargeable rights' ('*droits rechargeables*') introduced in 2014 strengthened the activation component of the unemployment benefit system. The introduction of such rights translates into both an increase in the potential total length of unemployment rights and a greater incentive to return to work. Also, it may boost the efficiency of the matching process since it: helps unemployed workers find jobs matching their skills; stabilises their income over the transition period from unemployment to work; and allows second earners not to lose benefits if they temporarily leave the labour force, hence maintaining their incentive to re-enter the labour market.

New negotiations between social partners are set to start in the first quarter of 2016 and a new agreement is planned in 2016. Besides the issues concerning the incentives to return to work discussed above, in July 2015 the French Court of Auditors questioned the efficiency of *Pôle Emploi*, the public employment service (PES), in particular concerning the reinsertion of unemployed workers into the labour market ([85]).

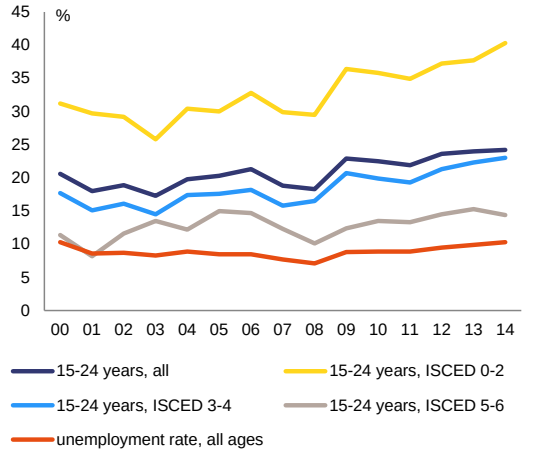
Active labour market policies

Individual monitoring of jobseekers has been scaled up in recent years and policy initiatives to encourage businesses to hire unemployed workers have been extended. The different strategies for the PES introduced since 2012 aim at reinforcing the focus of PES counsellors on the most vulnerable groups. France launched a long-term unemployment plan in early 2015, which introduced two new 'professionalisation contracts' to address the specific needs of long-term unemployed workers. In particular, the range of support for the long-term unemployed returning to work has been widened, including childcare and rental support. Moreover, a new PES offer called 'supervision in job' encourages employers to recruit long-term unemployed workers by offering social and professional expertise to accompany the recruitment. A post-placement support service has also been initiated. Finally, a parliamentary initiative, currently under discussion, enables 10 voluntary municipalities to offer a job in the field of social economy to long-term unemployed workers.

The strengthening of targeted active labour market policy measures has contributed to stabilising youth unemployment. The youth unemployment rate increased from 24.5 % in the third quarter of 2014 to 25.2 % in the third quarter of 2015, above the 20.2 % EU average. Young people with a low level of qualification are particularly hit by unemployment (Graph 3.2.3). At ISCED 0-2 level, they face a 39.6 % unemployment rate (above the EU average of 27.1 %). To address the difficulty of integrating them into the labour market, the number of youth-targeted subsidised contracts for the low qualified ('*emplois d'avenir*') has been increased to reach 125 500. More than 75 % are in the non-market sector (+ 19 % between August 2014 and March 2015). Although these contracts have a positive short-term effect on employment, there are concerns about whether they lead to lasting inclusion in the labour market, notably due to the lack of training elements.

([85]) Cour des Comptes (2015), 'Pôle emploi à l'épreuve du chômage de masse', Thematic Public Report, July 2015.

Graph 3.2.3: **Youth unemployment rate by education compared to unemployment in France**



(1) International Standard Classification of Education Developed (ISCED). ISCED 0-2 corresponds to pre-primary, primary and lower secondary education, ISCED 3-4 to upper secondary and post-secondary non-tertiary education, ISCED 5-6 to tertiary education.
Source: Eurostat

Counselling is also being stepped up, but integrating young people into the labour market remains problematic. France has developed a wide range of measures for the 'Youth Guarantee' ([86]). However, there is a lack of a comprehensive monitoring system and the visibility is generally low with no coordinated communication strategy. To help young people facing multiple obstacles in finding work, the experimental scheme youth guarantee ('*garantie jeunes*'), launched in October 2013 and managed by the *Missions locales*, has been extended to 50,000 young people in 2015 and is projected to reach 60,000 in 2016 and 100,000 in 2017. The PES has also developed a special individual and group counselling offer for young people ('*accompagnement intensif jeunes*') with 740 counsellors at the end of 2015. An agreement between the State and the regions also aims to better coordinate regional efforts targeted at early school leavers. This agreement is part of the broad action plan to fight early school leaving, launched under the ongoing education reform.

([86]) Council recommendation of 22 April 2013 by which all young NEET (Not in Education, Employment, or Training) below 25 years of age should be proposed within 4 months of becoming unemployed or leaving education a good quality offer for a job, a traineeship, an apprenticeship or a training.

Education and training

Educational inequalities in France have been widening for more than a decade due to a sharp decline in the results of low achievers. The 2012 PISA results were average in comparison to other countries but inequalities linked to the socio-economic background are among the highest in OECD countries. At 9 % in 2014, the French national target for the early-school leaving rate has been reached but masks large disparities between regions and sub-groups. Moreover, despite a decreasing trend, between 2010 and 2012, 15 % of young people left education with at most a lower secondary education qualification. Male students, initial vocational education and training (IVET) pupils and students having a migrant background are overrepresented. The latters face a higher risk of prematurely leaving education or to be oriented towards educational pathways which are less valued. They also experience a more difficult transition from education to work. This particularly applies to women.

The ongoing reform of compulsory education aims to address those challenges, focusing on their prevention, but the full implementation is yet to come. The November 2015 report ([87]) on the follow-up to the reform calls to pursue efforts to reach the expected benefits and to ensure an effective implementation (see also Section 2.7). Moreover, the implementation of the middle school reform to come into force in September 2016 is challenging. The reform entails new programmes, new pedagogical approaches and a reorganisation of instruction time with greater school autonomy.

Teacher training and support are key levers for delivering the expected results. In France, the proportion of teachers undertaking professional development activities is below the EU average and the average duration was shorter ([88]). In particular, collaborative teaching and peer mentoring are not well developed and a limited proportion of teachers seems to participate in training for teaching in a multicultural or multilingual setting (3.6 %). The initial teacher

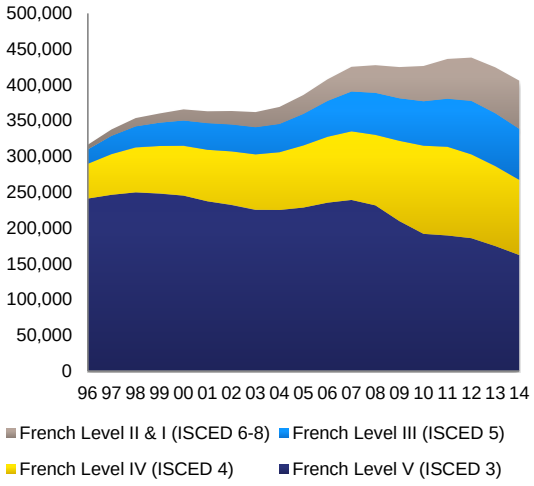
([87]) Comité de suivi de la Loi de refondation de l'école, 'Rapport annuel au Parlement', November 2015.
([88]) OECD (2013), Teaching and Learning International Survey, TALIS.

education reform requires further improvements and measures taken to ameliorate continuous professional training are still at an early stage. In this respect, the key challenges relate to the adaptation of teacher training programmes in terms of relevance to a school needs and context, in terms of quantity, and link with research ([89]).

A recent evaluation ([90]) pleads for significantly upscaling the link between education and labour market needs. Some recent measures for secondary education pupils aim to help them define their education and professional path, namely with a new (‘*parcours avenir*’) as from September 2015. Moreover, a set of 12 measures to strengthen the link between education and enterprises was announced in December 2015. These measures encompass the development of existing initiatives such as the centre for careers and qualifications (‘*campus des métiers et des qualifications*’) as well as new measures aiming to support work experiences for students (‘*stage*s’) and training activities for school leaders.

The recourse to apprenticeship is decreasing, especially for low-qualified categories, while the governance of the apprenticeship system remains fragmented. On 18 January 2016, an extension of apprenticeship to new qualifications was announced, enabling access throughout the year, accompanied by increased cooperation between apprenticeship and vocational education structures. The number of registered apprentices during the school year 2014-2015 was slightly above 400,000, far away from the national objective of 500,000 contracts for 2017 despite the first signs of improvement observed at the end of 2015. The trend is more negative for ISCED 0-2 level (below ‘*baccalauréat*’), with a decline in the entry rate of 7.1 %. Among the reasons that could explain this declining trend are competition with newly created schemes such as the ‘*emplois d’avenir*’ signed in the market sector, as well as the complex governance of the apprenticeship system. While the Sapin law of 5 March 2014 improved the governance of the system by substantially reducing the number of actors collecting the apprenticeship tax (‘*taxe d’apprentissage*’), such number is still high. Moreover, the coordination of different regional strategies remains insufficient. There is also no specific financial incentive to take low-qualified apprentices, while studies show that recourse to apprenticeship by firms depend on cost and benefit analyses ([91]).

Graph 3.2.4: **Evolution of number of apprenticeships by level 1996-2014**



Source: French Ministry for National Education

Jobseekers access to training remains limited, although new supporting measures have been taken since 2013. The access rate to training of jobseekers stood at 9.5 % in 2013, roughly stable since 2011, despite two main initiatives under implementation. First, the scheme priority trainings for employment (‘*formations prioritaires pour l’emploi*’) was launched in 2013, with the aim to provide training to jobseekers in sectors presenting specific needs in terms of workforce. This scheme involved 100,000 people in 2015 and new announcements made on 18 January would increase it to 500,000 in 2016, bringing the total number of jobseekers training over one million. The first results for 2014 are positive, with 57 % of the jobseekers trained being employed six months after the end of the training. Second, since January

([89]) Cour des Comptes (2015), ‘La formation continue des enseignants’, April 2015.

([90]) Demontès, C. (2015), ‘Evaluation du partenariat de l’éducation nationale et de l’enseignement supérieur avec le monde économique pour l’insertion professionnelle des jeunes’, Final Report, October 2015.

([91]) Mühlemann, S., Schweri, J., Winkelmann R. and S.C. Wolter (2007), ‘An empirical analysis of the decision to train apprentices’, *Labour, Review of Labour Economics and Industrial Relations*, Vol. 21, No. 3.

2015 jobseekers and employed workers can create a personal training account ('*compte personnel de formation*'), where training activities may be co-financed by the PES or by firms. Its take-up increased during the year, with more than 2 million personal training accounts opened and 126,000 training projects validated before the end of 2015.

The quality of the training provided remains key to improve the matching between vocational training and firms' needs. With only 40 % of workers having a job in line with their professional qualification, training is essential to give workers more job-specific and organisational knowledge. The law of 5 March 2014 also granted to the organisms financing vocational training activities ('*organismes paritaires collecteurs agrées*') the power to verify that training activities correspond to trainees' needs, although not setting a national quality evaluation and a certification system for proposed trainings. No special attention is devoted to some emerging sectors, such as the digital economy, where the demand seems higher than the supply of trained workers ([92]).

Social policies

France fares better than the EU average on poverty, social exclusion and inequalities. France's figures stand above the EU average, with 18.6 % of the population at risk of poverty or social exclusion in 2014 against 24.4 % for the EU and for the three EU 2020 poverty and social exclusion indicators. The impact of social transfers on poverty reduction remains high, at 44.6 %, compared with the EU average of 34.4 %. The intensity of poverty, as calculated by national figures, has seen a decrease from a peak of 21.2 % in 2012 to 19.8 % in 2013.

However, some more vulnerable categories still need special attention. While the poverty rate among unemployed people decreased significantly in 2014 (from 35.6 % in 2013 to 31.2 % in 2014, against the EU average of 47.4 % in 2014), the increasing proportion of part-time workers, particularly those who earn close to the statutory minimum wage, translated into an increase of in-work poverty risk since 2010 (7.8 % in 2013 and 8 % in 2014, compared to 6.5 % in 2010), reaching 13.4 % in 2014 for part-time workers. Moreover, the situation for the most vulnerable categories, including children, young people and single-parent families, remains of concern, with poverty rates of 17.6 %, 21.6 % and 35.0 % respectively in 2014. The problem of social segregation in some suburban zones ([93]) of cities concerns socially disadvantaged people and in particular non-EU nationals (aged 18 or more), who are more affected by poverty and social exclusion (50.5 % in 2014) than French nationals (16.5 %).

The implementation of the multiannual antipoverty plan adopted in January 2013 is progressing. The law on social dialogue of August 2015 merged two wage support schemes ('*revenu de solidarité active activité*' and the '*prime pour l'emploi'),* into a single bonus ('*prime d'activité'),* accessible also to less than 25 years old, contrarily to the previous '*revenu de solidarité active activité*'. Merging the two wage support schemes as of 1 January 2016 aims at reinforcing the activation component of the new bonus and at increasing its take-up by the households at the bottom of the wage scale. The amount of the minimum income for non-working people ('*revenu de solidarité active socle*') was raised by 2 % in real terms for the third time in September 2015. These measures complemented the other actions taken to reduce the tax burden on low incomes, through a tax credit in 2014 and the withdrawal of the bottom layer of income tax in 2015, further extended to benefit 12 million fiscal households in 2016. A second assessment of the government's action plan against poverty recommends to strengthen and to better manage emergency shelter solutions, to increase the supply of affordable social housing for very low income households and to better target single parent families through childcare facilities.

([92]) Rouzier-Deroubaix, A. and C. Ville (2015), 'Les besoins de formation non satisfaits au regard des besoins de l'économie: la problématique des formations émergentes ou rares', Inspection générale des affaires sociales, Final Report, July 2015.

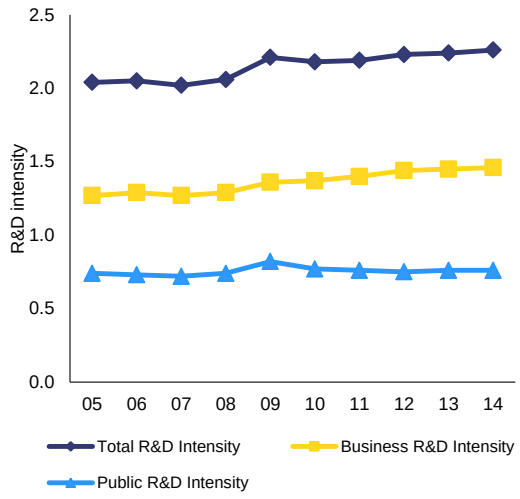
([93]) Insee (2015), 'Une pauvreté très présente dans les villes-centres des grands pôles urbains', *Insee Première*, No. 1552, Juin 2015. See also Bertelsmann Stiftung (2015), Social justice in the EU, Report 2015.

3.3. INNOVATION

Innovation capacity

According to the European Commission's Innovation Union Scoreboard (2015), France is an innovation follower and is ranked 10th, just above the EU average. Limited progress has been made over the past years and French innovation performance is still lower than the EU average in some indicators measuring firm's innovation activities and the economic impact of these activities (non-R&D innovation expenditure, Community designs and trademarks, exports of knowledge-intensive services) ([94]). In addition, the take-up of digital technologies by the overall economy, in particular businesses, is weak (see Section 3.2). France ranks 15th among Member States as regards the EU Digital Economy and Society Index and its performance is just above EU average.

Graph 3.3.1: **French R&D intensity (% of GDP)**

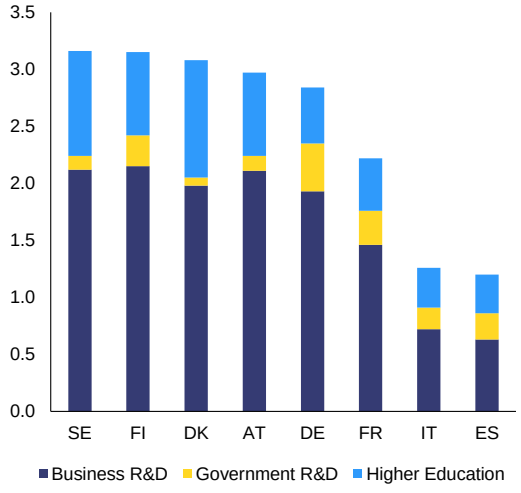


Source: Eurostat

R&D intensity, an important indicator of innovation efforts, has been on an increasing trend during the last decade. Total R&D intensity (R&D expenditure over GDP) of the French economy stood at 2.3 % of GDP in 2014, showing a steady but slow increase from its 2008 level (2.06 %), including throughout the crisis years. Business R&D expenditure has increased from the pre-crisis period and it stood at 1.5 % of GDP in 2014, compared to 1.3 % in 2008 and 2000. Public investment in R&D has been stable since 2009 and has amounted to 0.8 % of GDP in 2014 (Graph 3.3.1).

However, R&D intensity is lagging behind EU innovation leaders, in particular private R&D. France scores notably below Germany (2.8 %), and Austria and the Nordic countries (3 % and above) (Graph 3.3.2). The lower private R&D intensity in France compared with the four main leaders accounts for a large part of this gap. France is also lagging behind in terms of higher education expenditure on R&D. As a result, France is not on track to meet its national EU2020 target of 3 % of GDP devoted to R&D.

Graph 3.3.2: **R&D intensity by source (2014) (% of GDP)**



Source: European Commission

The structural evolution of the economy is not favourable to private R&D-intensive activities. R&D intensity is particularly high in the manufacturing sector (it amounted to 7.1 % in 2012), but the share of this sector in the total business value added of the economy is shrinking (11.3 % in 2012, down from 12.7 % in 2007 for a negative average annual growth rate of -2.2 % over the period). This trend has been more significant in R&D intensive subsectors such as motor vehicles (-5.9 % per year), computers, electronics and optical (-5 %) and pharmaceuticals (-3.6 %). In addition, most of the R&D intensive manufacturing subsectors have been reducing

([94]) European Commission (2015), *Innovation Union Scoreboard 2015*.

R&D intensity on average, with the exception of machinery & equipment (+7.4 %).

Compared to other EU countries, the quality of France's public research is average. Several reforms have been introduced, such as the creation of the high council for evaluation of research and higher education in 2013, the higher education institutions and university communities (COMUE) aiming to improve the coordination of education offer and research strategies the same year, and the adoption of the national research strategy in 2015. However, France keeps lagging behind the EU best performers, as suggested by the average impact factor of scientific publications and their share in the most 10 % cited worldwide (France ranks 11th and 13th respectively).

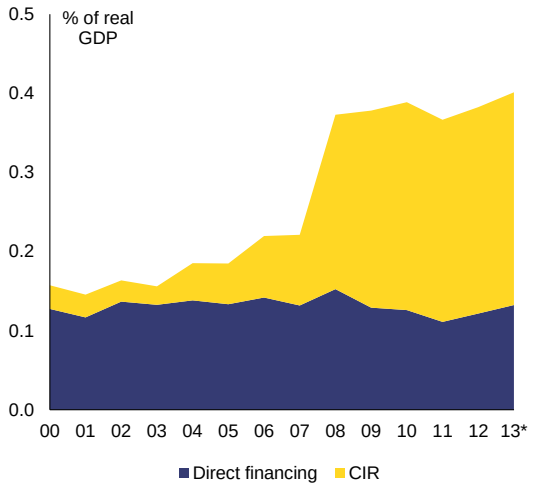
Public support to innovation

Public support to innovation has increased twofold over the past 10 years to reach 0.5 % of GDP in 2014 ([95]). Public support to private R&D activities enjoys the largest part of French innovation policy. It amounted to 0.4 % of GDP in 2011, making France the country with the third largest public transfers to business R&D worldwide ([96]). This support is primarily indirect through tax incentives (Graph 3.3.3). In particular, the research tax credit '*crédit d'impôt recherche*' (CIR) has increased massively since the 2008 reform and accounted for EUR 5.3 billion of foregone revenue (0.3 % of GDP) in 2015 ([97]), making it the second largest tax expenditure after the CICE. In addition, the innovative start-ups scheme ('*jeunes entreprises innovantes*' (JEI)) reduces the cost of hiring R&D staff through tax incentives in SMEs less than 8 years of age. It represented a total amount of EUR 175 million in 2015 ([98]).

The CIR is effective in supporting private R&D, but its impact on innovation remains to be demonstrated. The results of a recent counterfactual evaluation show that firms which benefited from the CIR significantly increased their R&D expenditures after the 2008 reform of the instrument as compared to firms that did not apply for it. Overall, figures show a substantial increase of private R&D in 2009 (Graph 3.3.1) and a positive trend afterwards, reversing the negative path since 2002. However, the same study finds a very modest impact of the CIR in terms of innovation since the 2008 reform when comparing innovation outcome for similar firms which benefited from this instrument and for those which did not ([99]). However, results need to be refined at a later stage, as data included in this study stops in 2010 and innovation is measured by the number of patents at firm level which may take time to materialise. In addition, the CIR has only been extended to non-R&D innovation expenditure in 2013, through the creation of the innovation tax credit ('*crédit d'impôt innovation'),* a tool dedicated to SMEs. It scope remains modest in comparison to the R&D component of the CIR (EUR 190 million in 2015, as estimated by the 2015 National Reform Programme).

([95]) Pisani-Ferry, J. et al., (2016), *Quinze ans de politiques d'innovation en France*, Rapport de la Commission nationale d'évaluation des politiques d'innovation, January.
([96]) OCED (2013), Science, technology and Industry Scoreboard.
([97]) Annexes to the 2016 Draft Budgetary Plan.
([98]) 2015 National Reform Programme, estimation.
([99]) Bozio A., Irac D., Py L. (2014), *Impact of research tax credit on R&D and innovation: evidence from the 2008 French reform*, Banque de France, Document de travail n°532, December.

Graph 3.3.3: **Public support to private R&D**



Source: Ministry of higher education and research and Base GECIR juin 2015, MENESR-DGRI-C1
Note: *Data on public financing in 2013 is provisional, Data on CIR for 2013 includes CIR and CII (EUR 0.069 billion)

Stability of the CIR has been preferred over the correction of imperfections in its design. The instrument has been for the most part unchanged since the major 2008 reform, which increases its business friendliness. However, its design is not well suited to the needs and characteristics of digital SMEs and start-ups ([100]). In addition, uncertainties related to its scope create recovery risks, since the eligibility of expenditure is only established by the administration *ex post*, and recovery may take place up to three years following the tax statement. Recent clarification and simplification measures adopted in the context of the simplification shock (such as the '*rescrit roulant*') are steps in addressing these issues.

There has been an inflation and instability of public schemes supporting innovation, raising concerns as regards overall coordination and consistency. The number of such schemes has increased from 30 in 2000 to 62 in 2015, as recently mapped out by the national commission for the assessment of innovation policies. The recently created public investment bank *BPI France* dedicated EUR 1.1 billion to financing innovation in 2014, 8 % of its total budget available for business support ([101]). Other recent initiatives include new industrial France ('*nouvelle France industrielle')* and '*French Tech*' (introduced in 2013) or the second phase of the programme for future investment ('*programme d'investissement d'avenir')* launched in 2014 (EUR 12 billion over 10 years). As a result, the support system is complex, targets an overly ambitious number of policy goals, and lacks clarity for companies. In addition, the subnational level is playing an increasing role (5.4 % of total public support in 2014, and 15.2 % excluding tax incentives ([102]), but there is no sufficient confluence between R&D national policy and the regional specialisation strategies developed locally. There is also little involvement of private actors in the design of innovation policy and its governance.

Policy commitments have been taken to strengthen and improve the efficiency of innovation policies. This is the goal of the plan '*Nouvelle donne pour l'innovation*' adopted in 2013 but which has not so far delivered tangible results. The national commission for the assessment of innovation policies created in June 2014 is currently evaluating existing policy tools, but it is not clear how and if the findings of the Commission will be translated into policy measures.

Furthermore, innovation performance is hindered by the framework conditions and the business environment. High and complex corporate taxation (see Section 3.4), but also product market rigidities limit corporate capacity to finance investments and mobilise the human resources required for innovation ([103]). Finally, the small size of firms and lack of midcaps (see Section 3.2) may also be an obstacle to innovation.

([100]) Conseil d'Analyse Economique (2015), *Economie numérique*, November.

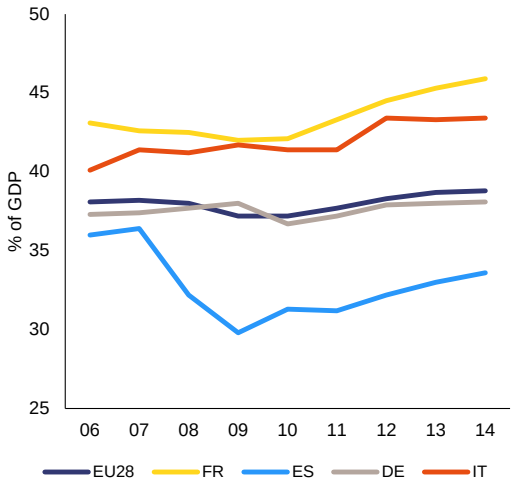
([101]) BPI France (2015), *Bilan d'Activité 2014*.
([102]) Pisani-Ferry, J. et al, (2016), op. cit.
([103]) OECD (2014), OECD Reviews of Innovation Policy: France 2014, OECD Publishing, Paris.

3.4. TAXATION

Evolution of the tax burden

High and increasing tax burden weighs on the economy. At 45.9 % of GDP, France had the second largest tax burden in the EU in 2014, and this ratio has been increasing year-on-year since 2009 (Graph 3.4.1) at a faster pace than the EU average. In addition, France's tax system features high taxes on companies and production factors in general, including labour.

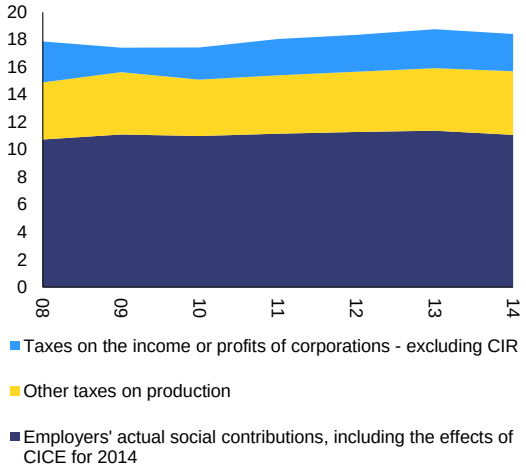
Graph 3.4.1: **Overall tax burden (receipts from taxes, excluding imputed social security contributions)**



Source: Eurostat

Steps are being taken to limit the weight of taxation on production factors. In addition to the implementation of the Responsibility and Solidarity Pact since 2014 (see Section 2.4), the budget for 2016 includes further measures aiming at reducing companies' tax burden. First, initiated in 2015 to the exclusive benefit of SMEs, the phase-out of the corporate social solidarity contribution (*C3S*) (a tax on turnover initially affecting 300 000 companies) ([104]) will be extended to medium-large companies in 2016. Companies with up to EUR 19 million of turnover will be *de facto* exempted from this tax, which will reduce further the overall tax bill by EUR 1 billion ([105]). Secondly, as of 2016, the exceptional levy on companies' profits will no longer apply. This elimination will further lower corporate taxes by EUR 2.5 billion. In addition, companies can deduct an additional depreciation which accounts for 40 % of the total value of the investment for industrial investments undertaken between April 2015 and April 2016. The budgetary impact is estimated at EUR 2.5 billion over the next five years. However, the reduction in the standard corporate income tax rate to 28 % by 2020 announced in 2014 is still to be implemented from 2017.

Graph 3.4.2: **Total taxes on corporations, % of GDP**



Source: Eurostat (National Tax List) and European Commission services calculations

At aggregated level, taxes weighing on corporations have started to decrease modestly in 2014 (Graph 3.4.2). This indicates that the effects of the abovementioned measures are starting to translate into figures, but only on a modest scale according to latest available data. Major efforts remain to be made to bring corporate taxation in line with France's main competitors, including limiting its impact on investment decisions. The effective average tax rate for corporations in France remained unchanged between 2014 and 2015 at 38.3 % and is still the highest of the EU in 2015, and way beyond competitors such as Spain (32.9 % in 2015), Germany (28.2 %), Italy (23.8 %) or the UK

([104]) This tax was designed to fund the social security scheme of independent workers.

([105]) The total cost of EUR 2 billion is the sum of the first step of the C3S phase out, which already took place in 2015, and the second step that will be implemented from 1 January 2016 onwards.

(21.5 %). This is particularly worrying as high corporate income taxation increases the cost of capital and deters investment.

Complexity of the tax system

Little effort has been made to simplify the tax system. In 2014, the general inspection of finances (*inspection générale des finances*) identified more than one hundred inefficient taxes, which have no or only a low yield. The 2016 budget provides for deleting only two (for a total amount of EUR 10 million), which is less than in 2015, but also creates five new taxes assigned to the funding of industrial research centres and the monitoring of transport activities.

Personal income taxation is particularly complex. Two distinct tools for taxing income with different logics coexist: one proportional, individual-based, with a rather high yield (‘*contribution sociale généralisée’*), the other one progressive, family-based and subject to many derogations limiting considerably its yield and concentrated on slightly less than 50 % of the households (‘*impôt sur le revenu’*). In addition, France is the only EU Member State where personal income tax (*‘impôt sur le revenu’*) is not paid in the year when the income is earned. Levying this tax therefore comes at a significant administrative cost for the tax administration ([106]). In addition, the absence of real-time labour income taxation limits the impact of automatic stabilisers and the efficiency of tax policy. It is a source of uncertainty for households, leading them to set aside precautionary savings ([107]) which could otherwise be pumped into the economy.

Steps are being taken towards the possible introduction of a withholding tax on income payments. The 2016 budget law includes a set of technical measures to implement in 2018 a withholding tax system for the personal income tax, as announced by the government in June 2015. The potential for achieving efficiency gains is high but will depend on the practicalities of the reform. Importantly, in a context of an already burdensome business environment, there is a need to minimise the potential cost of this reform for employers.

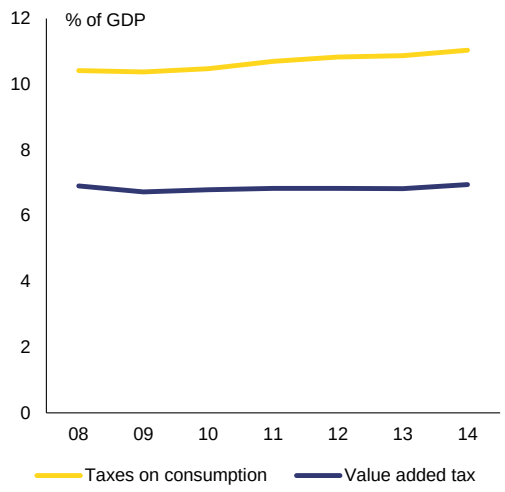
([106]) Wolf, M. (2015), *Retenue à la source : le choc de simplification à l'épreuve du conservatisme administratif*, Terra Nova, 12 May. The share of the tax administration resources devoted to collecting the *impôt sur le revenu* is estimated at 20 % or EUR 1.7 billion in 2013.

([107]) Conseil des Prélèvements Obligatoires (2012), *Prélèvements à la source et impôts sur le revenu*, February.

Tax base and taxes on consumption

In 2015, tax expenditures, CICE excluded, reached EUR 72 billion (2.5 % of GDP) and are overall on the rise (Box 2.5.2). The 2016 budget provides for a modest decrease of 1.2 %. Despite the commitment in the 2014-2019 public finance programming bills to regularly assess tax expenditures, their elimination is slow: only three were phased out in 2015, and the 2016 budget eradicates only another one (for a total amount of EUR 3 million). It creates a new tax expenditure for performing arts businesses without a time limit and extends some existing ones, such as the tax expenditure for the cinema industry.

Graph 3.4.3: **Total taxes on consumption**



Source: Eurostat

Taxes on consumption, including VAT, are low as compared to the rest of the EU and increasing at a very low pace. Total taxes on consumption increased slightly year-on-year since 2008 when they amounted to 10.4 % to reach 11 % of GDP in 2014 (Graph 3.4.3). A major component of consumption taxes, VAT yields relatively low revenues: Despite the 2014 reform of the VAT system, revenues from VAT remain relatively low as a share of GDP (6.9 % in 2014, EU average: 7 % - rank 21st), and as percentage of total taxation

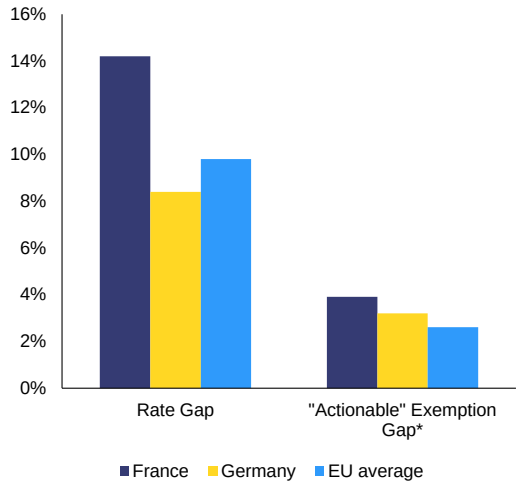
(14.5 % in 2014, EU average: 17.5 %). From a longer-term perspective, the weight of VAT as a share of GDP has been falling between the 1970's and 2009 according to Insee.

This is partly due to low rates and widespread application of reduced VAT rates. The standard VAT rate in France (20 %) is below the average standard rate in the EU (21.6 % in 2015). France also applies lower tax rates than the EU Member States on average for most categories of goods and services subject to reduced VAT rates (2.1 %, 5.5 % and 10 %). This is also true for all categories of goods in comparison to neighbouring countries. As a result, the rate gap ([108]) is high: 14.2 % in 2013 against an EU average of 9.8 %. The French Council for taxes and contributions (*Conseil des prélèvements obligatoires*) ([109]) identifies at least two inefficient reduced rates applied to (i) renovation and maintenance works on housing and (ii) hotels and restaurants for a total revenues loss of EUR 6.3 billion based on the 2016 finance law.

([108]) The rate gap represents the potential revenue loss due to the existence of reduced rates as a percentage of theoretical revenue.

([109]) Conseil de Prélèvements Obligatoires (2015), *La Taxe sur la valeur ajoutée*, December.

Graph 3.4.4: **Factors impacting the loss of revenue as compared to an ideal VAT system**



*: revenue loss resulting from the application of exemptions, deducting three items which would be very hard to collect (imputed rents, financial services) or not appropriate to collect VAT from (public goods)

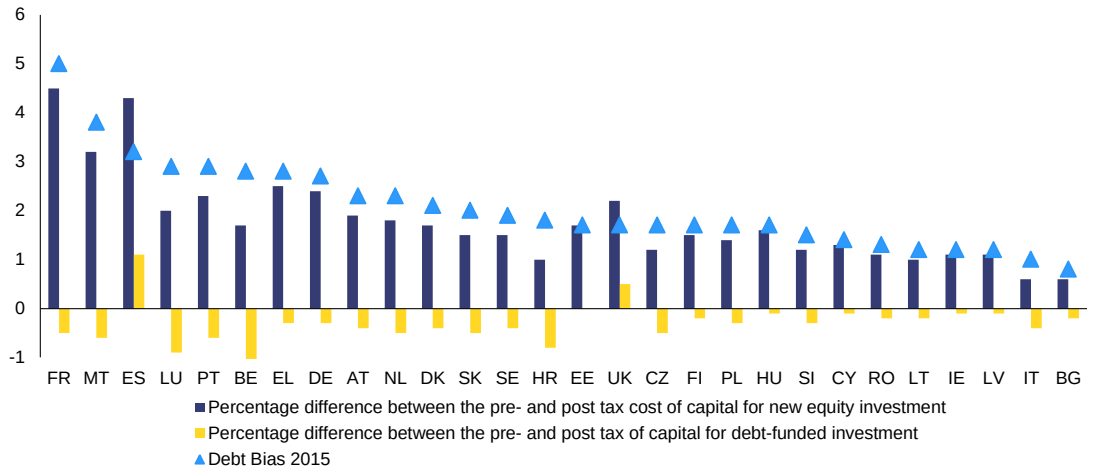
Source: Case, CPB

Another factor is the high occurrence of VAT exemptions, for an annual cost of EUR 48 billion (2.3 % of GDP). France makes use of optional exemptions provided by the VAT Directive and applies certain mandatory exemptions in the public interest without restrictions (e.g. certain paramedical services). As a result, France is the EU Member State with the highest 'actionable' exemption gap ([110]) (3.9 %, well above the EU average of 2.6 %) (Graph 3.4.4).

France has started closing the gap with the EU average in terms of environmental taxation. In its 2016 budget, France increases further environmental taxation. The carbon tax, which is levied on energy consumption, will be raised from EUR 14.5 to EUR 22 per tCO2 in 2016 with the objective to reach EUR 56 per tCO2 in 2020. In addition, excise duties on diesel will increase more than for unleaded petrol (EUR 0.4 per litre and

([110]) CASE (2015), *Study to quantify and analyse the VAT gap in the EU Member States*, TAXUD/2013/DE/321, Warsaw, May. The 'actionable' exemption gap represents the potential revenue loss due to the existence of reduced rates as a percentage of theoretical revenue, deducting three elements (public goods, financial services, and imputed rents) that either might not belong in an ideal VAT system, or that would be extremely hard to tax.

Graph 3.4.5: **Debt-equity bias in EU Member States - 2015**



Source: European Commission services' calculations based on ZEW (2015)

EUR 0.071 per litre respectively), impacting the diesel/petrol tax ratio currently standing at 65 %. Vehicle taxation in France comes exclusively in the shape of a registration tax, which is higher for high CO2 emission cars, but not for diesel cars. Also, the current system of water charging and nitrogen/pesticide taxation provides little incentive to improve farming practices and decrease pesticide and nitrate contaminations, which are major sources of water pollution and increase the cost of water treatment.

Debt-equity bias

The difference between the costs of capital for new equity and debt-funded investments remains the highest in the EU in 2015 (Graph 3.4.5). This debt to equity bias results from a favourable treatment of debt financing cost. 75 % of net financial charges can be deducted from the corporate tax base, but up to 100 % if such charges do not exceed EUR 3 million, which is the case for the large majority of businesses. As a result, financing investment through debt remains largely subsidised.

Such a favourable treatment of debt may not be conducive to growth. Empirical analysis suggests that in France, more debt is associated with slower growth while more stock market financing generates a positive growth effect ([111]). In addition, over-leveraged companies might aggravate negative externalities, such as the probability of default, the systemic risk and the social costs of business cycle fluctuations. First and foremost, the debt bias indirectly penalises SMEs, innovative companies and start-ups which must often be financed through equity-raising given their difficulties to obtain bank loans (e.g. due to a lack of collaterals or a lack of established reputation). As a result, SMEs face higher financing costs due to the asymmetric treatment between debt and equity.

The equity market for younger and innovative undertakings remains underdeveloped, despite existing tax incentive schemes. The *ISF PME*, a tax scheme reducing solidarity tax on wealth (ISF) with a view to promoting investment in SME equity is budgeted at a cost of EUR 620 million in the 2016 finance law, making it the largest support scheme for equity financing. As an upfront incentive rewarding investors at the time of the investment decision, regardless of the investment performance, it seems well suited to finance higher risk profiles companies. The *PEA-PME*, a savings plan in shares exempting capital gains from investment in SMEs and midcaps may be less efficient in reaching companies with a high risk

([111]) Cournède, B. and Denk, O. (2015), *Finance and Economic Gorwth in OECD and G20 countries*, OECD Economics Department Working Papers, No 1223, OECD publishing.

profile. As a back-end instrument, it rewards exclusively successful investments, which in turn may also come at a lower budgetary cost. It has failed to attract considerable savings since its creation in 2014 (about EUR 230 million according to PME Finance), leading to a clarification and broadening of eligibility criteria in the 2016 finance law.

ANNEX A
Overview Table

Commitments	Summary assessment ([112])
2015 Country-Specific recommendations (CSRs)	
CSR 1: Ensure effective action under the excessive deficit procedure and a durable correction of the excessive deficit by 2017 by reinforcing the budgetary strategy, taking the necessary measures for all years and using all windfall gains for deficit and debt reduction. Specify the expenditure cuts planned for these years and provide an independent evaluation of the impact of key measures.	France has made **limited progress** in addressing CSR 1 (this overall assessment of CSR 1 does not include an assessment of compliance with the Stability and Growth Pact): • **Limited progress** has been made in specifying the expenditure cuts planned up to 2017. The latest draft budgetary plan specified the expenditure cuts planned for 2016, but not for 2017. Moreover, no independent evaluation of the impact of the key measures included in the draft budgetary plan for 2016 was provided, due to the existence of many evaluations.
CSR 2: Step up efforts to make the spending review effective, continue public policy evaluations and identify savings opportunities across all sub-sectors of general government, including on social security and local government. Take steps to limit the rise in local authorities' administrative expenditure. Take additional measures to bring the pension system into balance, in particular ensuring by March 2016 that the financial situation of complementary pension schemes is sustainable over the long term.	France has made **some progress** in addressing CSR 2: • **Some progress** has been made in making the spending review effective. The spending reviews may become an important tool to identify efficiency gains in public expenditure, despite the limited amount of savings generated by the first round of reviews that were considered in the draft budget for 2016. • **Some progress** has been made on limiting the rise in local authorities' administrative expenditure. The spending norm (ODEDEL) for local authorities has been further specified in the draft budgetary plan for 2016, but is indicative rather than binding, while its in-year execution has not been monitored yet. • **Substantial progress** has been made for the long-term sustainability of complementary pension schemes. On 30

([112]) The following categories are used to assess progress in implementing the 2015 country-specific recommendations:
No progress: The Member State has neither announced nor adopted any measures to address the CSR. This category also applies if a Member State has commissioned a study group to evaluate possible measures.
Limited progress: The Member State has announced some measures to address the CSR, but these measures appear insufficient and/or their adoption/implementation is at risk.
Some progress: The Member State has announced or adopted measures to address the CSR. These measures are promising, but not all of them have been implemented yet and implementation is not certain in all cases.
Substantial progress: The Member State has adopted measures, most of which have been implemented. These measures go a long way in addressing the CSR.
Fully addressed: The Member State has adopted and implemented measures that address the CSR appropriately.

	October 2015 social partners agreed on a package of measures for complementary pension schemes (AGIRC-ARRCO) to improve the sustainability of complementary pension schemes, while strengthening incentives to work longer. According to social partners' estimations, a slight deficit for complementary pension schemes would persist in 2030 only under the most pessimistic scenarios provided by the *Conseil d'Orientation des Retraites*.
CSR 3: Ensure that the labour cost reductions stemming from the tax credit for competitiveness and employment and from the responsibility and solidarity pact are sustained, in particular by implementing them as planned in 2016. Evaluate the effectiveness of these schemes in the light of labour and product market rigidities. Reform in consultation with the social partners and in accordance with national practices, the wage-setting process to ensure that wages evolve in line with productivity. Ensure that minimum wage developments are consistent with the objectives of promoting employment and competitiveness.	France has made **some progress** in addressing CSR 3: • **Substantial progress** has been made in pursuing measures to reduce the cost of labour. The 2016 budget leaves the tax credit for competitiveness and employment (CICE) unchanged and confirms the implementation of the second phase of reductions in employers' social security contributions planned in the Responsibility and Solidarity Pact, albeit with a three months' delay from the original timing. Moreover, the third report on the CICE was published in September 2015 and a first *ex post* evaluation of its effects, based on firm-level data, is planned for September 2016. • **Some progress** has been made in reforming the wage-setting process. The law on social dialogue adopted in August 2015 enables companies, through majority agreements, to conclude wage agreements valid for up to three years instead of one year. Moreover, a reform of the labour code has been announced for 2016. • **Limited progress** has been made in ensuring that minimum wage developments are consistent with the objectives of promoting employment and competitiveness. While no increase of the minimum wage was granted in 2014, its automatic annual indexation process was not modified. In 2015 the minimum wage increased by 0.6 percentage point more than inflation while unemployment continued rising.

CSR 4: By the end of 2015, reduce regulatory impediments to companies' growth, in particular by reviewing the size-related criteria in regulations to avoid threshold effects. Remove the restrictions on access to and the exercise of regulated professions, beyond the legal professions, in particular as regards the health professions as from 2015.	France has made **some progress** in addressing CSR 4: • **Limited progress** has been made in reducing regulatory barriers to companies' growth. The measures taken or proposed to reduce barriers have limited impact (9 and 10 employee thresholds raised to 11) or are temporary (additional fiscal and social levies linked to reaching thresholds up to 50 employees have been frozen for 3 years). • **Some progress** has been made in removing unjustified restrictions on access to and the exercise of regulated professions, notably the legal professions. For health professions, the healthcare law somewhat eases such restrictions and relaxes shareholding requirements for pharmacies. Shareholding requirements for medical test laboratories have also been relaxed through a recent decree. Overall, in regulated professions authorisation schemes persist and generally there is a lack of transparency and comparability. Recently measures have been announced in the context of the simplification programme ('*choc de simplification*') but implementation remains to be completed.
CSR 5: Simplify and improve the efficiency of the tax system, in particular by removing inefficient tax expenditure. To promote investment, take action to reduce the taxes on production and the corporate income statutory rate, while broadening the tax base on consumption. Take measures as from 2015 to abolish inefficient taxes that are yielding little or no revenue.	France has made **limited progress** in addressing CSR 5: • **Limited progress** has been made to simplify and improve the efficiency of the tax system. The 2016 budget phases out one tax expenditure (for an amount of EUR 3 million from 2018), extends some existing ones, and creates a new one. At EUR 83.3 billion, their total amount is expected to remain globally stable in 2016 (minus 1.2 % on 2015). The government has taken a first set of technical measures to implement a withholding tax system for personal income tax by 2018. • **Some progress** has been made to reduce the taxes on production (phasing out of C3S) but the effective average tax rate on corporations remains stable.

	• **Limited progress** has been made to raise the tax base on consumption, indirectly through the increase in environmental taxation. The 2016 budget increases the carbon tax levied on energy consumption, from EUR 14.5 to EUR 22 per tCO2. In addition, excise duties on fuels have increased. • **No progress** has been made in abolishing inefficient taxes. Out of the more than 100 identified by the Inspectorate-General of Finances (‘*Inspection Générale des Finances*’) in 2014, the 2016 budget deletes two, for a total amount of EUR 10 million, and creates five new ones.
CSR 6: Reform the labour law to provide more incentives for employers to hire on open-ended contracts. Facilitate take up of derogations at company and branch level from general legal provisions, in particular as regards working time arrangements. Reform the law creating the *accords de maintien de l’emploi* by the end of 2015 in order to increase their take-up by companies. Take action in consultation with the social partners and in accordance with national practices to reform the unemployment benefit system in order to bring the system back to budgetary sustainability and provide more incentives to return to work.	France has made **limited progress** in addressing CSR 6: • **Limited progress** has been made in reducing labour market segmentation. Higher social contributions for very short-term contracts have failed to provide more incentives for employers to hire on longer-term contracts, while the overall effect of the measures contained in the French Small Business Act announced by Prime Minister Manuel Valls on 9 June 2015 and adopted as part of the 2016 budget is unclear. A bonus of EUR 2 000 per year for two years was recently introduced for firms with fewer than 250 employees. This premium, however, concerns both permanent and fixed-term contracts of more than six months. Finally, the reform of the ‘*justice prud’homale’* introduced by the Macron law (‘*loi Macron*’) could have reduced employers’ costs associated to hiring an employee on a permanent rather than a fixed-term contract but it was overturned by the French constitutional court. • **Limited progress** has been made in facilitating the take-up of derogations at company and branch level from general legal provisions. The reform of the labour regulation could grant more scope to company and branch level agreements to derogate from general legal provisions, but

	the details of the law are not yet known. • **Some progress** has been made in reforming the employment conservation agreements (‘*accords de maintien de l’emploi’)*. The Macron law (‘*loi Macron*’) modified those, but no new agreement has been signed since the adoption of this law. • **Limited progress** has been made in reforming the unemployment benefit system. While the 2015 national reform programme announces a reform of the unemployment benefit system for 1 July 2016 at the latest, its content is not known at the moment.
Europe 2020 (national targets and progress)	
Employment rate (20-64): 75 %.	The employment rate for workers aged 20-64 years old was equal to 69.9 % in 2014. Given the relatively stable trend and challenges on the French labour market, the target of 75 % may be reached only if additional signs of economic recovery are translated into jobs.
R&D: 3.0 % of GDP.	Although there has been some progress in recent years, France is not on track to meet those targets. R&D intensity in 2014 was at 2.26 %, up from 2.06 % in 2008, with an average annual growth rate of 1.56 % in the period 2008-2014. - Public R&D intensity increased from 0.74 % to 0.76 % in the same period, while indirect support through the CIR amounts to 0.25 % of GDP in 2014. - Private R&D intensity rose from 1.29 % to 1.44 % over this period, with an average annual growth rate of 2.08 %.
Greenhouse gas emissions: -14 %, compared to 2005 emissions in the sectors not covered by the Emissions Trading Scheme (ETS).	Based on the latest national projections and taking into account existing measures, non-ETS emissions will decrease by 18 % between 2005 and 2020. The -14 % target is thus expected to be met, by a margin of less than

	five percentage points. The preliminary estimates show the change in non-ETS greenhouse gas emissions between 2005 and 2014 was -17 %. The 2014 target for non-ETS emission was achieved.
Renewable energy: 23 %, with a share of renewable energy in all modes of transport equal to 10 %.	With a renewable energy share of 14.3 % in 2014, France could reach its target for 2020 provided it taps into its renewable energy potential. With a 7.8 % share of renewable energies used in the transport sector in 2014, France is well on track towards reaching the 10 % target of renewable energy in all modes of transport by 2020.
Energy efficiency: - 236.3 Mtoe primary consumption and 131.4 Mtoe final energy consumption.	France reduced its primary energy consumption from 245.4 Mtoe in 2013 to 234.5 in 2014. However, its final energy consumption in 2014 (141.7 Mtoe) remained above the 2020 target.
Early school leaving: 9.5 %.	The early school leaving rate declined from 9.7 % in 2013 to 9.0 % in 2014, reaching the Europe 2020 target. While France is below the EU average early school leaving rate, significant regional disparities remain. There are still too many young people, particularly among those with a migrant background, who leave education with at most a lower secondary level diploma, despite the labour market prospects of this population group having significantly deteriorated.
Tertiary education: 50 % of the population aged 17 to 33 years (different age group from the European-wide target, focusing on the 30-34 years old).	The French tertiary education attainment rate for the population aged 17 to 33 years (46.8 % in 2014 compared to 43.7 % for 30-34 years old) remains above the EU average (37.9 % in 2014 for 30-34 years old) with women outperforming men (47.9 % against 39.2 %). However, the attainment rate for foreign-born people is lower than that of the native-born population (respectively at 38.5 % against 44.4 % in 2014).
Target for reducing the number of people at risk of poverty or social exclusion:	The percentage of total population at risk of poverty increased between 2013 and 2014, from 18.1 % to 18.5 %. Moreover, the number

- 20 000 in cumulative terms since 2008.	of people at risk of poverty increased by 389 000 in cumulative terms since 2008.

ANNEX B
MIP scoreboard indicators

Table B.1: **The MIP scoreboard for France**

			Thresholds	2009	2010	2011	2012	2013	2014
External imbalances and competitiveness	Current account balance, (% of GDP)	3 year average	-4%/6%	-0.7	-0.9	-0.9	-1.0	-1.0	-1.0
	Net international investment position (% of GDP)		-35%	-14.8	-9.3	-8.7	-12.9	-17.5	-19.5
	Real effective exchange rate - 42 trading partners, HICP deflator	3 years % change	±5% & ±11%	2.6	-2.2	-4.4	-7.8	-2.3	-1.2
	Export market share - % of world exports	5 years % change	-6%	-14.5	-17.5	-15.2	-18.2	-13.8	-13.1
	Nominal unit labour cost index (2010=100)	3 years % change	9% & 12%	8.2	7.5	5.5	4.4	4.3	4.8
Internal imbalances	Deflated house prices (% y-o-y change)		6%	-4.9	3.6	3.9	-1.9	-2.7	-1.6
	Private sector credit flow as % of GDP, consolidated		14%	3.3	4.6	6.4	4.4	2.5	3.3
	Private sector debt as % of GDP, consolidated		133%	130.5	131.8	135.3	138.6	137.9	143.2
	General government sector debt as % of GDP		60%	79.0	81.7	85.2	89.6	92.3	95.6
	Unemployment rate	3 year average	10%	8.2	8.6	9.2	9.4	9.8	10.1
	Total financial sector liabilities (% y-o-y change)		16.5%	0.1	3.3	6.7	1.2	-0.5	5.4
New employment indicators	Activity rate - % of total population aged 15-64 (3 years change in p.p)		-0.2%	0.7	0.6	0.2	0.4	0.8b	1.3
	Long-term unemployment rate - % of active population aged 15-74 (3 years change in p.p)		0.5%	-0.5	0.5	1.0	0.7	0.5	0.6
	Youth unemployment rate - % of active population aged 15-24 (3 years change in p.p)		2%	1.6	3.8	3.7	0.8	1.6	1.5

Flags: b: break in time series.
Note: Figures highlighted are those falling outside the threshold established in the European Commission's Alert Mechanism Report. For REER and ULC, the first threshold applies to euro area Member States.
Source: European Commission

ANNEX C
Standard Tables

Table C.1: **Financial market indicators**

	2010	2011	2012	2013	2014	2015
Total assets of the banking sector (% of GDP)	391.7	407.8	387.0	372.4	383.5	374.1
Share of assets of the five largest banks (% of total assets)	47.4	48.3	44.6	46.7	47.6	-
Foreign ownership of banking system (% of total assets)	9.7	9.6	10.4	8.3	8.5	-
Financial soundness indicators:						
- non-performing loans (% of total loans)	3.8	4.3	4.3	4.5	4.2	-
- capital adequacy ratio (%)	12.7	12.3	14.5	15.4	16.3	-
- return on equity (%)	12.0	8.3	6.0	8.4	4.4	-
Bank loans to the private sector (year-on-year % change)	5.0	2.4	2.0	0.9	0.5	1.9
Lending for house purchase (year-on-year % change)	8.0	6.1	2.8	3.6	-2.8	3.1
Loan to deposit ratio	118.0	113.4	111.2	107.8	106.7	102.7
Central Bank liquidity as % of liabilities	1.7	4.4	4.6	2.8	2.3	2.3
Private debt (% of GDP)	131.8	135.3	138.6	137.9	143.2	-
Gross external debt (% of GDP)[1)] - public	49.5	50.5	54.6	57.2	62.9	62.6
- private	44.0	52.6	51.7	49.7	53.2	55.7
Long-term interest rate spread versus Bund (basis points)*	37.5	71.2	104.2	63.4	50.3	34.7
Credit default swap spreads for sovereign securities (5-year)*	57.6	94.9	85.7	38.9	31.0	24.4

(1) Latest data September 2015. Monetary authorities, monetary and financial institutions are not included. * Measured in basis points.
Source: IMF (financial soundness indicators); European Commission (long-term interest rates); World Bank (gross external debt); Eurostat (private debt); ECB (all other indicators).

Table C.2: **Labour market and social indicators**

	2010	2011	2012	2013	2014	2015 (4)
Employment rate (% of population aged 20-64)	69.3	69.2	69.4	69.5	69.4	69.5
Employment growth (% change from previous year)	0.1	0.8	0.3	0.0	0.4	0.3
Employment rate of women (% of female population aged 20-64)	64.9	64.7	65.1	65.5	65.7	66.0
Employment rate of men (% of male population aged 20-64)	74.0	74.0	73.9	73.7	73.3	73.2
Employment rate of older workers (% of population aged 55-64)	39.7	41.4	44.5	45.6	46.9	48.6
Part-time employment (% of total employment, aged 15 years and over)	17.8	17.9	18.0	18.4	18.9	18.8
Fixed term employment (% of employees with a fixed term contract, aged 15 years and over)	15.1	15.4	15.3	16.0	15.8	16.6
Transitions from temporary to permanent employment	10.6	11.6	10.9	11.1	7.9	-
Unemployment rate(1) (% active population, age group 15-74)	9.3	9.2	9.8	10.3	10.3	10.4
Long-term unemployment rate(2) (% of labour force)	3.7	3.8	3.9	4.2	4.4	4.4
Youth unemployment rate (% active population aged 15-24)	23.3	22.7	24.4	24.9	24.2	24.8
Youth NEET(3) rate (% of population aged 15-24)	12.7	12.3	12.5	11.2	11.4	-
Early leavers from education and training (% of pop. aged 18-24 with at most lower sec. educ. and not in further education or training)	12.7	12.3	11.8	9.7	9.0	-
Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)	43.2	43.1	43.3	44.0	43.7	-
Formal childcare (30 hours or over; % of population aged less than 3 years)	26.0	26.0	23.0	26.0	-	-

(1) Unemployed persons are all those who were not employed but had actively sought work and were ready to begin working immediately or within two weeks.
(2) Long-term unemployed are peoples who have been unemployed for at least 12 months.
(3) Not in Education Employment or Training.
(4) Average of first three quarters of 2015. Data for total unemployment and youth unemployment rates are seasonally adjusted.
Source: European Commission (EU Labour Force Survey).

Table C.3: **Labour market and social indicators (cont.)**

Expenditure on social protection benefits (% of GDP)	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Sickness/healthcare	9.0	9.0	8.9	9.0	9.1	-
Invalidity	1.9	2.0	2.0	2.0	2.1	-
Old age and survivors	13.8	13.9	14.0	14.3	14.5	-
Family/children	2.5	2.5	2.4	2.5	2.5	-
Unemployment	1.8	1.9	1.8	1.9	1.9	-
Housing and social exclusion n.e.c.	0.8	0.8	0.8	0.8	0.8	-
Total	30.6	30.7	30.7	31.3	31.7	-
of which: means-tested benefits	3.3	3.3	3.3	3.4	3.5	-
Social inclusion indicators	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
People at risk of poverty or social exclusion[1] (% of total population)	18.5	19.2	19.3	19.1	18.1	18.5
Children at risk of poverty or social exclusion (% of people aged 0-17)	21.2	22.9	23.0	23.2	20.8	21.6
At-risk-of-poverty rate[2] (% of total population)	12.9	13.3	14.0	14.1	13.7	13.3
Severe material deprivation rate[3] (% of total population)	5.6	5.8	5.2	5.3	4.9	4.8
Proportion of people living in low work intensity households[4] (% of people aged 0-59)	8.4	9.9	9.4	8.4	8.1	9.6
In-work at-risk-of-poverty rate (% of persons employed)	6.6	6.5	7.6	8.0	7.8	8.0
Impact of social transfers (excluding pensions) on reducing poverty	46.3	46.6	43.3	40.8	43.9	44.6
Poverty thresholds, expressed in national currency at constant prices[5]	11244	11414	11238	11321	11247	11283
Gross disposable income (households; growth %)	0.2	2.4	2.0	0.6	0.8	1.2
Inequality of income distribution (S80/S20 income quintile share ratio)	4.4	4.4	4.6	4.5	4.5	4.3

(1) People at risk of poverty or social exclusion (AROPE): individuals who are at risk of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in households with zero or very low work intensity (LWI).
(2) At-risk-of-poverty rate (AROP): proportion of people with an equivalised disposable income below 60 % of the national equivalised median income.
(3) Proportion of people who experience at least four of the following forms of deprivation: not being able to afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) enjoy a week of holiday away from home once a year, vi) have a car, vii) have a washing machine, viii) have a colour TV, or ix) have a telephone.
(4) People living in households with very low work intensity: proportion of people aged 0-59 living in households where the adults (excluding dependent children) worked less than 20 % of their total work-time potential in the previous 12 months.
(5) For EE, CY, MT, SI and SK, thresholds in nominal values in euros; harmonised index of consumer prices (HICP) = 100 in 2006 (2007 survey refers to 2006 incomes)
Source: For expenditure for social protection benefits ESSPROS; for social inclusion EU-SILC.

Table C.4: **Structural policy and business environment indicators**

Performance indicators	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Labour productivity (real, per person employed, y-o-y)						
Labour productivity in industry	0.31	4.26	3.02	1.46	2.98	0.51
Labour productivity in construction	-5.10	-1.45	-1.96	-4.72	2.45	-1.70
Labour productivity in market services	-1.49	1.49	1.67	0.20	1.47	0.08
Unit labour costs (ULC) (whole economy, y-o-y)						
ULC in industry	3.13	-0.93	-0.82	1.11	0.66	1.59
ULC in construction	6.81	2.39	3.99	5.85	0.13	2.89
ULC in market services	4.12	0.63	-0.27	1.75	0.23	1.76
Business environment	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Time needed to enforce contracts(1) (days)	390	390	390	390	390	395
Time needed to start a business(1) (days)	6.5	6.5	6.5	6.5	6.5	6.5
Outcome of applications by SMEs for bank loans(2)	0.50	0.54	0.46	0.59	0.60	0.53
Research and innovation	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
R&D intensity	2.21	2.18	2.19	2.23	2.24	2.26
Total public expenditure on education as % of GDP, for all levels of education combined	5.90	5.86	5.68	5.68	na	na
Number of science & technology people employed as % of total employment	42	43	46	47	47	48
Population having completed tertiary education(3)	26	26	27	28	29	30
Young people with upper secondary level education(4)	83	83	84	84	86	88
Trade balance of high technology products as % of GDP	0.43	0.60	0.42	0.68	0.76	0.81
Product and service markets and competition				**2003**	**2008**	**2013**
OECD product market regulation (PMR)(5), overall				1.77	1.52	1.47
OECD PMR(5), retail				3.76	3.80	2.64
OECD PMR(5), professional services				2.20	2.45	2.34
OECD PMR(5), network industries(6)				3.37	2.77	2.51

(1) The methodologies, including the assumptions, for this indicator are shown in detail here: http://www.doingbusiness.org/methodology.
(2) Average of the answer to question Q7B_a. "[Bank loan]: If you applied and tried to negotiate for this type of financing over the past six months, what was the outcome?". Answers were codified as follows: zero if received everything, one if received most of it, two if only received a limited part of it, three if refused or rejected and treated as missing values if the application is still pending or don't know.
(3) Percentage population aged 15-64 having completed tertiary education.
(4) Percentage population aged 20-24 having attained at least upper secondary education.
(5) Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are shown in detail here: http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm
(6) Aggregate OECD indicators of regulation in energy, transport and communications (ETCR).
Source: European Commission; World Bank — Doing Business (for enforcing contracts and time to start a business); OECD (for the product market regulation indicators); SAFE (for outcome of SMEs' applications for bank loans).

Table C.5: **Green growth**

Green growth performance		2009	2010	2011	2012	2013	2014
Macroeconomic							
Energy intensity	kgoe / €	0.15	0.15	0.14	0.14	0.14	-
Carbon intensity	kg / €	0.28	0.28	0.26	0.26	0.26	-
Resource intensity (reciprocal of resource productivity)	kg / €	0.44	0.43	0.43	0.42	0.41	0.42
Waste intensity	kg / €	-	0.19	-	0.18	-	-
Energy balance of trade	% GDP	-2.0	-2.4	-3.0	-3.3	-3.0	-2.5
Weighting of energy in HICP	%	8.10	8.21	9.29	9.93	9.45	9.85
Difference between energy price change and inflation	%	-5.9	4.9	8.0	3.3	2.9	1.3
Real unit of energy cost	% of value added	9.2	9.9	11.3	-	-	-
Ratio of labour taxes to environmental taxes	ratio	12.0	11.9	11.8	11.9	11.8	11.9
Environmental taxes	% GDP	1.9	1.9	1.9	2.0	2.0	2.1
Sectoral							
Industry energy intensity	kgoe / €	0.12	0.13	0.12	0.12	0.13	-
Real unit energy cost for manufacturing industry	% of value added	39.3	43.9	56.1	-	-	-
Share of energy-intensive industries in the economy	% GDP	6.89	6.69	6.74	6.79	6.83	6.83
Electricity prices for medium-sized industrial users	€ / kWh	0.07	0.07	0.08	0.09	0.09	0.09
Gas prices for medium-sized industrial users	€ / kWh	0.03	0.03	0.04	0.04	0.04	0.04
Public R&D for energy	% GDP	0.05	0.05	0.05	0.05	0.05	0.04
Public R&D for environment	% GDP	0.02	0.02	0.01	0.01	0.01	0.01
Municipal waste recycling rate	%	67.1	67.4	71.3	70.1	70.4	-
Share of GHG emissions covered by ETS*	%	21.8	22.4	21.5	21.1	23.3	22.0
Transport energy intensity	kgoe / €	0.68	0.63	0.62	0.60	0.61	-
Transport carbon intensity	kg / €	1.79	1.69	1.66	1.62	1.62	-
Security of energy supply							
Energy import dependency	%	50.9	49.0	48.6	48.0	47.9	-
Aggregated supplier concentration index	HHI	7.3	7.8	7.5	8.0	8.4	-
Diversification of energy mix	HHI	0.31	0.30	0.32	0.31	0.30	-

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2005 prices)
Energy intensity: gross inland energy consumption (in kgoe) divided by GDP (in EUR)
Carbon intensity: greenhouse gas emissions (in kg CO2 equivalents) divided by GDP (in EUR)
Resource intensity: domestic material consumption (in kg) divided by GDP (in EUR)
Waste intensity: waste (in kg) divided by GDP (in EUR)
Energy balance of trade: the balance of energy exports and imports, expressed as % of GDP Weighting of energy in HICP: the proportion of "energy" items in the consumption basket used for the construction of the HICP
Difference between energy price change and inflation: energy component of HICP, and total HICP inflation (annual % change)
Real unit energy cost: real energy costs as a percentage of total value added for the economy
Environmental taxes and labour taxes : from European Commission, 'Taxation trends in the European Union'
Industry energy intensity: final energy consumption of industry (in kgoe) divided by gross value added of industry (in 2005 EUR)
Real unit energy costs for manufacturing industry: real costs as a percentage of value added for manufacturing sectors
Share of energy-intensive industries in the economy: share of gross value added of the energy-intensive industries in GDP
Electricity and gas prices for medium-sized industrial users: consumption band 500–20 00MWh and 10 000–100 000 GJ; figures excl. VAT.
Municipal waste recycling rate: ratio of recycled municipal waste to total municipal waste
Public R&D for energy or for the environment: government spending on R&D (GBAORD) for these categories as % of GDP
Proportion of greenhouse gas (GHG) emissions covered by EU Emission Trading System (ETS): based on greenhouse gas emissions (excl land use, land use change and forestry) as reported by Member States to the European Environment Agency
Transport energy intensity: final energy consumption of transport activity (kgoe) divided by transport industry gross value added (in 2005 EUR)
Transport carbon intensity: greenhouse gas emissions in transport activity divided by gross value added of the transport sector
Energy import dependency: net energy imports divided by gross inland energy consumption incl. consumption of international bunker fuels
Aggregated supplier concentration index: covers oil, gas and coal. Smaller values indicate larger diversification and hence lower risk.
Diversification of the energy mix: Herfindahl index over natural gas, total petrol products, nuclear heat, renewable energies and solid fuels
* European Commission and European Environment Agency
Source: European Commission (Eurostat) unless indicated otherwise