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2017 European Semester: Assessment of progress on structural reforms, prevention and correction of macroeconomic imbalances, and results of in-depth reviews under Regulation (EU) No 1176/2011

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EXECUTIVE SUMMARY

This report assesses Latvia's economy in the light of the European Commission's Annual Growth Survey published on 16 November 2016. In the survey the Commission calls on EU Member States to redouble their efforts on the three elements of the virtuous triangle of economic policy — boosting investment, pursuing structural reforms and ensuring responsible fiscal policies. In so doing, Member States should focus on enhancing social fairness in order to deliver more inclusive growth.

Latvia has experienced subdued economic growth in recent years, but the short-term outlook is more positive. Real GDP growth has been below 3 % since 2013 and is estimated as having been particularly weak in 2016. Growth is driven by productivity gains, but employment and investment dynamics have been weak. A pick-up in economic growth is expected in 2017 (2.8 %) and 2018 (3.0 %), fuelled by the need for investments and the upturn in the EU financing cycle.

Investment is affected by uncertainty and the temporary trough in EU funding. The investment environment is weakened by uncertainty stemming from both the external situation and domestic economic policies. There is continued uncertainty about possible tax reforms, the weak investment protection in case of insolvency and the large informal economy. Delays in the use of EU funds under the new programming period have caused investment to be postponed in 2016. However, EU-financed projects are expected to resume from 2017. Moreover, after a prolonged period of debt reduction companies and households can allow for credit expansion for investment.

Consumer spending is supported by dynamic wage developments and has contributed significantly to GDP growth. Continued strong wage growth is driven by demand for labour, especially for high-skilled workers, a falling population and increases in the national minimum wage.

Despite weak demand from trading partners, Latvia runs a limited external deficit. Positive net non-trade flows with the rest of the world, such as labour income, compensate for a small trade deficit. The trade deficit is the result of strong domestic demand, leading to import outpacing export growth, which has experienced adverse external conditions in the last two years. The trade balance is expected to deteriorate slightly in 2017 and 2018 in line with the recovery of investments. In terms of stocks, the net international investment position has been gradually improving, although from a large debtor position (above 60 % of GDP).

Emigration and skills mismatches limit labour supply. Net outward migration and low fertility rates have reduced the working-age population. As a result, age dependency has increased, putting a strain on public resources for social and health services. Because of a declining labour force, employment growth has been weak, while unemployment has been falling only slowly. Employment prospects are better in centres of economic activity and for high-skilled workers. Unemployment is more prevalent among the low-skilled and those living in rural areas.

Inequality remains high and affects the labour market. The tax-benefit system in Latvia is less effective at reducing inequality than in other EU countries. The high tax wedge on low wages discourages formal employment. Weaknesses in providing public services affect the quality of the workforce in terms of education, skills and health. Finally, the weak social protection results in high poverty rates, especially for people with disabilities and the elderly.

Budgetary targets are prudent, but revenue and expenditure plans remain to be fully defined. The government position improved to a balance in 2016, but is projected to record a deficit of 1 % of GDP in 2017 and 2018. However, the stated objective to increase the tax-revenue-to-GDP ratio is not yet substantiated and expenditure plans beyond the annual budget underrepresent spending needs. Government debt was at 40 % of GDP at the end of 2016 and is projected to decline over the coming years.

Overall, Latvia has made limited progress in addressing the 2016 country-specific recommendations. Some progress has been made in the consolidation of research institutions, in strengthening private sector innovation incentives, in improving tax compliance, in improving vocational education, with the involvement of social partners, in increasing the accountability and

public oversight of insolvency administrators and in supporting social assistance recipients in finding and retaining work. However, limited progress has been made in shifting the tax burden away from low-wage earners, in improving the adequacy of social assistance benefits, in improving the accessibility, quality and cost-effectiveness of the healthcare system, in strengthening arrangements to prevent conflicts of interest and in setting up a common legal framework for all public employees.

Regarding progress in reaching the national targets under the Europe 2020 strategy, Latvia has attained its employment rate target in 2016 and is performing well on renewable energy, energy efficiency, reducing greenhouse gas emissions, reducing early school leaving, increasing tertiary education attainment and reducing poverty. More effort is needed in R&D investment.

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

- **Latvia's tax structure is not very growth-friendly and, despite some progress, tax compliance remains a challenge**. The tax wedge on low-wage earners remains high, while the revenue potential of taxes which are less detrimental to growth is underused, such as taxes on consumption, property and capital. Simulations show that a revenue–neutral tax shift would have positive employment and GDP growth effects, while also reducing income inequality. Moreover, property tax evasion is more difficult than labour tax evasion.

- **Activation of unemployed remains relatively low.** The involvement of the unemployed in active labour market measures is low relative to other Member States. The support measures are insufficiently developed for the low-skilled, long-term unemployed and persons with disabilities, with some improvements expected as of 2017.

- **The attractiveness of vocational education is being improved, but the curriculum reform is progressing slowly.** Vocational schools are being modernised, but the curriculum reform aligning education with contemporary skills needs takes time and little progress was made in 2016. The regulatory framework for work-based learning has been adopted, but it has not been effectively implemented yet. Participation in lifelong learning remains low.

- **Investment in research and innovation remains low.** Public research relies on EU funds and its effectiveness is hampered by fragmentation and low internationalisation. The framework for supporting business innovation is in place. The first monitoring report will be published in 2017.

- **Health outcomes remain problematic due to low public funding and structural impediments.** The healthcare system remains underfunded as public healthcare expenditure is low. While public funding has increased somewhat in 2017, specific measures for the medium term are still to be spelled out. Furthermore, access constraints and untransparent public purchasing of health services and supplies create corruption risks and inefficiencies.

- **The high proportion of people living at risk of poverty or social exclusion remains a major social and economic challenge.** Weaknesses in basic social safety nets contribute to high poverty and inequalities. The reform of minimum income level announced in 2014 was intended to raise the adequacy of social benefits. The reform was supposed to be implemented in 2017, but has been abandoned and a replacement plan is in preparation.

- **A public sector reform aims to increase the quality and efficiency of the central administration, but local authorities are not covered.** Efficiency gains are expected by simplifying procedures, making better use of IT solutions and increasing pay. However, there are no reforms planned at local government level, which accounts for a large share of public employment and has not seen significant efficiency gains from past reforms. Also, there is little oversight and few incentives for efficiency of the local authorities.

- **Energy market integration continues with improving network connections and the gradual liberalisation of the gas markets in the broader Baltic Sea region**. Unbundling and full opening of the gas market for competition is a priority area of action in 2017. Significant investments in electricity and gas interconnections, strengthening domestic infrastructure and synchronising the electricity grids with the European network will be crucial. Support schemes for electricity generation from fossil fuels in co-generation and from renewable energy sources have been complex, costly for consumers and not conducive to additional investments.

- **Policies on the prevention of conflicts of interest are formalistic.** Conflicts of interest may remain as public officials' income declarations have not been verified with sufficient diligence. Longstanding infighting at the Corruption Prevention and Combating Bureau continued in 2016, which has lowered the effectiveness of the Bureau and dented public trust. More independence and powers have been granted to the director of the Bureau and a transparent selection of the director is pending.

- **The legal framework for supervision of insolvency administrators has been completed, but challenges remain.** In response to fraudulent behaviour by insolvency administrators, important steps have been taken to restrict possible conflicts of interest. Moreover, more supervisory powers have been granted to the Insolvency Administration, but their effective application remains to be seen.

- **Governance of state-owned enterprises has improved for the central government, but oversight at local government level remains limited.** Consolidated reporting on state-owned enterprises and competition-based management selection have been implemented at the central government level, but such governance standards are not yet applied at the local government level.

1. ECONOMIC SITUATION AND OUTLOOK

GDP growth

In 2016, GDP growth was relatively low (+1.6 %), but is bound to pick-up in 2017 and 2018 to 2.8 % and 3.0 % respectively (Table 1.2**).** Since the crisis, economic growth has been driven by productivity gains, as labour and investment dynamics are subdued. Latvia still faces risks from its external environment, while on the domestic side, its capacity to make the most of opportunities from EU funds will be critical to support growth.

In 2016, economic growth was notably affected by a temporary drop in investment, linked to the slow implementation of EU funds. The situation is set to improve already in 2017 with a rebound in investment (Section 3.4). On the private side, the capacity utilisation rate is back to its pre-crisis historical high while borrowing costs and conditions are expected to keep gradually improving. Hence, private investment is expected to recover in the coming years. On the public side, EU funds are expected to bottom-up in 2017 and 2018 and foster public investment (see Section 3.4).

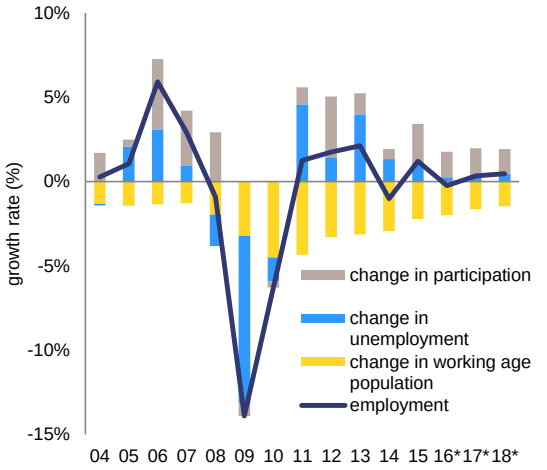
Consumption and trade hold steady. Consumption has supported growth and is expected to continue to do so, supported by cumulated wage increases. Exports have withstood adverse external conditions in the last two years, but imports are supported by more favourable domestic demand. Overall, trade is expected to have had a negative impact on growth in 2016 (-1.0 pp). This negative contribution is expected to persist in 2017 and 2018 with the recovery of investment.

Inflation was slightly negative in 2016 (-0.1 %). The fading of the base effects, combined with a projected increase in energy prices and continued strong wage increases are expected to drive inflation up to close to 2 % in the coming years.

Labour market

Employment remains stable despite negative demographic trends (Graph 1.1**).** The working age population continues to fall by around 1 % a year, as a result of negative natural growth and net emigration. The decline in labour supply puts upward pressure on activity and employment rates. Employment is projected to see a small decline in 2016, predominantly due to the temporary shedding of construction workers, before recovering in the following years.

Graph 1.1: **Labour market trends in Latvia**



Source: European Commission

The improvement in the labour market does not reach all segments equally. The decline in unemployment has slowed and the unemployment rate remained above the EU average at 9.5 % in Q3-2016. Work opportunities are lower for the older population (50+), those with low and medium qualification levels and among those living in rural regions. The long-term unemployment rate continues to decline and is at the EU average. On the positive side, youth unemployment and the share of young people not in education, employment or training (age group 15-24) are well below the EU average ([1]).

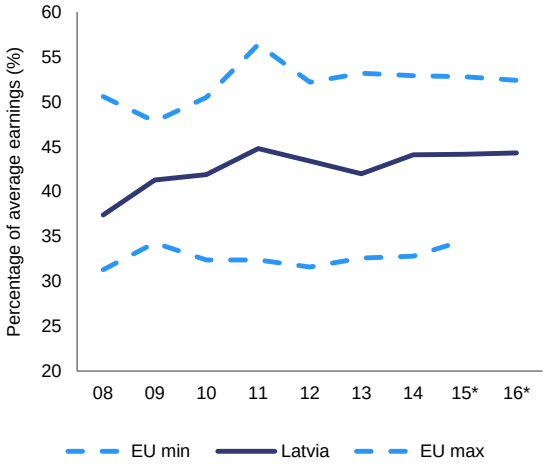
One in five workers receives the minimum wage. The national minimum wage was raised considerably in 2014 and 2015 (from EUR 289 to EUR 360 a month). For 2016 and 2017, minimum wage growth is estimated to be below the average wage growth (rising to EUR 370 and to EUR 380 respectively). 21 % of all workers receive the minimum wage ([2]), with a higher share in less

([1]) at 16.3 % and 10.5 % respectively in 2015

([2]) The share of the population that is paying social contributions based on the minimum wage is as high as 35%, but this also includes self-employed and people receiving social insurance benefits.

developed regions. This is high compared to other European countries, although there may be some underreporting of wages (Graph 1.2). In less developed regions, the minimum wage level can negatively affect employment growth. In 2016, the minimum wage stood at 66 % of the average wage in the eastern regions, compared to 45 % of the national average wage. In 2016, a broader set of economic factors (such as regional unemployment) were included in the government regulation on minimum wage setting.

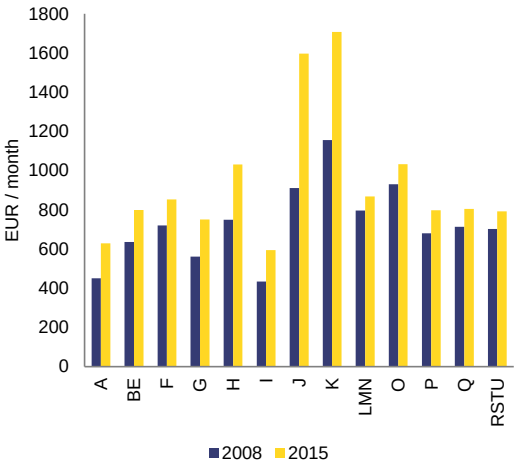
Graph 1.2: **Minimum wage as a percentage of average earnings**



Average earnings for 2015 and 2016 are taken from the Central Statistical Bureau of Latvia. The 2016 average wage is estimated as the simple average of average earnings for 2016Q1 and Q2 and may therefore be a slight underestimation.
Source: Eurostat, Central Statistical Bureau of Latvia, calculation by European Commission

Wage disparities are stable or declining. Across sectors, wage growth is relatively uniform (Graph 1.3). The highest wage growth is observed in higher technology services (finance and insurance or information and communication). Wage growth is also high in lower-pay sectors such as agriculture and low-paid services (wholesale and retail trade, transport, accommodation and food service activities). Across wage levels, wage growth has favoured the lowest paid workers: from 2007 to 2015, wages of the lowest paid quarter rose by 9.9 % per year, compared to 7.2 % for the highest paid quartile. Since the crisis, the highest wage growth for these low-paid workers was observed in 2014 and 2015, in line with substantial minimum wage increases.

Graph 1.3: **Sectoral wage differences**



Wages are measured as gross monthly fulltime equivalent wages, based on self-reported data. The considered sectors are (NACE rev2 codes in brackets): agriculture, forestry and fishing (A); industry (without construction) (C, D, E); construction (F); wholesale, retail and repair (G), transportation and storage (H), accommodation and food service (I), Information and communication (J), Finance and insurance (K), real estate, professional, scientific and tech. activities, administrative and support services (LMN); public administration and defence (O), education (P), human health and social work (Q), and other activities (RSTU).
Source: EU SILC 2008 and EU SILC 2015

Poverty and inequalities

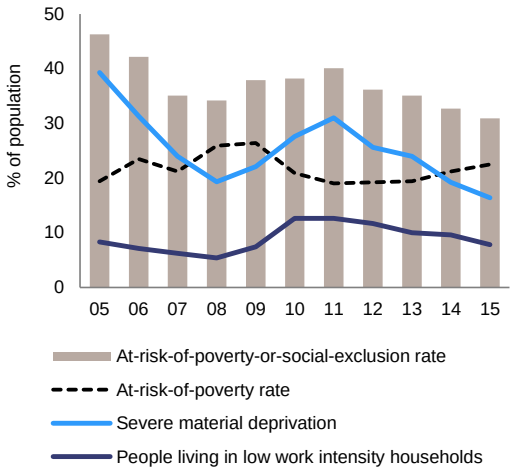
Income inequality and poverty remain high. The main income inequality indicator – the ratio of the highest to the lowest income quintile or S20 /S80 ratio ([3]) - stands at 6.5. This is above the EU average where the top 20 % earn 5.2 times the income of the bottom 20 %, and this ratio has stagnated since 2011. The Gini coefficient, another measure of income inequality, is also among the highest in the EU at 35.4 in 2015 compared to 31.0 on average in the EU. The Gini coefficient is also stable since 2010. In addition, net wealth ([4]) inequality is among the highest in the EU (ECB 2016).

The tax and benefit system remains less effective in reducing income inequalities than the EU average. Taxes and benefits bring income inequalities down by 14 points of the Gini

([3]) The income quintile share ratio is calculated as the ratio of total income received by the 20 % of the population with the highest income (the top quintile) to that received by the 20 % of the population with the lowest income (the bottom quintile).
([4]) Difference between total assets and total liabilities.

coefficient in Latvia against 21 points in the EU average. This situation is due to both the very limited progressivity of the tax system (Section 3.1.3 and Box 3.1.1) and the limited social protection system (Section 3.3.4). Relative poverty ([5]) has been increasing since 2011 (Graph 1.4), as economic growth favours the economically active population. The low adequacy of social assistance benefits and pensions does not provide effective protection against poverty (Section 3.3.4). In addition, inequalities are also reflected in non-financial aspects such as access to health care (Section 3.3.3) and quality learning opportunities between rural and urban schools (Section 3.3.2).

Graph 1.4: **At-risk-of-poverty or social exclusion rate and its components**



Source: Eurostat EU-SILC

Public finance

While the fiscal position remains sound, public investment fluctuations and uncertainty over future tax policies weigh on the business environment. The government is expected to have been balanced in 2016. At the same time, delays in implementing EU–funded projects have disrupted public investment, risking insufficient absorption capacity in the construction sector from 2017 onwards (see Section 3.4). The announced stability of tax policy was undermined by last minute changes to the 2017 budget and uncertainty over the upcoming tax strategy (see Section 3.1).

Government debt is estimated to peak at 39.4 % of GDP in 2016, largely due to the pre-financing of a large debt redemption in early 2017, before decreasing thereafter. Debt servicing costs are falling in line with the current low interest rate environment. The interest expenditure to GDP ratio is projected to drop from 1.3 % in 2015 to 1 % of GDP in 2017.

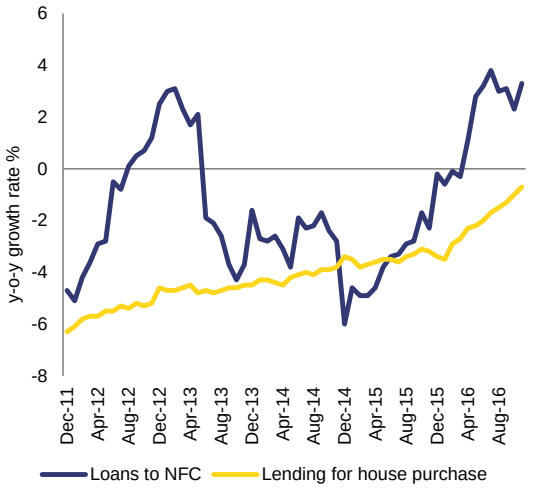
Financial sector

Despite post-crisis deleveraging, Latvia still has the largest banking sector among the Baltic countries. Bank assets amounted to EUR 31.9 billion in 2015 (131 % of GDP). The banking sector is dominated by Nordic banks. Other financial institutions remain limited in size with pension funds at EUR 2.7 billion (11 % of GDP) and insurers assets totalling EUR 1.1 billion (5 % of GDP).

Lending to companies picked up after a three year contraction. By November 2016, overall lending growth reached 2.4 % annually. Net lending to domestic businesses increased in 2016 after three years of deleveraging, growing 3.8 % y-o-y by December (Graph 1.5). However, loans for house purchases continued to fall, albeit at an ever slower pace, as the post-crisis deleveraging of mortgage exposure continued. According to the Bank of Latvia, the creditworthiness of domestic borrowers continues to improve in general. At the same time, recent changes to facilitate personal insolvency led banks to be more careful in granting credit. In this regard, Latvia is lagging behind its Baltic neighbours: both Lithuania and Estonia are recording much higher credit growth.

([5]) Percentage of people having income below 60 % of median equivalised disposable income

Graph 1.5: **Lending trends**



Source: European Central Bank

The cost of credit is relatively high in Latvia. Bank average interest spreads ([6]) for new loans amount to about 2.7 percentage points for businesses and 2.9 percentage points for households. Latvian households had among the highest interest rate spreads in EU for their mortgages in 2016, just after Ireland. On corporate lending, only Greek and Portuguese companies have to pay higher margins. The cost of credit has been falling in recent years, but very slowly. The main factors behind this situation are risk aversion stemming from the crisis and the high degree of market concentration, implying higher pricing power for banks.

Financial soundness indicators point to continued stability in the banking sector. Banks are well capitalised and in June 2016 the Tier 1 capital adequacy ratio was 15.6 % (Table 1.1). The quality of bank assets continued to improve with the average ratio of non-performing loans (NPL) decreasing from the crisis peak of 16 % to 4.4 % in mid-2016 The ratio of coverage of NPLs with provisions amounted to 53.7 %, slightly above the euro area average.

([6]) Difference between weighted average interest rates on loans and deposits.

Table 1.1: **Financial soundness indicators, all banks in Latvia**

(%)	2010	2011	2012	2013	2014	2015	2016Q2
Non-performing loans	15.3	10.1	7.9	5.6	7.7	5.1	4.4
Coverage ratio	60.4	74.8	76.2	79.3	47.2	48.7	53.7
Loan to deposit ratio (1)	206.7	193.3	161.7	132.3	119.4	109.3	109.3
Tier 1 ratio (2)	10.9	13.5	14.5	16.5	17.5	19.0	15.6
Return on equity (2)	-19.7	4.5	4.9	8.8	10.2	10.7	-
Return on assets	-1.7	0.5	0.6	0.9	1.0	1.2	-

(1) ECB aggregated balance sheet: loans excl. to gov and MFI / deposits excl. from gov and MFI
(2) Differs from Table 1.2. Includes EU and non-EU foreign-controlled subsidiaries and branches operating in Latvia.
Source: ECB

The banking sector's profitability held up well. Both the return on equity (10.7 %) and the return on assets (1.2 %) were well above the euro area averages (4.4 % and 0.3 %, respectively). In 2015, average return on assets in the Latvian banking sector was the highest among EU countries, which was also due to the high lending margins.

On the liabilities side, deposits have been growing since 2012. This trend helped the banks rebalance their funding structure. The loan-to-deposit ratio declined to 110 %, which is a sustainable level. Specialised banks account for 42% of these deposits and service non-resident clients. Issues related to this business model are discussed in Section 3.2.

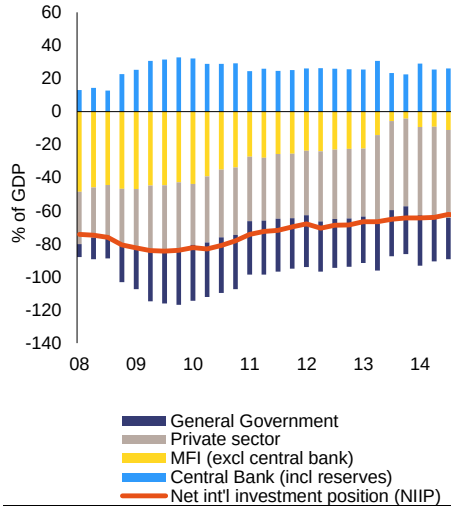
External position

The trade and current account deficits are set to widen in 2017 and 2018. In nominal terms, energy prices are expected to widen the small trade deficit, but Latvia is doing relatively better than its trade partners. In all - i.e. accounting for economic flows other than trade - Latvia is even in a net lending position, leading to a slow improvement in the net international investment position. It is expected to have reached –60 % in Q3-2016 (Graph 1.6). While at a high level, this indebtedness mostly reflects foreign direct investment in Latvia in the financial and real estate sectors (European Commission, 2016a).

Strong growth in nominal unit labour costs (Graph 1.8) may weigh on external competitiveness. Wage growth is driving domestic demand and GDP growth. Thus, it contributes to convergence and counteracts net emigration. However, unemployment remains relatively high among lower-skilled workers, and wage growth is only weakly matched by productivity growth. These developments can signal risks to cost

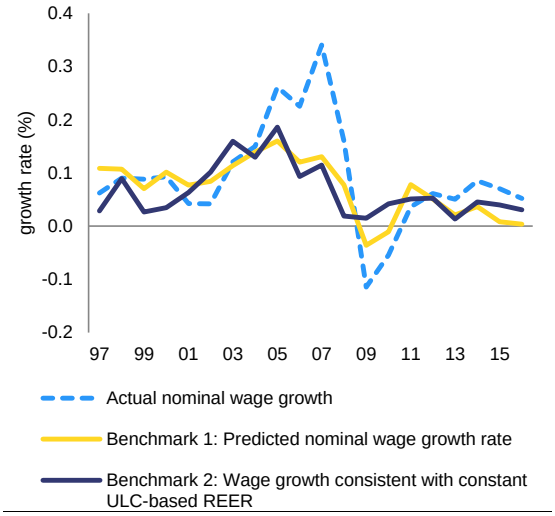
competitiveness. Indeed, since 2012, nominal wage growth has been above the rates that would be consistent both with internal labour market conditions and with a stable evolution of cost competitiveness (Arpaia and Kiss 2015, and Graph 1.7).

Graph 1.6: **Net international investment position**



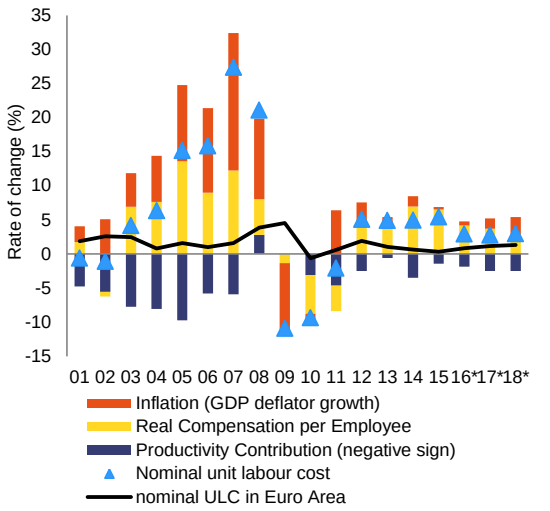
Source: European Commission

Graph 1.7: **Nominal wage growth in Latvia in comparison with wage benchmarks**



Source: European Commission, update of Arpaia and Kiss (2015)

Graph 1.8: **Real unit labour cost breakdown (% change)**



Source: European Commission

Despite recent losses in export market share, the overall risks to Latvia's external competitiveness remain limited. While some indicators reveal concerns about the cost competitiveness of the Latvian economy, non-cost developments are more favourable. Exports quality is improving and they are becoming more technologically-intensive. In all, Latvia is deemed to remain on the normal trajectory of a catching-up economy where both prices and real GDP grow faster than in more advanced trading partners.

Table 1.2: **Key economic, financial and social indicators — Latvia**

									forecast		
	2004-2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Real GDP (y-o-y)	7.5	-14.3	-3.8	6.2	4.0	2.9	2.1	2.7	1.6	2.8	3.0
Private consumption (y-o-y)	10.7	-16.0	2.8	3.0	3.1	5.0	1.3	3.5	3.6	3.9	3.9
Public consumption (y-o-y)	3.7	-10.7	-8.1	3.0	0.3	1.6	2.1	3.0	1.7	3.0	2.5
Gross fixed capital formation (y-o-y)	15.5	-33.3	-19.8	24.0	14.4	-6.0	0.1	2.8	-22.0	13.0	4.9
Exports of goods and services (y-o-y)	12.2	-12.9	13.4	12.0	9.8	1.1	3.9	2.6	2.0	2.6	3.1
Imports of goods and services (y-o-y)	13.2	-31.7	12.4	22.0	5.4	-0.2	0.5	2.1	3.6	4.1	4.5
Output gap	5.6	-11.2	-12.2	-5.5	-2.0	0.1	0.8	1.0	1.4	1.6	1.4
Potential growth (y-o-y)	7.1	-1.0	-2.7	-1.3	0.2	0.8	1.4	2.5	1.2	2.6	3.2
Contribution to GDP growth:											
Domestic demand (y-o-y)	10.4	-22.1	-4.3	7.1	5.2	1.8	1.2	3.3	-2.5	5.2	3.9
Inventories (y-o-y)	-0.5	-3.8	0.3	4.8	-3.5	0.3	-1.1	-0.8	5.1	-1.5	0.0
Net exports (y-o-y)	-2.5	11.5	0.2	-5.7	2.3	0.8	2.0	0.3	-1.0	-0.9	-0.9
Contribution to potential GDP growth:											
Total Labour (hours) (y-o-y)	0.2	-1.4	-1.6	-1.4	-1.2	-0.9	-0.8	-0.3	-0.1	0.1	0.2
Capital accumulation (y-o-y)	3.6	-0.3	-1.5	-0.7	0.1	-0.3	-0.4	-0.2	-1.8	-0.7	-0.2
Total factor productivity (y-o-y)	3.3	0.6	0.4	0.8	1.3	2.0	2.6	3.0	3.2	3.2	3.2
Current account balance (% of GDP), balance of payments	-15.6	7.8	2.1	-3.2	-3.6	-2.7	-2.0	-0.8	.	.	.
Trade balance (% of GDP), balance of payments	-15.6	-0.8	-1.3	-5.1	-4.6	-3.7	-1.9	-1.1	.	.	.
Terms of trade of goods and services (y-o-y)	0.8	0.2	0.1	3.0	-2.8	0.6	-1.2	0.7	3.2	-2.0	-0.2
Capital account balance (% of GDP)	1.3	2.4	2.0	2.1	3.0	2.5	3.2	2.8	.	.	.
Net international investment position (% of GDP)	-62.9	-82.4	-82.2	-74.2	-67.9	-66.5	-64.3	-62.5	.	.	.
Net marketable external debt (% of GDP) (1)	-33.3	-44.8	-43.7	-34.8	-28.9	-24.7	-21.2	-16.8	.	.	.
Gross marketable external debt (% of GDP) (1)	97.0	139.1	153.4	130.9	124.8	118.4	128.1	126.5	.	.	.
Export performance vs. advanced countries (% change over 5 years)	103.0	65.5	31.6	38.2	20.8	16.1	17.6	12.82	.	.	.
Export market share, goods and services (y-o-y)	12.3	-1.8	-4.8	7.0	4.1	2.4	0.8	-3.9	.	.	.
Net FDI flows (% of GDP)	-4.6	-0.6	-1.5	-4.9	-3.3	-1.6	-1.6	-2.3	.	.	.
Savings rate of households (net saving as percentage of net disposable income)	-6.5	5.9	-4.4	-15.0	-15.6	-16.1	-14.7	-12.7	.	.	.
Private credit flow, consolidated (% of GDP)	23.7	-8.7	2.5	-2.1	-2.0	0.9	-11.8	0.7	.	.	.
Private sector debt, consolidated (% of GDP)	89.9	125.4	134.0	115.5	98.1	92.6	96.3	88.8	.	.	.
of which household debt, consolidated (% of GDP)	34.5	50.4	49.8	40.4	33.2	29.6	26.6	24.5	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	55.3	75.0	84.2	75.1	64.9	63.0	69.7	64.3	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-9.2	12.8	12.2	8.1	6.1	6.4	8.1	7.0	5.2	4.1	3.4
Corporations, gross operating surplus (% of GDP)	29.8	27.7	30.6	33.4	32.8	32.0	31.0	29.7	27.5	26.4	26.1
Households, net lending (+) or net borrowing (-) (% of GDP)	-4.2	6.6	0.4	-5.7	-5.8	-5.1	-5.3	-3.7	-2.4	-2.0	-2.0
Deflated house price index (y-o-y)	12.2	-34.9	-8.7	4.0	-0.4	6.6	4.2	-2.7	.	.	.
Residential investment (% of GDP)	4.8	2.4	1.6	1.9	2.3	2.2	2.5	1.8	.	.	.
GDP deflator (y-o-y)	12.5	-9.8	-1.0	6.4	3.6	1.3	1.5	0.4	0.6	1.5	2.6
Harmonised index of consumer prices (HICP, y-o-y)	9.0	3.3	-1.2	4.2	2.3	0.0	0.7	0.2	0.1	1.9	2.0
Nominal compensation per employee (y-o-y)	23.2	-10.9	-6.6	2.4	7.7	5.5	8.6	6.9	4.8	5.3	5.5
Labour productivity (real, person employed, y-o-y)	5.3	0.0	3.1	4.6	2.5	0.6	3.5	1.4	.	.	.
Unit labour costs (ULC, whole economy, y-o-y)	17.1	-10.9	-9.4	-2.1	5.0	4.9	4.9	5.4	2.9	2.7	2.9
Real unit labour costs (y-o-y)	4.1	-1.3	-8.5	-8.0	1.4	3.5	3.3	5.0	2.3	1.2	0.3
Real effective exchange rate (ULC, y-o-y)	12.3	-12.5	-10.7	-2.8	2.4	4.4	4.4	2.9	2.0	1.6	0.9
Real effective exchange rate (HICP, y-o-y)	3.7	5.1	-7.9	0.7	-1.5	-1.0	2.8	1.3	1.2	-3.7	.
Tax rate for a single person earning the average wage (%)	28.7	28.3	30.8	31.0	31.1	30.4	29.8	29.1	.	.	.
Tax rate for a single person earning 50% of the average wage (%)	25.7*	26.6	28.9	28.8	29.0	28.4	27.6	27.1	.	.	.
Total Financial sector liabilities, non-consolidated (y-o-y)	33.2	-8.8	-2.3	-3.0	4.7	0.2	16.1	7.5	.	.	.
Tier 1 ratio (%) (2)	.	10.2	10.0	11.5	11.7	12.3	12.0	12.4	.	.	.
Return on equity (%) (3)	.	-31.0	-36.9	2.8	-1.3	10.5	13.2	13.8	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (4)	.	13.6	15.3	10.1	7.9	5.6	7.7	5.1	.	.	.
Unemployment rate	8.5	17.5	19.5	16.2	15.0	11.9	10.8	9.9	9.7	9.5	9.0
Long-term unemployment rate (% of active population)	3.1	4.5	8.8	8.8	7.8	5.7	4.6	4.5	.	.	.
Youth unemployment rate (% of active population in the same age group)	14.6	33.3	36.2	31.0	28.5	23.2	19.6	16.3	17.8	.	.
Activity rate (15-64 year-olds)	71.1	73.5	73.0	72.8	74.4	74.0	74.6	75.7	.	.	.
People at risk of poverty or social exclusion (% total population)	39.5	37.9	38.2	40.1	36.2	35.1	32.7	30.9	.	.	.
Persons living in households with very low work intensity (% of total population aged below 60)	6.8	7.4	12.6	12.6	11.7	10.0	9.6	7.8	.	.	.
General government balance (% of GDP)	-1.4	-9.1	-8.5	-3.4	-0.8	-0.9	-1.6	-1.3	0.0	-1.0	-1.0
Tax-to-GDP ratio (%)	28.3	27.6	28.1	28.0	28.8	28.9	29.3	29.5	30.4	31.2	31.1
Structural budget balance (% of GDP)	.	.	-2.2	-1.3	-0.1	-0.9	-1.5	-1.6	-0.7	-1.6	-1.6
General government gross debt (% of GDP)	12.6	36.6	47.4	42.8	41.3	39.0	40.7	36.3	39.4	36.5	35.0

(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, , EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.
(*) Indicates BPM5 and/or ESA95

Source: European Commission, ECB

2. PROGRESS WITH COUNTRY-SPECIFIC RECOMMENDATIONS

Progress with the implementation of the recommendations addressed to Latvia in 2016 to be seen in a longer term perspective since the introduction of the European Semester in 2011.

Latvia has advanced on a number of recommendations since 2012, but several issues remain open. The excessive government deficit was corrected in 2012 and fiscal discipline has been broadly observed since then. The fiscal framework has been set up and implemented. Latvia has made progress in higher education and judiciary reform and on integration with the EU energy market, although full implementation is not yet achieved or will require an effort over several years. The long-standing recommendations on work-based learning and insolvency have been completed in terms of regulatory framework, but effective implementation is still missing. Activation measures for unemployed have recently improved in quality, but supply is still low as compared to other Member States. Finally, growth-friendly tax shifting away from low wages, increasing adequacy of social assistance, healthcare and public sector reforms have not delivered satisfactory results.

Implementation of the recommendations has slowed down in the recent years. Over 2012-2014, Latvia made 'some' progress with the overall implementation of the country-specific recommendations, due to reforms initiated under the financial assistance programme, post-programme surveillance and the euro adoption process. More recently, as the economic situation has normalised and external pressure has decreased, the urgency of policy measures has abated, leading to a slowdown in the reform process to 'limited' in recent years.

Overall, Latvia has made limited progress ([7]) in addressing the 2016 country-specific recommendations. Some progress has been made in vocational education, in supporting social benefits recipients in finding and retaining work, in improving the insolvency regime, in supporting research and innovation and in tax collection. Progress has been limited in the tax shift, in improving the adequacy of social assistance benefits, in strengthening the conflict of interest regime and in healthcare. No progress was made in public sector reform. While small improvements or preparatory steps have been taken in these areas, there is no clarity or certainty on the measures addressing the related recommendation.

([7]) Information on the level of progress and actions taken to address the policy advice in each respective subpart of a CSR is presented in the overview table in the Annex. This overall assessment does not include an assessment of compliance with the Stability and Growth Pact.

Table 2.1: **Summary table on 2016 CSR assessment**

Latvia	**Overall assessment of progress with 2016 CSRs: Limited**
CSR 1: *Ensure that the deviation from the adjustment path towards the medium-term budgetary objective in 2016 and 2017 is limited to the allowance linked to the systemic pension reform and the major structural reform in the healthcare sector. Reduce the tax wedge for low-income earners by exploiting a growth-friendly tax shift towards environmental and property taxes and improving tax compliance.*	**Limited progress *** • Limited progress in shifting the tax burden away from low wages. • Some progress in improving tax compliance.
CSR 2: *Improve the adequacy of social assistance benefits and step up measures supporting recipients in finding and retaining work, including through increased coverage of activation measures. Speed up the curricula reform in vocational education, establish with the involvement of social partners a regulatory framework for apprenticeship-type schemes and increase their offer. Improve the accessibility, quality and cost-effectiveness of the healthcare system.*	**Limited progress** • Limited progress in improving adequacy of social assistance benefits. • Some progress in supporting social assistance recipients in finding work. • Some progress in improving vocational education. • Limited progress in improving healthcare system.
CSR 3: *Pursue the consolidation of research institutions and provide incentives for private investment in innovation. Strengthen the conflict of interest prevention regime and set up a common legal framework for all public employees. Increase the accountability and public oversight of insolvency administrators.*	**Some progress** • Some progress in supporting research and innovation. • Limited progress in strengthening the conflict of interest prevention regime and setting up a common legal framework for all public employees. • Some progress in increasing the accountability and public oversight of insolvency administrators.

* This overall assessment of CSR1 does not include an assessment of compliance with the Stability and Growth Pact
Source: European Commission

Box 2.1: Contribution of the EU budget to structural change in Latvia

Latvia is a major beneficiary of the European Structural and Investment Funds (ESI Funds) with an allocation up to EUR 5.6 billion by 2020. This is equivalent to around 3% of GDP annually (over 2014-2017) and 67% of the total public investment ([1]). By 31 December 2016, an estimated EUR 1.8 billion, which represents about 32 % of the total allocation for ESI Funds, have already been allocated to concrete projects.

Financing under the European Fund for Strategic Investments, Horizon 2020, the Connecting Europe Facility and other directly managed EU funds is additional to the ESI Funds. By end 2016, Latvia has signed agreements for EUR 255 million for projects under the Connecting Europe Facility. The EIB Group approved financing under EFSI amounts to EUR 91 million, which is expected to trigger nearly EUR 315 million in total investments (as of end 2016).

ESI Funds helped progress on a number of structural reforms in 2015 and 2016 via ex-ante conditionalities ([2]) and targeted investment. Examples include the adoption of the smart specialisation strategy which focuses on investments on growth areas; in healthcare the setting up of a national strategic policy framework and preparing a healthcare infrastructure mapping to increase the efficiency of healthcare investments; in education by developing evidence-based early school leaving (ESL) prevention strategy. These reforms have prepared the ground for better implementation of public investment projects in general, including those financed from national sources and from the other EU instruments mentioned above. In addition to that, administrative reforms support is available through targeted financing under the European Social Fund, advice from the Structural Reform Support Service and, indirectly, through technical assistance.

The relevant CSRs focusing on structural issues were taken into account when designing the 2014-2020 programmes. These include the consolidation of research institutions by linking financing to performance and in higher education by better focussing education to the needs of the economy; improving access and quality of healthcare by developing healthcare infrastructure focusing on priority healthcare areas; improving the quality of vocational education and training through consolidating the school network, updating the curricula and expanding the work-based learning components; strengthening activation and social inclusion measures to improve employability of persons with disabilities, elderly and long-term unemployed, as well as strengthening the capacity of social work; and improving efficiency of the judicial system by strengthening the capacity of law enforcement agencies and development of e-justice. Latvia has also received support from the Youth Employment Initiative (YEI) to combat youth unemployment and 14 000 young people have benefited from it.

In addition to the challenges specifically identified in past CSRs, the funds address wider structural obstacles to growth and competitiveness. These include reducing bottlenecks in infrastructure via improving accessibility through reconstructed TEN-T network roads (reduction of roads in bad and very bad condition from 46,3% to 10%) and regional roads (reduction of roads in bad and very bad condition from 53,7% to 26%); electrification of the railway network (reducing the CO2 emissions from 225 to 180 thousand t/year); incentivising innovation and private investments (increasing the share of innovative enterprises to 40%); supporting employment (100 000 unemployed will participate in active labour market policy measures).

https://cohesiondata.ec.europa.eu/countries/LV

([1]) National public investment is defined as gross capital formation + investment grants + national expenditure on agriculture and fisheries.

([2]) Before programmes are adopted, Member States are required to comply with a number of ex-ante conditionalities, which aim at improving framework and conditions for the majority of public investments areas. For Members States that did not fulfil all the ex-ante conditionalities by the end 2016, the Commission has the possibility to propose the temporary suspension of all or part of interim payments

3. REFORM PRIORITIES

3.1. PUBLIC FINANCES AND TAXATION

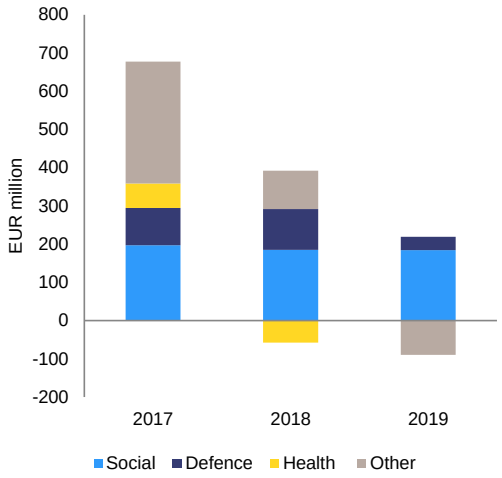
3.1.1. BUDGETARY PLANS

The fiscal situation is benign, in the short run. The government deficit target for 2017 is 1.1 % of GDP. The Commission winter forecast projects a deficit of 1%. The outlook has improved based on the better-than-expected outturn of a balanced fiscal position for 2016 (see Table 1.2). The 2017 budget contains revenue measures such as an increase in the microenterprise tax and a postponement of tax payment date for commercial vehicle taxes, as well as some improving tax collection and increasing indirect taxes. Expenditure increases are targeted at health, internal security and education.

Government expenditure plans beyond the annual budget do not fully reflect policy priorities. Insurance-based social expenditure is projected to continue increasing, as is defence — projected to reach the 2 % of GDP target in 2018 (Graph 3.1.1). However, the intended increase in health financing is not yet reflected in the expenditure plans after 2017 (Section 3.3.3). Other spending needs also appear underrepresented. Most government expenditure items are fixed in the plans for following three years. Decisions on spending priorities from available resources or by reallocation are decided at the time of the annual budget preparation. In several cases this means that some reform priorities never obtain financing, as in the example of the minimum income level reform (Section 3.3.4).

An ageing population already has a negative impact on public finances. The population above the pension age increased by some 0.4 % annually in 2013-2015, while the working age population fell by 1.6 %. This population trend is expected to continue, which implies higher social and health spending needs to be financed by a decreasing number of workers. As a result, the government's share in GDP is bound to increase over time.

Graph 3.1.1: **Government expenditure growth plans**



Source: The medium term budgetary plans for 2017-2019

A comprehensive medium-term budgetary strategy would give predictability to the business environment. While setting the budgetary targets is based on a well-defined framework described below, the approach to filling the targets with policy content is not equally transparent and predictable. Aligning expenditure plans with structural reform needs and demographic pressures set the stage for discussions on revenue plans. While there is scope to improve the efficiency of the current budgetary spending through expenditure reviews, it would be optimistic to fully rely on such savings. The tax strategy announced for April 2017 provides an opportunity to define a realistic medium-term budgetary plan encompassing both expenditure needs and revenue options to finance them.

3.1.2. FISCAL FRAMEWORK AND EXPENDITURE REVIEW

A well-defined fiscal framework provides the basis for fiscal policy. The budgetary targets are set in accordance with the fiscal rules and monitored by the independent Fiscal Discipline Council, which also endorses the macroeconomic forecasts used for budgetary planning. The 2017 budget target for the first time includes the fiscal

security reserve, as required by the Fiscal Discipline Law. ([8])

An expenditure review across line ministries was launched in 2016. It aims to identify inefficiencies, assess and update performance budgeting information, and develop tools for determining cost-effectiveness. Moreover, the health and education sectors underwent a particularly thorough investigation. The review involved public and independent experts on fiscal and sector specific issues. The resulting reports provide a good insight into the budgets of the line ministries and issue recommendations, the implementation of which will be monitored by the government. The 2016 review identified expenditure savings of 0.2 % of GDP. The expenditure review is set to be part of the annual budget planning process and its methodology is planned to be refined in 2017.

3.1.3. TAXATION

The World Bank and OECD suggest a fundamental reform of labour taxation and a tax shift to capital and real estate, while improving compliance (World Bank, 2016b; OECD, 2015). Effective tax rates on labour are high and the equity and progressivity of the tax system could be improved. Policy options for Latvia include a progressive personal income tax and/or social contributions, and a more uniform treatment of income derived from interest, dividends and capital gains and labour income. The current non-uniform treatment of capital is inefficient, generates inequalities and provokes arbitrage. For consumption taxes, the main issue for Latvia is the persistently low tax compliance, rather than tax rates. Recurrent property taxes have an additional revenue potential and are least distortive. Postponing the market-based valuation should be avoided. Tax collection can be improved through simplified compliance, better use of IT tools and investment in personnel. Improving tax collection has a large revenue potential.

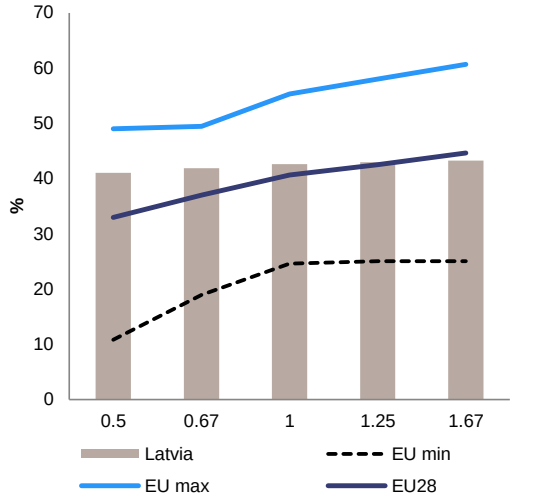
A growth-friendly tax shift would have positive employment and GDP growth effects. The tax wedge on low-wage earners (at 67 % of the average wage) remains high at 41.9 % in 2015, one of the highest in EU (EU average: 37 %) (Graph 3.1.2). This weighs on economic activity and employment. At the same time, the aggregate burden of capital taxes in Latvia is low. Latvia has scope to reduce the taxation of low-income earners, which could be offset by increasing tax revenue from consumption, property, and capital taxes (European Commission, 2015c). Stylised simulations show that a revenue neutral and growth-friendly tax shift away from low-income earners would boost employment and GDP growth, while also improving income equality (Box 3.1.1). Moreover, as property tax evasion is more difficult than labour tax evasion, it could also benefit tax compliance.

Measures implemented so far have had a limited effect on reducing the tax wedge on labour. Between 2016 and 2020, the existing flat basic tax allowance is being increased for low-income earners and reduced for high-income earners. This makes the tax system somewhat more progressive (see Box 3.1.1), but the tax wedge on low-income earners will be reduced only marginally to 41.5% in 2020 — still a high rate. The scope of the solidarity tax ([9]) introduced in 2016 is relatively small as it covers a limited number of tax payers.

([8]) The assessment of the 2016 draft budgetary plan of Latvia provides further details on the Fiscal Discipline Council: http://ec.europa.eu/economy_finance/economic_governance/sgp/pdf/dbp/2016/lv_2016-11-16_swd_en.pdf

([9]) Solidarity tax for salaries exceeding EUR 48 600 per year is taxed at the level of social contributions, but without accruing benefit rights.

Graph 3.1.2: **Tax wedge of single earners, various income levels, 2015**



Source: European Commission, based on OECD Tax-benefit models.

Measures affecting small businesses were reversed at the last minute. The introduction of minimum social contributions was cancelled, given their negative impact on part-time employment and small businesses. The plan to discontinue the micro-enterprise tax was also dropped. In order to compensate for the revenue foregone, the standard rate of the micro-enterprise tax has been increased from 9 % to 15 % yielding some 0.2 % of GDP, which is paid into social contributions.

The micro-enterprise tax remains prone to abuse and provides low social guarantees for workers. In 2016, 11 % of the workforce was employed under the micro-enterprise tax scheme. In 2015, most new employees under the scheme came from the regular tax regime — no new work places were created. Abuse of the scheme as a tax optimisation tool and the low social guarantees for workers contributed to the plan to close it. The tax rate increase in 2017 somewhat reduces the attractiveness of the scheme, but does not solve its compliance and social security problems. The authorities plan to replace the micro-enterprise tax with a better targeted support scheme for real small business.

Property tax is bringing in more revenue. Revenue from the recurrent property tax increased to 0.9 % of GDP in 2016 from 0.8 % of GDP in 2013. The tax is applied to cadastral values, which follow the market valuations. The alignment of property cadastral values with their market values and a pick-up in property prices have generated more tax revenue. An increase in property tax base on agricultural land is capped at 10 % annually. Moreover, inefficiencies in tax administration persist in terms of equal treatment of similar properties and use of tax rebates.

Tax compliance remains a challenge for Latvia. Latvia's shadow economy is estimated at 21 % of GDP in 2015, down by over 2 percentage points from 2014, but still approximately 6 pps. more than in Estonia and Lithuania (Sauka & Putniņš, 2016). During 2013-2015, by far the highest level of shadow activity was linked to the construction sector (40 %), followed by retail (25%). The same estimates show that the underreporting of business income decreased in 2015 (20 % of actual profits were intentionally concealed from the authorities) compared to 2014 (22 %), but it was still considerably higher than in Estonia (7.5 %) and Lithuania (10.5 %). The estimated underreporting of employees in Latvia remained unchanged at around 10 % of the actual number of employees, which is still the highest of all three Baltic countries. The estimated share of envelope wages out of total wages has declined steadily in Latvia over 2010-2015 (estimated at 18 % of actual salaries in 2015) (Sauka & Putniņš, 2016).

In 2016, a number of measures to improve tax compliance entered into force. In particular, penalties for interfering with the programming of cash registers were increased and credit institutions and providers of payment services were obliged to report suspicious transactions. In addition, the State Revenue Service was tasked with prohibiting the changing of board members, the reorganisation or the liquidation of companies suspected of tax evasion. To step up the fight against envelope wages, the Parliament adopted legislative changes in March 2016 envisaging criminal liability for employers paying envelope wages on a large scale.

The VAT gap in Latvia continues its downward trend, but still largely exceeds the EU average. The gap fell from 26 % of the VAT total tax liability in 2013 to 23 % in 2014 ([10]). The fall was

([10]) The VTTL is the theoretical tax liability according to tax law. The VAT gap is estimated using a "top-down" approach that applies respective VAT rates to six components of VAT revenue (namely final consumption of households; final consumption of government and non-

also accompanied by the introduction of new measures against tax fraud in 2014, such as the creation of a new register of 'high risk' entities and the obligation for the tax authorities to provide information on such individuals to the commercial register. However, the VAT gap is still higher than the average VAT gap of 14 % in 2014 for the EU as a whole (Centre for Social and Economic Research, 2016).

Environmental tax rates have been increased and are geared towards behavioural change. Environmental tax revenue stood at 2.7 % of GDP in 2014 close to the EU average. The 2017 budget changed the vehicle taxation system by replacing the vehicle registration tax with an increase in the annual vehicle taxation based on CO2 emissions, in a budgetary neutral way. This should provide an incentive to reduce CO2 emissions per km, which are among the highest in the EU. The natural resource tax rate is increased for a number of tax objects, in order to encourage the effective use of resources (see Section 3.5.1 on municipal waste).

3.1.4. LONG-TERM FISCAL SUSTAINABILITY

Latvia scores favourably on medium and long-term fiscal sustainability. However, the low future pension adequacy is cause for concern. Despite increasing dependency ratios, based on current policies, projected public pension expenditure as a percentage of GDP is the lowest in the EU Ageing Report (European Commission, 2015d). Latvia's projected future public pension expenditure is low mainly due to its high reliance on funded pensions, and the low projected future pension adequacy (European Commission; the Social Protection Committee, 2015) (see Section 5.3 on current pension adequacy). This implies that a high proportion of pensioners will be receiving very low pensions, which may be politically and socially unsustainable. Therefore, the projections of the 2015 Ageing Report are subject to risk of policy changes to address inadequate income in old age.

Demand for healthcare is likely to expand in the long run, putting additional pressure on public expenditure. The baseline projections of the 2015 Ageing Report are based on the low starting position in terms of health expenditure in Latvia. Under the risk scenario, the age-related expenditure is projected to increase by 1.8 % of GDP between 2013 and 2060 — a notably different position relative to the baseline scenario, although still below the EU average. Non-demographic factors are estimated to be a key driving force of health expenditures. Demand for healthcare is likely to increase with higher economic wealth, as growing living standards change people's attitudes towards their own health. Therefore, an upward convergence in healthcare coverage and costs to the EU average (as shown by the Cost convergence scenario of the Ageing report) would put pressure on public expenditure. Risks to the sustainability of public finances can be limited by ensuring cost-effectiveness of any healthcare expenditure increase.

profit institutions serving households; intermediate consumption; gross fixed capital formation; and other, largely country-specific, adjustments).

Box 3.1.1: Fiscal and distributional impacts of tax reforms

Latvia is recommended to *reduce the tax wedge for low-income earners by exploiting a growth-friendly tax shift* (see Section 2 and Annex A). The World Bank also proposes policy options for a more equitable and growth-friendly tax system for Latvia. This box presents the results of simulations by the Commission services ([1]) focusing on some reform scenarios for addressing the country-specific recommendation for Latvia: (1) the ongoing reform aiming at reducing the tax wedge on low income earners, (2) a more fundamental reform of the flat tax towards a progressive system, and (3) a possible tax shift from low income earners to property owners. The first reform has a marked positive impact on the lowest income earners, but comes at a fiscal cost. The second reform scenario generates additional tax revenues by targeting the highest income earners, while leading to more limited gains for the low income earners. Finally, the tax shift in the third scenario has both a redistributional effect and is budget neutral.

1. NON-TAXABLE ALLOWANCE REFORM

The personal income tax (PIT) is a flat tax. Some progressivity is nevertheless provided by a non-taxable allowance. This *non-taxable allowance* is being reformed introducing a progressive differentiation by income level. The reform is carried out gradually with the first step in 2016 and full implementation in 2020.

The reform will lower the effective tax rate by up to three percentage points for the poorest 20 % of the population in 2020 ([2]), one point being already gained in 2016. The estimated disposable income gains are close to 2 % for the lowest half of income distribution in 2020 (Graph 1a). The gains for the poorest groups are limited by their lower work intensity. For the richer fractions of the population the disposable income gains gradually decline and the reform is detrimental to the richest 10 % (-0.5 % in disposable income). The fiscal cost is estimated at 0.1 % of GDP in 2016 and 0.3 % of GDP in 2020.

2. A PROGRESSIVE PERSONAL INCOME TAX SCENARIO

One of the proposals by the World Bank (World Bank, 2016b) is to introduce a progressive PIT rate to increase redistribution across income groups. The lowest rate (19%) would apply up to the minimum wage (EUR 360 per month), the 23% rate would apply between EUR 360 and EUR 1 300. Above EUR 1 300 the marginal tax rate would be increased to 29 % ([3]).

This reform would yield some 0.3-0.4 % of GDP in tax revenue. It would be beneficial to 42 % of the population and detrimental to only 9 % concentrated among the richest. It would lower the implicit tax rate for half of the population by almost one percentage point, but would increase the tax rate for the richest 10 % by three points. The income redistribution and income equality would increase significantly (Graph 1a).

3. A GROWTH FRIENDLY TAX SHIFT SCENARIO

A revenue neutral tax shift from low-income earners to property taxes is expected to be growth friendly. Our stylised simulation assumes an increase in the non-taxable allowance to the point that no PIT is paid at the minimum wage. The estimated fiscal cost of around 0.5% of GDP is compensated by an increase in the property tax.

([1]) Simulations 1 and 2 have been conducted by the Joint Research Centre of the European Commission to analyse the fiscal and distributional impact of the reforms using EUROMOD, the tax-benefit microsimulation model for the EU. EUROMOD simulates benefit entitlements and tax liabilities (including social security contributions) of individual and households according to the tax-benefit rules in place in each Member State. The simulations are based on representative survey data from the European Statistics on Income and Living Conditions (EU-SILC) and cover the main elements of direct taxation and social contributions as well as non-contributory benefits. Simulation 3 has been conducted by the Commission based on the Quest model (http://ec.europa.eu/economy_finance/research/macroeconomic_models_en.htm).

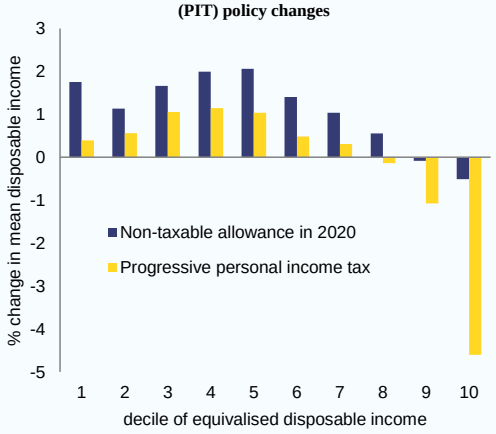
([2]) The simulation of the reform in 2020 assumes annual nominal wage growth of around 5% in 2016-2020.

([3]) http://www.baltic-course.com/eng/analytics/?doc=122413

(Continued on the next page)

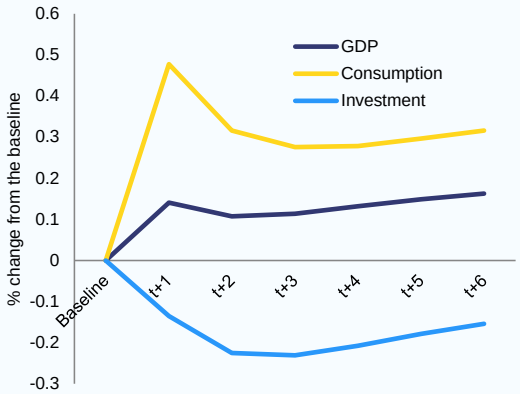
Box (continued)

Graph 1a: **Distributional effect of personal income tax (PIT) policy changes**



Source: European Commission (Euromod)

Graph 1b: **Macroeconomic effect of a 0.5% of GDP tax shift from low-income earners to property**



Source: European Commission (Quest)

The tax wedge for low-income single earners would be reduced from around 40% to 28 % – a relatively low level according to the EU standards. Reduced labour costs would stimulate employment among low income groups with an increase of 0.5 % in the first year and 2.2 % over four years. Consumption by low income groups would pick up to 8 %, while it would be slightly reduced for the medium and high income groups (0.5 %-0.8 %) due to the property tax hike. The reform is expected to have a small positive effect on GDP, as employment and consumption gains offset the impact on investment, predominantly housing (Graph 1b). Moreover, income equality is expected to notably improve.

This tax shift implies a stronger redistribution than that of the non-taxable allowance reform (0.5 % of GDP instead of 0.3 %) and it is budget neutral. The associated increase in the property tax remains, however, credible, as it would only bring Latvia closer to the EU average. Revenue from recurrent property taxes were 0.8 % of GDP in 2014, compared to an EU average of 1.6 % of GDP.

3.2. FINANCIAL SECTOR

Latvia's banking sector is dominated by Nordic banks serving local clients. However, specialised banks serving non-residents are an important part of the sector. After a protracted post-crisis period of deleveraging, credit supply is growing again (see Section 1). Two main developments in the sector are related to money laundering operations uncovered in some non-resident banks and the diversification of sources of financing.

3.2.1. ANTI-MONEY LAUNDERING SUPERVISION

Latvia is a regional financial centre for non-EU businesses and high net worth individuals from neighbouring countries. Non-resident deposits account for 42 % of total deposits and 30 % of assets in Latvia's banking sector and are concentrated in specific banks. Demand deposits account for around 88 % of total non-resident deposits and are invested in liquid financial assets. The non-resident banks ([11]) generate their income mostly from net interest income on loans to non-residents and on their securities portfolios. Their exposure to the real economy is relatively small. Non-resident banks account for 12 % of total loans to residents and 9 % of their deposits.

The very nature of the non-resident banking business entails specific risks, notably linked to the origin of the funds. Therefore, the sector has higher minimum capital and liquidity requirements than banks serving the domestic economy, and is subject to closer and more frequent supervisory action by the regulator. The presence of the non-resident banks has certain consequences for the whole Latvian financial sector, with some spill-overs to the other Baltic markets. All banks are subject to the reputational risks created by non-resident banks ([12]). Also, all banks incur costs of compliance with the new anti-money laundering regulations and other supervisory initiatives by the Financial and Capital Market Commission (FCMC), while capital and regulatory standards have tightened in many parts of the world.

Supervisory action revealed the involvement of Latvian non-resident banks in several fraud cases over the last year. Privatbank, ABLV bank, Latvijas Pasta banka and Trasta komercbanka were linked with the illegal withdrawal of funds from three Moldovan banks and money laundering. Following enforcement actions, the three former institutions were sanctioned with multi-million euro fines and the latter lost its licence in March 2016. Other fined banks ([13]) include Baltic International Bank, which participated in illegal withdrawals of funds from the liquidated DeltaBank in Ukraine, and Swedbank for weakness of AML internal control system used for providing financial services to non-resident customers. Two more administrative investigations were ongoing at the time of reporting.

A new Compliance Control Department has been created within the FCMC. The FCMC's strategy to deal with non-resident banks is based on three principles: compliance, transparency and concentration. Risk-based approach is used as basic principle for AML supervision on the whole banking sector. According to the supervisor, the banks should bear full responsibility for their business conduct and incur the costs of compliance and non-compliance. Since mid-2015, the FCMC has launched thorough checks of non-resident customers and stepped up on- and off-site inspections. All non-resident banks underwent special auditing by international audit companies, whose conclusions had to be followed up on. A national risk evaluation according to the World Bank methodology and a Moneyval assessment are scheduled for 2017. The financial intelligence unit is preparing a report summarising the conclusions of those assessments.

3.2.2. ACCESS TO FINANCE

Bank lending still plays a dominant role in funding of non-financial corporations (Graph 3.2.1). The Latvian capital market has a substantial development potential and may complement bank loans as the source of funding for companies. The equity market remains shallow measured by local capitalisation (5.2 % of GDP), although the stock exchange is fully integrated into

([11]) Defined as banks which grant more than 50 % of loans to non-residents and receive more than 50 % of deposits from non-residents.

([12]) For example, in reaction to the fraud cases in 2015 Deutsche Bank has cut off some Latvian banks from direct processing of US dollar transactions.

([13]) The Ministry of Finance estimated total revenue from fines in the 2016 budget at 20 million euro.

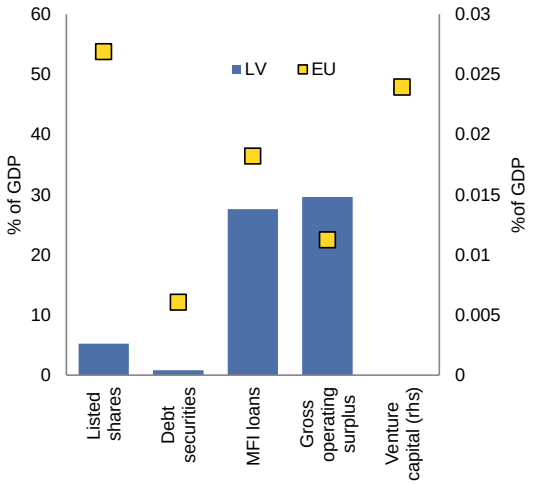
the Nordic OMX-Nasdaq group. The role of corporate bond issuance is still relatively small. The debt securities market in Latvia consists almost exclusively of government paper. While Latvia ranks fourth in the European Innovation Scoreboard for venture capital, such investments remain small. The annual gross operating surplus of Latvian companies is higher than the EU average, suggesting that companies have the potential to finance investment from retained earnings. A draft financial sector development plan has been announced to support lending and capital market development, as well as to ensure the competitiveness of Latvia's financial sector.

Latvian stock market capitalization continues to develop gradually. At the end of 2015, Latvian registered public offering of securities in the total capitalization amounted to 3.2 billion euro, compared to 1.9 billion euro at the end of 2012 ([14]). The largest share or 35.1% of the total market capitalization was still made up of public debt securities, followed by equities with a 33.8% share and corporate debt securities reaching 30.3%.

Corporate debt securities market is the fastest growing segment. The number of corporate debt emissions in 2015 increased almost threefold from 15 to 42 offerings, while the public offering of equities in this period decreased from 32 to 27. This market segment activation has been largely promoted by a favourable tax treatment.

([14]) Statistics on securities market, 2015, Latvian Central Depository.

Graph 3.2.1: **Funding of non-financial corporations**



(1) Data on venture capital not available
Source: European Central Bank, AMECO

Public support for access to finance is being actively promoted, but it is still at an early stage. Public financial funds primarily offer SMEs guarantees and loans for growth, largely supported by European Structural and Investment Funds. The government supported the creation of the Baltic Innovation Fund, managed by the European Investment Fund, to provide growth capital for SMEs and promote the development of Latvia's venture capital market. The rollout of the new support schemes started at the end of 2016 for financial products directly managed by the government agency Altum (Box 3.2.1). It is expected in 2017 for financial products to be procured to third parties.

Box 3.2.1: **Selected highlight: Altum – single development financing institution**

Latvia has been very active in enhancing access to finance for SMEs. A range of financial instruments for SMEs have been made available (public loans, public guarantees and microfinance measures) and a number of venture capital, pre-seed and seed capital funds have been established since 2011, to help young and innovative businesses throughout the different stages of growth. Previously, the support instruments were managed by different entities, now a single public development institution is in charge.

The new one-stop-shop for public financial support for businesses 'Altum' (the joint stock company Development Financing Institution Altum) was created in 2014 and merged with the other two existing institutions in 2015, completing the consolidation of the support activity in a single entity. At the end of 2015, Altum managed a portfolio of financial instruments of the total value of 1.5 % of GDP, made up of 8 900 projects, of which 90 % were loans and guarantees and 10 % venture capital funds. Altum provides financial and non-financial support, including counselling, training, mentoring, in various fields such as energy efficiency of buildings, agricultural business and even housing loan guarantees for families with children. Altum is also the contact point for the European Investment Bank and the European Investment Fund in Latvia. A substantial part of funding is provided for by European Structural and Investment Funds, with a 2014-2020 allocation from the European Regional Development Fund exceeding 0.6 % of GDP. ALTUM cooperates with all major banks in the country and it also operates as a fund of funds providing indirect financial support through acceleration, seed and start-up as well as expansion capital funds. ALTUM operations have only been recently rolled out, but stakeholders are appreciative of its work and of the design of the system, which has the potential to improve access to finance in Latvia.

3.3. LABOUR MARKET, EDUCATION AND SOCIAL POLICIES

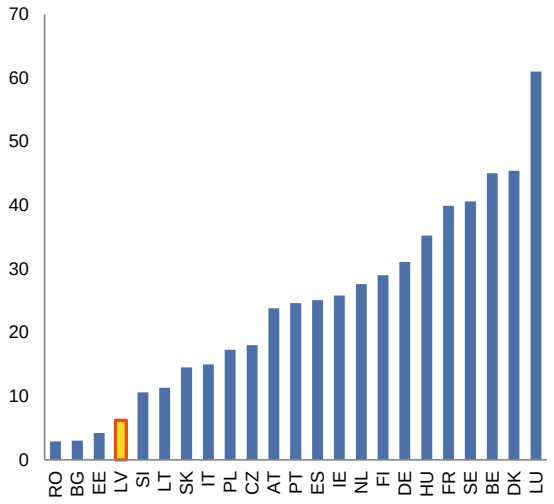
3.3.1. LABOUR MARKET

The decreasing working age population is a challenge for labour supply and for the social security and health systems. In the short run, the negative impact on labour supply is projected to be compensated by an increasing employment rate, which reached 73.1 % in Q3-2016 (above the national EU 2020 target of 73 %, see Annex A). However, in the medium and long run unused labour potential will be exhausted, leading to a contraction of the workforce, unless there is a change in the migration pattern. Since young people are overrepresented among emigrants, future dependency rates are projected to increase significantly.

Labour shortages exist both for low-paid jobs in some sectors and for jobs where specific skills are needed. Unfilled vacancies registered by the State Employment Agency tend to represent low-paid jobs with relatively poor working conditions. Low wages for public and health sector employees is a reason for unfilled vacancies. At the same time, there is a shortage of high-skilled professionals — ICT specialists, engineers, top managers and business and administration professionals (CEDEFOP, 2016). For advanced digital skills Latvia ranks only 25th in the EU ([15]) (though the gap for basic digital skills is somewhat narrower — ranking Latvia 16th in the EU) (European Commission, 2016b). Future skills shortages are expected in the engineering and healthcare sectors as these sectors employ an older workforce and these skills are expected to be in high demand also in the future.

The unemployment rate is gradually declining, but regional disparities persist. The registered unemployment rate is lower in centres of economic activity like Riga city (around 5 %), but high in rural regions (around 18 % in Latgale region). Around 42 % (Q3-2016) of the unemployed are long-term unemployed. Almost half of the long-term unemployed (44 %) are without a job for more than four years, making a return to the labour market more difficult. Around 54 % of the registered long-term unemployed are over the age of 50. Persons with disabilities account for around 11 % of the unemployed and half of them are long-term unemployed.

Graph 3.3.1: **Coverage of activation-support, 2014**

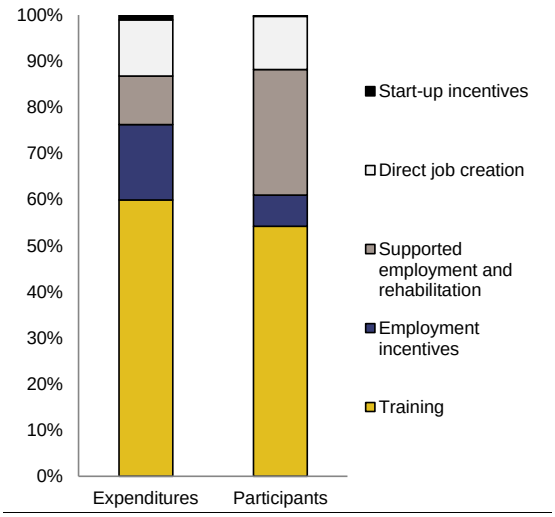


Note: Number of participants per 100 persons wanting to work (on average at any given moment)
Source: European Commission (Eurostat), LMP database.

Activation of the unemployed remains low. The involvement of the unemployed in active labour market policies (ALMPs) is lower than in most other EU countries (Graph 3.3.1). Financing of ALMPs largely relies on EU funds, which temporarily dropped in 2015 due to the transition between the two programming periods, but has increased in 2016 and 2017. About half of the ALMP measures consists of training (Graph 3.3.2), which have been shown to be effective in improving the labour market prospects of the unemployed, based on past evaluations. 'Employment incentives' and 'supported employment and rehabilitation' are targeted towards disadvantaged unemployed people. The former largely consists of wage subsidies, which are relatively expensive per participant and have not been rigorously evaluated yet. The share of the public works programme has slowly decreased, but still remains the most popular measure for the long-term unemployed. Public works are generally considered to be among the least effective activation instruments. In spite of the observed regional disparities in unemployment rates, the take-up of regional mobility support remains below expectations, largely due to the fact that mobility to Riga is only partially eligible for support.

([15]) The advanced digital skills and development indicator is calculated based on the number of ICT specialists and STEM graduates.

Graph 3.3.2: **Expenditure on and participation in activation measures, 2016**

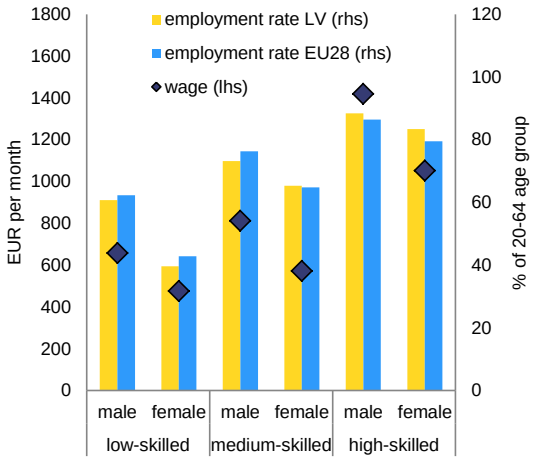


Source: National data based on the Eurostat methodology

Activation support for the disadvantaged unemployed is set to expand. Support measures for the long-term unemployed, persons with disabilities and other disadvantaged unemployed people will substantially increase and their share of financing in the total ALMP envelope is set to increase from 14% in 2015 to 32% in 2017. The measures will include specialised consultations, health and professional suitability assessment, mentoring, motivational programmes, and addiction treatment. Persons with disabilities will also benefit from social entrepreneurship measures to be launched in the beginning of 2017.

Supporting longer working lives is crucial given Latvia's demographic challenges and high projected dependency ratios. Employment rates of older workers (55-64) are above the EU average, but unemployment rates are also high in this age group (9.4 % in Q2-2016) compared to other EU countries (EU average 6.5 % in Q2-2016). A relatively high percentage of pensioners wish to stay employed (38 % in Latvia; EU average 28 %). High activity rates among older workers may be partially motivated by relatively low pensions. The main obstacles for older individuals to find a job are poor health (both physical and mental), outdated skills, low education and lack of Latvian language proficiency, and care responsibilities (World Bank, 2015). The government has taken measures to support the skills development of older workers, prioritising those over 45 in the lifelong learning measures. Additional new measures targeting those over 50 have been prepared, including public campaigns to promote active ageing, assessment of skills and health status of older workers followed by individualised support (if necessary) and support to employers in adjusting the workplaces to the ageing workforce. However, most of these measures are not yet implemented on the ground.

Graph 3.3.3: **Labour market outcomes by skills level and by gender**



(1) Wages are measured as gross monthly fulltime equivalent wages, based on self-reported data. They mostly refer to 2014 incomes (latest available data). Employment rates refer to 2015 (latest available annual data).
Source: Eurostat, DG EMPL calculations based on EU SILC 2015

The variation in labour market outcomes by education level is somewhat wider in Latvia than in many other EU countries. The labour market for highly skilled workers is rather tight, and the unemployment rate for workers with tertiary education is only 3.8 % (EU average 4.9 %, Q3-2016). However, unemployment among the low-skilled (20.3 % in Latvia v 16.3 % in the EU) is more prevalent also in the EU comparison. This suggests the importance of up-skilling to relieve the labour market tensions at the higher skilled segment of the labour market and improve the labour market prospects of the lower-skilled workers. Having a higher qualification also has a substantial impact on wages (Graph 3.3.3).

3.3.2. EDUCATION

The demographic decline exposes overcapacity and quality-disparities in the education system. Student-to-teacher ratios and average class sizes are among the lowest in the OECD in both primary and secondary education (OECD, 2016c) ([16]). This is due to the number of small schools in rural areas. The number of schools and higher education institutions and staffing levels remain high relative to the dwindling number of students (OECD, 2016d). Maintaining excessive education capacity is costly. Moreover, learning outcomes in rural schools significantly lag behind those of urban schools (OECD, 2016b; European Commission, 2016e). This has a link to low remuneration of teachers based on the number of students.

Conditions on the minimum number of students are set to reduce the number of schools and teachers. Minimum numbers of students per class are set to gradually increase until 2018. These are criteria for the financing of schools, including teacher salaries. A number of small schools, in which students of different ages are taught together in one classroom, are expected to be merged. The minimum student number criteria are less stringent for younger grades allowing schools to remain close to home. The reform aims at increasing the quality and efficiency of general education.

To improve the quality of education, a new teacher remuneration model was introduced in September 2016. Under the previous system, municipalities received government funding for teacher salaries on the basis of the number of students enrolled at the beginning of the school year. Municipalities and school principals had substantial discretion as to how they handled the funds. As a result, teachers' salaries varied considerably from one municipality to another for the same amount of work (European Commission, 2015f; OECD, 2014). The new model is based on a clearer definition of teachers' base salaries. The model provides for a 30-hour working week, including contact hours and preparatory work (Government of Latvia, 2016). This makes teacher remuneration fairer and more transparent. However, the model implicitly allows for teachers to work more than 40 hours per week, provided that the additional hours are not in the same school. This could encourage teachers to work extra hours to increase their salary, without paying sufficient attention to the quality of teaching (European Commission, 2016e).

Students' proficiency in mathematics and science has deteriorated, but scientific subjects are receiving more attention. The proportion of low achievers among 15-year-olds' in the 2015 OECD Programme for International Student Assessment (PISA) in mathematics (21 %) and science (17 %) worsened compared to the previous 2012 round, although it continues to be better than the EU average (OECD, 2016b; European Commission, 2016f). As a policy effort, diagnostic tests in science, technology, engineering and mathematics (STEM) subjects have recently been introduced in the last years of basic education and in upper secondary education. However, it is still too early to assess whether these tests are able to improve STEM proficiency. Promoting STEM subjects also requires modern approaches to teaching and learning. The new competence-based framework curriculum, aiming at modernising teaching methods in general education, is being piloted in 80 schools in 2016-2017 (rather than 2015-2016, as originally planned). Its success depends largely on teachers' ability and motivation to implement it.

Latvia has a high proportion of the population with secondary education but no professional qualification. Around one third of secondary school ([17]) graduates do not continue their studies in either vocational education and training (VET) or higher education. Yet, the labour market prospects for people holding VET qualification are better than for those holding general secondary education, and this applies both to recent graduates and to the population as a whole.

The attractiveness of VET has improved, but there has been little progress on curricula reform in 2016. Modernisation of buildings and equipment has been a priority. Currently 7 VET schools (out of 41) are fully modernised and by

([16]) For the year 2016-2017, authorities report an increase of the student-to-teacher ratio to 11.95 % from 8.67 % the previous year.

([17]) In 2015, 63% of primary school graduates continued their studies in general secondary education, 32% in VET

2023 27 schools will be fully modernised ([18]). In 2016, secondary legislation to create sectoral expert councils and procedures for updating curricula was passed implementing the amendments to the Vocational Education Law adopted in 2015. The sectoral expert councils comprise representatives from employers, trade unions and government and have wide ranging powers including involvement in VET curricula, school networks and work-based learning. The curricula reform started in 2010 and is expected to be finalised in 2021. In 2016, limited progress was made on the development of occupational standards, qualification exams or modular VET programmes as implementation of projects relying on EU funding had not yet started. The social partners, especially employers, have been involved in many aspects of the VET reforms.

The regulatory framework for work-based learning is adopted, but it remains to be seen how it works in practice. In 2016, secondary legislation was adopted stipulating the requirements for implementing work-based learning. The VET school and the employer should develop individual learning plans and at least 25 % of the programme should take place in the company. If they cannot justify of sufficient pedagogical competence, in-company trainers are required to complete at least 72 hours of specific training. The company can choose between an employment contract with the student that pays at least the minimum wage or a tax-free stipend determined by the employer. Support for work-based learning and practical training using EU funds is available, the project is expected to start in February 2017.

Latvia is implementing higher education reforms. It is introducing a new model for higher education financing, with elements that reward quality. An independent national accreditation agency was also set up in 2015-2016 (European Commission, 2016a). In 2016, a World Bank study was commissioned to assess the governance of higher education institutions with a view to enhancing internal governance, funding mechanisms, academic recruitments and remunerations schemes, to be completed in April 2018.

Participation in lifelong learning is low. In Latvia**,** only 5.7 % of adults participate in education or training (every 4 weeks), which is below the EU average of 10.7 %. Latvia has prepared an EU-funded lifelong learning programme for employed adults with a special focus on workers in high social risk groups, such as those over 45 or low-skilled. The programme is expected to start at the beginning of 2017.

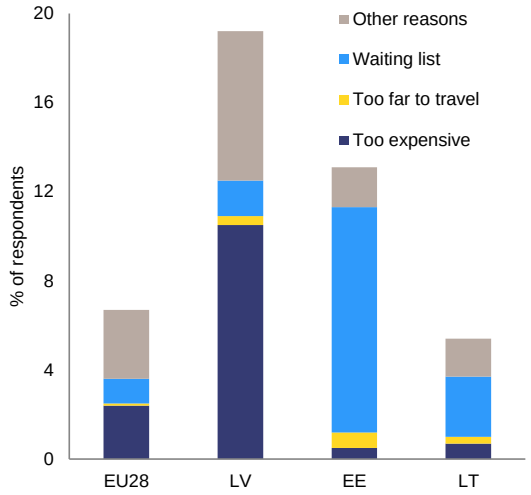
3.3.3. HEALTHCARE

Health indicators remain poor and there is ample room for improvement. Life expectancy and the number of healthy life years are among the lowest in the EU (OECD, 2016a). While poor health outcomes result from a complex set of factors, including lifestyle choices; the accessibility, quality and cost-effectiveness of healthcare services play a prominent role. A high proportion of Latvians report unmet healthcare needs, notably due to cost factors (Graph 3.3.4) ([19]). Low efficiency of the current health spending further aggravates the situation of the limited resources (Medeiros & Schwierz, 2015).

([18]) In Latvia, the art and music schools under Ministry of Culture are also defined as VET schools. If these are excluded form calculation, then 19 VET schools in traditional sense (out of 30) will be fully modernized by 2023.

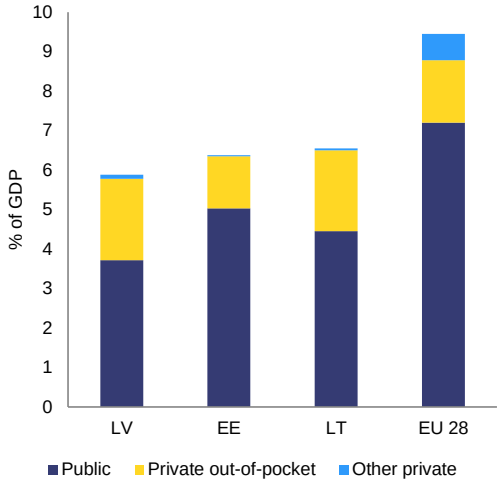
([19]) This proportion has declined in 2015 and 2016.

Graph 3.3.4: **Self-reported unmet needs for medical examination, 2014**



Source: Eurostat

Graph 3.3.5: **Health expenditure in 2014**



Source: World Health Organisation

Access to healthcare is severely limited by large out-of-pocket payments and inefficient allocation of services. Public spending on health is remarkably low (3.7 % of GDP against the EU average of 7.2 % in 2014, Graph 3.3.5) and is controlled by a quota system, which is not sufficiently linked with quality of healthcare services and based on outdated costings. This system implies an uneven distribution of state-funded healthcare services, because as soon as the number of services reaches the defined limit, patients must pay for the service out-of-pocket ([20]) or wait for the following year. Thus long waiting times and high level of out-of-pocket payments, which account for 38.5 % of total health expenditure (OECD, 2016a), are among the highest in the EU.

([20]) Official expenses for medical care not reimbursed by insurance

Access constraints and non-transparent public financing of health services create corruption risks. Patients are likely to make informal payments ([21]), to jump waiting lists or receive preferential treatment. The number of patients who report having used unofficial payments, gifts or acquaintances is above the EU average (TNS Opinion & Social; European Commission, 2014). Moreover, allocation of public financing among service providers is non-transparent and poorly linked to quality and effectiveness of healthcare services (Ministry of Finance, 2016). This creates corruption risks and inefficiencies.

The ageing health workforce faces an unbalanced skills mix and earns low wages. Low pay is one of the key reasons for shortages of some health professionals in Latvia. In particular, the number of nurses is very low (4.8 per 1 000 population, which is the third lowest in the EU). While the number of physicians is around the EU average, two thirds of general practitioners are aged 50 and over and are expected to retire in the coming years (World Bank, 2016a). Workforce plans, including for remuneration, are part of the broader strategy for the health sector expected in April 2017.

Poor health outcomes raise questions about the effectiveness of the health system. The amenable mortality rate in Latvia is the highest in the EU and

([21]) Outside the official payment channels

preventable mortality ([22]) is the second highest in the EU. These data indicate a need to improve the effectiveness and quality of care, in particular for cardiovascular disease, which accounts for 57 % of all deaths. This underlines the importance of more focus on prevention and health promotion so as to tackle the high prevalence of risk factors. Within the Public Health Strategy for 2014-2020, substantial financial resources (from the European Social Fund and the state budget) are envisaged for health promotion and prevention activities, including health network development guidelines in the priority disease areas. However, actual financing increases for the sector lag behind the plans.

There has been some progress in increasing the efficiency of the healthcare system, but further steps are needed. A number of hospitals have been closed in recent years and simultaneous efforts have been made to move care out of hospitals to community settings. The World Bank (2016a) suggests a further rationalisation of the hospital sector. The implementation plan for financing system based on diagnosis-related groups (DGRs) was approved in 2015 for three years and six hospitals have already been providing information to the Ministry of Health. Moreover, further improving access to out-patient and primary care deserves a systemic approach.

The reform of the health care system has been progressing, but parts are still at the programming stage. The government has agreed to continue to pursue universal healthcare coverage and to increase healthcare spending to 12% of the general government expenditure, but no budgetary plans are set out yet. Quality of financial management will be increased by moving to strategic purchasing of services and relying more on DRG-based payment mechanisms. The detailed elements of the reform on infrastructure (including primary care), human resources development (including wages), strategic purchasing and quality monitoring system will be included in the national Policy Planning Document, which is supposed to be presented by April 2017.

([22]) Amenable mortality is mortality that, in theory, could be prevented by timely access to good-quality healthcare; preventable mortality concerns deaths which could have been avoided by preventive public health interventions.

The structural reform clause for healthcare is applied from 2017. Latvia has an allowance from its structural fiscal target for the structural reform in the healthcare sector of 0.5% of GDP in 2017-2019. In 2017, Latvia can use 0.1% of GDP of this allowance. The first measures of the package for 2017 include early diagnostics and treatment of oncology patients, improving treatment success and cost-effectiveness. These measures appear to have a positive effect on public financing in the medium-run, though the effect could be more clearly presented by the authorities. The remaining measures for 2017 are expected to be announced in February 2017.

The introduction of e-health is slow and poorly communicated. The mandatory use of e-prescriptions and e-sick leave certificates has been postponed to September 2017. The pilot phase was shorter than planned in 2016 and the medical professionals were not ready to subscribe to the product. According to the national authorities all services have been developed and work is ongoing to increase take-up ([23]). A centralised e-health system is one of the preconditions for ensuring quality and cost efficiency of the healthcare services. So far, quality and financial management systems are underutilised.

3.3.4. SOCIAL POLICIES

Although the poverty or social exclusion rate declined over recent years, relative poverty remains among the highest in the EU. The high poverty level is influenced by low spending on social protection and the low impact of social transfers on poverty reduction (see Section 1 on recent trends and Graph 1.4).

The social assistance system is weak and does not provide effective protection against poverty. The main social assistance benefit — guaranteed minimum income (GMI) — tops up income to reach EUR 50 per month per person and is usually

([23]) By 1 February 2017, NHS had concluded contracts for the use of the e-Health System with 84% of pharmacies, 16% of general practitioners, 29% of other medical institutions. Two e-health hotline have been set-up for citizens and professionals. In January 2017, an eHealth pilot testing working group of specialist was established to evaluate eHealth system functionalities.

supplemented by a housing benefit ([24]), but the level of the benefits vary considerably from municipality to municipality. Less than a third of people in need (defined as having monthly incomes below EUR 129) receive GMI or housing benefits ([25]). The GMI level has not been changed since 2009, and it was agreed to keep the level unchanged in 2017. Latvia spends little on social assistance as a percentage of GDP in comparison to other countries ([26]). Different studies have assessed Latvia's minimum income scheme as inadequate (European Commission, 2015a; Bradshaw & Marchal, 2015; World Bank, 2013).

The plans adopted in 2014 to reform social assistance will not be implemented as planned. In 2014, the government adopted a concept paper on the minimum income level to be set at 40 % of equalised household median income. Various benefits (state social security benefits, unemployment benefits, minimum pensions, social assistance benefits) would be linked to this level. Implementation was supposed to start from 2017, however, these plans have been abandoned while a replacement plan is in preparation, future orientation is uncertain ([27]). No budgetary allocation has been made to give any guarantee of implementation.

The absence of minimum income level reform negatively affects the poorest households. Assuming the minimum income level of EUR 155 in 2016, a EUROMOD simulation demonstrates a 21 % increase in disposable income for the poorest 10% of the population. This is estimated to cost 0.3 % of GDP, mostly for means-tested benefits and less for pensions. However, an increase in GMI to the minimum income level under the current income test system would create labour market disincentives. A simulation assuming GMI at 50 % of the minimum income level (EUR 78) combined with the benefit withdrawal by 50 % for any additional income caters for the labour incentives. However, disposable income gains for the poorest 10 % are lower at 7 % with fiscal costs of 0.1 % of GDP.

Social assistance for families has slightly improved. In January 2017, the Parliament adopted legislative amendments stipulating that the family state benefits ([28]) are excluded from the income test, increasing the amount and coverage of GMI benefit for families with children. Additionally, the collection and transparency of data about social assistance benefits has improved.

Inactivity traps affect only a small proportion of benefit recipients, but could increase with a rise in benefits. Currently, the GMI is reduced by one euro for every euro of additional income. This design of the benefit withdrawal contributes to an inactivity trap (World Bank 2016b), which can be limited by a more gradual withdrawal in view of a possible increase in generosity of social assistance. To smoothen the transition from social assistance benefits to work, from 2017 wage income up to the minimum wage is excluded from the means tests for the first three months of employment. While this would create an incentive to seek work, its effect is limited in time.

The elderly represent the age group that is most exposed to poverty. The at-risk-of poverty or social exclusion rate for the elderly stands at 42 % (among the highest in the EU and 11 percentage points (pps.) above the rate for the general population). The incomes of the elderly have increased at a slower pace than for the general population. Moreover, indicators measuring current pension adequacy ([29]) demonstrate that pensions in Latvia replace a lower proportion of income than in most other EU countries. The minimum pension as a percentage of median income is the lowest in the EU (European Commission; the Social Protection Committee, 2015). While the gender pension gap is relatively

([24]) The levels of housing benefit and GMI according to Ministry of Welfare data (Jan-Oct 2016), the average monthly housing benefit was 60 EUR per household or 13.56 EUR per person.
([25]) Ministry of Welfare data
([26]) Eurostat data on spending on social exclusion and housing benefits
([27]) A new plan for 2017-2020 is expected to be submitted to the government in the first quarter of 2017.
([28]) These are non-means-tested monthly benefits for children aged 1-15, or until 19 as long as they remain in full time education and unmarried.
([29]) The relative median income ratio (65+) is defined as the ratio of the median equivalised disposable income of people aged above 65 to the median equivalised disposable income of those aged below 65. The indicators stands at 0.71, while the EU average is 0.94 (2014). Aggregate replacement ratio is defined as the ratio of the median individual gross pensions of 65-74 age category relative to median individual gross earnings of 50-59 age category, excluding other social benefits. The ratio is 0.44 for Latvia and 0.56 for the EU.

low, the gender gap in old-age poverty is considerable — more than 15 pps. ([30]). This is mainly due to a high gender gap in life expectancy and the absence of survivors' pensions for spouses.

Latvia has taken some steps to address pension adequacy concerns. The parliament adopted legislative amendments, entering into force on 1 January 2016, to the Law on State Pensions stipulating that pensions will be indexed at 50 % of the growth of the national wage bill as opposed to 25 % previously. The amendments also envisage that the accrual of pension capital will be spread over the economic cycle, with retroactive effect, resulting in an upward revision of the pensions granted during the crisis (European Commission, 2016a). Pensions granted in 2010 have been revised upwards and pensions granted in 2011 will be subject to an upward revision in 2017 (see Section 3.1.4 on pension adequacy and long-term sustainability). Pensions granted from 2012–2015 will be revised in 2018.

Child poverty rates are above the EU average, but have been on a strongly downward trend. In 2017, additional support for foster families will be provided. The survivors' benefit for children will be increased, and the state family benefit for the fourth and subsequent children will be raised from EUR 34 to EUR 50 per month. On the negative side, a relatively high number of children were living in child care institutions (Opening Doors for Europe's Children, 2016).

The coverage of children under the age of four in childcare facilities is lower than the EU average. In 2014, only 22 % of all 0-3 year old children were enrolled in formal childcare, lower than the Barcelona targets of 33 % and below the EU average of 28 %. In May 2016, the central government stopped financing childcare vouchers for children without a place in public kindergartens, transferring the responsibility to ensure equal access to pre-school education back to the municipalities. Demand for childcare facilities exceeds supply in some locations and the provision of childcare vouchers is expected to continue. However, no data are available yet to assess the latest developments. Policies supporting gender equality are particularly relevant in the context of the increasing gender pay gap in Latvia.

The social protection of persons with disabilities is weak. While the employment and activity rates for persons with disabilities in Latvia are better than the EU average, the poverty rates are among the worst in Europe. 43 % of persons with disabilities are exposed to poverty or social exclusion, and the difference in poverty rates between people with and without disabilities is the second highest in the EU. The at-risk-of poverty or social exclusion rates for people with severe disability ([31]) are even higher — 51 %. Latvia spends only 1.2 % of GDP on disability related benefits (EU average 2 %) and the mean gross disability benefits as a percentage of the financial poverty threshold is 60 %, which is among the lowest in the EU (ANED, 2016). The number of people with disabilities has been increasing to a large extent due to the ageing population.

Poor people in particular struggle to get access to adequate housing. A high percentage of poor households live in overcrowded, poor quality housing (27.3 % v an EU average of 12.4 % in 2015) with children living in poverty being especially exposed (45.6 % v 18.0 % in the EU). Overcrowding rates are high, both for the poor and for the population in general (respectively, 49.4 % v 29.7 % EU and 39.1 % v 14.1 % EU average in 2015). Social housing only accounts for 0.4 % of the total housing stock.

([30]) At-risk-of-poverty and social exclusion rate for women is 47.3% vs 31.2% for men (aged 65+, 2015).

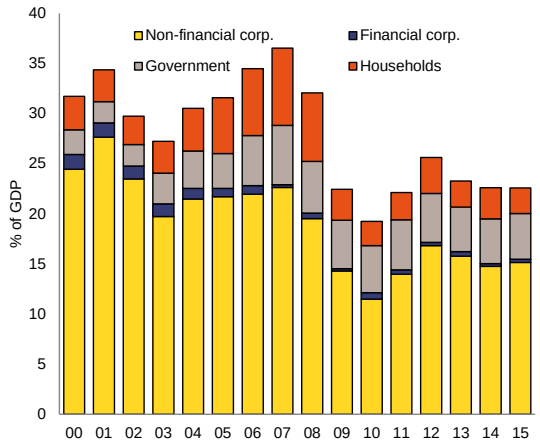
([31]) EU-SILC definition

3.4. INVESTMENT

3.4.1. INVESTMENT SITUATION

Private investment has not yet returned to its pre-crisis level. Non-financial corporations remain the main investors in Latvia, but their investments accounted for 15 % of GDP in 2015 against 24 % in 2000 (Graph 3.4.1). On the other hand, public investment has increased from 2 % of GDP in 2000 to 5 % in 2015. By assets, the main investments are in buildings (other than housing) and machinery and equipment which each account for around 40 % of investment.

Graph 3.4.1: **Investment by institutional sector as a share of GDP**

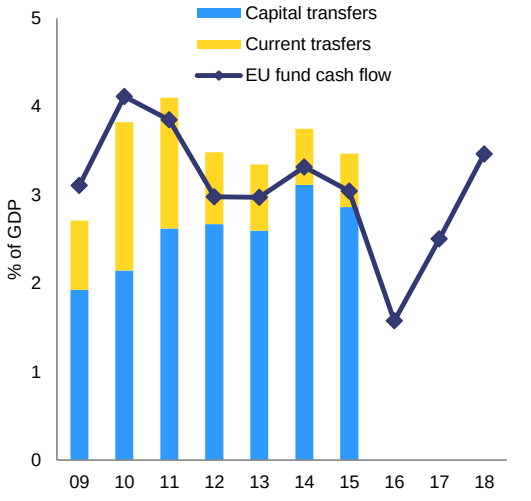


Source: Eurostat

Latvia relies heavily on EU funds for its investment. EUR 5.2 billion were allocated to Latvia over 2007-2013 and another EUR 5.6 billion over the 2014-2020 programme period. This amounts to approximately 70 % of the expected national public investment in areas supported by the funds (Box 2.1). These funds cover a wide range of policies, from infrastructure projects and business environment to social and environmental policies.

A slowdown in flow of EU funds has had a negative impact on investments in 2016. The transition to the 2014-2020 programme period resulted in a temporary slowdown in investment activity in 2016 (Graph 3.4.2). Other Members Sates have been also affected by this transition, but to a smaller extent. The new framework provision introduced new elements to make cohesion policy more effective (performance framework, ex-ante conditionalities, e-cohesion). The Latvian authorities put a lot of emphasis on preparing national implementing provisions, which took more time than initially envisaged. Moreover, measures to speed up the implementation as well as a strict monitoring system have been put in place. Between the beginning of 2016 and December, the amount of selected projects accelerated from 8.8 % to around 32 % of total costs over the period 2014-2020 (including the EU and national share) (Box 2.1).

Graph 3.4.2: **Implementation of EU funds**



Source: European Central Bank, Latvian Ministry of Finance

There are specific investment needs in the healthcare sector, in transport and energy infrastructures, as well as in research and innovation. These needs are discussed in Sections 3.3 and 3.5.

3.4.2. BUSINESS ENVIRONMENT

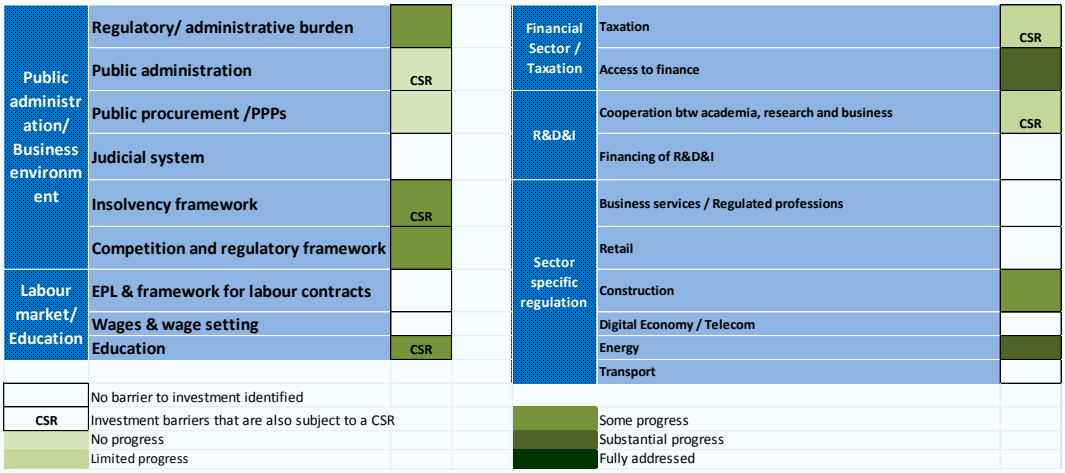
Latvia's business environment is quite favourable, but some weaknesses remain. Latvia is ranked 14 out of 190 in the latest World Bank Doing Business review (World Bank, 2017). Most Latvian sub-indicators are high in the ranking except for the rate of recovery of investment from insolvency cases (49 cents on a dollar compared to an OECD average of 73) and getting electricity.

Box 3.4.1: **Investment challenges and reforms in Latvia**

Section 1. Macroeconomic perspective

The high share of investment in GDP contributed to the economy catching up prior to 2007. However, a housing bubble was fuelled by the credit expansion. Following the crisis, investment has adjusted to a lower level, but is still above the EU average. Investment in equipment, non-residential construction and civil engineering still dominates. Since the crisis both households and corporations have engaged in a marked deleveraging process. The signs of a turnaround in the credit cycle in 2016 are encouraging for private investment prospects. However, an interruption of public and private investment flows (both reliant on the EU funding) implied a temporary drop in investment in 2016.

Section 2. Assessment of barriers to investment and ongoing reforms



In addition to macroeconomic constraints and external developments, Latvia's investment attractiveness is hampered by a number of domestic policy bottlenecks (European Commission, 2015e; 2016a). Reforms progress slowly and those implemented still have to demonstrate their effectiveness, in particular in the areas of research and innovation, and access to finance (see Sections 3.2, 3.5 and 3.6).

Main barriers to investment and priority actions underway

1. Despite efforts to introduce merit-based selection and transparency in decision-making, inefficiencies in public administration still persist and prevent needed far-reaching structural reforms. As a result, structural changes are gradual and interests of different groups are not adequately represented.

2. The insolvency proceedings are inefficient in sufficiently recovering assets and reviving businesses through restructuring. The system has been abused by the insolvency administrators in the past, but public oversight and ability to tackle insolvency related crimes have been strengthened recently (see Section 3.6). However, legal and implementation challenges still persist.

The shadow economy is a structural constraint on the development of the Latvian economy. It is estimated to be as high as 21 % of GDP (Sauka & Putniņš, 2016). Underreported business income, unregistered companies and envelope wages are widespread practices. These directly affect the development potential and borrowing capacity of such companies and households.

The integration of digital technology by Latvian businesses remains a challenge. Despite some progress compared to 2015, Latvia still scores among the lowest in the EU (European Commission, 2016b) ([32]). The take-up of digital technologies is still relatively slow. Only a minor fraction of Latvian SMEs are selling online (8.3 %, compared to 16 % in the EU) and an even smaller percentage of SMEs are engaged in cross border online sales (3.9 %, compared to 7.5 % in the EU).

Support for new innovative enterprises has been launched. A new support programme for start-ups was passed in November 2016, providing an option of fixed tax payments for employees or grants for highly qualified employees, as well as a corporate tax exemption. Support for individual start-ups is set to last for five years, which appears on the long side. The implementation details are still to be refined. Other support schemes for lifestyle businesses are expected.

There are specific issues related to productivity, skill shortages and mismatches, insolvency procedures, corruption and inefficiencies in public administration. These issues are discussed in Sections 3.3 and 3.6. Other noteworthy topics related to the business environment are the need for a more comprehensive assessment of the impact on small businesses of decisions taken by public authorities, missing national rules and procedures for companies to transfer their registered offices into and out of Latvia. On the positive side, there are improvements in the electronic tax declaration system.

([32]) Across indicators, Latvia ranks 19th among the EU Member States in the 2016 Digital Economy and Society Index.

3.5. SECTORAL POLICIES

3.5.1. ENERGY AND ENVIRONMENTAL ISSUES

Energy

Latvia has a high share of renewables in its energy mix, but remains dependent on imports of fossil fuels. The main renewable sources of energy are biomass and hydropower. Energy import dependency has decreased over time, but Latvia has been exclusively dependent on Russian natural gas supplies so far. The opening of the Klaipėda LNG terminal in Lithuania has provided a possible alternative for natural gas supplies from 2015. Electricity interconnections are being improved, but the weak points are the congestions on the Estonia-Latvia border and Latvia's internal power grid. Latvia is also among the top three Member States with the highest electricity market concentration (after Cyprus and Malta).

Security of supply and the development of a competitive regional energy market rely on electricity and gas interconnections strengthening domestic infrastructure and efficient use of resources. The Baltic Energy Market Integration Plan (BEMIP) aims at ending isolation of the Baltic states from the rest of the EU for the electricity and gas market. In 2015, the cooperation under the BEMIP was extended to renewable energy and energy efficiency. In 2016, Latvia hosted the first BEMIP meetings on renewable energy and energy efficiency financing. Modernisation of the Inčukalns underground gas storage facility, reinforcement of electricity and gas transmission systems ([33]),and synchronisation of the Baltic states' electricity grid with the European networks are among the priority actions. The related projects are included in the EU list of projects of common interest, and some of them already benefit from EU co-financing.

The opening of the gas market and separation of energy supply and generation is foreseen to be completed by end of 2017. Full opening of the gas market for competition is foreseen in April 2017. Regulated prices are to remain available for vulnerable consumers. The third party access to the Latvian gas infrastructure has already been ensured for natural gas transport and storage, but not for sales in Latvia. The vertically integrated gas company AS Latvijas Gaze is set to be fully unbundled by end of 2017.

The electricity market deregulation and tariff changes have created price fluctuations. Latvia phased-out regulated electricity prices for households in 2015. While facilitating investment and choice, the deregulation and the discontinuation of subsidies led to a sharp increase in household electricity prices by around 28 % in 2015 and a small decrease during the first half of 2016. According to data from the Nordic electricity exchange "Nord Pool Spot", wholesale electricity prices in Latvia since 2013 have experienced a sharp decline (-30 %), attributable to the introduction of new electricity transmission interconnections in Lithuania with Poland and Sweden ("NordBalt" and "LitPolLink"). For industries, electricity prices remained stable. However, in summer 2016, an electricity tariff reform introduced a fixed connection-capacity payment component, favouring consumers with constant use of their connection capacity.

Energy efficiency and support for renewable energy deserve attention. Latvia currently scores well in terms of its 2020 targets for energy consumption and renewable energy (see Annex A). However, the primary and final energy consumption levels may increase until 2020, in view of the projected economic growth, unless energy efficiency policies are implemented. Continued uncertainty of the renewable energy investment framework conditions and continued support to fossil fuel based co-generation increases the complexity and overall cost of such support and slows down renewable energy development, particularly in electricity sector.

Electricity feed-in tariffs carry a high cost for domestic consumers. Electricity generation from renewable energy sources and in efficient co-generation is supported by feed-in tariffs based on quotas on generation capacity. In 2016, around two thirds (59 %) of this support was given to the co-generation plants which use mainly imported natural gas. In 2015, the share of renewable energy and co-generation support in national prices in Latvia was the fifth highest in the EU for households and the fourth highest for industry.

([33]) The key electricity connection projects include the construction of the line between Riga Combined Heat and Power Plant (Riga CHP 2) and Riga Hydro Power Plant (Riga HPP) by 2018 and the completion of the Ventspils-Tume-Imanta line by 2019.

Gradual cost reduction for this support is expected to be introduced as of 2019.

Balancing support for electricity generation and costs for consumers has been difficult. From 2014, over-subsidisation of the electricity generators and the electricity price impact for the final consumers is limited through a tax on subsidised electricity generators. The support scheme is closed for new entrants since 2011. Moreover, the feed-in tariff component in electricity bills is kept stable compensating the additional costs from the state budget. In November 2016, a fixed connection-capacity payment was also introduced for this tariff component. It will enter into force on 1 January 2018. The government expects that it could result in a reduction of this tariff component payment for households and companies with effective use of connected electricity capacity. Part of the support costs is covered by dividend payments of the state-owned energy company Latvenergo which is also a major beneficiary of the scheme. A dialogue between the European Commission and the Latvian authorities on past and existing support framework for renewable and fossil electricity generators is ongoing ([34]).

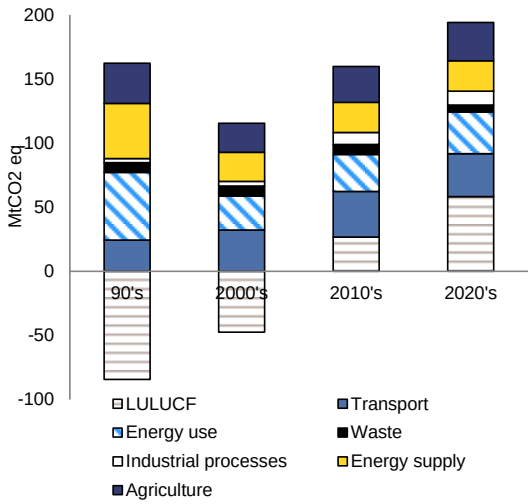
Environmental policy areas

Recycling is low and most of the waste is landfilled, falling short of the EU requirements. Latvians generate less municipal waste than the average European, but most of it is still disposed of in landfills. With the municipal waste recycling rate at 27 % and landfilling rate at 68 % in 2015 ([35]), Latvia is at risk of not meeting its 2020 targets of 50 % for recycling and 75 % for diversion of biodegradable waste from landfills.

Incentives for a better waste management and investment are provided. The tax on municipal waste landfill is set to increase to EUR 25 per tonne in 2017 and to EUR 50 by 2020 incentivising a better waste management and timely investment in recycling capacity. However, in order to ensure that waste is not simply shifted from landfill to incineration, the study on environmental fiscal reforms suggests introducing a tax on incineration and mechanical biological treatment of up to EUR 15 per tonne (Eunomia Research & Consulting, 2016). This would provide economic incentives for waste management focused on the upper tiers of the waste hierarchy, including recycling.

Latvia is on track to meet its 2020 target of greenhouse gas (GHG) emissions reduction outside the EU emissions trading system (ETS) by a 10 percentage points margin. Emissions outside the ETS are expected to increase by 7 % between 2005 and 2020 whereas the forecast was 17 %. In 2015, such emissions accounted for 80 % of Latvia's total GHG emissions. Half of this total is due to the transport and agriculture sectors whose emissions are increasing ([36]). In addition, land use, land use change and forestry (LULUCF) is projected to become the most important GHG emitter in the coming years (Graph 3.5.1).

Graph 3.5.1: **Greenhouse gas emissions**



(1) GHG inventory and proxy inventory data
Source: EEA, European Commission

CO2 emissions from new cars are among the highest in the EU. Transport vehicle registration tax is linked to CO2 emissions, but has a limited effect on consumers. In 2015, new cars in Latvia (and Estonia) had the highest CO2 emissions per kilometre in the EU — 137g CO2/km, against an EU average of 119.6 g CO2/km (European Environment Agency, 2016).

([34]) Part of the state aid case SA.43140 (2015/NN) - Subsidised Energy Tax and RES and CHP.

([35]) http://ec.europa.eu/eurostat/web/waste/transboundary-waste-shipments/key-waste-streams/municipal-waste

([36]) GHG in agriculture sector increased by 3.3 % while in transport sector – by 4.3 % (United Nations, 2016).

Opportunities for energy efficiency measures in the residential sector have been made available. Energy efficiency financing instruments measures for multi-apartment buildings are becoming more available for inhabitants. The framework for energy performance contracting both for residential and for public buildings is being developed, which is expected to boost the energy services market in Latvia. Smart electricity meters were introduced in 2014. Their share is expected to increase significantly from 12 % in 2015 to 80 % by 2020 and 100 % by 2023. Achieving further energy savings in the residential sector is an important investment priority under the European Structural and Investment Funds financing period for 2014-2020, as only some 3 % of apartment buildings have been renovated in 2009-2013.

The legal framework for energy efficiency policies is about to be completed. In March 2016, the Parliament adopted the Energy Efficiency Law — a key legislative act to transpose Directive 2012/27/EU on energy efficiency. Even though the majority of the provisions have been transposed into national law, some provisions of the Energy Efficiency Directive (e.g. the Energy Efficiency Obligation scheme) remain to be transposed through government regulations so that it can start delivering savings. In addition, the implementation of the Energy Performance of Buildings Directive should also be completed, to promote more frequent use of energy performance certificates for existing buildings, including raising awareness about energy performance certificates.

3.5.2. TRANSPORT INFRASTRUCTURE

Road safety remains poor. Although Latvia is no longer the worst performing EU Member State, it remains among the three countries with one of the highest fatality rate in the EU (94 deaths per million inhabitants in 2015, against the EU average of 51.5). The national road safety plan (EUR 25 million over 2014-2016) aims at a 50 % reduction in road fatalities between 2010 and 2020.

Road investments rely almost exclusively on European funds. Significant investments have been programmed for 2014-2020 (EUR 454 million) aiming at improving the network, reducing the percentage of roads in a bad and a very bad condition. Implementation is progressing. Nevertheless funding for road maintenance and reconstruction from the state budget is insufficient to improve the currently low quality of the network (EUR 145 million available in 2016 from the state budget).

The Rail Baltica project relies on the commitment of the three countries. By 2025, a new high-speed railway line should connect the Baltic states to the trans-European network for both freight and passenger transport. Central coordination of the project is entrusted to a joint venture — RB Rail AS — with equal participation of each Baltic state. Nevertheless, balancing financial and organisational interests of the parties has taken time and increased the complexity of project management. The agreed division of responsibilities and the key deadlines will be laid down in an intergovernmental agreement between the three Baltic countries. Ratification of this agreement would ensure a long-term commitment and the smooth implementation of the project.

The railway electrification project faces significant delays. The estimated cost of the railway electrification project has tripled (from EUR 450 million according to the initial studies to EUR 1.5 billion according to the latest Design study). The available funding is insufficient to electrify all TEN-T railway tracks in Latvia (998 km) as initially planned and the scope of the project is to be redefined ([37]). EUR 347 million from the Cohesion Fund are dedicated to this project over the 2014-2020 programming period.

3.5.3. RESEARCH AND INNOVATION

Latvia's innovation performance has slightly improved. The country moved up from the group of 'modest innovators' (<50 % of EU average) to the group of 'moderate innovators' (50-90 % of EU average) (European Commission, 2016c). However, Latvia's business R&D intensity remains one of the lowest in the EU and cooperation between science and business remains

([37]) A first stage of electrification (Daugavpils – Krustpils – Rīga and Rēzekne – Krustpils – Rīga) is under preparation for 2019-2023 following the approval on 17 January 2017 by the Cabinet of Ministers of the report on the cost-benefit analysis and project implementation alternatives of the major project "Electrification of the Latvian Railway TEN-T Network".

low. Latvia's research and innovation system strongly depends on support from EU funds.

The implementation of Latvia's research and innovation strategy for smart specialisation (RIS3) is progressing. It is supported by a re-launched entrepreneurial discovery process (11 thematic sectoral councils). The implementation of RIS3 is monitored by the strategic innovation council. The first monitoring report of RIS3 in Latvia is expected in June 2017.

Most public investment in research and innovation is supported by EU funds. Research and innovation financed by the EU funds has encountered some delays under the new programming period 2014-2020. Authorities are putting measures in place to increase the quality of investments, such as *ex ante* assessments and analysis of eco-systems of each priority of smart specialisation as well as involvement of foreign experts in the assessment of some project proposals. Latvia is also putting in place measures to increase its success rate in Horizon 2020 calls.

Public research suffers from underfunding, fragmentation and low internationalisation. Reforms to consolidate research institutions are ongoing ([38]). New rules for the allocations of both project funding (with international standards of peer review) and institutional funding (with elements of performance-based funding) were introduced. However, public research funding remains fragmented and regulations for the assessment of projects are complex. At the request of the Latvian authorities, a *specific support* under the European Commission's Horizon 2020 policy support facility ([39]) has been launched to develop concrete recommendations in this area including governance and organisational aspects.

Business investment in research and innovation remains low in international comparison. Over the last eight years Latvia had a positive growth of business R&D investment of about 4.8 % per year. However, in 2015, business investment in R&D declined to 0.15 % of GDP (from 0.24 % in 2014). Overall, business investment in R&D remains among the lowest in the EU. The take-up of R&D tax incentives is increasing, though in absolute terms the amounts are still limited.

The sectoral distribution of SME's is not conducive to innovation. SMEs are, to a large extent, concentrated in sectors with low and medium-low research intensity, such as metal processing and machinery, wood products and food processing (82 %). There is however a growing eco-system of hi-tech start-ups, supported by conferences, accelerator funds, a new start-up association and cross-border experience sharing.

([38]) In 2016 the Ministry of Education and Science decreased the number of research institutions receiving basic funding from 44 to 21.

([39]) https://rio.jrc.ec.europa.eu/en/policy-support-facility

3.6. PUBLIC ADMINISTRATION

3.6.1. PUBLIC SECTOR EMPLOYMENT

Inefficiency in the public administration weighs on the business environment. The size of the public administration has decreased since 2008 in absolute terms (from 211 000 in 2008 to 176 115 in 2015) and relative terms (from 9.6 % to 8.9 % of the population), notably in the central administration ([40]). Efficiency gains in the municipal sector or municipal enterprises have been limited. *Ex post* assessment of the last regional reform, intended to increase economies of scale, shows little decrease in staff and comparatively large administrative expenditures, especially in smaller municipalities (Ministry of Environment and Regional Affairs, 2013). Weaknesses in regulatory quality and government effectiveness are illustrated by business survey results. The Global Competitiveness report notes favouritism in decisions of government officials, low public trust in politicians, wastefulness of government spending, low efficiency of the legal framework in settling disputes and in challenging regulations (World Economic Forum, 2016). According to World Bank Worldwide Governance Indicators, Latvia lags behind its peers (such as Estonia) as well as the average OECD results in terms of regulatory quality, control of corruption and the rule of law ([41]).

The comparatively low pay in the public sector harms recruitment. Low pay and limited performance-rewarding elements (bonuses) make attracting and retaining talent, especially from the private sector and international organisations, challenging in Latvia's public sector. Managers and experts in public administration receive around 50 % lower pay than their private sector peers (Fontes, 2016), while the stated policy objective is 80 % of private sector pay. There are notable skills shortages in ICT, audit and project management.

Progress in public administration reform has been limited. The State Chancellery has been preparing reform plans, but no reform tools were introduced in 2016. The stated reform objective is to achieve an effective, accessible, innovative, professional and result-oriented administration. However, few decisions have been agreed to drive the reform forward.

Accountability of the public administration is low due to weak prevention of conflicts of interest, corruption (section 3.6.4), and a fragmented legal basis for public employment. The draft Civil Service Law to unify public officials and other public sector employees under a common legal framework has been under consideration by the parliament since 2015. The draft law is expected to be reviewed in the light of the planned public sector reform.

Proposals for a leaner and more professional public sector were tabled in 2016. The intention is to simplify the structure of public administration by evaluating and possibly merging smaller institutions, unifying related service functions, and creating shared public service centres. Effectiveness audits and process reengineering is considered for each and every institution to save at least 1 % per year. The reform will also aim to introduce more variable performance indicators and linkages between results and remuneration. Top managers will be given more flexibility on staff and reinvestment of savings generated through efficiency gains. Attracting the top level Latvian-born experts from international institutions is also considered. Finally, there will be increased transparency — all salaries before tax of all public sector employees will be accessible online.

Local municipalities are looking for efficiency gains, but no comprehensive reform of their finances or staff policies is planned. Local authorities employ a large share of public sector employees (almost 60 %, according to the Central Statistical Office). While they are responsible for an increasing share of public functions (social services, social assistance, owner of schools and hospitals, transport and mobility services) and budgetary resources, in practice they are not subject to sufficient scrutiny. According to a forthcoming report commissioned by the Union of Local and Regional Governments, municipalities have considerable leeway in managing the expenditures of their budgets while outcome and programme-based budgeting is rare (Public Administration Consultancy, 2017). Municipalities could achieve significant efficiency gains by increasing transparency and modernising their budgeting procedures.

([40]) Numbers include a large share of those employed in education and health sectors.
([41]) www.govindicators.org

Latvia has further improved its e-government services. Recently, Latvia has further improved its digital public services. It increased the availability of complete services online and improved the sophistication of such services. It now ranks 14th among EU countries in the Digital Economy and Society Index 2016 (European Commission, 2016b), scoring above the EU average. The number of active e-government users also increased further to 36 %, surpassing the EU average (32 %).

3.6.2. THE JUSTICE SYSTEM

Quality and independence of the justice system show room for improvement. Weaknesses remain on the quality of legal aid in consumer disputes, training of judges and criteria for determining the financial resources for the judiciary, which appear to be predominately based on historic and realised costs (European Commission, 2017). On the independence of the judiciary, the amendment to the law of judicial power tabled in 2015 which aim at strengthening the powers of the Council for the Judiciary has not yet been adopted by the parliament.

3.6.3. PUBLIC PROCUREMENT

The efficiency of public procurement procedures is low. Most public contracts (67 %) continue to be awarded based on the lowest price criterion (compared to an EEA average of 64 %). It is noteworthy that fewer operators on the Latvian market (39 % compared to an EU average of 45 %) point out that the overall contract value is too large and therefore prevents them from participating in tenders. Nevertheless, 64 % of those companies consider that the 'lowest price' awards are an obstacle for public contracts. The lowest price criterion in practice often leads to price dumping, tax evasion, sub-standard goods or services rendered and renegotiations of contracts mid-term. The share of awarded contracts following only one bidder participation in the tender procedure was 31 % in 2016 (compared with an EEA average of 15 %). Together with the fact that Latvian authorities frequently use negotiated procedures without prior publication of a contract notice (12 %, compared to an EEA average of 4 %), this results in a limited scope of competition for public contracts. Contrary to its obligations under the EU Treaty, Latvia failed to transpose by 18 April 2016 any of the three new EU public procurement directives adopted in 2014, while further step have been taken since then. This situation creates legal uncertainty for investments in the public sector, including for big infrastructure projects co-financed by the European Structural and Investment Funds. The absence of alignment of Latvia's procurement legislation would further delay the investment rollout.

Using e-procurement platforms is still not obligatory. Although companies in Latvia are generally satisfied with the quality of the existing e-procurement services (37 % of companies complain about a low quality of services compared to the EU average of 40 %), the broader range of e-procurement platforms has not yet been introduced in a mandatory manner. This would have reduced the administrative burden and would have helped achieving greater transparency and savings for both the administration and the economic players participating in tender procedures. In this context it should be taken into consideration that 63 % of companies operating on the Latvian market consider possible collusion and bid rigging as an obstacle for their participation in tender procedures.

The use of central purchasing for local authorities and innovation-oriented procurement are low. The amendments to the national public procurement rules in 2013 aimed to expand central purchasing for local authorities by making it compulsory, but results so far are limited. Data from Tenders Electronic Daily show that the Latvian contracting authorities make recourse to centralised purchasing only rarely (in 4 % of the tender procedures, compared to an EU average of 8 %). However, aggregated purchasing at demand level not only leads to better prices but more importantly to better quality thanks to economies of scale, expertise, human resources and know-how. Public procurement for innovation and other demand-led policy instruments is largely absent in Latvia. Government procurement of advanced technology products in Latvia takes 98th place in the total evaluation of 138 countries (World Economic Forum, 2016).

Further efficiency gains could be achieved in the healthcare sector. One of the sectors where e-

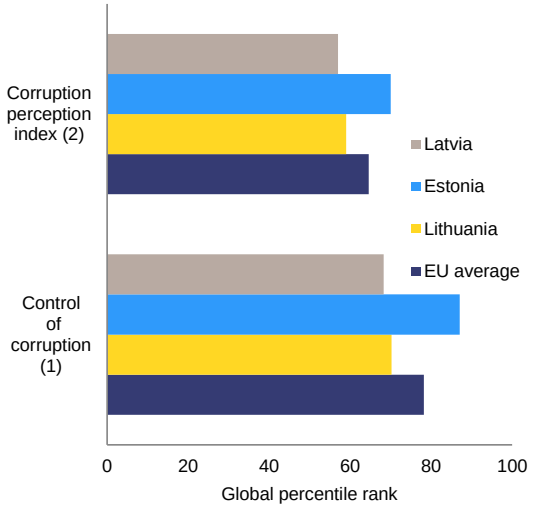
procurement and central purchasing could contribute most to enhance the transparency of public contracts and efficiency of public spending is the healthcare sector. Although the Latvian authorities tend to make regular recourse to public procurement procedures for purchases made in the healthcare sector, there is still room for improvement in terms of competition and increasing professionalism. In 2012-2015, in 38 % of all contract award notices in the healthcare sector published in Tenders Electronic Daily, only one bid had been received. This results in limited competition. Furthermore, the Latvian authorities rarely make use of award criteria other than the lowest price. Moreover, smart use of public procurement is known to be an important trigger for innovation. Although not all types of purchases are suitable for aggregation, the excessively low aggregation rates in the healthcare sector imply lost opportunities. The identified challenges of formalistic compliance and rigidity of the system already highlighted previously remain a concern.

3.6.4. CORRUPTION

Corruption remains a challenge for Latvia. The World Bank governance indicators ranked Latvia 20th in the EU for control of corruption in 2015, with a score of 68/100 (EU average 78/100). The World Economic Forum Global Competitiveness Report 2016-2017 (World Economic Forum, 2016) ranked Latvia 99th out of 138 countries on favouritism in decisions of government officials. The formalistic compliance and rigidity of the conflict of interest regime for public officials remains a challenge. Public procurement remains subject to corruption risks, particularly at the local level. The State Audit Office confirmed in their 2015 report (The State Audit Office of the Republic of Latvia, 2015) and subsequently discussed the persistence of these challenges, and called for more effective verification of declarations submitted by officials.

The reputation and efficiency of the Corruption Prevention and Combating Bureau (KNAB) has deteriorated. Longstanding infighting at the KNAB has continued to weaken the Bureau and to dent public trust. Official statistics between 2011 and 2013 indicate a steady increase in the number of bribery cases being handled in the criminal justice system, which is also reflected in the number of people convicted ([42]). However, few high level cases reach the courts. Prominent investigations have focused on the financing of political parties, but do not appear to have a deterrent effect.

Graph 3.6.1: **Corruption perception**



(1) Worldwide Governance Indicators 2015. Kaufmann et al. (2010)
(2) Corruption perception index 2016. Transparency international (2017)
Source: Worldwide Governance Indicators project and Transparency international

More independence and powers have been granted to the director of the KNAB, but the post remains vacant. In March 2016, the parliament adopted amendments to make the KNAB more independent and strengthen its director whose performance will no longer be assessed and who can now dismiss subordinates more easily. There are also new arrangements for dismissing the director and revoking unlawful decisions. Following expiry of the previous director's mandate at the end of 2016, no new director has been selected. The first selection procedure ended without a result and no new competition is announced.

Initiatives improving ethics and conduct of public officials proceed slowly. Work continues on a draft whistleblower law that was due by the

([42]) 110 opened investigations in 2011, 132 in 2012, 158 in 2013, and 263 in 2014. There were 39 convictions in 2011, 51 in 2012, 82 in 2013, and 120 in 2014.

end of 2015. The State Chancellery is also drafting a single ethics code for public servants.

3.6.5. INSOLVENCY

Insolvency procedures remain inefficient, there are few restructuring cases and the recovery rate of assets is below that of peer countries. Latvia ranks 20th among the EU Member States when it comes to the effectiveness of its insolvency proceedings. Although the insolvency procedure in Latvia on average takes 1.5 years (2 years on average in the EU), the recovery rate is low (49.1 %) and the cost of procedure amounts to 10 % of the insolvency estate (World Bank, 2017). In 2016 (until end of September), around 1 200 cases of personal insolvency were completed and around 750 cases for legal persons. Moreover, there were 4 successful business restructuring cases out of 90 initiated.

The legal framework for supervision of insolvency administrators has been completed. As of 1 September 2016 all insolvency practitioners became public officials, subject to declaring their income and complying with conflict of interest prevention requirements. This is supposed to increase their transparency and accountability. Moreover, legislative amendments were adopted in December 2016 strengthening public oversight of insolvency administrators. This includes moving from self-certification to state certification, increasing disciplinary penalties for negligence and fraud, and increasing the responsibility of supervisors of legal protection proceedings. Further improvements of the insolvency regime were set out in the strategy for 2016-2020 adopted by the government in September 2016.

The effective public oversight of the insolvency proceedings remains to be seen. The new legal powers are shared among the several public intuitions. Prevention of conflict of interest has it weaknesses as discussed above. Random electronic distribution of cases among insolvency administrators is set up and control measures are launched, but they seem to concentrate on formal compliance. Detecting and preventing malpractice by insolvent companies, individuals and creditors acting in bad faith is still a challenge. Institutions investigating economic crimes play a role in early detection of abuse of the insolvency regime and their capacity is being expanded.

3.6.6. STATE-OWNED ENTERPRISES

State-owned enterprises (SOEs) play a major role in Latvia's economy, especially in the transport, energy, communications forestry and health care sectors. SOEs — with EUR 8,2 billion in assets, EUR 3,4 billion in annual turnover, EUR 164,4 million in profits and 52 200 employees in 2015 accounted for 5.4 % of total employment and 18 % of GDP. (Pārresoru koordinācijas centrs, 2016). An initial ambition to create a centralised, holding-style structure back in 2011 has been watered down, and currently, a de-centralised system where line ministries retain the final say, with some coordination and evaluation functions at the central government level, has been put into practice. Municipal enterprises as well as port authorities ([43]) have been exempt from the new framework. The Cross-Sectorial Coordination Centre is providing consultancy functions to municipalities on an *ad hoc* basis.

Governance of SOEs in Latvia has a poor track record; therefore, restoration of public trust goes hand in hand with more transparency, accountability and public oversight. Latvia's longstanding problem has been the politicisation of Supervisory Councils (which were abolished in 2009), and the Management Boards of SOEs. The recent political appointments of new board members of port authorities, exempt from the unified governance framework, does not help to restore public trust.

Improvement of SOE management is part of Latvia's international obligations. It was one of the last stumbling blocks before Latvia's accession to the OECD in June 2016. The Corporate Governance Committee at the OECD issued a positive report on Latvia's compliance with OECD principles in April 2016. However, the OECD is closely monitoring how the new nomination and appointment procedures of Supervisory Councils work in practice under the post-accession surveillance process.

([43]) Port authorities are part of public administration legally, but they operate as commercial enterprises.

Re-establishment of Supervisory Councils has been completed. As a condition of accession, Latvia and the OECD agreed on a schedule during 2016 for creating Supervisory Councils for the 12 larger SOEs. By the end of December 2016, all 12 Councils were established. It remains to be monitored how the new arrangements help strategic planning, improve transparency and quality of management, as well as increase return on equity.

ANNEX A

Overview Table

Commitments	Summary assessment ([44])
2016 Country-specific recommendations (CSRs)	
CSR 1: Ensure that the deviation from the adjustment path towards the medium-term budgetary objective in 2016 and 2017 is limited to the allowance linked to the systemic pension reform and the major structural reform in the healthcare sector. Reduce the tax wedge for low-income earners by exploiting a growth-friendly tax shift towards environmental and property taxes and improving tax compliance. • Ensure that the deviation from the adjustment path towards the medium-term budgetary objective in 2016 and 2017 is limited to the allowance linked to the systemic pension reform and the major structural reform in the healthcare sector.	Latvia has made **limited progress** in addressing CSR 1 (this overall assessment of CSR1 does not include an assessment of compliance with the Stability and Growth Pact): The compliance assessment with the Stability and Growth Pact will be included in spring when final data for 2016 will be available.
• Reduce the tax wedge for low-income earners by exploiting a growth-friendly tax shift towards environmental and property taxes...	• **Limited progress** has been made in shifting the tax burden away from low-wage earners. Adopted measures have a limited effect. The tax wedge on low-wage earners remains high, while there is a scope to shift taxation to consumption, property and capital.
• …and improving tax compliance.	• **Some progress** has been made in improving tax compliance. A number of small measures have been introduced. The increased tax revenue relative to the tax

([44]) The following categories are used to assess progress in implementing the 2016 country-specific recommendations:
No progress: The Member State has not credibly announced nor adopted any measures to address the CSR. Below a number of non-exhaustive typical situations that could be covered under this, to be interpreted on a case by case basis taking into account country-specific conditions:
• no legal, administrative, or budgetary measures have been announced in the National Reform Programme or in other official communication to the national Parliament / relevant parliamentary committees, the European Commission, or announced in public (e.g. in a press statement, information on government's website);
• no non-legislative acts have been presented by the governing or legislator body;
• the Member State has taken initial steps in addressing the CSR, such as commissioning a study or setting up a study group to analyse possible measures that would need to be taken (unless the CSR explicitly asks for orientations or exploratory actions), while clearly-specified measure(s) to address the CSR has not been proposed.
Limited progress: The Member State has:
• announced certain measures but these only address the CSR to a limited extent;
and/or
• presented legislative acts in the governing or legislator body but these have not been adopted yet and substantial non-legislative further work is needed before the CSR will be implemented;
• presented non-legislative acts, yet with no further follow-up in terms of implementation which is needed to address the CSR.
Some progress: The Member State has adopted measures that partly address the CSR
and/or
the Member State has adopted measures that address the CSR, but a fair amount of work is still needed to fully address the CSR as only a few of the adopted measures have been implemented. For instance: adopted by national parliament; by ministerial decision; but no implementing decisions are in place.
Substantial progress: The Member State has adopted measures that go a long way in addressing the CSR and most of which have been implemented.
Full implementation: The Member State has implemented all measures needed to address the CSR appropriately.

	base demonstrates a better collection.
CSR 2: Improve the adequacy of social assistance benefits and step up measures supporting recipients in finding and retaining work, including through increased coverage of activation measures. Speed up the curricula reform in vocational education, establish — with the involvement of social partners — a regulatory framework for work-based learning and increase their offer. Improve the accessibility, quality and cost-effectiveness of the healthcare system.	Latvia has made **limited progress** in addressing CSR 2:
• Improve the adequacy of social assistance benefits…	• **Limited progress** has been made in improving adequacy of social assistance benefits. The key reform of the minimum income level was not implemented as planned in 2017 and future plans are uncertain. The family state benefit has been excluded from the means test to qualify for social assistance with a limited improvement in benefit adequacy.
• …and step up measures supporting recipients in finding and retaining work, including through increased coverage of activation measures.	• **Some progress** has been made in supporting social assistance recipients in finding and retaining work. The EU financed programmes have picked up in 2016 after a dip in 2015. Measures for vulnerable groups are expanded, but regional mobility support is not fully utilised. To encourage taking up employment, income up to the minimum wage is excluded from the means test for the social assistance for three months from start of employment.
• Speed up the curricula reform in vocational education, establish — with the involvement of social partners — a regulatory framework for work-based learning and increase their offer.	• **Some progress** has been made in improving vocational education. The regulatory framework for work-based learning and on development of VET programmes is established. Limited progress has been made on curricula reform in 2016, which is to be finalised in 2021.
• Improve the accessibility, quality and cost-effectiveness of the healthcare system.	• **Limited progress** has been made. The current structure of the system, with high out-of-pocket and informal payments, still leaves much of the population with unmet healthcare needs. There is some increase in public funding in 2017, but no medium-term financing plans have been adopted yet. The implementation of e-health

	services is delayed.
CSR 3: Pursue the consolidation of research institutions and provide incentives for private investment in innovation. Strengthen the conflict of interest prevention regime and set up a common legal framework for all public employees. Increase the accountability and public oversight of insolvency administrators.	Latvia has made **some progress** in addressing CSR 3:
• Pursue the consolidation of research institutions and provide incentives for private investment in innovation.	• **Some progress** has been made in the consolidation of research institutions and in private innovation incentives. The consolidation of research institutions is ongoing. Business investment in R&D has slightly declined and remains low in international comparison.
• Strengthen the conflict of interest prevention regime and set up a common legal framework for all public employees.	• **Limited progress** has been made in strengthening the conflict of interest prevention regime. The legislative framework has been further developed by granting more independence of the director of the corruption prevention office and by an expert-based selection process of the director, but there is political reluctance to apply this framework. The draft Public Service Law has not progressed and will be reviewed in light of the upcoming public service reform.
• Increase the accountability and public oversight of insolvency administrators.	• **Some progress** has been made in increasing the accountability and public oversight of insolvency administrators. Legal framework and tools for supervision of insolvency administrators have been put in place. The capacity of the state police is gradually increased for preventing criminal offences related to insolvency.
Europe 2020 (national targets and progress)	
Employment rate: 73%	The employment rate (for the age group 20-64 year old) has reached the target in Q3-2016 (73.1 %). The employment rate is expected to grow further partly offsetting the impact of the decline in working age population on employment.
R&D: 1.5 % of GDP	R&D expenditure was 0.71 % of GDP in 2015. Latvia is not on track to meet the target.

Greenhouse gas emissions: increase by 17% between 2005 and 2020 (in non-ETS sectors)	According to the latest national projections and taking into account existing measures, the target is expected to be achieved: 7% in 2020 compared to 2005. Furthermore, while the target for 2015 was an increase of no more than 11.6% compared to 2005, the preliminary figures show that the non-ETS emissions actually decreased by 9%.
Renewable energy target: 40% Renewable energy in all modes of transport: 10%	In 2015, Latvia's share of renewable energy reached 39.2%, just 0.8% short of the 2020 target ([45]). The share of renewables in transport at 3.2% in 2014 is below the target and with no progress since 2010.
Energy efficiency: 5.4 Mtoe expressed in primary energy consumption (4.5 Mtoe expressed in final energy consumption)	In 2015, Latvia reduced its primary energy consumption by – 1,8% from 4.36 Mtoe in 2014 to 4.28 Mtoe in 2015. Final energy consumption also decreased by 2% from 3.9 Mtoe in 2014 to 3.8 Mtoe in 2015 showing a positive trend. Even if Latvia has already achieved the levels of primary and final energy consumption which are below the indicative national 2020 targets, it would need to make an effort to keep these levels until 2020.
Early school leaving: 10%	The early school leaving rate is at the target in 2015, but has increased with respect to 2014 from 8.5 % to 9.9 %. In addition, this rate is higher for boys (13.4 %) than for girls (6.2 %).
Tertiary education: 34-36%	The tertiary attainment rate was 41.3 % in 2015, i.e. exceeded the target. Gender disparities are however strong: 26.8 % for men and 56.5 % for women.
Poverty/social exclusion: reduction of the number of people at risk of poverty and/or living in jobless households by 121 000 compared to 2008.	The number of people living at risk of poverty and/or living in jobless households has been reduced by 108 000 compared to 2008. Latvia has not yet met its poverty target.

([45]) Renewable energy shares for 2015 are approximations and not official data, reflecting the available data (04.10.2016). See the Öko-Institut Report: Study on Technical Assistance in Realisation of the 2016 Report on Renewable Energy, http://ec.europa.eu/energy/en/studies

ANNEX B
MIP Scoreboard

Table B.1: **The MIP Scoreboard for Latvia**

			Thresholds	2010	2011	2012	2013	2014	2015
External imbalances and competitiveness	Current account balance, (% of GDP)	3 year average	-4%/6%	-0.8	2.2	-1.6	-3.2	-2.8	-1.8
	Net international investment position (% of GDP)		-35%	-82.9	-74.6	-67.4	-66.4	-64.3	-62.5
	Real effective exchange rate - 42 trading partners, HICP deflator	3 years % change	±5% & ±11%	6.7	-2.5	-8.6	-1.7	0.2	3.1
	Export market share - % of world exports	5 years % change	-6%	22.0	27.1	8.7	6.6	9.4	10.5
	Nominal unit labour cost index (2010=100)	3 years % change	9% & 12%	-2.3	-21.0	-6.9	7.8	15.6	16.0
Internal imbalances	Deflated house prices (% y-o-y change)		6%	-8.7	4.0	-0.4	6.6	4.2	-2.7
	Private sector credit flow as % of GDP, consolidated		14%	2.5	-2.0	-2.1	0.9	-11.8	0.7
	Private sector debt as % of GDP, consolidated		133%	134.0	115.5	98.1	92.7	96.3	88.8
	General government sector debt as % of GDP		60%	47.4	42.8	41.3	39.0	40.7	36.3
	Unemployment rate	3 year average	10%	14.9	17.7	16.9	14.4	12.6	10.9
	Total financial sector liabilities (% y-o-y change)		16.5%	-0.3	-4.1	5.2	5.2	10.4	12.2
New employment indicators	Activity rate - % of total population aged 15-64 (3 years change in p.p)		-0.2%	0.4	-1.4	0.9	1.0	1.8	1.3
	Long-term unemployment rate - % of active population aged 15-74 (3 years change in p.p)		0.5%	7.2	6.9	3.3	-3.1	-4.2	-3.3
	Youth unemployment rate - % of active population aged 15-24 (3 years change in p.p)		2%	25.6	17.4	-4.8	-13.0	-11.4	-12.2

(1) House price index: e = Eurostat estimates.

Source: European Commission, Eurostat and Directorate General for Economic and Financial Affairs (for real effective exchange rate), and International Monetary Fund

ANNEX C
Standard Tables

Table C.1:

	2011	2012	2013	2014	2015	2016
Total assets of the banking sector (% of GDP)	145.4	128.7	128.2	130.7	131.1	120.1
Share of assets of the five largest banks (% of total assets)	59.6	64.1	64.1	63.6	64.5	-
Foreign ownership of banking system (% of total assets)	64.1	62.3	59.7	24.9	22.2	-
Financial soundness indicators:[1)]						
- non-performing loans (% of total loans)	10.1	7.9	5.6	7.7	5.1	4.4
- capital adequacy ratio (%)	16.5	16.7	18.0	20.2	21.8	18.4
- return on equity (%)[2)]	4.5	4.9	8.8	10.2	10.7	9.3
Bank loans to the private sector (year-on-year % change)	-6.3	-0.4	-2.0	-4.5	-0.1	6.2
Lending for house purchase (year-on-year % change)	-6.3	-4.5	-4.5	-3.4	-3.3	-0.7
Loan to deposit ratio	193.3	161.7	132.3	119.4	109.3	108.7
Central Bank liquidity as % of liabilities	1.3	1.3	1.3	0.3	1.0	1.0
Private debt (% of GDP)	115.5	98.1	92.7	96.3	88.8	-
Gross external debt (% of GDP)[1)] - public	32.0	32.3	30.6	34.3	28.4	29.5
- private	44.5	40.9	42.1	40.2	40.4	41.7
Long-term interest rate spread versus Bund (basis points)*	329.9	307.0	177.0	134.5	46.8	42.5
Credit default swap spreads for sovereign securities (5-year)*	234.9	213.2	110.3	99.6	76.5	62.0

(1) Latest data Q2 2016.
(2) Quarterly values are not annualised
* Measured in basis points.

Source: 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 (A)**

	2011	2012	2013	2014	2015	2016 [4]
Employment rate (% of population aged 20-64)	66.3	68.1	69.7	70.7	72.5	73.1
Employment growth (% change from previous year)	1.5	1.4	2.3	-1.3	1.3	0.2
Employment rate of women (% of female population aged 20-64)	65.3	66.4	67.7	68.5	70.5	71.6
Employment rate of men (% of male population aged 20-64)	67.5	70.0	71.9	73.1	74.6	74.8
Employment rate of older workers (% of population aged 55-64)	50.5	52.8	54.8	56.4	59.4	61.0
Part-time employment (% of total employment, aged 15-64)	8.8	8.9	7.5	6.8	7.2	8.1
Fixed-term employment (% of employees with a fixed term contract, aged 15-64)	6.7	4.7	4.3	3.3	3.8	3.8
Transitions from temporary to permanent employment	41.4	36.8	54.6	59.3	57.6	:
Unemployment rate[1] (% active population, age group 15-74)	16.2	15.0	11.9	10.8	9.9	9.7
Long-term unemployment rate[2] (% of labour force)	8.8	7.8	5.7	4.6	4.5	4.2
Youth unemployment rate (% active population aged 15-24)	31.0	28.5	23.2	19.6	16.3	17.7
Youth NEET[3] rate (% of population aged 15-24)	16.0	14.9	13.0	12.0	10.5	:
Early leavers from education and training (% of pop. aged 18-24 with at most lower sec. educ. and not in further education or training)	11.6	10.6	9.8	8.5	9.9	:
Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)	35.9	37.2	40.7	39.9	41.3	:
Formal childcare (30 hours or over; % of population aged less than 3 years)	15.0	19.0	22.0	20.0	:	:

1 Unemployed persons are all those who were not employed but had actively sought work and were ready to begin working immediately or within 2 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 2016. 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 (B)**

Expenditure on social protection benefits (% of GDP)	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Sickness/healthcare	3.9	3.4	3.3	3.4	3.5	:
Disability	1.4	1.3	1.2	1.2	1.3	:
Old age and survivors	9.5	8.2	7.8	7.7	7.4	:
Family/children	1.5	1.1	1.0	1.2	1.3	:
Unemployment	1.3	0.7	0.5	0.6	0.6	:
Housing	0.1	0.1	0.1	0.1	0.1	:
Social exclusion n.e.c.	0.2	0.3	0.2	0.1	0.1	:
Total	18.0	15.1	14.2	14.4	14.3	:
of which: means-tested benefits	0.7	0.7	0.4	0.3	0.2	:
Social inclusion indicators	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
People at risk of poverty or social exclusion[1] (% of total population)	38.2	40.1	36.2	35.1	32.7	30.9
Children at risk of poverty or social exclusion (% of people aged 0-17)	42.2	44.1	40.0	38.4	35.3	31.3
At-risk-of-poverty rate[2] (% of total population)	20.9	19.0	19.2	19.4	21.2	22.5
Severe material deprivation rate[3] (% of total population)	27.6	31.0	25.6	24.0	19.2	16.4
Proportion of people living in low work intensity households[4] (% of people aged 0-59)	12.6	12.6	11.7	10.0	9.6	7.8
In-work at-risk-of-poverty rate (% of persons employed)	9.4	9.3	8.6	8.9	8.1	9.2
Impact of social transfers (excluding pensions) on reducing poverty	26.7	29.1	25.3	25.4	21.5	17.6
Poverty thresholds, expressed in national currency at constant prices[5]	2055	1945	1980	2029	2263	2517
Gross disposable income (households; growth %)	-8.8	1.1	6.4	4.7	3.0	4.1
Inequality of income distribution (S80/S20 income quintile share ratio)	6.8	6.5	6.5	6.3	6.5	6.5
GINI coefficient before taxes and transfers	52.0	53.5	53.1	52.0	51.2	49.8
GINI coefficient after taxes and transfers	35.9	35.1	35.7	35.2	35.5	35.4

1 People at risk of poverty or social exclusion : individuals who are at risk of poverty and/or suffering from severe material deprivation and/or living in households with zero or very low work intensity.
2 At-risk-of-poverty rate : 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 = 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: **Product market performance and policy indicators**

Performance indicators	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Labour productivity (real, per person employed, year-on-year % change)						
Labour productivity in industry	9.69	-2.59	-1.55	-0.68	4.76	7.53
Labour productivity in construction	-20.65	16.85	11.46	-1.38	-1.39	-0.97
Labour productivity in market services	2.01	7.65	2.91	-0.83	0.44	3.12
Unit labour costs (ULC) (whole economy, year-on-year % change)						
ULC in industry	-11.41	2.55	9.41	6.20	2.37	2.38
ULC in construction	17.49	-24.59	1.22	8.63	7.91	6.26
ULC in market services	-6.83	-3.19	7.08	3.98	6.30	5.52
Business environment	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Time needed to enforce contracts[1] (days)	309.0	369.0	469.0	469.0	469.0	469.0
Time needed to start a business[1] (days)	15.5	15.5	15.5	12.5	12.5	5.5
Outcome of applications by SMEs for bank loans[2]	na	0.88	na	0.85	1.19	0.49
Research and innovation	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
R&D intensity	0.61	0.70	0.67	0.61	0.69	0.63
Total public expenditure on education as % of GDP, for all levels of education combined	4.96	4.96	na	3.37	na	na
Number of science & technology people employed as % of total employment	42	42	44	44	43	45
Population having completed tertiary education[3]	23	24	25	27	27	28
Young people with upper secondary education[4]	80	81	84	86	87	86
Trade balance of high technology products as % of GDP	-1.83	-1.69	-1.18	-1.03	-1.24	-1.19
Product and service markets and competition				**2003**	**2008**	**2013**
OECD product market regulation (PMR)[5], overall				na	na	1.61
OECD PMR[5], retail				na	na	0.40
OECD PMR[5], professional services				na	na	na
OECD PMR[5], network industries[6]				na	na	2.66

1 The methodologies, including the assumptions, for this indicator are shown in detail at: 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 if the outcome is not known.
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 at: http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm
6 Aggregate OECD indicators of regulation in energy, transport and communications.
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		2010	2011	2012	2013	2014	2015
Macroeconomic							
Energy intensity	kgoe / €	0.26	0.23	0.23	0.22	0.22	0.21
Carbon intensity	kg / €	0.92	0.81	0.78	0.75	0.73	-
Resource intensity (reciprocal of resource productivity)	kg / €	2.76	2.87	2.66	2.74	2.62	2.64
Waste intensity	kg / €	0.11	-	0.16	-	0.17	-
Energy balance of trade	% GDP	-4.9	-5.4	-6.1	-5.3	-4.2	-
Weighting of energy in HICP	%	14.06	15.51	15.70	15.93	15.42	15.10
Difference between energy price change and inflation	%	0.6	6.9	7.3	-1.7	-1.7	4.4
Real unit of energy cost	% of value added	20.3	20.1	20.5	20.2	20.2	-
Ratio of environmental taxes to labour taxes	ratio	0.37	0.36	0.34	0.32	0.30	-
Environmental taxes	% GDP	2.4	2.5	2.5	2.5	2.7	-
Sectoral							
Industry energy intensity	kgoe / €	0.41	0.39	0.43	0.40	0.41	0.39
Real unit energy cost for manufacturing industry excl. refining	% of value added	17.7	19.2	19.7	19.5	19.3	-
Share of energy-intensive industries in the economy	% GDP	9.24	9.01	8.84	8.39	8.63	-
Electricity prices for medium-sized industrial users	€ / kWh	0.09	0.10	0.11	0.11	0.12	0.12
Gas prices for medium-sized industrial users	€ / kWh	0.03	0.03	0.04	0.04	0.04	0.03
Public R&D for energy	% GDP	0.02	0.01	0.01	0.01	0.01	0.01
Public R&D for environmental protection	% GDP	0.01	0.01	0.01	0.01	0.01	0.02
Municipal waste recycling rate	%	9.4	9.7	15.8	25.9	27.0	26.7
Share of GHG emissions covered by ETS*	%	26.3	25.3	24.0	23.2	20.7	20.0
Transport energy intensity	kgoe / €	0.94	0.72	0.66	0.67	0.67	0.72
Transport carbon intensity	kg / €	2.56	1.93	1.77	1.79	1.82	-
Security of energy supply							
Energy import dependency	%	45.5	59.9	56.4	55.9	40.6	51.1
Aggregated supplier concentration index	HHI	20.7	47.4	47.3	47.2	23.1	-
Diversification of energy mix	HHI	0.30	0.29	0.30	0.30	0.29	-

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 over labour taxes and GDP: from European Commission's database, '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 excluding refining: 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.
Recycling rate of municipal waste: ratio of recycled and composted municipal waste to total municipal waste
Public R&D for energy or for the environment: government spending on R&D for these categories as % of GDP
Proportion of greenhouse gas (GHG) emissions covered by EU Emissions Trading System (ETS) (excluding aviation): 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

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