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Country Report Latvia 2016

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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 26 November 2015. The survey recommends three priorities for the EU's economic and social policy in 2016: re-launching investment, pursuing structural reforms to modernise Member States' economies, and responsible fiscal policies.

Latvia recovered from the economic crisis by taking decisive measures and is set to grow by round 3% in the short run. Caught up in the economic crisis, Latvia embarked on a rigorous reform programme supported by the EU-IMF financial assistance, which led to a swift rebalancing of the economy and return to economic growth in 2011. After some moderation in 2014 and 2015 due to external factors, Latvia's economy is set to grow by around 3 % in 2016-2017. Government debt was estimated at 36.7 % of GDP at the end of 2015. The government's budgetary position is under control with a fiscal deficit of 1 % of GDP projected for 2016.

Consumption and investment are expected to be the main drivers of the economy in the medium term. Private consumption and investment were restrained by external uncertainty from 2014, but are projected to recover gradually. As regards the private sector, household income growth is dynamic and new credit is bottoming out. As for public investment, absorption of EU funds is expected to accelerate during the new programming period. Latvia is a major beneficiary of the European Structural and Investment Funds (ESIF) and can receive up to EUR 5.6 billion for the period 2014-2020. Such investments will cover a broad spectrum of areas, in particular infrastructure, environment, education innovation and healthcare.

Latvia is an open economy with close links to trading partners in the region. Export performance and investor confidence wavered in the wake of tensions with Russia, outweighing the relief provided by lower oil prices and the weaker euro. With some adjustment costs, the export sector has managed to find new markets. Moreover, an increase in product quality explains Latvia's export performance amid adverse cost competitiveness developments.

Major challenges relate to the demographic situation. The labour market is tightening due to net emigration and negative natural growth. Working age population could drop by 20 % by 2030. This puts a strain on the social and health systems, as age dependency increase, and can aggravate already high rates of poverty and social exclusion.

The decline in the population of working age contributes to wages increasing faster than productivity. If continued, this may pose a threat to the competitiveness of the tradable sector and the long-term growth potential of the economy as a whole. In the meantime, qualified labour force is lacking in some sectors.

Overall, Latvia has made limited progress in addressing the 2015 country-specific recommendations. Some progress has been made in improving vocational education, setting up quality-based financing for higher education and research, increasing the employability of social assistance recipients, improving the efficiency of the judicial system and tackling the shadow economy. However, limited progress has been made in shifting the tax burden away from low-wage earners, improving the adequacy of social assistance benefits and the accessibility and cost-effectiveness of healthcare services, and increasing the accountability of insolvency administrators. No progress has been made in improving public service legislation as the draft Public Service Law has not passed through the Parliament.

Regarding the progress in reaching national targets under the Europe 2020 strategy, Latvia is performing well in employment rate, renewable energy, energy efficiency, reducing greenhouse gas emissions, reducing early school leaving and tertiary education attainment, while more effort is needed in R&D investments and reducing poverty.

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

- **The structure of tax revenue is limiting economic growth and supply of public services.** A high tax burden on low-wage earners creates disincentives to formal employment. Only marginal use is being made of the scope for a growth-friendly tax shift from labour to consumption, environmental

and property taxation. Tax evasion, which is falling but remains high, is limiting the availability of adequate public financing for education, social and healthcare services.

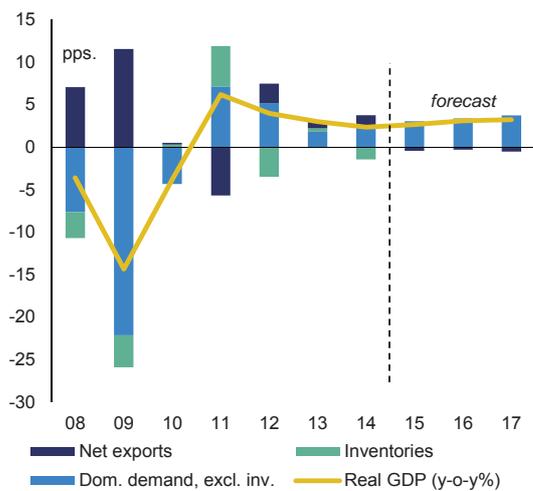
- **The minimum income reform is expected to improve the adequacy of social benefits.** The nationwide minimum income threshold is to be rolled-out from 2017, but budget financing has not yet been decided. Once implemented, this measure should partially address poverty and social exclusion issues. The reform will necessitate long-term financial planning to ensure fiscal sustainability.
- **Ensuring a well-qualified labour force is critical for sustainable economic growth.** Demand for labour in a situation of declining population of working age is driving down unemployment, but wage growth is higher than that of productivity. This could be counteracted by productivity-boosting reforms particularly in education, labour market activation and healthcare.
- **A framework for market-relevant education, research and innovation has been established, but not fully implemented yet.** The higher education attainment rate is above the EU average in Latvia, but providing sufficient graduates for knowledge-intensive sectors and attracting international students remain challenging. Quality-rewarding incentives are being introduced into the financing of higher education and research, and Latvia is moving towards an independent accreditation of higher education establishments. Science, technology, engineering and mathematics are being promoted in school education and prioritised in the public financing of study places. However, work-based learning and innovation are insufficient and the coverage of active labour market measures is low. The consolidation of research institutions and targeted innovation support are expected to stimulate Latvia's currently low innovation performance.
- **Latvia lags well behind other Member States in terms of general health of the population** Access to healthcare remains a major concern due to low public financing and high out-of-pocket payments. Underfunding is driving up waiting lists and Latvia's unmet health needs are the highest in the EU. Efficiency and preventive measures are being implemented gradually, but a comprehensive vision especially with regard to appropriate financing is lacking.
- **Investment is being held back by the uncertain external environment, and deficiencies in investment protection.** Investments in businesses linked to Russia have been put on hold. The shrinking labour pool is lessening Latvia's investment attractiveness. Moreover, the weak supervision of insolvency administrators, low recovery rates in insolvency cases and inefficiencies in public administration discourage investment in Latvia. In addition, the size of the shadow economy, although declining, is distorting competition and is not conducive to investment or innovation.
- **Energy security relies on investment in interconnections and the efficient use of resources.** The electricity market has been fully liberated since 2015, but the full benefits of this will be reaped only once sufficient regional interconnections are established. The gas market liberalisation, to be completed by April 2017, is progressing. The support framework for renewable and fossil fuel based co-generation has become increasingly complex and costly. Meanwhile new projects are on hold until the future framework conditions have been clarified. There is room for improving the energy efficiency through heat-insulating apartment buildings.
- **Inefficiencies in the public administration and inadequate public infrastructure are weighing on the business environment.** Remuneration in the public sector is poorly linked to results. In such conditions, attracting and retaining talent are difficult. Latvia relies on EU financing to upgrade its public infrastructure, but a number of projects have run into difficulties due to poor project management. More efficient project management and public procurement could bring greater benefits for both the public administration and businesses.

1. SCENE SETTER: ECONOMIC SITUATION AND OUTLOOK

Growth outlook

In 2015, Latvian economic growth is expected to have slightly picked-up to 2.7% amid unfavourable external developments. In 2016 and 2017, economic growth is expected to modestly accelerate to 3.1% and 3.2% respectively, driven by domestic demand (Graph 1.1). Potential growth is set to exceed 3% mainly driven by productivity gains. At this pace, Latvia's GDP per capita is likely to catch up with the euro-area average shortly before 2050, compared with the national aspiration to reach this target by 2030⁽¹⁾. Nevertheless, the current recovery is highly dependent on the continued recovery of European partners and the development in emerging economies.

Graph 1.1: Real GDP growth and contributions



Source: European Commission

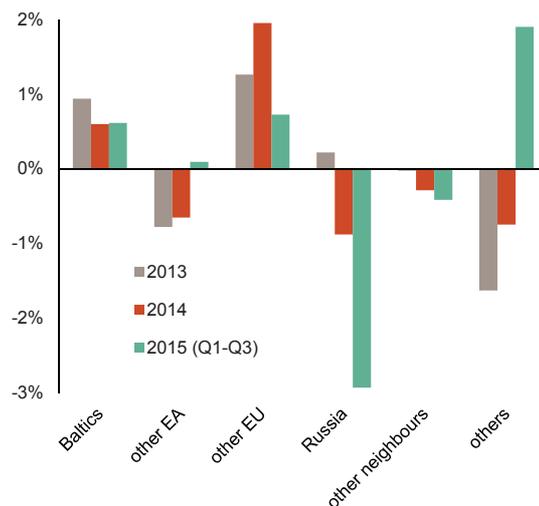
Domestic demand is set to remain the main driver of the economy as private consumption is supported by steadily rising income and cheaper energy. Investment growth is expected to gradually pick-up from a low level, supported by a pick-up in the number of projects financed under the new EU budget programming period and a nascent recovery in bank lending. Although the deleveraging process is still ongoing, recent indicators point to a modest rebound in new loans: Latvian banks reported rising demand for loans

⁽¹⁾ Latvia's long-term development strategy by 2030.

and an easing of credit standards for businesses and households by the end of 2015⁽²⁾. The upturn in the credit cycle constitutes a positive risk of a boost in consumption and investment.

Latvian trade has proven resilient to major shocks. In particular, demand from Russia dropped mainly due to the sharp devaluation of the rouble and Russian sanctions on agricultural goods over the Ukrainian crisis⁽³⁾. This also led to increased competition from similarly affected neighbours, who also had to redirect their Russian exports. The negative impact from the steep decline in Russian demand triggered a substantial readjustment in products and markets (Graph 1.2). Exporters have consolidated their trade links with the other Baltic countries and found new markets in non-euro countries within the EU. The weakening of the euro against the US dollar, the Chinese yuan and the UK pound sterling (Graph 1.3) has helped exporters to expand outside the euro area, primarily to Algeria (vegetable products) and the United Arab Emirates (machinery and equipment). Export support measures have also been reinforced (see Section 2.6). Overall, Latvia's export sectors have exceeded expectations.

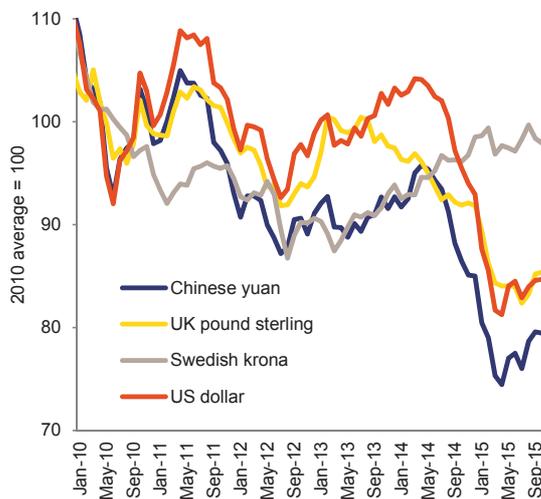
Graph 1.2: Changes in export shares by destination



Source: Central Statistical Bureau of Latvia

⁽²⁾ ECB-Bank of Latvia bank lending survey, September 2015
⁽³⁾ [No milk for the bear: the impact on the Baltic states of Russia's counter-sanctions](#) Kaspar Oja *Baltic Journal of Economics* Vol. 15, Iss. 1, 2015

Graph 1.3: Euro exchange rate against selected currencies



Source: European Central Bank

Inflation is set to gradually recover from historically low levels. Low commodity prices, in particular crude oil, have kept inflation low at 0.2 % in 2015. The expected protracted dynamism of wage growth and the flattening of the energy indices should gradually push up inflation to 0.4 % in 2016 and 2.0 % in 2017.

Labour market

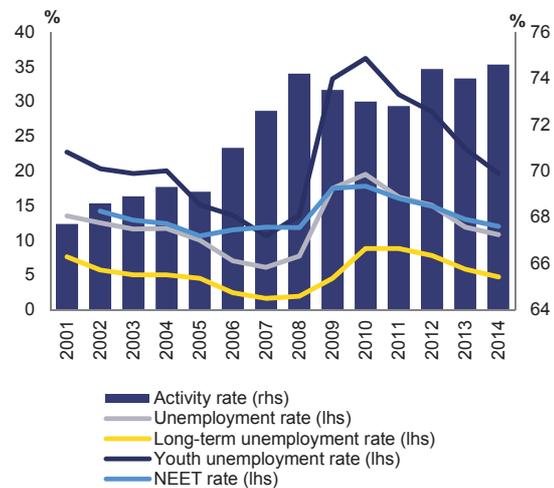
Tensions are building up on the labour market. The combination of net emigration and an ageing population is causing a declining in the population of working age. Positive employment growth and an increasing participation rate have led to a fall in unemployment (Graph 1.4, Table 1.2). However, an increase in competition for labour, both in terms of numbers and skills, is reflected in a strong wage growth. Nominal wage growth peaked at 9.3 % in 2014, then slowed to around 6 % in 2015, but this is still the highest growth rate in the EU.

Labour supply constraints are expected to increase. Relative to its 2014 level, the working age population (15-64) could decline by almost 40 % by 2060 and by more than 20 % by 2030⁽⁴⁾. The age-dependency ratio (number of people aged 65 and over relative to those aged 15-64) is

⁽⁴⁾ The 2015 Ageing Report of the European Commission http://ec.europa.eu/economy_finance/publications/european_economy/2014/pdf/ee8_en.pdf

projected to increase substantially from 28.6 % in 2014 to 50.5 % in 2050. In this context wages are projected to continue rising at a fast rate (above 5 %) in the short run, while unemployment is expected to decrease from 10.8 % in 2014 to 8.6 % in 2017. Related labour market, health and education policy challenges are discussed in Section 2.

Graph 1.4: Key rates on the labour market: activity, unemployment, long-term unemployment, youth unemployment, NEET



Source: Eurostat

Note: Activity rate (% of population), total, ages 15-64; Unemployment rate and long-term unemployment rate (% of labour force), total, ages 15-74; Youth unemployment rate (% of labour force), total, ages 15-24; NEET: Not in employment, education or training (% of population), total, ages 15-24

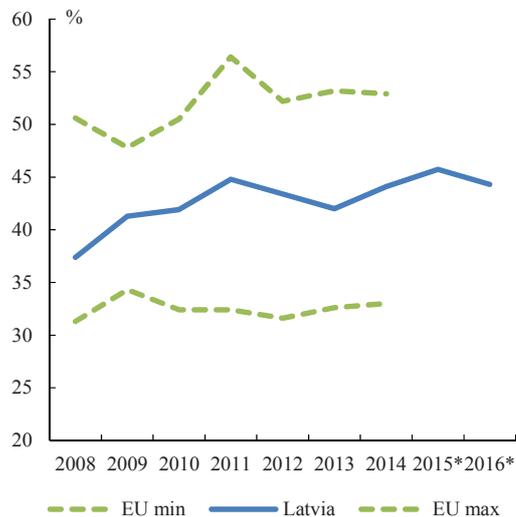
Employers in Latvia report high shortages of employees with skills matching industry needs⁽⁵⁾. There is some evidence of bottleneck vacancies in the information and communication technology, manufacturing of textiles, construction and healthcare sectors. However, difficulties in filling vacancies in the healthcare and textile manufacturing are probably linked to relatively poor working conditions and low wages. Future skills shortages are expected in the engineering and healthcare sectors as these sectors employ an older workforce. On the positive side, Latvia's

⁽⁵⁾ Source: European Company Survey (2013)

skills mismatch has reduced over the last 15 years due to the upskilling of the population ⁽⁶⁾.

The minimum wage increased relatively quickly in 2014 and 2015, after two years of relative stagnation. The monthly minimum wage was raised from EUR 285 in 2013 to EUR 360 in 2015, and now amounts to an estimated 45.7 % of average monthly earnings in the private sector. In 2016, it was marginally increased from EUR 360 to 370; this is below predicted average wage growth (Graph 1.5).

Graph 1.5: **Minimum wage as a percentage of average monthly earnings: Latvia and the EU**



Source: European Commission

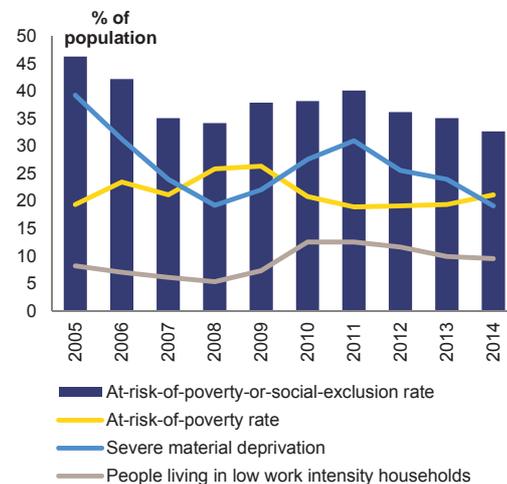
These minimum wages increases account for a substantial part of aggregate wage growth. The coverage of the minimum wage is estimated at 35.2 % based on national statistics, which is relatively high in EU comparison. Part of the high coverage may be due to a still substantial shadow economy (envelope wages) as well as the fact that a significant share of the self-employed declare they earn the minimum wage. In the particular context of Latvia, increases in the minimum wage, on the one hand, have moved some unofficial

⁽⁶⁾ The skills mismatch is measured by the relative dispersion of employment rates across education levels. Kiss, A., Vandeplass, A. (2015) Measuring Skills Mismatch, European Commission, Directorate-General for Employment, Social Affairs & Inclusions, Analytical Web Note 7/2015.

payments ('envelope wages') into the official statistics and contributed to the whitening of the economy. On the other hand, the measure's efficiency might be reduced by employers limiting formal working hours.

Income inequality and poverty remain among the highest in the EU. The rate of poverty and social exclusion has decreased from 35.1 % in 2013 to 30.9 % in 2015 (Graph 1.6). Nevertheless it remains high and the social safety net is weak (see Section 2.2). Income inequalities, as measured by the Gini coefficient, are the second highest in the EU. Compared to other Member States, the capacity of the tax-benefit system to reduce inequality is limited (Section 2.1). Inequality is magnified by the restricted provision of health services. A high proportion of the population reports unmet healthcare needs and access to healthcare has not improved in recent years (Section 2.3).

Graph 1.6: **At-risk-of-poverty or social exclusion rate and its components**

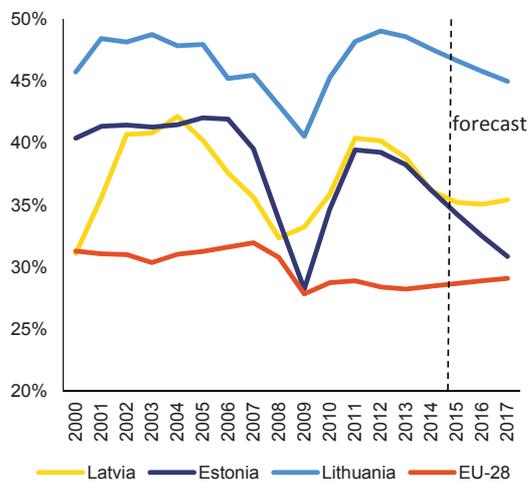


Source: Eurostat, EU-SILC

A sizeable part of the wage growth in 2014 was associated with positive productivity developments (a trend that has continued since 2009). As a result, the nominal unit labour cost rose less rapidly than wages, at 4.6 % in 2014. It is still the strongest growth observed across the EU, and it is expected to have remained relatively dynamic (close to 4 %) in 2015.

Labour cost dynamics remain a key indicator to be monitored in the future. In 2012-2014, the nominal unit labour cost (ULC) increased above the indicative threshold under the macroeconomic imbalances procedure and the cumulative increase reached 9.1% according to the latest data ⁽⁷⁾. The situation is not yet problematic: firms' operating surplus remains above the EU average, a situation comparable to the Baltic peers (Graph 1.7).

Graph 1.7: Net profit margins



Source: European Commission

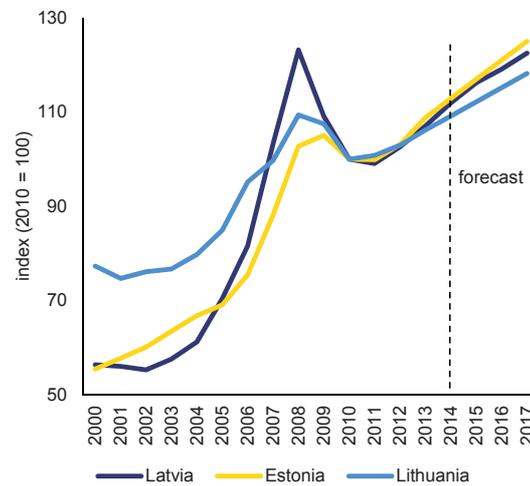
Note: Net operating surplus over net value added

Latvia's labour costs have been developing broadly in line with the changes in its main trading partners, notably Lithuania and Estonia (Graph 1.8). The ULC dynamics should be also seen in the context of the very abrupt adjustment after the crisis in 2008-2009 when Latvia saw a larger downward correction than its Baltic peers. At sectoral level, nominal unit labour cost growth was highest in construction (Graph 1.9), but was also relatively high in manufacturing and trade (wholesale and retail, food and accommodation services, and other sectors).

Latvia's labour productivity is among the lowest in the EU. This is related to the prevalence of low-tech and medium-low-tech

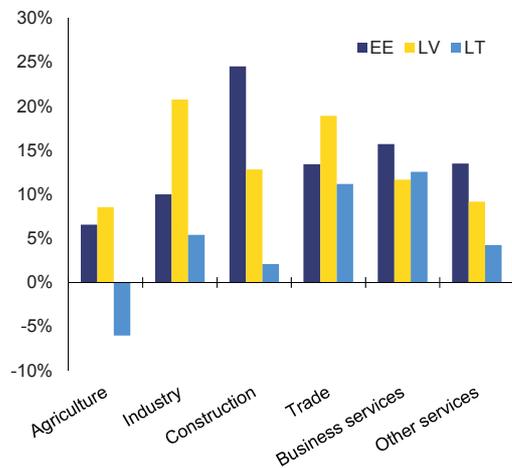
industries. However, Latvian productivity is catching up with other EU Member States, as productivity per employed person increased from 57 % of the EU average in 2008 to 64 % in 2014. Growth in real labour productivity per employed person in the last 5 years is among the highest in the EU (together with Bulgaria, Romania and Lithuania). Nevertheless, there are limitations to the convergence of the productivity with other Member States such as the severe weaknesses of the research and innovation system, which are discussed in Section 2.4.

Graph 1.8: Nominal unit labour costs



Source: European Commission

(7) see also Annex B for data as published in the Alert Mechanism Report 2016

Graph 1.9: **Nominal unit labour cost annualised growth (2011-2014)**

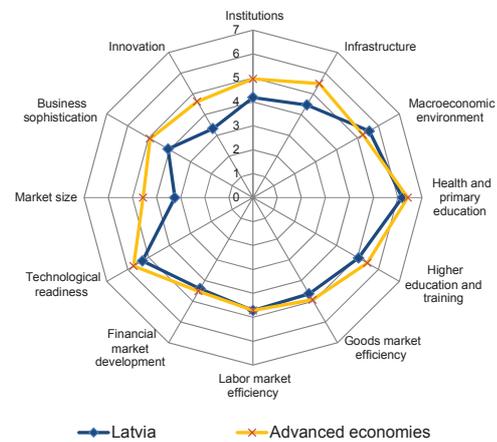
Source: European Commission

As wage growth outpaces productivity, Latvia's competitive advantage is being eroded and this could affect medium and long-term growth prospects. The pickup in domestic demand may favour the non-tradable sector, putting pressure on the tradable sector to cease low productivity activities or to move up the value chain.

So far, Latvia has continued to gain market shares for goods since the crisis and is performing better than other EU Member States. Between 2008 and 2010 these gains were driven partly by cost competitiveness gains (Graph 1.8). Between 2009 and 2014, Latvian exports have become more intensive in higher quality products (Graph 1.11), which could account for the country's trade performance amid adverse cost competitiveness developments.

Competitiveness of the private sector is hampered by weak knowledge transfer. The World Economic Forum's Global Competitiveness Report 2015-2016 ranks the country 44th place⁽⁸⁾ with innovation its weakest point (Graph 1.10). Business R&D intensity is among the lowest in the EU and there is insufficient cooperation between research institutions and business (see Section 2.4).

(8) Two places lower compared to 2014-2015

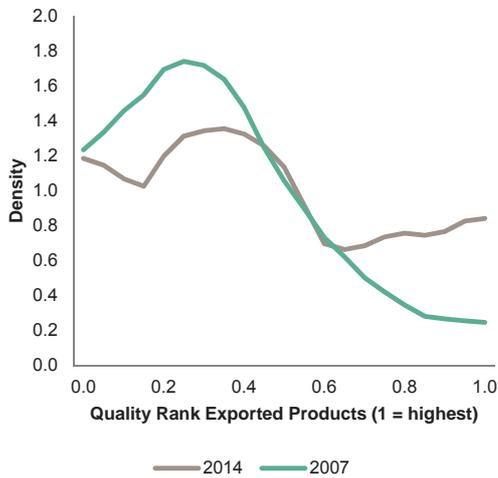
Graph 1.10: **Global competitiveness index**

Source: 2015 World Economic Forum

Competitiveness gains could be achieved through further improvements in the business environment. The most problematic factors for doing business are identified as instability and complexity of tax regulations, inefficiency of public administration, access to financing and adequacy of education and innovation capacity. These topics are discussed in Sections 2.1, 2.4 and 2.6. Businesses would also benefit from more risk-taking and proactive entrepreneurship⁽⁹⁾.

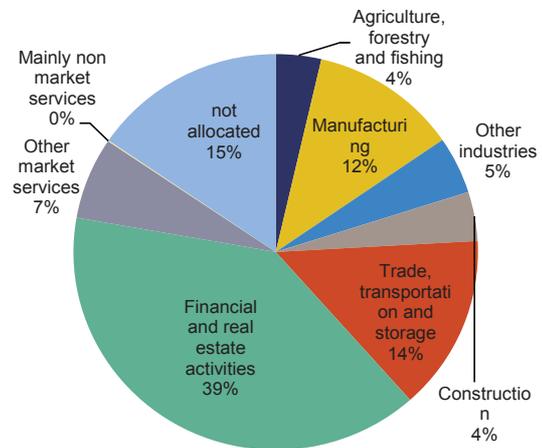
The current account remains in deficit. Although the improving trade balance helps to limit the current account deficit it does so at a decreasing pace. Net external debt has remained at a moderate level (28.6 % of GDP in Q3-2015) and is expected to decline.

(9) Arnis Sauka (2014) Measuring the competitiveness of Latvian companies, *Baltic Journal of Economics*, 14:1-2, 140-158, DOI: 10.1080/1406099X.2014.995421

Graph 1.11: **Density function of export value per quality rank**

Source: European Commission calculation based on Comext (Eurostat) and ORBIS data

The high negative net international investment position (NIIP) ratio is on a downward trajectory. At the same time, three quarters of this liability reflects foreign direct investment (FDI) stocks in 2015. In 2014-2015, FDI were primarily invested in financial and real estate activities, followed by trade and manufacturing (Graph 1.12). This structure reflects the large proportion of foreign banks in Latvia and a recovery in the housing sector. It also highlights the need for investment in growth enhancing sectors to foster the economy's catching-up process.

Graph 1.12: **Foreign direct investment in Latvia (2014-2015Q3)**

Source: Bank of Latvia

Indebtedness

After the housing bubble burst in 2009-2010, domestic indebtedness dropped below 150 % of GDP in 2014 (Graph 1.13). Private debt stood at 107 % of GDP in 2014. The deleveraging should continue as long as new credits remain subdued (Graph 1.16), especially as households save part of their purchasing power gains. This process is expected to stop at some point as banks are reporting both an increase in the demand for loans by companies and households and more favourable lending terms and conditions⁽¹⁰⁾.

(10) ECB-Bank of Latvia bank lending survey-Sept.2015. Firms also report higher demand and availability of loans (Survey on the access to finance of enterprises-SAFE, September to October 2015)

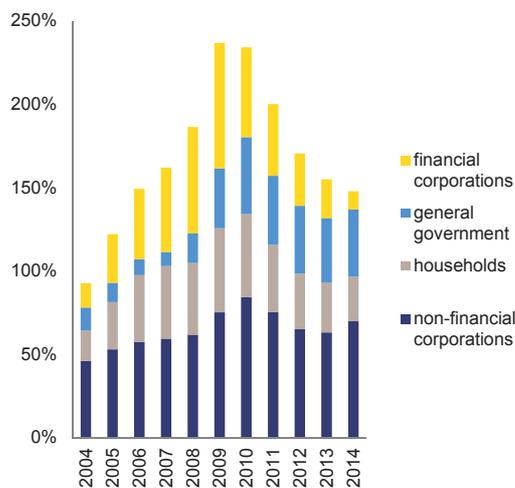
Table 1.1: Financial soundness indicators

	2008	2009	June 2010	2010	June 2011	2011	June 2012	2012	June 2013	2013	June 2014	2014	June 2015
Non Performing Loans, %	2.7	13.6	16.1	15.3	14.8	10.1	9.2	7.9	7.1	5.6	4.4	7.6	7.5
Capital Adequacy Ratio, %	11.0	13.7	12.9	13.9	14.5	16.5	16.3	16.7	17.5	18.0	19.9	20.0	20.3
Tier 1 ratio, %	9.6	10.8	10.2	10.9	11.5	13.5	14.2	14.5	15.8	16.5	17.3	17.3	17.5
Return on Equity, %	3.1	-44.3	-31.7	-19.7	8.1	4.5	7.5	4.9	7.3	8.8	12.6	10.3	6.5
Return on Asset, %	0.2	-4.0	-2.6	-1.7	0.8	0.5	0.8	0.6	0.7	0.9	1.3	1.0	0.7
Coverage ratio	61.3	58.3	60.8	60.4	63.0	74.8	74.1	76.2	76.3	79.3	83.6	33.0	44.5

Source: European Central Bank

Note: All domestic and foreign banks (subsidiaries and branches)

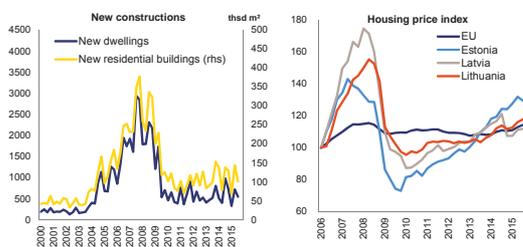
Graph 1.13: Debt by sector in % of GDP (non consolidated)



Source: European Commission

The housing market has cooled off. New constructions have been stable since 2010. The effect of the housing bubble on price has been reabsorbed. However, house prices remain relatively dynamic compared to the rest of the EU (Graph 1.14).

Graph 1.14: Housing market



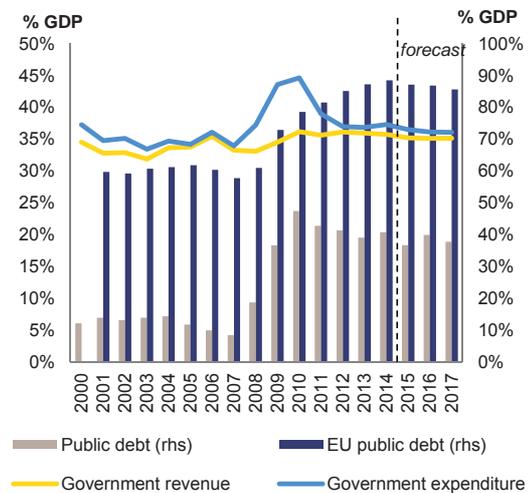
Source: Central Statistical Bureau of Latvia and Eurostat

Fiscal policy

Despite the depth of the crisis, the government's indebtedness is limited in comparison to other Member States (Graph 1.15). Government debt

was estimated at 36.7% of GDP at the end of 2015. The government's budgetary position is well under control with fiscal deficit of 1% projected in 2016. However, revenue and expenditure structure could be more conducive to inclusive economic development. On the revenue side, the tax burden on labour, in particular on low wages, and tax compliance are among the key issues (see Section 2.1). On the expenditure side, the amount of financing and quality are key issues for healthcare (2.3), education (2.4) and public administration (2.6).

Graph 1.15: Public expenditure, income and debt



Source: European Commission

Financial sector

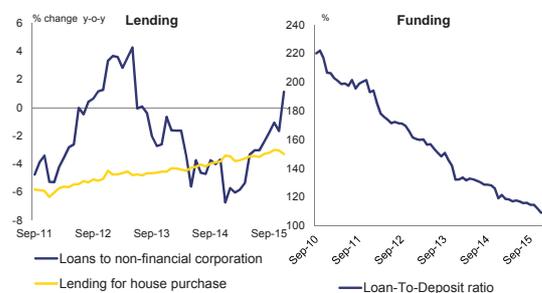
Latvia's banking system is well capitalised and liquid, but access to finance remains an issue. Bank profitability and asset quality were restored after the crisis. However, lending to the private sector continues to shrink. Reforms to further reduce the private sector's debt overhang could help revive the demand for credit, reduce perceptions of credit risk and encourage a rebound in investment. SME's access to finance could benefit from the loan guarantees and other

instruments offered by the (newly-integrated) development financial institution ALTUM, and from the development of credit bureaus with standardised information.

Latvia has the largest banking sector among the Baltic countries. The banks' assets amounted to EUR 30.9 billion in 2014, which represented 128 % of GDP. Trailing far behind, pension funds rank second with EUR 2.3 bn (9.5 % of GDP) in 2014 while insurers only hold EUR 1.0 bn (4.0 % of GDP). Pension funds' assets have been increasing continuously since 1999. By contrast, insurers' assets have been relatively stable since 2010.

The banking sector is dominated by Scandinavian financial groups. This market structure limits country-specific risks, which is convenient for a small open economy. On the other hand, some large external shocks may have a knock-on effect on the country.

Graph 1.16: **Main trends in the balance sheet of the banking sector**



Note: In calculation of the loan-to-deposit ratio claims on monetary financial institutions, government and non-residents were excluded.

Source: European Central Bank

Deleveraging continued across the private sector. Net lending to corporations declined until the end of 2015, when it turned around increasing by 1.1 % y-o-y (Graph 1.16). The stock of housing loans decreased by 3.3 % y-o-y, but the decline decelerated. On the liabilities side, deposits have been volatile in recent years, but their stock has grown overall since 2012. This helped the banks rebalance their funding structure. In 2015, the deposits of households and non-financial corporations grew by 7.3%. The loan-to-deposit ratio fell to 110 %, which is close to a sustainable level.

Financial soundness indicators suggest that the stability of the banking sector is not at risk.

Banks are well capitalised and in June 2015 the average solvency ratio was 20.3 %. Tier 1 instruments account for the majority of the capital (Table 1.1). The quality of bank assets improved: the average ratio of non-performing loans (NPLs) decreased from the crisis peak at 16 % to 7.5 % in mid-2015. The ratio of coverage of NPLs with provisions amounted to 45 %, close to the euro-area average (43 %). Nevertheless, the sector's profitability has been good. In 2014, both the return on equity (10.3 %) and the return on assets (1 %) far exceeded the euro-area averages (3.6 % and 0.2 %, respectively) and the results for the first half of 2015 confirm this positive profitability trend.

The high share of non-resident deposits poses a particular challenge.

Non-resident deposits, mainly from Russia, account for about half of the total deposits in the sector and are concentrated in specific banks. It exposes the banks' funding to volatility risk, especially in the event of intensified geopolitical tensions. Whereas the minimum capital and liquidity requirements for these banks are already higher than for others, the situation warrants the continued attention of the supervisor.

The capital market is relatively underdeveloped.

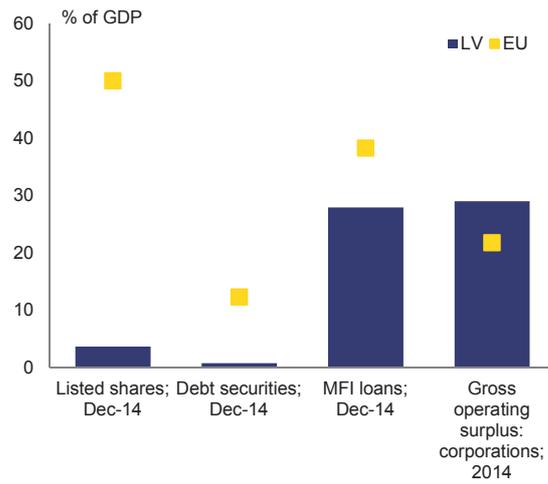
The debt securities market in Latvia consists almost exclusively of government papers. On the back of the government's increased borrowing needs, the total size of the market increased from EUR 2.2 bn in 2010 (12 % of GDP) to EUR 7.1 bn in 2014 (29 % of GDP). The Latvian stock market is shallow with capitalisation amounting to EUR 1.3 bn (5.3 % of GDP) at the end of 2015. Non-financial corporations are the dominant issuers. The stock market structure is fully integrated into the OMX-Nasdaq group.

In the funding of Latvian companies, banks play a more important role than the capital market.

The total stock of loans to corporations equals 28 % of GDP. Funds raised by non-financial companies on the stock market (3.6 % of GDP) complement bank loans. The role of debt securities issuance is negligible. On the other hand, the annual gross operating surplus of Latvian companies is somewhat higher than the EU average, suggesting that companies have the potential to finance investment from their retained

profits (Graph 1.17). This potential can be eroded if forthcoming wage increases are not matched by productivity gains.

Graph 1.17: **Funding of non-financial corporations**



Source: European Central Bank, European Commission
Note: MFI = monetary and financial institutions

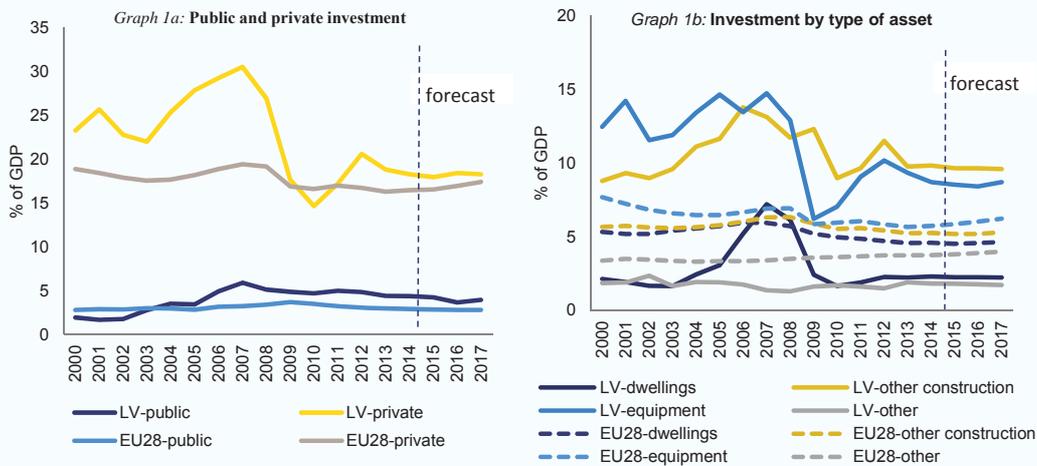
Box 1.1: Investment challenges

Macroeconomic perspective

Investment is recovering, but at a lower level. The crisis severely hit investment in Latvia. In 2013, after two years of rapid recovery, investment plummeted again, in particular in the manufacturing sector. In 2014 investment held firm (+0.5 %) and is expected to gradually pick-up (by +2.1 % in 2015 and +4.5 % in 2017). As a proportion of GDP, private investment in Latvia boomed in 2004-2007 (Graph 1a). After a sharp correction, it has lowered to 18 % of GDP since 2009, but is expected to remain stable. Public investment also boomed prior to the crisis, but the correction was less severe. It is expected to remain stable at 4 % of GDP over the next couple of years, which is above the EU average.

Non-residential construction and equipment dominates investment in Latvia. Non-residential construction and civil engineering accounted for 43 % of total investment in 2014 (other construction in Graph 1b) and equipment goods for 38 %, of which 10 pps. were transport equipment. The crisis has had a lasting impact on investment in equipment goods: after falling by 13 % between 2000 and 2008 to only 6 % in 2009, investment in equipment goods now amounts to only 9 % of GDP. By contrast, after the housing bubble burst in 2009, investment in dwellings returned to its pre-boom level of 2 % of GDP in 2014.

Public investment relies on the EU funding (Graph 2a). Infrastructure projects attract a large share of the EU funds (see Box 1.2 and Section 2.5).



Source: European Commission, 2016 winter forecast

Assessment of barriers to investment and ongoing reforms

Latvia has its own specific challenges to investment⁽¹⁾. Public investment is low in sectors where there are insufficient private incentives. Particularly transport and energy infrastructure needs to be further improved to increase the country's competitiveness (see Section 2.5). Latvia is open to foreign investment and a large share of investment is financed through the banking sector (Graph 2b). Private sector investment is held back by the business environment, labour market and innovation issues.

⁽¹⁾ 'Challenges to Member States' Investment Environments' SWD(2015) 400 final (http://ec.europa.eu/europe2020/challenges-to-member-states-investment-environments/index_en.htm)

(Continued on the next page)

Box (continued)

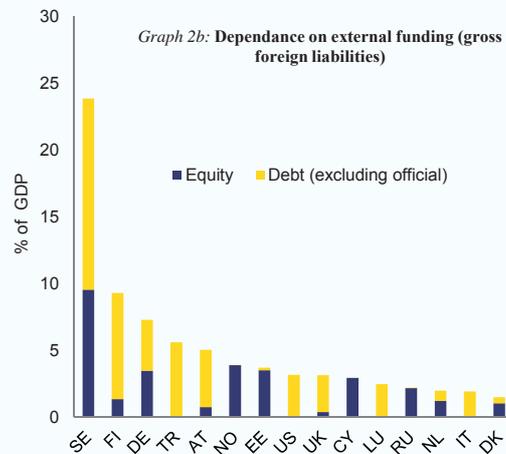
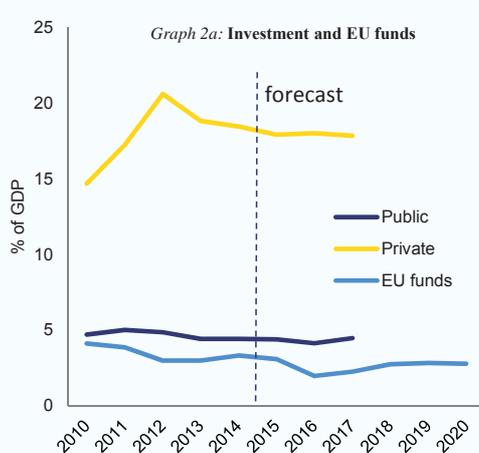
The effective application of the insolvency regime is creating uncertainty over investment protection.

While the Latvian Insolvency Law follows the best international practice, recovery rates are low and insolvency regime tend to be abused by insolvency practitioners at the expense of creditors (see Section 2.6). This undermines the investment climate and carries a high cost for the economy⁽²⁾. Efforts to strengthen the public oversight of insolvency practitioners have faced setbacks, and capacity to solve economic crimes remains low.

A shrinking labour force and limited skill set create barriers to investment. Challenges on the labour market may affect investment profitability due to the scarcity of the necessary labour force and qualifications (see Sections 2.2 and 2.4). Lifelong learning is underdeveloped and an ‘active ageing’ strategy is to be defined in 2016. The reform of higher education is progressing, with the setting-up of a new accreditation agency for example, but more can still be done to increase the attractiveness of vocational education and training.

Latvia’s business R&D intensity is one of the lowest in the EU with insufficient cooperation between business and science. Research units receiving public funds have been grouped together and further efforts in this direction are planned. A smart specialization monitoring system has been created (see Section 2.4). It is now necessary to allocate sufficient resources so that the system can produce results i.e. data that can be further used in analysis of the situation.

The EU-funded projects could be better managed. EU funds account for 10-15 % of total investment, but the roll-out of new projects is slow (see Section 2.6). This is due to capacity constraints in the public administration and of some beneficiaries, as well as to political interference in the selection of projects.



Source: European Commission, 2016 winter forecast, Latvian Ministry of Finance

⁽²⁾ Resolving insolvency and protecting minority investors are second and third worst ranked items for Latvia in the 2016 World Bank Doing business report.

Box 1.2: Contribution of the EU Budget to structural change

Latvia is a major beneficiary of the European Structural and Investment Funds (ESIF) and can receive up to EUR 5.6 billion for the period 2014-2020. This is equivalent to 3% of GDP annually and around 68% of the expected national public investment in areas supported by the ESI funds.

A number of reforms were passed as ex-ante conditionalities in areas to benefit from the Funds to ensure successful investments. National strategic frameworks necessary to ensure successful investments has been put in place in most areas, except for early school leaving where the ex-ante conditionality is still to be fulfilled. Where ex-ante conditionalities are not fulfilled by end 2016, the Commission may suspend interim payment to the priorities of the programmes concerned.

The programming of the Funds includes a focus on priorities and challenges identified in recent years in the context of the European Semester. For instance, to improve vocational education and training and support to labour market, education and social integration measures to increase the employability of those further from the labour market. Latvia also benefits from the Youth Employment Initiative to support young people to find their way to the labour market, get involved into traineeship projects or continue their education. Business support, investments in research and innovation, resource efficiency measures, sustainable transport infrastructure are programmed to increase productivity and promote further development of the country. Regular monitoring of implementation includes reporting in mid-2017 on the contribution of the funds to Europe 2020 objectives and progress in addressing relevant structural reforms to maximise the use of EU financing (notably, in the R&DI and education sectors).

Financing under the new European Fund for Strategic Investments (EFSI), Horizon 2020, the Connecting Europe Facility and other directly managed EU funds would be additional to the ESI Funds. Following the first rounds of calls for projects under the Connecting Europe Facility, Latvia has signed agreements for EUR 118 million in the energy field and EUR 248 million for transport projects. For more information on the use of ESIF in Latvia, see: <https://cohesiondata.ec.europa.eu/countries/LV>.

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

	2003-2007	2008	2009	2010	2011	2012	2013	2014	forecast		
									2015	2016	2017
Real GDP (y-o-y)	9.9	-3.6	-14.3	-3.8	6.2	4.0	3.0	2.4	2.7	3.1	3.2
Private consumption (y-o-y)	13.4	-7.9	-16.1	2.8	3.0	3.2	5.1	2.3	3.4	3.8	3.9
Public consumption (y-o-y)	4.1	2.4	-10.7	-8.1	3.0	0.3	1.6	4.9	2.7	2.4	2.0
Gross fixed capital formation (y-o-y)	19.4	-9.2	-33.3	-19.8	24.1	14.4	-6.0	0.5	2.1	2.8	4.5
Exports of goods and services (y-o-y)	12.5	2.4	-12.9	13.4	12.0	9.8	1.1	3.1	1.8	2.7	3.2
Imports of goods and services (y-o-y)	17.7	-10.7	-31.7	12.4	22.0	5.4	-0.2	0.8	2.4	3.1	4.0
Output gap	5.3	2.9	-10.9	-11.9	-5.3	-1.8	0.3	1.2	1.5	1.8	1.8
Potential growth (y-o-y)	7.4	3.8	-1.1	-2.7	-1.2	0.3	0.8	1.5	2.3	2.8	3.3
Contribution to GDP growth:											
Domestic demand (y-o-y)	13.6	-7.6	-22.1	-4.3	7.1	5.2	1.8	2.4	3.0	3.4	3.7
Inventories (y-o-y)	1.0	-3.1	-3.8	0.3	4.8	-3.5	0.4	-1.4	0.1	0.0	0.0
Net exports (y-o-y)	-4.7	7.1	11.6	0.2	-5.7	2.3	0.8	1.4	-0.4	-0.3	-0.5
Contribution to potential GDP growth:											
Total Labour (hours) (y-o-y)	0.2	0.1	-1.4	-1.5	-1.3	-1.2	-0.8	-0.7	-0.2	-0.1	0.1
Capital accumulation (y-o-y)	3.0	3.2	-0.3	-1.5	-0.7	0.1	-0.3	-0.2	0.0	0.2	0.5
Total factor productivity (y-o-y)	4.3	0.5	0.6	0.4	0.8	1.4	1.9	2.4	2.6	2.7	2.7
Current account balance (% of GDP), balance of payments	-14.4	-12.3	8.1	2.4	-2.9	-3.3	-2.4	-2.0	.	.	.
Trade balance (% of GDP), balance of payments	-15.3	-11.5	-0.5	-1.1	-4.8	-4.3	-3.4	-2.2	.	.	.
Terms of trade of goods and services (y-o-y)	1.5	-1.8	0.2	0.1	3.0	-2.8	0.6	-0.8	0.8	0.3	0.0
Capital account balance (% of GDP)	1.1	1.4	2.4	2.0	2.1	3.0	2.5	3.2	.	.	.
Net international investment position (% of GDP)	-55.7	-75.0	-83.2	-83.1	-73.9	-67.5	-66.6	-62.1	.	.	.
Net marketable external debt (% of GDP) ¹	-27.0	-45.9	-45.3	-44.1	-34.7	-28.8	-24.7	-20.2	.	.	.
Gross marketable external debt (% of GDP) ¹	87.3	112.1	140.5	155.0	130.4	124.1	118.5	127.2	.	.	.
Export performance vs. advanced countries (% change over 5 years)	105.1	96.7	65.5	31.6	38.2	20.8	16.1	17.34	.	.	.
Export market share, goods and services (y-o-y)	14.5	4.1	-1.7	-5.0	7.4	3.9	2.6	1.0	.	.	.
Net FDI flows (% of GDP)	-4.4	-2.8	-0.6	-1.5	-5.0	-3.2	-1.6	-1.0	.	.	.
Savings rate of households (net saving as percentage of net disposable income)	-7.4	3.8	7.1	-2.3	-14.2	-15.5	-14.3	-11.2	.	.	.
Private credit flow (consolidated, % of GDP)	27.3	9.1	-8.7	2.5	-2.1	-2.1	0.9	-11.8	.	.	.
Private sector debt, consolidated (% of GDP)	86.4	104.6	125.5	134.1	115.7	98.3	92.7	96.4	.	.	.
of which household debt, consolidated (% of GDP)	32.5	42.9	50.4	49.8	40.5	33.3	29.6	26.6	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	53.9	61.7	75.1	84.3	75.2	65.0	63.1	69.8	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-9.2	-8.5	12.0	10.9	7.7	6.0	5.6	5.6	3.7	2.5	2.2
Corporations, gross operating surplus (% of GDP)	31.6	26.7	29.0	30.6	33.7	33.7	33.1	31.3	29.5	28.6	28.3
Households, net lending (+) or net borrowing (-) (% of GDP)	-4.1	1.3	7.4	1.6	-5.3	-5.8	-4.2	-2.8	-1.2	-0.6	-0.7
Deflated house price index (y-o-y)	17.8	-10.8	-35.0	-8.7	4.1	-0.3	6.6	5.1	.	.	.
Residential investment (% of GDP)	3.9	6.2	2.4	1.6	1.9	2.3	2.2	2.3	.	.	.
GDP deflator (y-o-y)	11.1	11.8	-9.7	-1.0	6.4	3.6	1.3	1.2	1.0	1.2	2.3
Harmonised index of consumer prices (HICP, y-o-y)	6.5	15.3	3.3	-1.2	4.2	2.3	0.0	0.7	0.2	0.4	2.0
Nominal compensation per employee (y-o-y)	22.0	16.0	-11.5	-5.5	3.7	6.1	5.0	8.5	6.1	5.2	5.5
Labour productivity (real, person employed, y-o-y)	7.5	-2.8	0.0	3.1	4.6	2.5	0.7	3.8	.	.	.
Unit labour costs (ULC, whole economy, y-o-y)	13.5	19.3	-11.5	-8.3	-0.9	3.5	4.3	4.6	3.8	2.5	2.9
Real unit labour costs (y-o-y)	2.1	6.7	-2.0	-7.4	-6.9	0.0	3.0	3.3	2.8	1.3	0.5
Real effective exchange rate (ULC, y-o-y)	8.3	14.2	-13.0	-9.7	-1.4	0.9	3.7	4.0	0.9	1.8	.
Real effective exchange rate (HICP, y-o-y)	0.8	10.2	5.1	-7.9	0.8	-1.5	-1.0	2.9	1.4	3.1	-0.9
Tax wedge on labour for a single person earning the average wage (%)	29.0	27.5	28.3	30.8	31.0	31.1	30.4	29.8	.	.	.
Tax wedge on labour for a single person earning 50% of the average wage (%)	26.3*	23.3	26.6	28.9	28.8	29.0	28.4	27.6	.	.	.
Total Financial Sector Liabilities, non-consolidated (y-o-y)	41.2	9.1	-8.8	-2.3	-3.0	4.7	0.2	16.1	.	.	.
Tier 1 ratio (%) ²	.	7.5	10.2	10.0	11.5	11.7	12.3	11.6	.	.	.
Return on equity (%) ³	.	-10.1	-31.0	-36.9	2.8	-1.3	10.5	13.3	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (4)	.	2.7	13.6	15.3	10.1	7.9	5.6	7.6	.	.	.
Unemployment rate	9.3	7.7	17.5	19.5	16.2	15.0	11.9	10.8	9.9	9.2	8.6
Long-term unemployment rate (% of active population)	3.7	1.9	4.5	8.8	8.8	7.8	5.8	4.7	.	.	.
Youth unemployment rate (% of active population in the same age group)	15.8	13.6	33.3	36.2	31.0	28.5	23.2	19.6	.	.	.
Activity rate (15-64 year-olds)	70.0	74.2	73.5	73.0	72.8	74.4	74.0	74.6	.	.	.
People at-risk poverty or social exclusion (% total population)	41.2	34.2	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)	7.2	5.4	7.4	12.6	12.6	11.7	10.0	9.6	7.8	.	.
General government balance (% of GDP)	-0.9	-4.1	-9.1	-8.5	-3.4	-0.8	-0.9	-1.6	-1.3	-1.0	-1.0
Tax-to-GDP ratio (%)	28.1	28.1	27.5	28.0	27.9	28.7	28.7	29.2	29.3	29.5	29.7
Structural budget balance (% of GDP)	.	.	-2.3	-1.3	-0.1	-1.0	-2.0	-1.9	-1.7	-1.6	-1.6
General government gross debt (% of GDP)	11.7	18.7	36.6	47.5	42.8	41.4	39.1	40.8	36.7	39.9	37.7

(1) Sum of portfolio debt instruments, other investment and reserve assets

(2,3) domestic banking groups and stand-alone banks.

(4) domestic banking groups and stand-alone banks, foreign (EU and non-EU) controlled subsidiaries and foreign (EU and non-EU) controlled branches.

(*) Indicates BPM5 and/or ESA95

Source: European Commission, winter forecast 2015; ECB

2. STRUCTURAL ISSUES

This section provides an analysis of the main structural economic and social challenges for Latvia. Focusing on the policy areas covered in the 2015 country-specific recommendations, this section first analyses the reforms to the fiscal environment and public finances sustainability. Second, it studies the labour market and other aspects of social policies, including healthcare and education. Finally, a broad spectrum of parameters influencing the business environment is analysed, related to public administration efficiency, the judicial framework and legal practises, infrastructure and networks for communication and energy, research and innovation, and environment.

2.1. FISCAL POLICY, TAXATION, FISCAL FRAMEWORK AND LONG-TERM SUSTAINABILITY

Fiscal policy

The 2016 budget has demonstrated a strong commitment to the fiscal deficit target. The starting position for the 2016 budget was negatively affected by lower-than-expected economic growth and an aspiration to increase defence spending⁽¹¹⁾. In order to meet the budgetary target of a headline deficit of 1 % of GDP, the authorities took the necessary deficit-reducing measures in the 2016 budget. The Commission issued an opinion that the 2016 budget was broadly compliant with the Stability and Growth Pact⁽¹²⁾.

The revenue measures for 2016 allow for some additional spending. The revenue-increasing measures yielding 0.8 % of GDP rely to a large extent on direct taxes on labour, as well as some smaller indirect tax measures and dividend payments from the state-owned businesses. After limited expenditure cuts of 0.1 % of GDP, additional spending measures amount to 0.4 % of GDP, mostly for external and internal security and to a lesser extent for health and education.

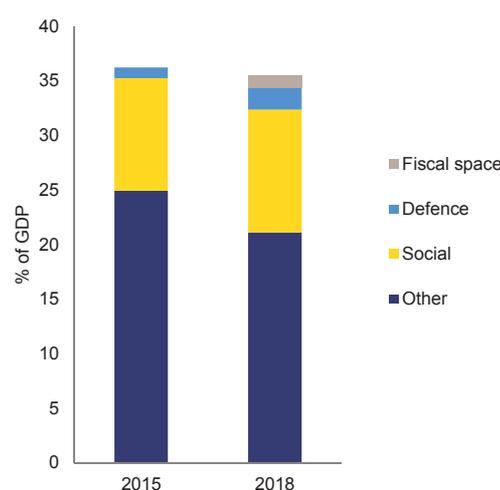
Budgetary policy is set to be in line with the medium-term objective of a structural deficit of 0.5 % of GDP, while allowing for a deviation linked to the pension reform. The headline deficit targets are set at 1.0 % of GDP in 2017 and 0.8 % of GDP in 2018. Based on the authorities' projections expenditure growth rate is expected to be below that of GDP and of government revenue.

(11) The authorities' request for a looser fiscal stance under the Stability and Growth Pact was not accepted by the Commission and the Council.

(12) http://ec.europa.eu/economy_finance/economic_governance/sgp/budgetary_plans/index_en.htm

This results in a fiscal space for new policy initiatives of 0.2 % of GDP in 2017 and 1 % of GDP in 2018, which will most likely be spent on public services.

Graph 2.1.1: Government expenditure plans



Source: European Commission, based on the Medium-term expenditure plan 2016-2018

In the medium-term further efficiency reforms or alternative revenue sources may be needed. Based on current policies, tax revenue and total revenue as a proportion of GDP is expected to increase only marginally over the coming years. This sets a limit on public expenditure. The medium-term expenditure plans envisage almost no growth or even a decline in nominal terms for most of the spending areas, except for defence and social expenditure. Defence spending is set to increase to the NATO target of 2 % of GDP by 2018 (1 % of GDP in 2015), while the growth of social protection spending follows that of the contribution-based social benefits. The share of

other spending in GDP is expected to contract by almost four pps between 2015 and 2018, compared with the estimated fiscal space for policy measures of 1 % of GDP in 2018 (Graph 2.1.1). While some efficiencies in public spending can be achieved, this seems an optimistic assumption.

The authorities are working on a tax policy strategy and a strengthening of the public expenditure review function. The aim of the tax policy strategy is to make the tax policy more growth-friendly, predictable and equitable, while at the same time generating sufficient revenue for public services. The stability programmes have reiterated a goal of increasing the tax-revenue-to-GDP ratio to 1/3 through better tax collection. The draft strategy is expected to be completed in mid-2016 in order to feed into the 2017 budget. The comprehensive expenditure review was begun during the preparation of the 2016 budget and is expected to identify less effective or underfinanced government programmes for the 2017 budget. So far, a public expenditure review across line ministries has not been performed, though such an exercise is part of the budgetary process in other Member States. Stakeholders and experts outside the public sector are involved in both processes.

Taxation

The tax revenue proportion of GDP is expected to remain at 28.9 % under current policy assumptions. In terms of revenue breakdown, most of the tax revenue comes from consumption and labour taxes, while the taxation of capital is limited.

The relatively high tax burden on low wage earners weighs on economic activity and employment. While the tax wedge on the average wage for a single person without children was just above the EU average in 2014, the tax wedge on individuals earning 50 % of the average wage stood at 41.4 % the second highest in the EU (after Hungary, and Germany). This creates disincentives to formal employment for single low-wage earners. Even after the reduction of the personal

income tax rate from 24 % to 23 % in 2015, the tax burden on labour still remains high ⁽¹³⁾.

Latvia has scope to shift the tax burden from labour to more growth-friendly sources of taxation. Comparative research suggests that Latvia has room to reduce taxes on labour, in particular on low-wage earners, compensating for the revenue loss by increasing environmental, consumption, and recurrent property taxes ⁽¹⁴⁾,⁽¹⁵⁾. For consumption taxes, the key issue for Latvia is low tax compliance. Property and environmental taxes have further revenue potential and are among the least distortive.

Labour taxation is characterised by a flat rate system. The basic allowance for personal income tax (EUR 75 per month) is the only item that implies progressivity in the flat labour taxation system (social contributions and personal income tax) for single individuals. Wage earners with dependants are in a much better position, as more generous allowances for dependants reduce their tax wedge. Some may not even use all of their personal income tax allowances ⁽¹⁶⁾. The basic allowance was cut by more than 60 % in 2009, as a crisis-related fiscal consolidation measure, and increased little in 2011 and 2014, remaining at around 9 % of the average wage in 2014, as compared to 18 % of the average wage in 2009. As income growth outpaces the increase in the basic allowance, its effectiveness as a progressivity instrument in the labour taxation is declining.

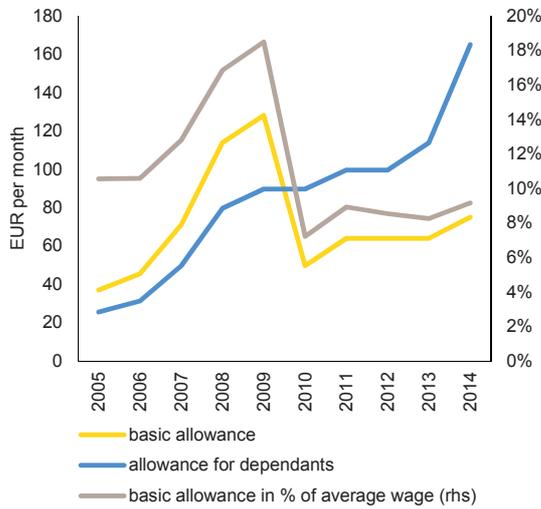
(13) In 2015, the tax wedge for a single wage earner is estimated at 42.7 % at the average wage and at 41.1% at 50 % of the average wage.

(14) Consolidation on the revenue side and growth-friendly tax structures: an indicator based approach. Wöhlbier, Astarita and Moure http://ec.europa.eu/economy_finance/publications/economic_paper/2014/pdf/ecp513_en.pdf

(15) Model simulations suggest that a revenue-neutral shift from labour to consumption taxes have positive effects on employment and GDP. Roeger and In't Veld (2010), European Commission (2010 and 2011), The 2014 Tax Reforms in EU Member States.

(16) A single earner with two children does not pay personal income tax up to a monthly salary of EUR 450 and uses his/her personal income tax allowance fully starting from this wage level.

Graph 2.1.2: Personal income tax allowances and the average wage



Source: European Commission

The budget for 2016 increases the progressivity of labour taxation, but the tax burden is shifted from low-income to high-income earners, rather than to more growth-friendly sources.

The progressivity of labour taxation has increased through the introduction of a solidarity tax for monthly wages exceeding EUR 4050 and the income-differentiation of the basic allowance, as well as a withdrawal of the planned personal income tax cut (regressive measures⁽¹⁷⁾). The allowance for dependants has been increased by EUR 10. Taken together, the above-mentioned measures yield 0.5 % of GDP out of a total revenue effort of 0.8 % of GDP for 2016, representing a slight increase in the tax burden on labour, relative to other sources. Lowering the high tax burden on labour, especially on low-wage earners, is among the EU and euro area priorities⁽¹⁸⁾.

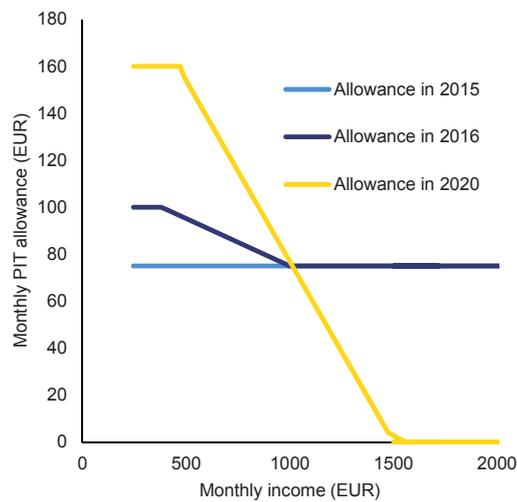
The solidarity tax increases equality between wage earners, but widens the gap between the tax burden on labour and capital. No social contributions were paid for wages exceeding a certain threshold in 2014 and 2015 (EUR 4 050

(17) A reduction in the flat personal income tax rate benefits more medium- and high-wage earners than to the low-wage earners.

(18) The 2016 Annual Growth Survey,

per month in 2015)⁽¹⁹⁾. This meant a declining tax wedge for wages above the threshold and increasing inequality between wage earners. The solidarity tax effectively restores the tax wedge for high wages to the pre-2014 level, but without the accumulation of benefit rights. This represents a new progressive element in the labour taxation system. The measure applies to some 4 700 taxpayers (0.6 % of employees). The new tax wedge on their income at 44 % incentivises tax optimisation. This can be done by diverting labour income to capital income streams, with a capital income tax rate of 25 %⁽²⁰⁾.

Graph 2.1.3: The income-differentiated basic allowance for personal income tax



Source: European Commission

The income-differentiation of the basic allowance lowers the tax wedge on low-wage earners, but to a limited extent.

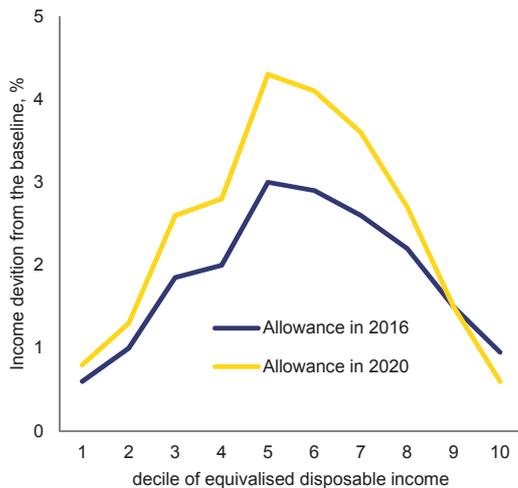
The basic allowance will be increased for monthly wages to just above the minimum wage, reduced for wages of almost three times the average wage and proportionally attributed to incomes between the two thresholds. The full implementation of the measure will take until 2020 and is expected to be revenue-neutral or to have a small positive yield

(19) A cap on social contributions was removed between 2009 and 2013 as an emergency fiscal measure. It was reinstated in 2014 for annual incomes over EUR 46400 and increased to EUR 48600 in 2015.

(20) Company profits received by the owner are taxed at 15 % corporate income tax and 10 % personal income tax for dividend withdrawal.

over time. Graph 2.1.3 illustrates the applicable basic allowance depending on the income level in the first stage of the reform in 2016 and in the last stage in 2020. The differentiated basic allowance mostly affects people in the middle of the income distribution, as the bottom decile groups contain proportionally fewer employed individuals, while in the top decile groups the allowance, which is set in absolute terms, represents a smaller share of income – and hence has a weaker effect (Graph 2.1.4). The reform should reduce the tax wedge on single individuals at 50 % of the average wage from 41.1 % in 2015 to 40.4 % in 2020 under reasonable wage growth assumptions⁽²¹⁾. This brings the tax wedge for low-wage earners still above the EU average of 34 % in 2014.

Graph 2.1.4: **Distributional effect of the income-differentiated basic allowance**



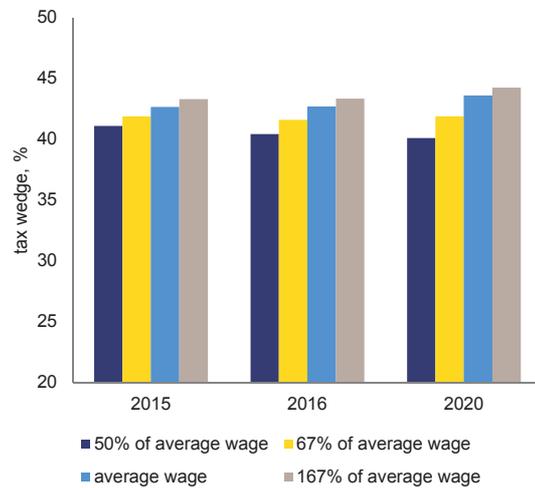
Source: EUROMOD simulations by the Baltic International Centre for Economic Policy Studies (Alf Vanags, Anna Zasova; Latvia Stumbling Towards Progressive Income Taxation, Free Policy Brief Series, 2015)

The administration of the differentiated basic allowance ensures continuity of tax collection, but makes it more cumbersome for taxpayers. The basic allowance will be applied on annual basis, while the lowest basic allowance is used in the calculation of monthly wages (EUR 75 in 2016, EUR 0 in 2020). The overpaid tax will be refunded once a year after the submission of tax

(21) Average wage growth is assumed at 6.1 % in 2015, 5.2 % in 2016 and 5.5 % as of 2017. Stronger wage growth will reduce the effectiveness of the basic allowance leading to a higher tax wedge.

declarations. As a result, the effectiveness of the measure may suffer. Low-wage earners will receive lower monthly wages for the duration of the year, which will be compensated by tax refunds of around one month’s wage (the 13th wage). Some employees may not submit their income declarations, thereby losing their tax refunds. However, electronic submissions of prefilled income tax declarations enable the administrative burden to be minimised⁽²²⁾.

Graph 2.1.5: **Effect of the income-differentiated basic allowance on the tax wedge for single wage earners**



Source: European Commission

The micro-enterprise tax scheme is used as a tax optimisation tool and provides limited social insurance for employees⁽²³⁾. Micro-enterprise tax was introduced in 2010 as an initiative to alleviate the administrative burden on small businesses and start-ups by applying a single tax on turnover. However, over time an increasing number of companies and employees have started using this tax regime for tax optimisation. Given the small scale of operations, tax control measures are not cost effective to limit abuse of the tax regime. In 2015, 11 % of employees worked fully or partly under the micro-enterprise tax regime. The share of micro-enterprise tax revenue diverted

(22) 75 % of employees submitted their income declarations in 2015, of which around half did it electronically. Source: The State Revenue Service.

(23) Notes on micro-enterprise tax assessment by the Ministry of Welfare and the Ministry of Finance.

to social contributions is well below the contributions paid by workers under the regular tax regime. This entails lower social insurance coverage, which means a lower future pension. Successive budgets have attempted to limit use of micro-enterprise tax, but the proposals have been watered down by Parliament. The 2016 budget did not succeed in limiting application of micro-enterprise tax to certain sectors, but a flat payment of social security contributions from the minimum wage for each employee will be partly implemented from 2017 and fully from 2018.

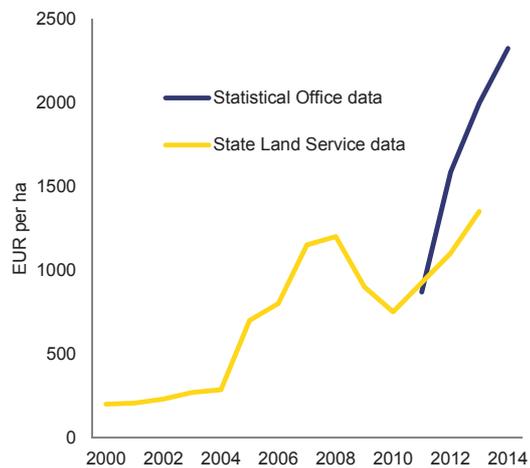
Reducing personal income tax, as a measure to reduce labour taxation, is a political challenge for the local authorities. 80 % of personal income tax revenue is received by local governments and it forms some 56 % of their revenue. Initiatives to reduce the tax burden on labour face local political opposition, requesting compensatory measures for municipalities. In the context of other political constraints, this leads to a piecemeal approach in reforming the labour taxation system, taking small revenue-neutral measures or finding limited compensatory measures from other sources.

Recurrent property tax has additional revenue potential for financing a growth-friendly shift away from labour taxation. The annual property tax is levied on the value of property. Local municipalities can set annual property tax rates from 0.2 % to 3.0 % and grant tax rebates. Until 2015, the local municipalities had an option to cap the property tax payment increase, softening the effect of an increase in cadastral values in some cases. However, the cap on an increase in the cadastral value of agricultural land was set in the 2016 budget at 10 % annually between 2016 and 2025, in order to even out property tax payment increase linked to a steep rise in land price in the last few years (Graph 2.1.6)⁽²⁴⁾. The price increase is stimulated by speculative behaviour, the government's support for mortgages of farmers and the EU flat-rate farm payments. While the cap enables farmers to control their costs, it also reduces efficiency of the property tax as a tool against speculative behaviour. Immovable property

(24) Cadastral values for 2016 are based on real estate data for 2012 and 2013. The cadastral values for agricultural land have increased by 29 % on average and by 70 % in some areas in 2016.

taxes accounted for 0.8 % of GDP in revenue in 2014. Additional revenue can be generated by better aligning property cadastral values with their market values, restricting property tax rebates and increasing tax rates. The property tax rebates could be transformed into tax deferrals for vulnerable groups, allowing the accumulation of tax liabilities attached to the property. Overall, an increase in property taxation could compensate local governments for a reduction in personal income tax revenue, reign in speculative behaviour and improve resource allocation.

Graph 2.1.6: **Agricultural land prices**



Source: Central Statistical Bureau of Latvia, State Land Service

Environmental tax revenue is similar to the EU average, at 2.4 % of GDP (2013). Taxes on energy, mostly excise on fuel, accounted for 74 % of environmental tax revenue in 2013, with the rest coming from taxes on transport and pollution. The revenue breakdown for Latvia is similar to the EU average.

Some tax-increasing measures have been implemented, but with a limited fiscal effect. Excise duties on fuels were raised following similar increases in other Baltic States, and the application of reduced excise duty for agricultural production was restricted. Tax on natural resources was increased for municipal waste landfill, environmentally harmful goods, packaging and vehicles from January 2014. Natural resource tax on CO₂ and particle emissions was increased from January 2015. Value-added-tax (VAT)

deductibility for the purchase price and operating costs of company cars was reduced from 80 % to 50 % as of January 2016. However, the yield of the environmental tax measures constitutes only a small share of the overall fiscal effort.

Existing measures represent small steps towards a growth-friendly tax shift. In terms of car taxation, concerted efforts with Latvia's neighbouring Member States would avoid cross-border leakages. At the same time, there is a good case for increasing the tax on waste landfill in order to divert waste from landfill towards recycling (see Section 2.5). To this end, the authorities intend to increase the tax on natural resources, including a schedule for a waste landfill tax rate increase starting from July 2016 and running until 2020, to stimulate a timely response from the industry. Moreover, phasing out the reduced excise duties for fuel used in agriculture and heating could have positive environmental and fiscal effects.

Tax compliance remains challenging for Latvia. The estimated size of Latvia's shadow economy remains high (23.5 % of GDP), despite some improvement in recent years. Unreported business income (tax evasion) is estimated at 46 % of the shadow economy in 2014, followed by unregistered/underreported work ('envelope wages'), 36.1 %. The situation is particularly dire in the construction sector (with an estimated 49 % of shadow activity)⁽²⁵⁾. The VAT gap is estimated to have declined from 34 % in 2012 to 30 % in 2013 but remains among the highest in the EU (average of 15.2 %)⁽²⁶⁾. Several features of Latvia's tax system can be used in structures of aggressive tax planning⁽²⁷⁾. In particular, the absence of anti-abuse rules⁽²⁸⁾ may be creating an

attractive environment for certain aggressive tax planning structures.

Measures have been taken to improve tax compliance in some areas. Legislative changes in 2015 enforced the personal liability of companies' board members for tax debts and allowed for the publication of tax payments by legal persons. Two measures have been postponed until 2016: (a) new requirements for cash registers with electronic record-keeping and (b) information exchange with financial institutions regarding suspicious transactions. The Enterprise Register will apply the register of risk addresses once they have spare administrative capacity. However, the proposal to include foreign individuals in a register of high-risk individuals (restricting their right to establish and operate a business in Latvia) has not been passed. This weakens the personal responsibility of the board members for tax debts, as fraudulent companies tend to have board members residing in countries outside the EU – with which cooperation may prove to be difficult. Tax administration measures at sectoral level and preventive measures are yielding additional tax revenue.

The tax revenue increase through better collection is part of the tax policy strategy. The authorities are working on a list of new measures for tackling the shadow economy over the period 2016-2020. The new measures will follow good examples already implemented in other Member States, with a view to moving towards more real-time, electronic based tax declarations and control measures, as well as eradicating tax loopholes. This is expected to make the tax administration more efficient, while at the same time freeing up manpower for other priority tasks.

Pension adequacy and sustainability

Pension adequacy has been deteriorating. The majority of current pensioners rely on first pillar public pensions. The median pension income as a share of median earnings of those aged 50-59⁽²⁹⁾

those of a foreign state or the lack of beneficial-owner test for reduction of withholding tax on dividend, interest or royalty.

(29) Measured as aggregate replacement ratio, which is the ratio of the median individual gross pensions of 65-74 age

(25) SSE Riga and SEB study "Shadow Economy Index for the Baltic countries 2009 – 2014", published on May 13, 2015.

(26) Study to quantify and analyse the VAT Gap in the EU Member States, 2015 Report.

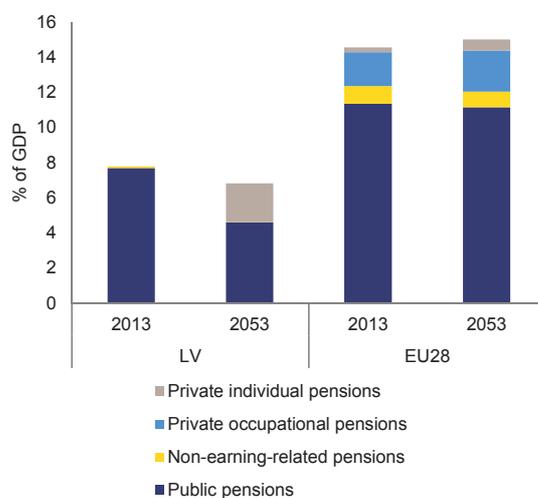
(27) For an overview of the most common structures of aggressive tax planning and the provisions (or lack thereof) necessary for these structures to work, see Ramboll Management Consulting and Corit Advisory (2016), Study on Structures of Aggressive Tax Planning and Indicators, European Commission Taxation Paper n°61. It should be noted that country-specific information provided in the study gives the state of play by May/June 2015.

(28) For example the lack of Controlled Foreign Companies (CFC) rules, the lack of rules to counter mismatches in tax qualification of domestic companies or partnerships and

continues falling to at 44 % in 2014 (the EU average was 56 %) and 42% in 2015. Also, the inequalities among Latvian pensioners are increasing, as the public contribution-based pension scheme provides little redistribution among pensioners ⁽³⁰⁾.

Addressing the adequacy of pensions brings additional fiscal costs. The planned implementation of the minimum income level in 2017 should, to a limited extent, address the poverty issue. Assuming a continuation of the increasing share of minimum pensions together with upward revisions of the minimum income level, pension expenditure would exceed existing plans. Moreover, a change in the pension indexation formula has been under consideration, increasing the scale of real wage bill growth from 25 % to 50 % and with additional annual fiscal costs (less than 0.1 % of GDP in 2016).

Graph 2.1.7: Pension expenditure projections



Source: Ageing report 2015

The long-term sustainability of the pension system masks the problem of low pension adequacy. Despite the fact that, based on current

category relative to median individual gross earnings of 50-59 age category, excluding other social benefits.

(30) The indexation is more favourable towards low pensions. The part of the pension equal to 50 % of average national earnings for the previous year is indexed by both consumer price index and 25 % of the real increase in the social insurance wage bill.

policies, Latvia scores well in terms of the long-term sustainability of public finances, the low future pension adequacy and the policy plans in the pipeline are expected to bring in additional fiscal costs. The net replacement rate ⁽³¹⁾ for an employee with average earnings having a 40-year service record is projected to decrease from 65 % in 2013 to 51 % in 2053. The situation for low-wage earners with short careers (30 years) is projected to be even more pessimistic: their replacement rate would fall from the current rate of 66.4 % to 39.4 %, which appears inadequately low. Pension expenditure funding is projected to change over time with higher contributions from the statutory funded pension schemes, but total expenditure is estimated to remain below the EU average (Graph 2.1.7). Even maintaining the current ratio of the average pension to the average wage in 2053 could cost some 3 % of GDP more than assumed in the 2015 Ageing report of the Commission.

Fiscal framework

The domestic fiscal framework defines the budgetary policy. The fiscal rules are applied in a top-down manner, deriving the annual headline deficit targets from the structural balance rule. The distance between the headline deficit target and the no-policy-change estimate represents the necessary policy action in any given year. In the 2016 budget, the negative fiscal space has been addressed by net consolidation measures of around 0.4 % of GDP. However, the fiscal security reserve of 0.1 % of GDP for 2016, required by the Fiscal Discipline Law from 2016, has not been implemented.

The Fiscal Discipline Council is fully operational. The Fiscal Discipline Council was established in January 2014 on the basis of the Fiscal Discipline Law as a functionally and financially independent body with the purpose of monitoring compliance with that law. The number of staff in the secretariat has been increased to

(31) The net replacement rate represents pension entitlement divided by net pre-retirement earnings, taking into account personal income taxes and social security contributions paid by workers and pensioners. The 2015 Pension Adequacy Report: <http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=2339>

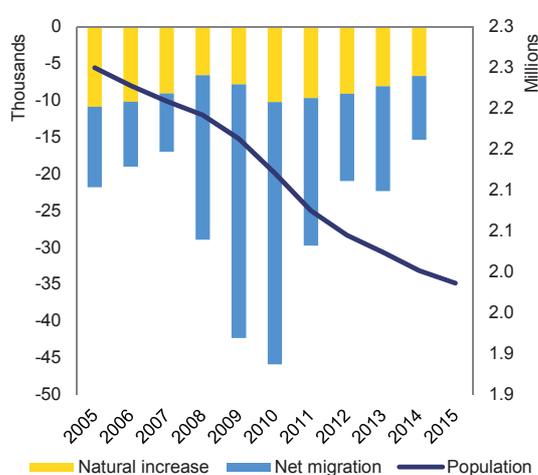
four, covering macroeconomic, fiscal analysis and administrative tasks.

A formal working arrangement will clarify the role of the Fiscal Discipline Council. The Memorandum of Understanding between the Fiscal Discipline Council and the Ministry of Finance is being drawn up. When finalised, it is expected to clarify the function of independent assessments of macroeconomic forecasts, and the timetable and procedural steps for the annual budget and the stability programme assessment.

2.2. LABOUR MARKET AND SOCIAL POLICIES

Against the backdrop of a decreasing labour supply, employment rate continues to improve (20-64) reaching 72.3 % in 2015 (Q1-Q3 average). Due to high emigration (mostly as a result of higher wages abroad) and negative natural growth, the working age population has declined by 15% during the last 10 years, which is the highest decrease in the EU (Graph 2.2.1). Youth outward migration is considerable, as more than 40% of the emigrants are in the age group 20-35. During the crisis, labour mobility alleviated the unemployment problem in Latvia, but continued outward migration in normal growth conditions limits the labour supply in Latvia. This leads to upward pressure on wages and may reduce the investment attractiveness of Latvia, due to a declining number of consumers and workers. This calls for productivity enhancing reforms to ensure the Latvian economy stays on a sustainable growth path.

Graph 2.2.1: Population dynamics



Source: Central Statistical Bureau of Latvia

Some of the recent measures may exacerbate the problems of the shrinking labour force. The central government will stop financing the childcare vouchers scheme⁽³²⁾ as of May 2016, passing the responsibility to local government.

(32) Local authorities are primarily responsible for provision of childcare services, but demand exceeds supply. As a stopgap measure, the central government financed childcare vouchers from 2013, ensuring private childcare services for children without a place in municipal kindergarten.

This may have repercussions on the accessibility of childcare and female employment. Childcare participation is already below the EU average. Only 23 % of children up to three years of age are involved in formal care arrangements (79% of children between three years of age and mandatory school age). Likewise, the extension of early retirement rights for some professions reduces the supply of older workers. The early retirement schemes were extended to ambulance medical and driving staff and some professions related to state security. Legislative proposals concerning the early retirement of teachers in specialised schools, pre-schools and sports teachers have been submitted to Parliament. The labour supply is also negatively affected by a steady increase in the number of people with disabilities.

Coverage of the unemployed by active labour market policy (ALMP) measures remains low — 10.4 % of the registered unemployed were activated in 2014. The funding for ALMPs was reduced in 2015, but increased again for 2016, which against, the backdrop of declining unemployment, should increase the coverage of ALMPs in 2016⁽³³⁾. The largest share of ALMP spending is dedicated to Youth Guarantee⁽³⁴⁾ (39%) and training (39%) measures. Subsidised employment and public works make up 12% and 7% respectively. Long-term unemployment has decreased considerably and, at 4.7% of the active population, it stands below the EU average. The authorities are designing active ageing measures based on the research recommendations of the World Bank and preparing targeted activation measures for the long-term unemployed.

Given Latvia's demographic challenges, activation of young people is especially crucial. Youth unemployment has fallen considerably and is below the EU average, partly due to high emigration of young people. The field work to reach out to young people not in education, employment and training has been considerably

(33) The funding for ALMPs in 2014 was 38 million EUR, in 2015 – 33 million EUR and planned funding for 2016 – 41 million EUR.

(34) The Youth Guarantee is an approach to tackling youth unemployment which ensures that all young people – whether registered with employment services or not – get a good-quality, concrete offer within 4 months of them leaving formal education or becoming unemployed.

delayed; as a consequence the labour supply potential of young people is not fully utilised. The information sharing on at-risk youth between schools, municipalities and the public employment service is weak. Assistance to young people facing multiple barriers could be improved, which will require better links to social services.

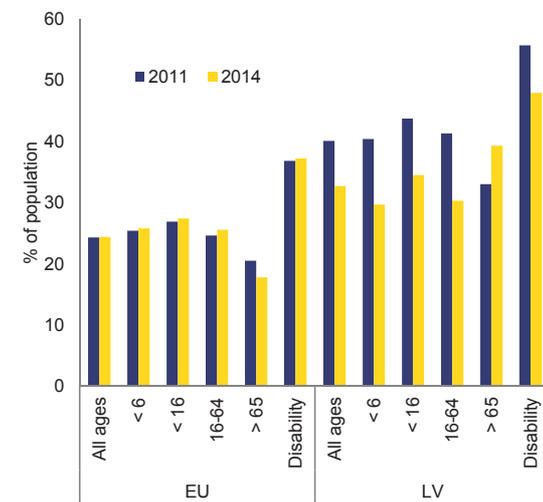
Poverty and social exclusion rates continue decreasing, albeit from a very high level. In 2015, 30.9 % of the population was exposed to risks of poverty and social exclusion, which is among the highest in the EU. Inequality in Latvia is also among the highest in the EU. Expenditure on social protection benefits (14 % of GDP in 2013) is the lowest in the EU, and social transfers have a relatively low impact on poverty reduction. The latest improvements in the living standards are largely due to economic growth, which brought about an increase in wages and a reduction of unemployment. However, the availability of financial resources for social spending remains a reason for concern. Also, the micro-enterprise taxation regime (see Section 2.1) hinders poverty reduction efforts, because the employees of micro-enterprises do not have adequate social protection in the event of unemployment, disability, illness and maternity. The remittances sent by emigrants (estimated around 2.5 % of GDP in 2013 ⁽³⁵⁾) may have a positive impact on poverty reduction.

The at-risk-of-poverty rates for the elderly have increased since 2011 (Graph 2.2.2). Incomes of the elderly grew at a slower pace than those for the general population. The relative poverty of elderly is also related to the low pension adequacy ⁽³⁶⁾ in Latvia relative to the EU average. The minimum pension as the percentage of median income is the lowest in the EU and does not provide sufficient protection against elderly poverty. Moreover, Latvia does not have survivor's pensions, in contrast to other EU Member States.

(35) The World Bank, data on Migration and Remittances.

(36) The median relative income ratio for the people 65+ as a ratio of income of the age group 0-64 was 77 % in 2013, below the EU average of 93 %. The aggregate replacement ratio in Latvia was 47 % in 2013, below the EU average of 56 %. Source: The 2015 Pension Adequacy Report.

Graph 2.2.2: **People at risk of poverty or social exclusion**



(1) People with disability at age 16-64, 2013 data for 2014.

Source: Eurostat

Some of the immediate adequacy concerns have been addressed. Pensions granted in the period 2009-2015 will be revised upwards. During this period, the indices, linking notional pension capital to wage growth in the economy, fell below one. This led to significantly lower pensions for those retiring in 2009-2015. To avoid such situations, the index will not be allowed to fall below one in the future.

Children, single parent families and persons with disabilities are relatively more exposed to risk of poverty, despite some improvement. The risk of child poverty and social exclusion has decreased since 2011, but is still above the EU average (Graph 2.2.2). This is reflected in relatively low spending on child and family benefits (1.1 % of GDP vs. 2.4 % of GDP in the EU). A large share of child-related social benefits is linked to parents' social contributions and is paid until the age of two. The age-skewed child support is reflected in somewhat higher risk of poverty for older children than for smaller ones (Graph 2.2.2). The at-risk-of-poverty of poverty and social exclusion rate of single parents stood at 54.8 % in 2014, above the EU average of 48.2 %. Moreover, the share of single parent households is particularly high in Latvia — 30.6 % of children were living with a single parent in Latvia in 2014, against an EU average of 16.6 %. Persons with disabilities are at even higher risk of poverty or social exclusion (43.2 % vs 30.1 % in the EU).

Coverage and benefit adequacy of social assistance is low. The guaranteed minimum income (GMI) benefit — the main poverty-targeting programme — contributes very little to the incomes of those in the poorest quintile. Only around 12.5 % of the poorest quintile receive GMI or housing benefits⁽³⁷⁾. The low coverage follows from low-income thresholds and relatively strict eligibility criteria. Adequacy is low, as cash benefits are provided as a top up of household income to reach EUR 50 per month per person or higher in some municipalities and/or for vulnerable groups such as children, elderly or disabled persons. The total amount of social assistance benefits reaches only 29 % of the poverty threshold for singles (31 % for couples), which is among the lowest in the EU⁽³⁸⁾. Latvia's spending on social exclusion benefits (including GMI) is only 0.1% of GDP, while the EU average is 0.5 %. The spending on housing benefits is similarly small — 0.1 % of GDP in comparison to the 0.6 % for the EU. The funding for social assistance is fully decentralised, which risks exacerbating regional inequalities. Moreover, the social assistance system suffers from insufficient support to the benefit recipients to help re-enter back to the labour market.

The government plans to introduce a minimum income level, which is expected to provide a universal social safety net. The concept of a minimum income level at 40 % of equalised household median income remains a cornerstone for the future reforms in the social security system and various benefits (state social security benefits, unemployment benefits, minimum pensions, social assistance benefits) will be linked to this level. However, most benefits (minimum unemployment benefits, minimum pensions, guaranteed minimum income for the unemployed) are expected to remain significantly below the minimum income level, according to draft proposals. Restricting the application of the minimum income level would further limit its effectiveness in reducing poverty.

The minimum income level is planned to be gradually implemented from 2017, but the

budget is not yet allocated nor has the legislative proposal been tabled. Preparations continued in 2015, but the specific proposal is expected to be presented in 2016 and to be included in the 2017 budget. Implementation stages remain uncertain. Financing is expected to be shared between the central government and municipalities, ensuring greater transparency and political support.

Some preparatory work has been done to improve the employability of social assistance clients, but implementation has not yet started.

Many social assistance clients have poor health, addictions, motivation problems, caring obligations and other issues, which require tailored social services. The Ministry of Welfare has allocated funding from the European Social Fund to provide individualised support for the long-term unemployed. It will include health assessment, addiction treatment, motivation programmes, individual consultations, career development support. Another measure to support social entrepreneurship is under preparation. The Ministry of Health is developing EU co-financed health support measures for disadvantaged groups, including the poor and the unemployed. However, implementation has been delayed. Social workers play an important role to help activating the social assistance benefit recipients. Targeted training courses and supervision of social workers will be provided in 2016 co-financed by EU funds.

(37) World Bank, Latvia: Who is Inactive, Unemployed or Needy?, 2013.

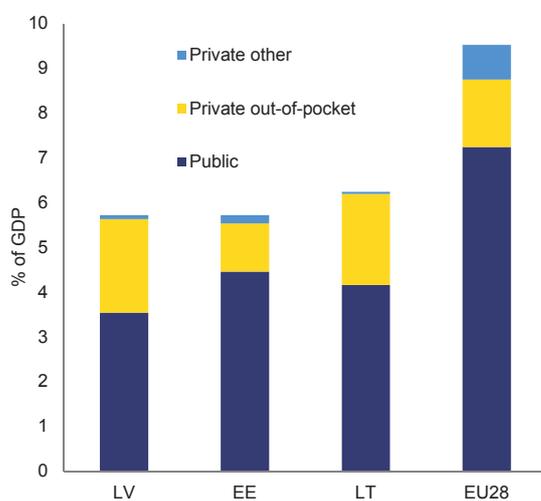
(38) Bradshaw J. and S. Marchal, A Comparison of Minimum Income Schemes in European Countries Using MIPI Data, 2015.

2.3. HEALTHCARE

Current situation

Access to healthcare is hampered by low public financing and high out-of-pocket payments, leaving a high proportion of the population with unmet healthcare needs. Total health expenditure is well below the EU average and a high share of it is covered by private out-of-pocket payments (Graph 2.3.1). Public spending is controlled by quotas that drive up the waiting times and make it more difficult for such groups as children and needy persons to receive guaranteed free healthcare. This leads to delayed treatment and high private out-of-pocket payments, including payments to avoid long waiting times⁽³⁹⁾. The Latvian population reports since 2010 the highest rates of unmet needs for medical examination (Graph 2.3.2). The most important barrier to access to healthcare results from the inability and/or unwillingness to pay for health services and medical goods. In addition, informal payments remain a concern⁽⁴⁰⁾ and hinder the efficiency, quality and accessibility of the system.

Graph 2.3.1: Health expenditure, 2013



Source: World Health Organization

Unequal access to healthcare is a challenge.

Unmet needs for medical examination in Latvia are consistently higher among people in low-income groups compared with those in high

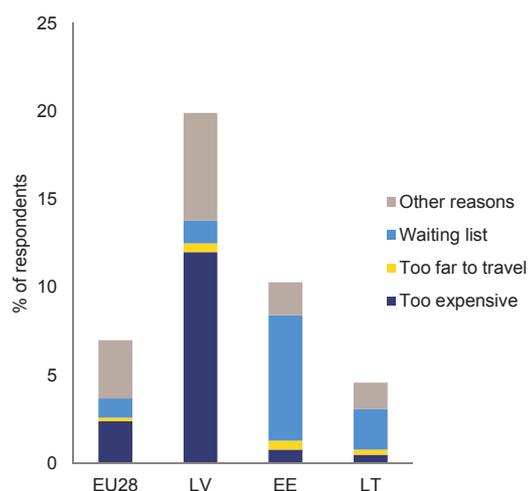
(39)Zilvere, R (2014)., Country Document. Pensions, health and long-term care. p. 17-24.

(40)Special Eurobarometer 397 on Corruption, February 2014, http://ec.europa.eu/public_opinion/archives/ebs/ebs_397_en.pdf

income groups (with the highest gap in the EU between lower and higher income quintiles in 2013).

Poor health outcomes lead to a loss of potential workforce. Mortality rates before the age of 65 are the second highest in the EU and are estimated to reduce the workforce in Latvia by 3.9 % when compared to its potential if mortality rates were equal to the EU average⁽⁴¹⁾. This is particularly problematic in the Latvian context of a dwindling labour force. A reduction of number of premature deaths by providing additional financing can be cost effective over time through positive effect on working age population and GDP⁽⁴²⁾.

Graph 2.3.2: Self-reported unmet needs for medical examination, 2013



Source: Eurostat

Financing

Only a limited increase in public funding is currently planned. In 2016 the public healthcare expenditure has reached EUR 770.8 million that is a marginal increase of EUR 5.5 million compared to 2015⁽⁴³⁾. In 2016, wages for the lowest paid

(41)Source: European Commission calculations on impact of mortality on labour force size, measured as the number of potential working life years per birth cohort, standardised for population size and age cohort mix, based on Eurostat, 2013 figures.

(42)Evaluation of the Health Strategy for 2014-2020 by the University of Latvia (2014)

(43)Budget of the Ministry of Health <http://www.vm.gov.lv/lv/ministrija/budzets/>

Box 2.3.1: Health outcomes in Latvia lag behind those of most EU Member States.

Life expectancy at birth is well below the EU average for both men (72.9 vs 77.8) and women (80.1 vs 83.3). The trend shows a slight improvement since 2010, similar to the rest of the EU. Time lived in good health and without disabilities (healthy life years) is the shortest of all Member States (54.3 years in 2013; EU: 61.5). In 2013, healthy life years at birth had a significant gap compared to life expectancy which indicates that people live a substantial period of life with morbidity and/or disability.

The overall mortality rate is considerably higher than the EU average. Although mortality rates have decreased since 2007, especially respiratory mortality, there is still a significant gap with the EU average, especially for cardiovascular and cancer mortality. The rates of potentially amenable and preventable mortality are respectively the highest and the second highest in the EU. In-hospital mortality rates following acute myocardial infarction and stroke are the highest among the Member States ⁽¹⁾.

Latvia is among the two countries with the highest level of new HIV diagnoses and AIDS diagnoses rates in Europe; and these rates are increasing. The number of related deaths has increased over the last 10 years (106 in 2014) ⁽²⁾. The rate of hepatitis C reported cases is also very high relative to other EU countries (62.6 for 100 000 persons compared to 7.6 on average in the EU), as well as number of diagnosis of hepatitis B and some other sexually transmitted diseases ⁽³⁾.

In addition, the self-perceived level of general health among the population is the worst in the EU and dissatisfaction with the healthcare system remains high ⁽⁴⁾.

⁽¹⁾ Data for 2013/2012 available for 19 MSs for Acute Myocardial Infarction and for 18 MSs for stroke. Source: OECD, Health statistics.

⁽²⁾ European Centre for Disease Prevention and Control, WHO Regional Office for Europe. *HIV/AIDS surveillance in Europe 2014*. Stockholm: ECDC; 2015.

⁽³⁾ European Centre for Disease Prevention and Control. *Sexually transmitted infections in Europe 2013*. and *Annual epidemiological report 2014 — Sexually transmitted infections, including HIV and blood-borne viruses* Stockholm: ECDC; 2015 .

⁽⁴⁾ Self-perceived health and Self-perceived long-standing limitations in usual activities due to health problem (Eurostat) and Special Eurobarometer 411, Patient Safety and Quality of Care http://ec.europa.eu/public_opinion/archives/ebs/ebs_411_en.pdf .

medical staff will be slightly increased along with the monthly minimum wage increase to EUR 370. Furthermore, investments in healthcare from the European Structural and Investment Funds have not yet taken place. Limited extra financing will be made available for state guaranteed hospital loan repayments and to reduce burden on tariffs.

The allocation of resources between the different providers is improving with a shift from expensive hospital care to less costly ambulatory and primary care. However, hospitals are still being reimbursed regardless of the complexity of health services provided. The introduction of the diagnosis-related groups payment system has been slowed down.

Ongoing and forthcoming reforms

The study identifying the main bottlenecks and reforms needed in the health sector is

significantly delayed and could be finalised only by mid-2016. The study includes a mapping exercise of the existing and planned health care investments, including human resource provision, infrastructure accessibility and cost efficiency. The mapping is conditional for the European Regional Development Fund investments in health care infrastructure ⁽⁴⁴⁾. Thus, Latvia is not taking advantage of the available EU funds better to address accessibility of health care services.

Existing measures, such as exemptions and lower patient co-payments are steps in the right direction, but are not yet sufficient. Limited public financing is prioritised for certain critical medical cases, creating fast access options. As of January 2016, the patient co-financing for certain diagnosis (hepatitis C, HIV/Aids) is abolished as

⁽⁴⁴⁾Partnership Agreement for the European Union Investment Funds Programming Period 2014 – 2020, paragraph (392)

the incidence rate of these infectious diseases levelled off. The state will fully compensate medical expenses (instead of 75 % previously) for hepatitis C patients. For HIV/Aids patients treatment at an earlier stage of the disease will be compensated by the state. To improve the quality of hospital care, Latvia plans to introduce a national healthcare quality assurance system as one of the investment priorities linked to EU funds for 2014-2020.

Incentives for quality and geographical coverage of health services are weak. With a pay-for-performance scheme in primary care, quality incentives are being put in place. However, the quality linked payments for family doctors do not provide strong incentives. Also weaker distribution of family doctor practices in rural areas creates geographical barriers to primary care. To alleviate this situation, a bonus system was put in place. The effect of these initiatives is uncertain at this stage and positive outcomes will only be detectable in the longer term. However, very low financial incentives linked to these initiatives are putting them at risk.

The government is putting limited efforts into improving disease prevention and health promotion. The share of national resources allocated to prevention has decreased ⁽⁴⁵⁾ despite the high level of chronic conditions and the lack of focus on preventable lifestyle diseases. The Public Health Strategy for 2014-2020 earmarks significant financial resources for activities in these fields. However, it has not been translated into actual national budget allocations in 2016. Still, EUR 47 million from the European Social Fund can be allocated to health promotion and disease prevention services.

The Health Workforce Strategy, in place since 2006, has only been implemented partly, due to the fiscal adjustment period. The number of practising doctors per capita is just below the EU average. However, the number of practising nurses per capita is among the lowest in the EU. The age of doctors and nurses is rapidly increasing threatening the sustainability of providing healthcare services. The difference in remuneration

of medical personnel, relative to other Member States, encourages an outward migration of newly qualified physicians and nurses. To mitigate the risks, a residency programme is being implemented with the opening of 200 new residency places. However, the drawing-up of a new comprehensive policy planning document was further delayed and will be completed only after the recommendations of the research analysis carried out by the World Bank will be available.

Governance modernisation

For 2014-2020, Latvia has allocated around EUR 272 million of cohesion policy funding for investments in the health sector. Over EUR 179 million co-financed by the European Regional Development Fund (ERDF) will be spent on infrastructure, while European Social Fund investments will amount to almost EUR 93 million. Among others, Latvia is conducting an eHealth project with EUR 7 million from ERDF. This eHealth project encompasses a common eHealth portal, eBooking visits referral, electronic health records, ePrescriptions, eSickness leaves.

More efficient project management is needed. The State Audit Office has raised concerns about the effective implementation of this eHealth project pointing at weak project preparation and project management by the staff, lacking sufficient qualification and experience. The Office also point to insufficient promotion of the project among the stakeholders. The project was started in 2007, but the planned services are not yet provided. This has repercussions on the progress of healthcare reforms, including those delivering budget savings, and the EU grant for the project is at risk. These topics are discussed further in Section 2.6.

Availability and coverage of eHealth services remains below the EU average. As use of eHealth services is on voluntary basis, only 13 % of Latvian general practitioners exchanged medical data electronically in 2013, as compared to 36 % in the EU on average. Only 6 % of general practitioners have used ePrescriptions, while some Member States are 100% digital in this aspect. Medical institutions and pharmacies will be required to use two services – electronic sick-leave and electronic prescription, as from 1 December 2016. The availability of eHealth

(45) Budget of the Ministry of Health
<http://www.vm.gov.lv/ministrija/budzets/>

services will be expanded and their use is expected to become mandatory from July 2017.

Electronic health records are still at a development stage. A pilot phase was meant to be launched at the beginning of 2015. However, the system has not yet been launched. The aim of e-

Health and Health Information System is to create a single data centre, which will store medical records of each resident electronically and will also integrate all internal information systems of healthcare institutions. The National Health Service is the primary institution responsible for its development.

2.4. EDUCATION, RESEARCH AND INNOVATION

Education

Latvia's labour productivity is among the lowest in the EU and further enhancing human capital is crucial for improving its growth potential. Productivity improvements are also important for maintaining competitiveness and sustaining income convergence with the EU average.

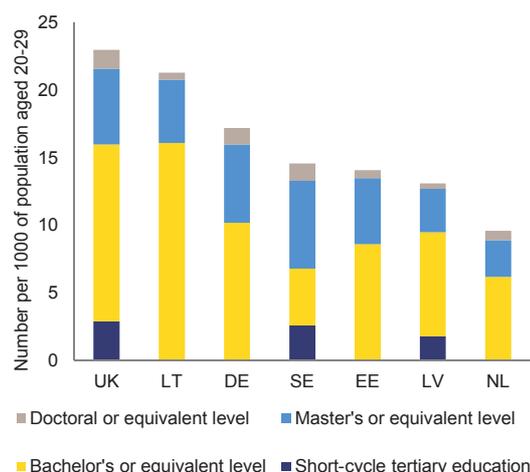
A relatively large proportion of young people enters the labour market without professional qualifications (i.e. with only basic or general secondary education). This could indicate shortcomings in the career guidance system or limited access to post-secondary education. Career guidance faces several challenges, such as insufficient access to its services, little involvement of employers and insufficient contacts with the world of work. There are also concerns about the impartiality of career guidance since general education schools have a financial interest in keeping more students and do not have incentives to let students learn about the possibilities offered by vocational schools. Some of these challenges could be tackled by the new European Social Fund (ESF) project to improve provision of career education, but the project has not yet started.

Adult participation in life-long learning is relatively low, but comparable to other countries in the region. There is scope to step up action to improve adult learning. Public support for adult learning has been mostly ESF funded and there is no evidence that this will change in the near future. The first draft of the adult learning action plan (implementation model for life-long learning) which was planned for end-2014 was only produced in mid-2015 and is likely to be considerably revised. As a consequence, no effective delivery mechanism is in place and implementation of ESF financed activity has been significantly delayed.

The tertiary education⁽⁴⁶⁾ attainment rate is high, but supplying graduates to knowledge-intensive sectors and attracting international students remain a challenge. Latvia's tertiary

education attainment rate of 30-34 year-olds decreased slightly between 2013 and 2014 (from 40.7 % to 39.9 %) after significant increases in previous years, but remains well above the Europe 2020 target of 34-36 %. The proportion of tertiary graduates in science, technology, engineering and mathematics (STEM) fields (17.9 % in 2013) is among the lowest in the EU (Graph 2.4.1). This may to some extent be amplified by gender biases: the share of women in tertiary education is proportionally higher, while men are often more likely to opt for STEM fields. In 2013 only 1.7 % of bachelor graduates and 3 % of masters graduates in Latvia came from a foreign country. These figures are, respectively, the sixth lowest and the fifth lowest in the EU.

Graph 2.4.1: **Proportion of tertiary graduates in STEM fields, 2013**



Source: Eurostat

Latvia is gradually introducing a new model for financing the higher education system with elements which reward quality. Until 2015, Latvia's model for financing higher education lacked performance-oriented components. A new quality-targeting financing model was developed in 2015, based on World Bank recommendations⁽⁴⁷⁾. It includes three pillars: 1) basic funding allocated per study place and per full-time equivalent of academic staff; 2) performance-oriented funding (with a number of

(46) Tertiary education — provided by universities and other higher education institutions — is the level of education following secondary schooling.

(47) World Bank (2014), Higher Education Financing in Latvia: Final Report.

indicators for performance in research and internationalisation); 3) targeted funding for innovation and development, currently supported by the European Structural and Investment funds. This is a welcome step, although the amounts are lower than those required for the optimal model of development suggested by the World Bank study. The international dimension of the new model is also limited. For the third pillar, no additional national funding was allocated in 2016, due to budget restrictions.

Measures on accreditation are promising, although their implementation is still at an early stage. To improve the accreditation system of higher education institutions, the government designated the Academic Information Centre as an independent national accreditation agency starting from July 2015. The Centre aims to be included in the European Quality Assurance Register for Higher Education in 2018 at the latest, i.e. before the next large accreditation round, which is scheduled for 2019. The effective implementation of ESF support has, however, not yet started.

The quality of higher education is also related to improvements in the governance of institutions and higher criteria for academic staff. To assess possibilities to make governance structures more conducive to internal reforms, responsive to the demands of the economy and ensuring a higher degree of academic integrity, a World Bank study will be commissioned in 2016. To improve the quality of academic staff, the rules for assessing professors' qualifications are being amended. Under the new compulsory criteria, professors will have to have a minimum number of international publications and sufficient knowledge of foreign languages. ESF support is also envisaged for raising capacity of the staff, but implementation has not started yet.

STEM subjects are being promoted, both at tertiary and secondary education level. In order to achieve a better balance in the supply of places in higher education, Latvia is gradually increasing the number of publicly financed study places in STEM fields and cutting it in social sciences. This may help steer demand towards study fields linked to high value added economic sectors. But it also entails some risks of distortion to market incentives if there are rational reasons for students not to opt for STEM fields (e.g. relevance of the

training provided, expected labour market returns). Diagnostic tests in STEM subjects will be introduced for ninth to eleventh-grade students starting from the 2015/2016 school year, while tests for eighth-grade students already started from 2014-2015. An optional pilot exam in physics, chemistry or natural sciences for twelfth-grade pupils is to be introduced from 2015/2016.

The vocational education and training (VET) system has been reformed over the years but the challenges remain. VET reforms have been ongoing for several years, and significant progress has been achieved in consolidating the school network and modernising equipment. However, more work remains to be done to expand the work-based learning components and to update outdated curricula. Moreover, the poor public image of vocational education reduces its attractiveness for potential students⁽⁴⁸⁾.

Apprenticeship type schemes are underdeveloped in Latvia. A pilot project, called work-based learning pilot, was implemented during 2013-2015 to test different approaches. The legislative amendments in 2015 introduced work-based learning as one type of acquiring VET. However, a clear and consistent legislative framework is not in place. The main characteristics of work-based learning are not specified, and further uncertainties remain, especially in relation to the pay and status of the student as well as organisational aspects. Motivating companies to provide quality work-based learning and practical training placements is problematic. The government has analysed the possible options (lower minimum wages for apprentices, tax reliefs, stipends) to provide financial support for employers taking on an apprentice or trainee, but decisions are not taken yet.

The vocational education curricula reform is progressing slowly. This started in 2008 and is expected to be finalised in 2020. Currently only 80 out of 240 occupational standards/ occupational qualification basic requirements have been completed. Similarly progress has been slow in introducing modular programmes (around one

(48) Special Eurobarometer 369, Attitudes towards vocational education and training, 2011; Special Eurobarometer 417, European Area of Skills and Qualifications, 2014.

third completed) and in developing examination content (13 % completed). The social partners are significantly involved in curricula reform. However, their role could be strengthened in relation to work-based learning and VET school governance. Parliament has adopted the amendments to the Vocational Education law, which entered in force in May 2015. However, these amendments are not fully implemented as secondary legislation on several aspects, such as sectoral expert councils, convents and procedures for curricula update are not yet in place.

Research and innovation

R&D intensity has slightly increased, but both public and business investments remain very low (Graph 2.4.2). R&D intensity marginally increased from 0.56 % of GDP in 2007 to 0.68 % in 2014, but remains well below the EU average of 2.03 % of GDP. The severe reduction in national public R&D budgets since 2009 has been more than compensated by the substantial use of EU Structural funds for R&D from 2010-2011. Public R&D intensity has increased, but is dependent on EU funds. Business expenditure on R&D is very low, but appears to be on a slow upward trend in recent years (from 0.17 % in 2013 to 0.24 % of GDP in 2014).

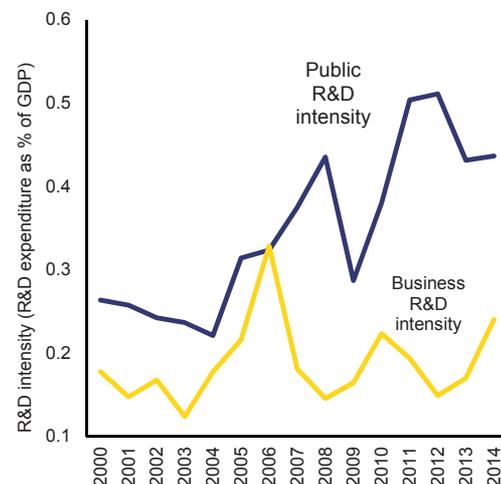
The structure of the Latvian economy implies low drive for innovations. The low share of medium and high-tech companies in value added⁽⁴⁹⁾, the prevalence of the shadow economy and the large share of state-owned companies leaves little room for private innovative capacity, as confirmed by the low number of researchers employed in the private sector. The lack of collaboration with research institutes and universities is reflected in the low number of public-private co-publications – 1.5 per million inhabitants, the lowest in the EU.

Uptake of R&D tax incentives is increasing, following the 2014 reform of their scope and generosity. Until recently Latvia has been a marginal user of R&D-related tax incentives,

(49) Value added of high-tech manufacturing, medium /high-tech manufacturing and high-tech knowledge-intensive services amount in total to only 7.1% of GDP (ranking 24th in the EU).

mainly targeting the acquisition of technology from outside the country and/or foreign investors and entrepreneurs. As of July 2014, a new general tax allowance for R&D expenditure is offered. The uptake of this incentive is increasing and more companies are reporting their innovative activities, which were previously accounted for in operational expenditure.

Graph 2.4.2: R&D intensity



Source: Eurostat

Note: (1) Business R&D intensity: Business enterprise expenditure on R&D (BERD) as % of GDP.
(2) Public R&D intensity: Government intramural expenditure on R&D (GOVERD) plus higher education expenditure on R&D (HERD) as % of GDP

The Latvian public R&D system is fragmented, with efforts dispersed across many areas of research⁽⁵⁰⁾. The combination of limited and inefficient funding leads to very low scientific performance⁽⁵¹⁾, lack of skilled human resources in both public and private sectors⁽⁵²⁾ and low levels of public-private cooperation. Low levels of internationalisation worsen the situation. Improving the quality of the scientific base is a

(50) Latvia until recently had 150 registered research units located in 29 research institutions.

(51) This is evidenced by various bibliometric indicators. For instance, the average of relative impact factors of scientific publications (ARIF), at 0.68 in 2013, is the lowest in the EU.

(52) The number of new doctoral graduates per thousand population aged 25–34 in Latvia is among the lowest in the EU - 0.95 in 2012, EU average: 1.81 (Eurostat)

necessary precondition for the public research to have an impact on Latvia's further economic development.

Large-scale reforms of higher education and research introduced a consolidation of research structures, quality-based financing model and incentives to foster innovation in academia.

Consolidation of research institutions is ongoing to improve the quality and relevance of their outputs. Linked to the higher education reform, public R&D institutions in similar research areas are encouraged to merge. Public financing is gradually being limited to institutions that have achieved a certain critical mass and performance thresholds. Moreover, the best performing research institutions are rewarded by a 10 % increase in their basic infrastructure grant. Further support is also provided for institutional improvements assisting the consolidation process.

A range of policy tools have already been used to increase innovation capacity such as innovation vouchers, an entrepreneurial motivation programme, a cluster programme and programmes for conquering external markets and attracting venture capital to companies with high growth potential. The ongoing Technology Transfer Programme consists of local support programmes in the main universities alongside centralised support for commercialisation in international markets.

The Smart Specialisation Framework⁽⁵³⁾ has been established, but implementation has only just started. Latvia has identified seven priorities for R&D support across five smart specialisation areas (Table 2.4.1). The definitions of the specialisation areas are relatively broad, but during implementation the entrepreneurial discovery process⁽⁵⁴⁾ should help narrowing down the areas, where Latvia has competitive advantages. The process can be assisted through close monitoring and sufficiently resourced analytical support. A monitoring mechanism was adopted in September 2015. The first analytical report is scheduled in 2017, measuring progress towards the national policy objectives, including R&D to GDP spending ratio.

(53) The Smart Specialisation is a strategic approach to economic development through targeted support for research and innovation.

(54) The entrepreneurial discovery process is a learning process to select R&D and non-technological activities in which a region can hope to excel.

Table 2.4.1: **Latvia's Smart Specialisation Framework**

Innovation priorities	Smart specialisation areas
1. Moving up the value-added ladder	1. Knowledge intensive bio-economics (1)
2. Creating new products/services	2. Biomedicine, biotechnology, biopharmaceuticals and medical technology
3. Increasing energy efficiency	3. Smart materials, technologies and engineering systems
4. Upgrading information technology systems	4. Smart energy
5. Market-oriented education system	5. Information and communication technologies
6. Strengthening the existing know-how areas	
7. Supporting regional specialisation	

(1) Bio-economy designates use of forest and vegetable produce in bio-materials and bio-products.

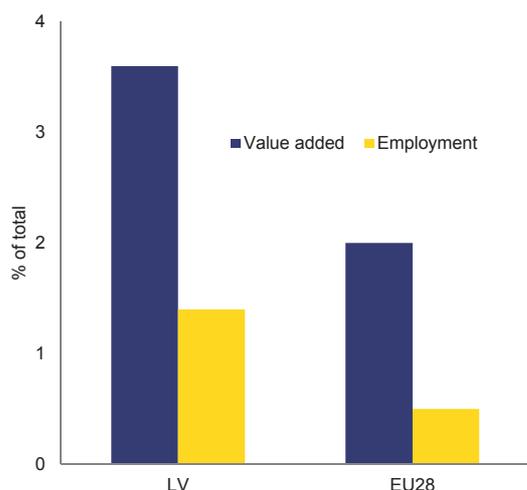
Source: The Science, Technology and Innovation Strategy for 2014-2020.

2.5. ENERGY, TRANSPORT AND ENVIRONMENTAL ISSUES

Energy

Latvia has a large share of renewables in its energy mix, but is highly dependent on imports of fossil fuels. The energy sector represents a greater share of total value added and employment than the EU average (Graph 2.5.1). Latvia has the second highest share of renewables in the energy mix in the EU after Sweden and a much lower share of solid fuels than the EU average (Graph 2.5.2). However, import dependence on imports of petroleum products and natural gas is above the EU average (Graph 2.5.3). In particular, all natural gas is imported from a single supplier — Russia. The trade deficit of energy products amounts to 5 % of GDP (2 % for EU28), making the Latvian economy more exposed to energy price fluctuations.

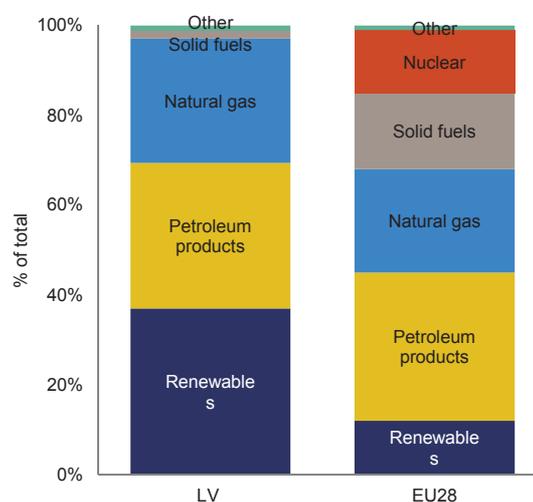
Graph 2.5.1: **Energy sector value added and employment**



Source: Eurostat

Electricity interconnection of the Baltic States with the European electricity market has markedly increased. The recent completion of the electricity connections of Estlink2, Nordbalt and LitPol Link between the three Baltic States and Finland, Sweden and Poland, respectively, brings the interconnection ratio to around 25 % (considering the Baltic States as one entity). These projects were supported under the European Energy Programme for Recovery or had the status of Project of Common Interest, thus contributing to exceeding the EU-wide policy goal of 15 % interconnectivity by 2030.

Graph 2.5.2: **Gross inland energy consumption in 2013**



Source: Eurostat

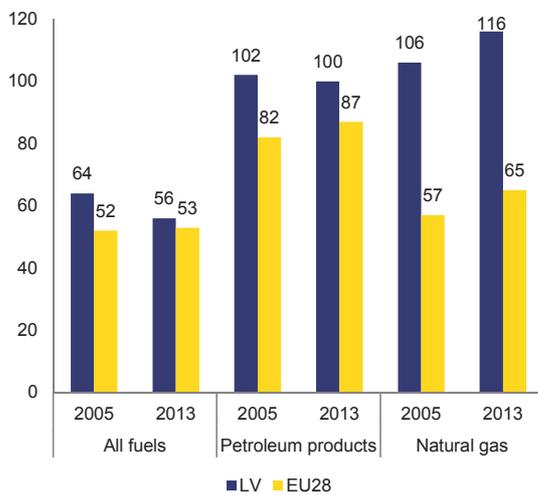
Latvia remains exposed to electricity supply risks, due to its dependence on external suppliers. The Baltic States are synchronised in a common grid with Russia and Belarus and rely on external electricity suppliers through the IPS/UPS system. Moreover, Estonia-Latvia connection capacity has been insufficient for the smooth operation of the Baltic States electricity market. If large generating units failed in Latvia and Lithuania, continuity of supply for the region would be endangered. Therefore, in early 2015 the Baltic States agreed to switch from the IPS/UPS system to a synchronisation with the Continental European Network by 2025. The capacity of the Estonia-Latvia links will also be increased in several steps by 2020, 2022 and 2023.

The electricity market for households is fully liberalised since 1 January 2015. Now households can choose their electricity supplier, but only 3.5 % had switched their supplier by the end of 2015 and switching is still perceived as difficult⁽⁵⁵⁾. Deregulation has led to a sharp increase in consumer electricity prices by around 27.5 % in 2015 from the unchanged regulated price since mid-2012. If approved, a distribution tariff reform proposal that the system operator *Sadales tīkls* has submitted to the public utilities regulator could lead to a slight decrease in retail

(55)Market Monitoring Survey 2015, to be published in Consumer Markets Scoreboard 2016 (July 2016)

electricity prices. Moreover, the congested Estonia-Latvia electricity connection has not yet allowed benefits from the lower wholesale electricity prices achieved by the Finland-Estonia connection. Therefore, wholesale prices in the Latvia-Lithuania price zone remain higher and more volatile than in Estonia. The situation is expected to improve with the launch of the Swedish-Lithuanian interconnector (Nordbalt) at the end of 2015. As a result, the authorities have alluded to a potential electricity price drop by 3 %-4 % in 2016.

Graph 2.5.3: Import dependency ratio, 2013



(1) A dependency rate above 100 % indicates a build-up in energy reserves.

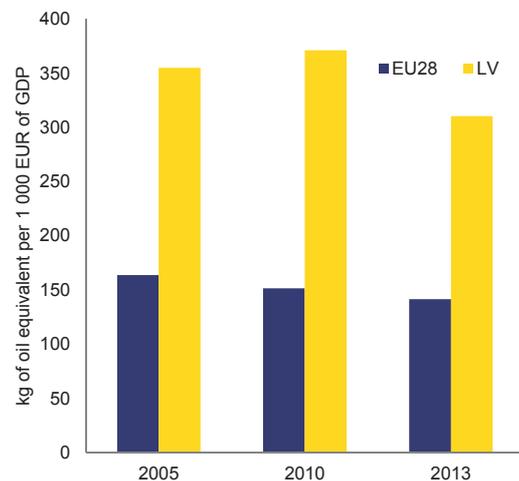
Source: Eurostat, European Commission

For natural gas, Latvia still depends on Russian supplies. However, the Klaipeda LNG terminal in Lithuania started commercial operations at the beginning of 2015, providing an alternative for natural gas supplies. Moreover, the completion of the Poland-Lithuania gas interconnector 'GIPL' by December 2019 will help ending the Baltic States' gas isolation. Also, Balticconnector and the future regional LNG projects, once operational, will allow for a diversification in gas supplies and market integration in the Baltic region. Modernisation and enhancement of the Incukalns Underground Gas Storage facility is important for the efficient operation of the joint East-Baltic regional gas market.

The natural gas retailer, Latvijas Gāze JSC, still holds a monopoly position, but steps have

been taken towards full gas market opening by April 2017. The amendments to the Energy Law for the legal unbundling of vertically integrated Latvijas Gāze into two companies by April 2017 were adopted in February 2016. Third party access to Latvian gas infrastructure has already been legally ensured for natural gas transport and storage, but not for sales in Latvia. Nevertheless, a government regulation was adopted in February 2016 making it possible for industries (such as the large energy consumer 'Latvenergo') to procure natural gas directly from the third parties.

Graph 2.5.4: Energy intensity of the economy



Source: Eurostat

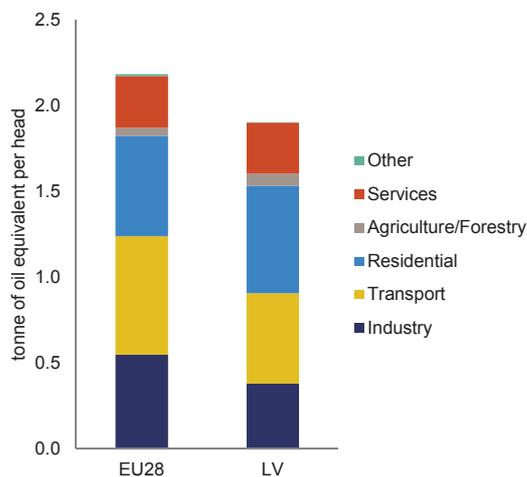
Energy, climate and environmental issues

Energy intensity has decreased since 2005, but remains above the EU average (Graph 2.5.4). High energy intensity is recorded in the industrial sector, but data reflects the operations of energy-intensive companies generating lower value added relative to industries in other Member States. The residential sector accounts for 34 % of total energy consumption in Latvia (Graph 2.5.5) and energy consumption per square metre is above the EU average (climate corrected).

There is room for further energy efficiency gains in residential and non-residential buildings. Latvia is late with transposition of the Energy Efficiency Directive. While the draft Energy Efficiency Law, covering energy producers, transmission, distribution and final consumption, was tabled in April 2015, it still

needs to be adopted. Further energy savings can be achieved in the residential sector, as only some 3 % of apartment buildings were renovated and heat-insulated in 2009-2013. The building standards for heat-insulation have changed little since 2001, while stricter energy performance requirements would be cost-effective for both the existing buildings undergoing renovations and new buildings⁽⁵⁶⁾. Stricter requirements were proposed in 2014, but not reflected in the building standards adopted in 2015. Moreover, according to existing national law, energy performance certificates for existing buildings are issued only at the request of the new owners or tenants, which falls short of the requirements under the Energy Performance of Buildings Directive. Awareness of the option to request the certificate is low and it is rarely used, reducing the energy efficiency potential of the measure. Finally, support from EU funds for energy efficiency measures in industrial buildings, public buildings and multi-apartment buildings is planned at around 1.1 % of GDP over 2014-2020, while their implementation has not yet been started.

Graph 2.5.5: Final energy consumption by sectors, 2013

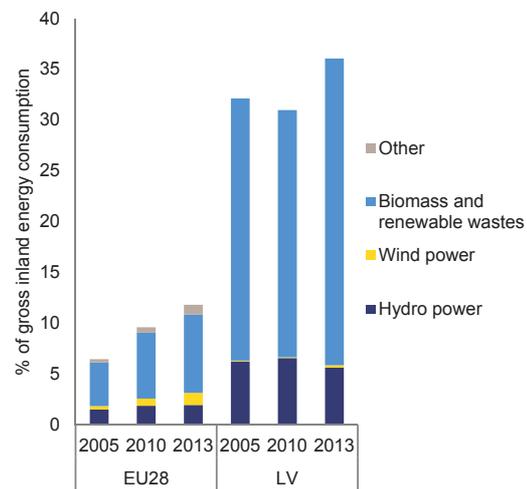


Source: Eurostat

The use of renewable energy sources has increased, but their use in transport remains low. The share of renewable energy sources

reached 38.7 % of total final energy consumption in 2014 (Graph 2.5.6). Energy efficiency investments and fuel switching to renewables in central and district heating also led to reduced heating tariffs for energy consumers in 2014. However, the 3.2 % share of renewable energy in transport (2014) is well below the progress level needed to achieve the binding 10 % renewable energy target in transport by 2020. The use of renewable energy and fuels in public transport has been made part of green public procurement rules in 2015.

Graph 2.5.6: The use of renewable energy sources



Source: Eurostat

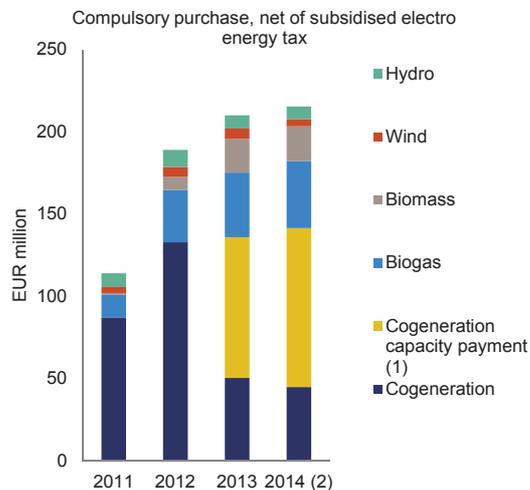
The support framework for renewable energy has become increasingly complex over the years. Electricity generation from renewable energy sources and in efficient co-generation is supported by feed-in tariffs based on quotas on generation capacity. However, more than two thirds of the co-generation plants use imported natural gas and they are major beneficiaries of the current support scheme (Graph 2.5.7). Auctioning of new quotas has been suspended since 2011 to cap the electricity price increases for final consumers. A subsidised electricity tax was introduced in 2014 to limit the windfall profits for subsidised energy producers and reduce the cost of the support scheme on final energy consumers. The current scheme is expected to continue until 2018, by when all previously allocated energy capacity will be built. From 2016, part of the costs will be covered from dividend payments of state-

(56) Study on the cost-optimal minimum energy performance requirements under the Energy Performance of Buildings Directive: <https://ec.europa.eu/energy/en/topics/energy-efficiency/buildings>

owned Latvenergo (also one of the main beneficiaries of the current support scheme).

Uncertainty on the future framework conditions and continued support to fossil fuel based co-generation increases the overall cost of such support and delays investments in renewables. The subsidised electricity tax was set to expire at the end of 2017, but it was extended to the end of 2018 during the 2016 budget adoption process, in order to continue financing the current support scheme. The government's obligations for some of the current compulsory purchase agreements will continue until 2033. The authorities are awaiting the outcome of a State Aid case (SA.37970) on state support for energy producers before proceeding with changes in the current support framework and the design of a new support framework for the future. This implies that investments in many new projects are currently on hold until the future framework has been clarified.

Graph 2.5.7: **Support for renewable energy (compulsory purchase), net of subsidised electricity tax**



Source: Ministry of Economics of Latvia

(1) From April 2013, a part of variable compulsory purchase of electricity is replaced by power capacity payment for large power base load stations.

(2) Support on compulsory purchases is reduced by the subsidised electricity tax from 2014.

Transport vehicle registration tax is linked to CO₂ emissions, but has a limited effect on consumers. New cars in Latvia had the highest CO₂ emissions per km in the EU in 2013, and the

second highest in 2014⁽⁵⁷⁾. The tax payment is relatively lower than elsewhere in Europe, but similar to that of the neighbouring countries,⁽⁵⁸⁾ in order to limit the risk of cross-border-arbitrage. In the 2014-2020 programming period, the European Regional Development Fund is expected to contribute EUR 7 million to the development of the electric charging station network and the Cohesion fund – EUR 108.5 million to the environmentally friendly public transport system (trams infrastructure and rolling stock).

Greenhouse gas emission and resource intensity

Greenhouse gas (GHG) emission targets are projected to be met. Latvia can increase its GHG emissions not covered by the EU emissions trading system (ETS) by 17 % between 2005-2020, according to the Effort Sharing Decision⁽⁵⁹⁾. According to the latest projections, non-ETS emissions are expected to increase by 7 % between 2005 and 2020, well below the limit for Latvia.

Latvia's GHG emissions are relatively lower than in other Member States. This is related to a lower level of economic development and the higher share of renewables in the energy sector relative to other Member States. Transport and agriculture sectors account for a relatively bigger share in Latvia's greenhouse gas emissions. These sectors form a part of non-ETS emissions, for which the Europe 2020 target is set. The authorities assess limited scope in reducing emissions in transport and agriculture. Agricultural emission may even increase, if usage of fertiliser approaches the EU average.

Revenue from sales of emission permits is little used for climate-related measures. Government revenue from the auctioning of emission permits under the EU ETS amounted to EUR 10.2 million in 2014. The Law on Pollution provides that all revenue is used for domestic climate and energy-related purposes. In 2014, only 1 % was used for

(57) Emissions are as high as 140.4 g/km in Latvia, 2nd in EU after Estonia 141 g/km, EEA data.

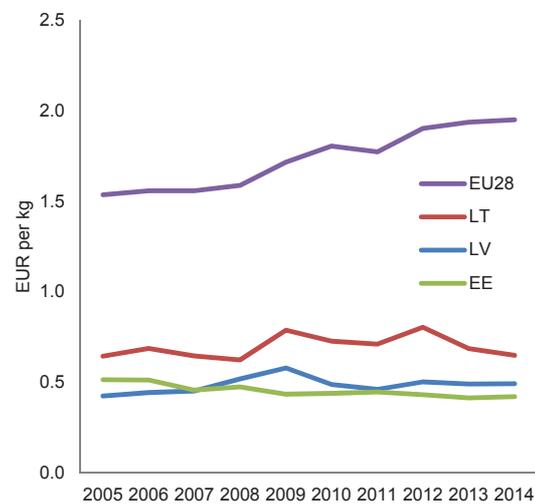
(58) The car registration tax in Estonia and Lithuania is not linked to CO₂ emissions.

(59) http://ec.europa.eu/clima/policies/effort/index_en.htm

those purposes⁽⁶⁰⁾. The authorities consider spending EUR 23 million of the emission sales revenue on new energy efficient building and heat-insulation of existing buildings in 2016-2018. Support for new buildings is less cost efficient than insulation of existing buildings.

The resource intensity of the Latvian economy is high relative to the EU average. Latvia's resource productivity stood at EUR 0.49 for gross value added per kilogram of raw material consumption in 2014, compared to the EU average of EUR 2 per kilogram (Graph 2.5.8). Reliance on exploitation of natural resources tends to decline for more advanced economies along the changes in the sectoral breakdown. However, the resource productivity indicator for Latvia has not visibly improved over the past decade. Use of biomass, in particular wood, stands out for Latvia relative to the EU average, which is linked to a dynamic forestry industry and an increasing use of wood as a renewable energy source (Graph 2.5.6).

Graph 2.5.8: **Resource productivity**



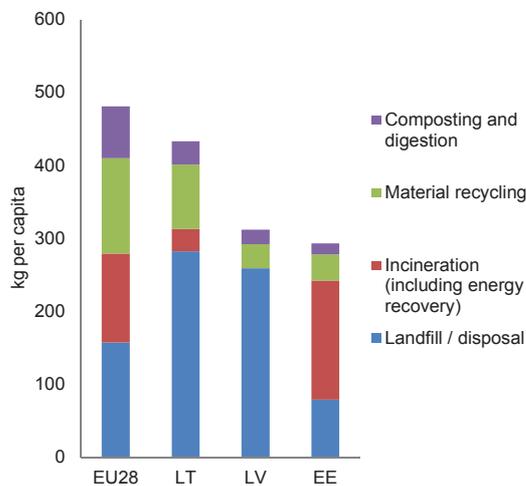
(1) Resource productivity is GDP divided by domestic material consumption, which represents the annual quantity of raw materials extracted from the domestic territory of the focal economy, plus all physical imports minus all physical exports.

Source: Eurostat

(60) Commission Staff Working Document, *Technical information to the climate action progress report*, Brussels, 18.11.2015 SWD(2015) 246 final

Waste management

Little has been done to divert municipal waste away from landfill. Latvia has not used the 10-year transition period of the Packaging and Packaging Waste Directive to establish an effective infrastructure and regulatory framework for the separate collection of certain waste streams by 2015. Separate waste collection is a precondition to successful recycling. While municipal waste generation in Latvia remained below the EU average, its main treatment option remains disposal in landfills (83 % of waste against the EU average of 30 % in 2013) (Graph 2.5.9). As a result, Latvia is unlikely to meet the 50 % recycling target by 2020, and landfill diversion targets of 75 % of biodegradable waste.

Graph 2.5.9: **Municipal waste management, 2013**

Source: Eurostat

Investment, appropriate market instruments and regulatory measures are necessary for material improvement in municipal waste management. Significant investments are required to put in place infrastructure for separate collection of packaging and biodegradable waste and for recycling and composting capacity. Revenues from the landfill tax and the EU funding⁽⁶¹⁾ can be used; to prioritise waste reduction over other forms of waste management (waste hierarchy). In parallel, market-based instruments and regulatory measures can be adopted, including appropriate taxation of waste and polluting products and extended producer responsibility to facilitate recovery, including composting.

Low taxation of municipal waste currently does not provide incentives for resource efficiency in waste management. Latvia's landfill charges for municipal waste at around EUR 40 per tonne, consisting of a landfill tax of EUR 12 per tonne and the landfill gate fee of around EUR 30 per tonne, are well below the EU average of around EUR 80 per tonne⁽⁶²⁾. Landfill charges could be substantially increased in order to divert waste from landfill to more efficient options. In order to

(61) Partnership Agreement for the EU Investment Funds 2014-2020, paragraphs 109, 112, 336; http://www.esfondi.lv/upload/Planosana/FMPlans_230714_PA_updated_17.12.2014.pdf

(62) <http://www.eea.europa.eu/data-and-maps/figures/typical-charge-gate-fee-and>

make recycling economically viable, level of taxation could be graduated from some taxation of incineration and mechanical biological treatment to higher taxation of landfill⁽⁶³⁾. Latvia considers increasing the land fill tax on municipal waste to EUR 22 per tonne from 1 July 2016 and gradually increasing to EUR 40 per tonne by 2020.

Transport infrastructure

Public roads are in poor condition due to limited public investment, which has an adverse effect on regional development, international traffic and road safety. In 2014, 43.4 % of state roads (4 290 km of bituminous roads, 4 609 km of gravel roads) were in a 'poor' or 'very poor' condition⁽⁶⁴⁾. It is planned to reconstruct or upgrade 920 km of roads by 2023 benefiting from EUR 453 million of the Cohesion fund and the European Regional Development Fund in the 2014-2020 programming period⁽⁶⁵⁾ and EUR 378 million of national financing between 2014 and 2016. Given the length of roads in poor condition (almost 9 000km excluding local roads and streets network), these investments will need to be prolonged and intensified to ensure roads are maintained in better condition.

Road safety remains low. The country saw a remarkable reduction in road fatalities between 2001 and 2010 (-61 %), but they remain the highest in the EU (98 per 1 million inhabitants in 2015, against the EU average of 51). Inappropriate speed is the main reason for road fatalities. The national road safety plan for EUR 25 million⁽⁶⁶⁾ over 2014-2016 aims at a 50 % reduction target in road deaths between 2010 and 2020.

(63) Study on assessing the Environmental Fiscal Reform potential for the EU28 (2016) suggests landfill tax at EUR 50 per tonne and tax on mechanical biological treatment and incineration at EUR 15 per tonne. http://ec.europa.eu/environment/integration/green_semester/pdf/Eunomia%20EFR%20Final%20Report%20MAIN%20REPORT.pdf

(64) State Road Network - Statistics 2014 http://lvceli.lv/wp-content/uploads/2015/08/Latvijas_Valsts_Celi_2014_A4_LAT_ENG_20150617.pdf

(65) The focus of investments is on trans-European transport network. Access roads (10km) will be financed if compliant with integrated development plans and necessary for business development.

(66) http://ec.europa.eu/transport/road_safety/pdf/20151210_1_latvia.pdf

Sea ports will benefit from investments financed by EU funds, but identified improvements are still missing. In a 2014 report on the ports sector in Latvia, the World Bank specific recommendations were to (a) improve connection with other transportation means (rail), (b) increase investment, (c) raise tariffs and (d) improve accountability and transparency. The State Audit Office of Latvia also pointed out weaknesses in governance and compliance with the law in the two main ports (Riga and Ventspils). In 2014-2020 the EU funds will contribute only to the environmental and safety measures of the ports in Riga, Ventspils and Liepaja (EUR 74 million).

The Latvian railway network has a low electrification rate and high wear and tear. This increases the price of transportation and has a negative environmental impact. In the 2014-2020 programming period EUR 454 million of the Cohesion fund will contribute to modernising of railway infrastructure. The biggest part of the Cohesion funding for railways (EUR 345 million) will be targeted towards electrification of the railway network. However, the project preparation is slow, the scope of the project has not yet been decided, there is no clarity regarding the necessary financing, there are capacity issues for the beneficiary and no coordination with the passenger-carrying railway company Pasazieru Vilciens.

The European-gauge railway infrastructure project Rail Baltic is on track. In November 2015, the Innovation and Networks Executive Agency (INEA) and the joint venture of the three Baltic States RB Rail AS signed an agreement on the first stage of the Rail Baltic high-speed railway construction project. This involves EUR 442 million financing from the EU Connecting Europe Facility. A technical study on the planned route of the railway line in Latvia will be completed in early 2016. The technical project is expected to be developed by 2019, in order to start construction in 2020 and with completion in 2024. The new railway line will connect the Baltic States to the trans-European network, providing new business opportunities and reducing greenhouse gas emissions through a modal shift towards rail in freight and passenger transport.

2.6. GOVERNANCE AND BUSINESS ENVIRONMENT

Public administration

Public administration in Latvia faces many challenges. These include attracting, retaining and motivating talent in order to reduce high staff turnover — in some ministries exceeding 15 % per year⁽⁶⁷⁾. This could be mitigated by linking more closely remuneration with results and improving its competitiveness relative to the private sector. The public administration is also fragmented between some employees working under Civil Service Law and others under labour contracts. The horizontal expenditure cut by 3 % for most ministries in the 2016 budget, which some agencies translated into staff reductions, was not related to performance or results.

Wages in public administration remain uncompetitive. Specialists in public administration receive around 50 % lower pay than their private sector peers⁽⁶⁸⁾. Salary scales are capped at the level of the Prime Minister's salary and its increase provides a room for upward shift across the wage scales. The policy target is to align public sector salaries to 80 % of those in the private sector. The stated policy objective is to create a smaller, but more professional administration, broadly staying within the same expenditure parameters. On the ground, there is resistance to this vision and more human and financial resources are requested without linking these requests to efficiency gains.

A reform to unify the public service is in progress. A draft State Service Law defines common standards for hiring, career development, assessment, motivation and training. However, the new law does not include municipalities, employing the majority of public sector employees, does not address wage-related issues and remains under consideration in the national Parliament.

Centralised selection of senior public officials has started. The State Chancellery takes the leading role in determining recruitment standards and evaluating the competence of candidates. The first procedures under the new selection mechanism will serve as test-cases for

the integrity of the system. Moreover, the State Administration School has been internally revamped to pursue a consistent and demand-driven training strategy for civil servants, focusing on higher-level managers, young talents and promoting innovative approaches.

The Cross-Sector Coordination Centre has been nominated as the institution responsible for coordination of the management of state-owned enterprises, including the nomination of company managers. Starting in January 2016, the supervisory councils will be re-instated in more than 15 state-owned enterprises, following OECD recommendations. These Councils were abolished in 2009, citing political interference. Providing their members are appointed on the basis of professionalism and proven management skills, the councils are expected to contribute to better corporate governance and improved revenue figures.

Public procurement

The efficiency of public procurement procedures has still not reached the EU average standards. Most of public contracts (77 %) continue to be awarded based on the lowest price criterion whereas only 23 % of contracts are awarded based on the most economically advantageous bid criterion⁽⁶⁹⁾. A number of big EU-financed projects have run into difficulties because of insufficient project preparation, and weak project management and supervision. This has led to considerable delays, cost increases and failing projects with a risk of losing the EU grants.

Using e-procurement platforms is still not obligatory. Contracting authorities have the possibility to decide whether to make use of electronic means in their tender procedures. However, introducing mandatory e-procurement platforms would reduce administrative burden and would help achieve more transparency and greater economies for both the administration and the economic actors participating in tender procedures.

The use of central purchasing for local authorities and innovation-oriented

(67) OECD Economic Surveys: Latvia 2015

(68) http://www.fm.gov.lv/files/valstsparvaldesdarbasamaksas_politika/FMInf_23052013.pdf

(69) Single Market Scoreboard: http://ec.europa.eu/internal_market/scoreboard/

procurement are low. The amendments to the national public procurement rules in 2013 aimed at expanding central purchasing for local authorities by making it compulsory, among other things, but results are limited. Public procurement for innovation and other demand-led policy instruments are largely absent in Latvia. According to the results of the Global Competitiveness Report 2014-2015, with the evaluation of 3.2 points, government procurement of advanced technology products in Latvia takes 92nd place in the total evaluation of 144 countries. Further changes to the public procurement law are envisaged for 2016, with a view to transpose the 2014 package of EU public procurement directives.

Justice

In 2015 the government embarked on a number of initiatives to improve efficiency and quality of the justice system, including elements of court specialisation and reform of the Civil Procedure Law. In October 2015, the government proposed reforms to the Law on Judicial Power in order to strengthen the role of the Judicial Council and thereby contribute to increasing the independence of the judiciary. This law was discussed in Parliament in January 2016.

Efficiency of the justice system at first instance has improved. The time needed to resolve civil, commercial and administrative cases at first instance has further improved⁽⁷⁰⁾. The rate of resolving litigious civil and commercial cases remains stable while the rate of resolving administrative cases has decreased compared to previous years albeit from a very high level. For both types of cases the rate remains above 100 % which indicates that more cases are resolved than opened. As a result, the number of pending cases went down both for litigious civil and commercial as well as for administrative cases.

Quality of the justice system can be further improved. For instance, it is possible to promote alternative dispute resolution methods and diversify the training of judges. The criteria to determine financial resources for the judiciary which are exclusively based on historic or realised costs may lead to dysfunctions in the justice

(70)2016 EU Justice Scoreboard (forthcoming)

system in the longer run. The structural independence of the judiciary could be further strengthened in particular as regards appointment and voluntary transfer of judges to higher or lower courts. The perception of independence in Latvia improved slightly in 2015 but remains at a rather low level⁽⁷¹⁾.

Corruption

Corruption remains a challenge for Latvia, particularly in public procurement, the construction sector and healthcare. Only 39 % of staff in large companies say that senior management has strongly communicated its commitment to anti-bribery or anti-corruption policies⁽⁷²⁾. Among the 38 countries surveyed, this percentage is lower in only four. The conflict-of-interest regime for public officials, while comprehensive, is complex and rigid, prioritising formalistic compliance over evaluating the merits of individual cases⁽⁷³⁾.

The 2014 EU anti-corruption report⁽⁷⁴⁾ welcomed some measures such as the online database of political donations and the track record of investigations by the Corruption Prevention and Combating Bureau (KNAB). It also suggested further strengthening the bureau's independence and stepping up efforts in fighting corruption in public procurement.

The government updated guidelines, which had expired in 2013, for preventing and combating corruption until 2020, with detailed and comprehensive plans in virtually all parts of the public sector as well as in the private sector. Public and civil society institutions are drafting a law to protect whistle-blowers. The State Audit Office implements a new mechanism to recover losses

(71)World Economic Forum, "The Global Competitiveness Report 2015-2016", http://www3.weforum.org/docs/gcr/2015-2016/Global_Competitiveness_Report_2015-2016.pdf

(72)[http://www.ey.com/Publication/vwLUAssets/ey-emeia-fraud-survey/\\$FILE/ey-emeia-fraud-survey.pdf](http://www.ey.com/Publication/vwLUAssets/ey-emeia-fraud-survey/$FILE/ey-emeia-fraud-survey.pdf)

(73)Council of Europe Group of States against Corruption (GRECO), [http://www.coe.int/t/dghl/monitoring/greco/evaluations/round4/GrecoEval4\(2012\)3_Latvia_EN.pdf](http://www.coe.int/t/dghl/monitoring/greco/evaluations/round4/GrecoEval4(2012)3_Latvia_EN.pdf)

(74)http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/organized-crime-and-human-trafficking/corruption/anti-corruption-report/index_en.htm

and encourage follow-up of audit recommendations at state and municipal bodies.

Public procurement remains subject to corruption risks, particularly at the local level, where supervision of municipal enterprises lacks independence, and councils neither systematically discipline officials nor claim compensation for damages. At both local and central level, arbitrary specifications may exclude potential suppliers and favour others. In 2014, there was only one bidder in 32 % of public procurement procedures and no call for tender in 10 % of them. In a 2015 study, 39 % of business managers (2 percentage points more than in 2013) say that corruption prevented them from winning a public tender or public procurement contract, compared to an EU average of 34 %⁽⁷⁵⁾.

Healthcare also continues to be among the sectors most vulnerable to corruption, with nearly 28 % of patients reporting having used unofficial payments, gifts or acquaintances⁽⁷⁶⁾. Additional risks arise in contacts between hospitals and suppliers, and at the State Agency for Medicines.

The KNAB has been weakened by internal tensions, despite a solid track record of investigations. These tensions have continued to destabilise the bureau and to dent public trust in its operations and its willingness to prioritise high-profile cases. In 2015, only 30 % of business managers said that Latvia applies measures against corruption impartially, down by 16 percentage points since 2013, and below the EU average of 44 %⁽⁷⁷⁾.

A number of KNAB investigations have focused on public procurement, especially in the construction sector where competition is insufficient. Official statistics between 2011 and 2013 indicate a steady increase in the number of bribery cases being handled in the criminal justice system: 110 opened investigations in 2011, 132 in 2012 and 158 in 2013. This is also reflected in the number of people convicted: 39 in 2011, 51 in

(75) 2015 Flash Eurobarometer 428

(76) KNAB(2014) Attieksme pret korupciju Latvijā http://www.knab.gov.lv/uploads/free/knab_lf_aptauja2014.pdf

(77) 2015 Flash Eurobarometer 428

2012, and 82 in 2013. Over half of the custodial sentences imposed are immediate, in contrast to the situation in many Member States where sentences are suspended. However, in the first half of 2015, KNAB sent fewer criminal cases to prosecutors than in previous years.

Regulatory environment

The government's strategy for improving the regulatory environment is based on the National Development Plan 2014-2020, a comprehensive medium-term planning document, which is accompanied by an annual action plan. The 'Action Plan for Improvement of the Business Environment' comprises measures in areas such as starting a business, construction and real estate registration, investor rights protection, taxation or enforcing contracts. The action plan is inspired by Latvian performance in international rankings such as the World Bank 'Doing Business' and 'Global Competitiveness' reports, and involves consultations with stakeholder organisations and regular business surveys.

Graph 2.6.1: Distance to frontier scores on Doing Business topics



Source: Doing business database - 2016

Note: The rankings are benchmarked to June 2015 and based on the average of each economy's distance to frontier (DTF) scores. The distance to frontier score (on a scale from 0 to 100) benchmarks economies with respect to regulatory practice, showing the absolute distance to the best performance in each Doing Business indicator.

The business environment is quite favourable in Latvia, the country is ranked 22/189 in the

latest Doing Business review. However, the survey reveals some relative weaknesses on protection of minority investors (Graph 2.6.1) and insolvencies and some slippage regarding the administration of tax payments and construction permits.

In the latest survey by the Ministry of Economics, all regulatory areas were judged less likely to hinder business development than in previous years. Entrepreneurs spent 13 % of their working time dealing with issues related to administrative requirements in 2014 (compared to 37 % in 2005). According to the survey, the most burdensome areas are taxation, frequency of changes in laws and regulations, as well as the shadow economy.

Cross-border transfer of registered office to and from Latvia is difficult in the absence of specific procedures. Latvian legislation has no specific provisions on direct cross-border transfers of registered office⁽⁷⁸⁾. Companies, including Latvian ones, who want to relocate to another Member State find it difficult and costly (e.g. they might need to close their company and establish a new one abroad), which can weaken the business environment⁽⁷⁹⁾.

Insolvency law

While the business environment is overall quite favourable, the insolvency framework is perceived by businesses as an obstacle⁽⁸⁰⁾. Insolvency proceedings of a legal person may last from several months to several years (in the case of litigation in the course of the proceedings). Insolvency proceedings of a natural person allow discharging debts within 1.5 – 4 years with repayment plan lasting for 1 – 3.5 years. Debtors have access to restructuring proceedings if they are in financial difficulties or expect them. The rate of resolving insolvency cases at first instance has gone up compared to the previous year but remains

at a low level. The number of pending insolvency cases in 2014 has increased substantially compared to 2012.

Latvia also lags behind its peers with respect to the recovery rate of assets of insolvent companies. According to the World Bank 2016 ‘Doing Business’ report, creditors can expect to recover 48.1 % of their asset once the insolvency procedure is completed, while in OECD high income countries the rate is 72.3 %⁽⁸¹⁾.

The amended insolvency law is expected to lead to improvements, but challenges remain. The amended insolvency law that entered into force in March 2015 is expected to reduce the length of insolvency proceedings. Transparency may also improve following the introduction in June 2015 of electronic auctions. Nevertheless, key challenges remain with respect to effective application of the insolvency regime and sufficient oversight over insolvency administrators. The insolvency administrators are independent and self-governed, and the insolvency administration office monitors the sector, but does not actively engage in supervision. The light supervision and the limited capacity of police to solve complex economic crimes have led to insolvency regime abuse cases. The disposition to make insolvency administrators public officials as of January 2016 was ruled out by the constitutional court in December 2015 as the specific regulation, insofar as sworn attorneys are concerned, is not ‘proportionate’. In February 2016 the law has been further amended and insolvency administrators, who are not sworn attorneys, will have to declare their income as of January 1, 2016. For those insolvency administrators who are also sworn attorneys this obligation will be in place as from 1 September 2016. Sworn attorneys, according to their professional association, form the bulk of insolvency administrators (150 or around 70 %).

Competition Council

The independence of the Competition Council is not yet fully guaranteed and the risk of political interference remains. The Competition Council is independent in investigating and deciding on

(78) Except for the specific European legal form of European Companies (Societas Europea).

(79) http://ec.europa.eu/justice/civil/files/131007_study-cross-border-merger-directive_en.pdf
[http://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL-JOIN_ET\(2013\)494460](http://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL-JOIN_ET(2013)494460)

(80) Improving insolvency procedures is part of the "Council recommendation on the economic policy of the euro area" SWD(2015) 700 final.

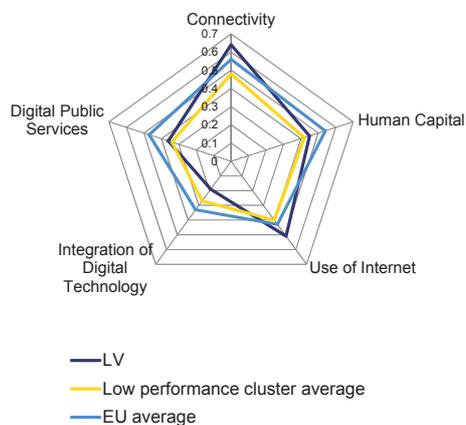
(81) <http://www.doingbusiness.org/data/exploretopics/resolving-insolvency>

competition cases, but it is dependent on the Ministry of Economics for administrative and budgetary issues. The lack of institutional independence may impede the quality and scope of the Competition Council's work, including possible political interference with investigations of anti-competitive actions or biased monitoring of state and municipal owned enterprises. The issue has been discussed with the Latvian authorities under the European Semester process, but no significant progress has been made.

Digital economy

Latvia falls into the cluster of low-performing countries in digitisation of the economy. In the 2015 Digital Economy and Society Index (DESI), Latvia ranks 18th among the EU Member States (Graph 2.6.2). High speed broadband infrastructure is a precondition for digitisation and Latvia performs well in this respect with 91 % of homes having access to high speed broadband connections (10th in the EU).

Graph 2.6.2: Digital Economy and Society Index (2015)



(1) The Digital Economy and Society Index is a composite index includes five dimensions: Connectivity, Human Capital, Use of Internet, Integration of Digital Technology and Digital Public Services. For more information see <http://ec.europa.eu/digital-agenda/en/digital-agenda-scoreboard>.

Source: European Commission

In Integration of Digital Technology by businesses dimension, Latvia is the worst performing country in the EU (DESI 2015). Not only are Latvian businesses lagging behind the EU in all aspects of e-commerce, but performance in online commercial activities has stagnated when

compared to the previous year. E-commerce remains under exploited in Latvia with only 38 % of the population having purchased online goods or services over the internet in the last 12 months (53 % EU)⁽⁸²⁾ and consumers' confidence to buy online both from national and EU sellers is below the EU average⁽⁸³⁾. Moreover, only 33 % of Latvian retailers sell online to final consumers (41 % EU average) and only 8 % of Latvian SMEs sold online in 2015 (16 % EU28)⁽⁸⁴⁾.

Slow digitisation of the economy is reflected in relatively low growth of ICT jobs. The number of ICT specialists has increased at a slower pace than in the EU on average, which corresponds to the low take-up of digital technologies in all sectors of the economy (Graph 2.6.3). Latvia has a lower share of ICT specialists than the EU average.

Despite good availability of e government services, their usage is below the EU average. Latvia ranks average in the EU in terms of availability of government services online. The 'complete services online' indicator stands at 100 % for enterprises and almost 90 % for citizens⁽⁸⁵⁾. However, the number of citizens using e-government services stood at 25 % compared to the EU average of 33 %, while the use of services is higher for enterprises (89 % against 74 % in the EU). The Latvian Point of Single Contact⁽⁸⁶⁾ could still be further improved, e.g. concerning the availability of e-procedures, also for foreign users and to make it more accessible and user-friendly. The information provided by the Point of Single Contact could also be more comprehensive and cover all necessary requirements and licences.

(82) Eurostat Community Survey on ICT usage in households and by individuals, 2015

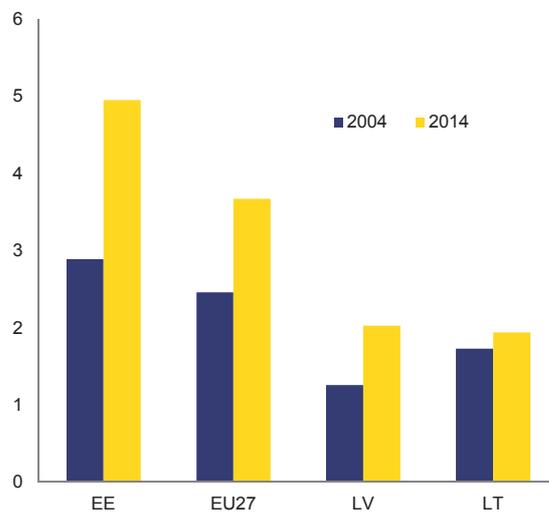
(83) Consumer Conditions Scoreboard 2015
http://ec.europa.eu/consumers/consumer_evidence/consumer_scoreboards/11_edition/index_en.htm

(84) Eurostat ICT usage by enterprises, 2015

(85) The Online Service Completion indicator measures the extent to which the various steps in an interaction with the public administration – life event – can be performed completely online.

(86) www.latvija.lv

Graph 2.6.3: ICT specialists, % of number employed



Source: European Commission

Economic policies

The government's strategy for 2014-2020 aims to stimulate the creation of start-ups and the development of new products or technologies, to provide support for growing export oriented companies and to focus on higher risk segments (micro and small companies). Public financial funds primarily offer SMEs guarantees and loans for growth, largely supported by EU funds.

Governmental initiatives aim to facilitate access to finance. In order to improve the availability of equity financing, the government has supported the creation of the Baltic innovation fund to provide growth capital for SMEs and promote the development of Latvia's venture capital market. In 2015, the three existing development financing institutions were merged into a single development institution (ALTUM), establishing a 'one-stop shop' for development financing, through which the EU fund will be channelled.

The Latvian multi-fund Operational Programme (OP) Growth and Employment 2014-2020 for Latvia was among the first to be adopted by the Commission. However, the implementation of the OP has been slow – by the end of November 2015 from 121 sets of selection criteria, only 26 had been adopted (against the planned 80 sets of selection criteria) and in 20 activities the project selection process has started;

only 6.4 % of the allocation has been contracted. Results regarding the ESF were better by the end of 2015 where around 23 % of the allocation was contracted.

The quality of project management is insufficient. There is a lack of administrative capacity in several ministries to prepare the required documentation on time. The decision-making process is heavy, and work is organised in sub-committees where several rounds of consultations are organised involving many stakeholders with diverse interests. The competent managing authority (Ministry of Finance) lacks the necessary political support to manage the process faster.

Export support measures have been reinforced in the difficult external context. The depreciation of the Russian rouble and trade sanctions adversely affected some Latvian exporters. In support of these exporters, the authorities have made it possible to postpone tax payments for up to five years. Moreover, the existing support measures have been reinforced, including support for market analysis and for participation in trade missions, exhibitions and conferences abroad. The Latvian authorities also increasingly support cluster initiatives aimed at expanding business activities into third markets and integrating Latvian businesses into international supply chains.

ANNEX A

Overview Table

Commitments

Summary assessment ⁽⁸⁷⁾

2015 Country-specific recommendations (CSRs)	
<p>CSR 1: Ensure that the deviation from the medium-term budgetary objective in 2015 and 2016 is limited to the allowance linked to the systemic pension reform.</p>	<p>CSRs related to compliance with the Stability and Growth Pact will be assessed in spring once the final data will be available.</p>
<p>CSR 2: Improve vocational education and training, speed up the curricula reform and increase the offer for work-based learning. Ensure that the new financing model of the higher education system rewards quality. Better target research financing and incentivise private investment in innovation on the basis of the Smart Specialisation Framework.</p>	<p>Latvia has made some progress in addressing CSR 2:</p> <ul style="list-style-type: none"> • Some progress has been made in improving vocational education. The Vocational Education Law provides for new institutions governing vocational education (Sectoral Expert Councils, convents) from May 2015, but no implementing regulations for their operation are yet provided. The curricula reform is progressing slowly (58 vocational education modular programmes (out of 240), 32 qualification exams (out of 242) and 80 occupational standards (out of 240) have been developed). The work-based learning pilot project runs from 2013, but an appropriate regulatory framework for work-based learning is not yet established. • Some progress has been made towards a quality-oriented financing model for higher education. A new financing model has been put in place including quality-rewarding elements, but relatively little financing is provided for optimal development of the model. • Some progress has been made in targeting research financing. The consolidation of research institutions is ongoing. The innovation support framework has been established, but implementation is at an

(87) The following categories are used to assess progress in implementing the 2015 CSRs:

No progress: The Member State (MS) has neither announced nor adopted measures to address the CSR. This category also applies if the MS has commissioned a study group to evaluate possible measures.

Limited progress: The MS has announced some measures to address the CSR, but these appear insufficient and/or their adoption/implementation is at risk.

Some progress: The MS has announced or adopted measures to address the CSR. These are promising, but not all of them have been implemented and it is not certain that all will be.

Substantial progress: The MS has adopted measures, most of which have been implemented. They go a long way towards addressing the CSR.

Fully implemented: The MS has adopted and implemented measures that address the CSR appropriately.

<p>CSR 3: Take concrete steps to reform social assistance, ensuring adequacy of benefits, take measures to increase employability. Reduce the high tax wedge for low-income earners by shifting the tax burden to other sources less detrimental to growth. Take action to improve the accessibility, cost-effectiveness and quality of the healthcare system and link hospital financing to performance mechanisms</p>	<p>early stage.</p> <p>Latvia has made limited progress in addressing CSR 3:</p> <ul style="list-style-type: none"> • Limited progress has been made in reforming social assistance and ensuring adequacy of benefits. The preparatory work is ongoing to reform social assistance by introducing the minimum income level from 2017, but its implementation is uncertain. The social assistance benefit adequacy has not improved since 2009. • Some progress has been made in increasing the employability of social assistance benefit recipients. Support for social assistance clients and long-term unemployed will be expanded from early 2016 (motivational programmes, addiction treatment, social and psychological support, health assessment) covering 20 000 unemployed by 2023 (50 000 were long-term unemployed in Q3-2015). • Limited progress has been made in reducing the high tax wedge for low-income earners by shifting the tax burden to other sources less detrimental to growth. The 2016 budget measures make labour taxation more progressive, but marginally reduce the high tax wedge on low wages. However, the tax burden has been shifted little to other sources less detrimental to growth. • Limited progress has been made in improving the accessibility, cost-effectiveness and quality of the healthcare system and in linking hospital financing to performance mechanisms. Access has been prioritised for critical medical cases, while financial constraints limit supply of services in general. Hospital budget envelopes are set considering historical case-based costs, but intra-year financing is not yet directly linked to actual costs per case.
<p>CSR 4: Improve efficiency of the judicial system, increasing accountability of all parties (including insolvency administrators) by strengthening the role</p>	<p>Latvia has made limited progress in addressing CSR 4:</p>

<p>of the Judicial Council, providing adequate means to fight tax evasion, improve the public service legislation to strengthen the conflict of interest regime and link remuneration to responsibilities.</p>	<ul style="list-style-type: none"> • Some progress has been made in improving the efficiency of the judicial system. Amendments to the civil procedure law entered into force in May 2015 extending the possibilities to redistribute cases to other courts. Some court specialisation has been introduced. A legislative proposal to strengthen the role of the Judicial Council is before the national parliament. • Limited progress has been made in increasing the accountability of insolvency administrators. The key provisions of the legislative reform increasing the accountability of insolvency administrators were ruled out by the constitutional court on the ground of lack of proportionality. Some legislative changes improving insolvency proceedings were adopted. • Some progress has been made in providing adequate means to fight tax evasion. Administrative and legislative measures have been taken to improve tax collection, but some measures have not been passed. Further measures are included in the 2016 budget and the draft plan for tackling the shadow economy. • No progress has been made in improving the public service legislation. The draft Public Service Law has not progressed in Parliament since February 2015. The conflict of interest regime has not been strengthened.
<p>Europe 2020 (national targets and progress)</p>	
<p>Employment rate: 73%</p>	<p>The employment rate in 2014 was 70.7%. The employment rate increased further in 2015 reaching 72.8% in the third quarter. Latvia is on track to reach its EU2020 employment target.</p>
<p>R&D: 1.5 % of GDP</p>	<p>R&D expenditure was at 0.68 % of GDP in 2014. Latvia is well below its target and progress towards it is very slow.</p>
<p>Greenhouse gas emissions: increase by 17% between 2005 and 2020 (in non-ETS sectors)</p>	<p>The limit is expected to be observed, based on the latest national projections, including existing measures. Non-ETS emissions are</p>

	expected to increase by 7% between 2005 and 2020 — 10 percentage points below the limit.
Renewable energy target: 40% Renewable energy in all modes of transport: 10%	With a 38.6% renewable energy share in 2014, Latvia is on track to meet its target of 40% by 2020. However, with a 3.2% share of renewables in transport in 2014 Latvia needs to speed up its efforts in progressing towards 10% RES target in transport.
Energy efficiency: 5.4 Mtoe expressed in primary energy consumption (4.5 Mtoe expressed in final energy consumption)	Even though Latvia's current primary energy consumption (4.4 Mtoe in 2013) is below its 2020 target, further energy efficiency measures should keep primary energy consumption at the current level or allow for a slight increase along the economic growth, but still within the 2020 target.
Early school leaving: 10%	The early school leaving rate was 8.5% in 2014. Latvia has achieved its target. Girls strongly outperform boys: 5.1% against 11.7% in 2014.
Tertiary education: 34-36%	The tertiary attainment rate was 39.9% in 2014. Latvia has achieved its target. Women strongly outperform men: 52.3% against 27.8% in 2014.
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 fell by 108 000 in 2015 as compared to 2008. Latvia has moved away from the target since 2013 as income inequalities have increased.

ANNEX B

MIP scoreboard

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

			Thresholds	2009	2010	2011	2012	2013	2014
External imbalances and competitiveness	Current account balance, 3 year average	(% of GDP)	-4%/6%	-8.3	-0.6	2.5	-1.2	-2.8	-2.5
	Net international investment position (% of GDP)		-35%	-82.4	-81.9	-74.4	-66.8	-65.1	-60.9
	Real effective exchange rate - 42 trading partners, HICP deflator	3 years % change	±5% & ±11%	23.4	6.7	-2.5	-8.6	-1.7	0.4
	Export market share - % of world exports	5 years % change	-6%	52.5	21.6	27.1	8.5	6.9	9.9
	Nominal unit labour cost index (2010=100)	3 years % change	9% & 12%	33.7	-3.1	-19.6	-5.9	7.0	12.9
	Deflated house prices (% y-o-y change)		6%	-35.0	-8.7	4.1	-0.3	6.6	5.1
	Private sector credit flow as % of GDP, consolidated		14%	-8.6	2.5	-2.0	-2.1	0.9	-11.9
Internal imbalances	Private sector debt as % of GDP, consolidated		133%	125.5	134.1	115.6	98.2	92.7	96.4
	General government sector debt as % of GDP		60%	36.6	47.5	42.8	41.4	39.1	40.6
	Unemployment rate	3 year average	10%	10.4	14.9	17.7	16.9	14.4	12.6
	Total financial sector liabilities (% y-o-y change)		16.5%	-9.2	-0.3	-4.1	5.2	5.2	10.4
New employment indicators	Activity rate - % of total population aged 15-64 (3 years change in p.p)		-0.2%	2.5	0.4	-1.4	0.9	1.0	1.8
	Long-term unemployment rate - % of active population aged 15-74 (3 years change in p.p)		0.5%	2.1	7.2	6.9	3.3	-3.0	-4.1
	Youth unemployment rate - % of active population aged 15-24 (3 years change in p.p)		2%	19.7	25.6	17.4	-4.8	-13.0	-11.4

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

Source: Alert Mechanism Report 2016 (European Commission)

ANNEX C

Standard Tables

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

	2010	2011	2012	2013	2014	2015
Total assets of the banking sector (% of GDP)	172.5	145.6	128.9	128.3	130.2	130.1
Share of assets of the five largest banks (% of total assets)	60.4	59.6	64.1	64.1	63.6	-
Foreign ownership of banking system (% of total assets)	135.7	127.8	124.7	119.2	-	-
Financial soundness indicators:						
- non-performing loans (% of total loans) ¹⁾	15.9	14.1	8.7	6.4	4.6	4.8
- capital adequacy ratio (%) ¹⁾	13.9	16.5	16.7	18.1	19.7	20.4
- return on equity (%) ¹⁾	-19.7	-10.8	7.8	7.7	10.9	14.2
Bank loans to the private sector (year-on-year % change)	-	-6.3	-0.4	-2.0	-4.5	-0.1
Lending for house purchase (year-on-year % change)	-	-6.3	-4.5	-4.5	-3.4	-3.3
Loan to deposit ratio	206.7	193.3	161.7	132.3	119.4	109.3
Central Bank liquidity as % of liabilities	1.4	1.3	1.3	1.3	0.3	1.0
Private debt (% of GDP)	134.1	115.6	98.2	92.7	96.4	-
Gross external debt (% of GDP) ²⁾ - public	33.5	32.0	32.4	30.6	34.2	28.5
- private	47.1	44.6	40.9	42.1	40.0	41.0
Long-term interest rate spread versus Bund (basis points)*	759.4	329.9	307.0	177.0	134.5	46.8
Credit default swap spreads for sovereign securities (5-year)*	357.8	234.9	213.2	110.3	99.6	76.5

(1) Latest data Q2 2015.

(2) Latest data September 2015. Monetary authorities, monetary and financial institutions are not included.

* Measured in basis points.

Source: IMF (financial soundness indicators); European Commission (long-term interest rates); World Bank (gross external debt); Eurostat (private debt); ECB (all other indicators).

Table C.2: Labour market and social indicators

	2010	2011	2012	2013	2014	2015 ⁽⁴⁾
Employment rate (% of population aged 20-64)	64.3	66.3	68.1	69.7	70.7	72.3
Employment growth (% change from previous year)	-6.7	1.5	1.4	2.3	-1.3	1.0
Employment rate of women (% of female population aged 20-64)	64.5	65.3	66.4	67.7	68.5	70.3
Employment rate of men (% of male population aged 20-64)	64.0	67.5	70.0	71.9	73.1	74.4
Employment rate of older workers (% of population aged 55-64)	47.8	50.5	52.8	54.8	56.4	59.1
Part-time employment (% of total employment, aged 15 years and over)	9.8	9.2	9.4	8.1	7.4	7.4
Fixed term employment (% of employees with a fixed term contract, aged 15 years and over)	7.1	6.6	4.7	4.4	3.3	3.5
Transitions from temporary to permanent employment	35.3	41.4	36.8	54.6	59.3	-
Unemployment rate ⁽¹⁾ (% active population, age group 15-74)	19.5	16.2	15.0	11.9	10.8	9.9
Long-term unemployment rate ⁽²⁾ (% of labour force)	8.8	8.8	7.8	5.8	4.7	4.5
Youth unemployment rate (% active population aged 15-24)	36.2	31.0	28.5	23.2	19.6	15.2
Youth NEET ⁽³⁾ rate (% of population aged 15-24)	17.8	16.0	14.9	13.0	12.0	-
Early leavers from education and training (% of pop. aged 18-24 with at most lower sec. educ. and not in further education or training)	12.9	11.6	10.6	9.8	8.5	-
Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)	32.6	35.9	37.2	40.7	39.9	-
Formal childcare (30 hours or over; % of population aged less than 3 years)	16.0	15.0	19.0	22.0	-	-

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

(2) Long-term unemployed are peoples who have been unemployed for at least 12 months.

(3) Not in Education Employment or Training.

(4) Average of first three quarters of 2015. Data for total unemployment and youth unemployment rates are seasonally adjusted.

Source: European Commission (EU Labour Force Survey).

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

Expenditure on social protection benefits (% of GDP)	2009	2010	2011	2012	2013	2014
Sickness/healthcare	3.9	3.7	3.2	3.1	3.2	-
Invalidity	1.3	1.4	1.3	1.2	1.2	-
Old age and survivors	7.8	9.6	8.2	7.8	7.7	-
Family/children	1.7	1.5	1.1	1.0	1.2	-
Unemployment	1.6	1.3	0.7	0.5	0.6	-
Housing and social exclusion n.e.c.	0.1	0.1	0.1	0.1	0.1	-
Total	16.5	17.9	14.9	14.0	14.2	-
of which: means-tested benefits	0.3	0.7	0.7	0.4	0.3	-
Social inclusion indicators	2009	2010	2011	2012	2013	2014
People at risk of poverty or social exclusion ⁽¹⁾ (% of total population)	37.9	38.2	40.1	36.2	35.1	32.7
Children at risk of poverty or social exclusion (% of people aged 0-17)	38.4	42.2	44.1	40.0	38.4	35.3
At-risk-of-poverty rate ⁽²⁾ (% of total population)	26.4	20.9	19.0	19.2	19.4	21.2
Severe material deprivation rate ⁽³⁾ (% of total population)	22.1	27.6	31.0	25.6	24.0	19.2
Proportion of people living in low work intensity households ⁽⁴⁾ (% of people aged 0-59)	7.4	12.6	12.6	11.7	10.0	9.6
In-work at-risk-of-poverty rate (% of persons employed)	10.8	9.4	9.3	8.6	8.9	8.1
Impact of social transfers (excluding pensions) on reducing poverty	14.8	26.7	29.1	25.3	25.4	21.5
Poverty thresholds, expressed in national currency at constant prices ⁽⁵⁾	2532	2056	1945	1980	2029	2263
Gross disposable income (households; growth %)	-18.1	-7.3	0.4	5.0	5.7	5.8
Inequality of income distribution (S80/S20 income quintile share ratio)	7.4	6.8	6.5	6.5	6.3	6.5

(1) People at risk of poverty or social exclusion (AROPE): individuals who are at risk of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in households with zero or very low work intensity (LWI).

(2) At-risk-of-poverty rate (AROP): proportion of people with an equivalised disposable income below 60 % of the national equivalised median income.

(3) Proportion of people who experience at least four of the following forms of deprivation: not being able to afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) enjoy a week of holiday away from home once a year, vi) have a car, vii) have a washing machine, viii) have a colour TV, or ix) have a telephone.

(4) People living in households with very low work intensity: proportion of people aged 0-59 living in households where the adults (excluding dependent children) worked less than 20 % of their total work-time potential in the previous 12 months.

(5) For EE, CY, MT, SI and SK, thresholds in nominal values in euros; harmonised index of consumer prices (HICP) = 100 in 2006 (2007 survey refers to 2006 incomes)

Source: For expenditure for social protection benefits ESSPROS; for social inclusion EU-SILC.

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

Performance indicators	2009	2010	2011	2012	2013	2014
Labour productivity (real, per person employed, y-o-y)						
Labour productivity in industry	9.53	9.70	-2.59	-1.54	-0.68	2.94
Labour productivity in construction	1.65	-20.88	16.91	11.60	-1.31	1.73
Labour productivity in market services	-2.05	2.03	7.76	3.05	-0.75	1.88
Unit labour costs (ULC) (whole economy, y-o-y)						
ULC in industry	-15.29	-11.03	4.58	7.39	5.54	5.37
ULC in construction	-14.73	17.78	-23.82	-0.35	8.22	1.45
ULC in market services	-8.98	-6.21	-1.78	5.23	3.40	5.35
Business environment	2009	2010	2011	2012	2013	2014
Time needed to enforce contracts ⁽¹⁾ (days)	279	309	309	369	469	469
Time needed to start a business ⁽¹⁾ (days)	15.5	15.5	15.5	15.5	15.5	12.5
Outcome of applications by SMEs for bank loans ⁽²⁾	1.56	na	0.88	na	0.85	1.19
Research and innovation	2009	2010	2011	2012	2013	2014
R&D intensity	0.45	0.60	0.70	0.66	0.60	0.68
Total public expenditure on education as % of GDP, for all levels of education combined	5.59	4.96	4.96	na	na	na
Number of science & technology people employed as % of total employment	43	42	42	44	43	43
Population having completed tertiary education ⁽³⁾	21	23	24	25	27	27
Young people with upper secondary level education ⁽⁴⁾	81	80	81	84	86	87
Trade balance of high technology products as % of GDP	-1.11	-1.83	-1.69	-1.18	-1.03	-1.20
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 here:

<http://www.doingbusiness.org/methodology>.

(2) Average of the answer to question Q7B_a. "[Bank loan]: If you applied and tried to negotiate for this type of financing over the past six months, what was the outcome?". Answers were codified as follows: zero if received everything, one if received most of it, two if only received a limited part of it, three if refused or rejected and treated as missing values if the application is still pending or don't know.

(3) Percentage population aged 15-64 having completed tertiary education.

(4) Percentage population aged 20-24 having attained at least upper secondary education.

(5) Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are shown in detail here: <http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm>

(6) Aggregate OECD indicators of regulation in energy, transport and communications (ETCR).

Source: European Commission; World Bank — Doing Business (for enforcing contracts and time to start a business); OECD (for the product market regulation indicators); SAFE (for outcome of SMEs' applications for bank loans).

Table C.5: **Green growth**

Green growth performance		2009	2010	2011	2012	2013	2014
Macroeconomic							
Energy intensity	kgoe / €	0.36	0.37	0.33	0.33	0.31	-
Carbon intensity	kg / €	0.78	0.89	0.78	0.74	0.72	-
Resource intensity (reciprocal of resource productivity)	kg / €	2.29	2.75	2.87	2.66	2.75	2.75
Waste intensity	kg / €	-	0.11	-	0.16	-	-
Energy balance of trade	% GDP	-4.4	-4.9	-5.4	-6.1	-5.3	-4.2
Weighting of energy in HICP	%	11.64	14.06	15.51	15.70	15.93	15.42
Difference between energy price change and inflation	%	6.9	0.6	6.9	7.3	-1.7	-1.7
Real unit of energy cost	% of value added	15.8	15.8	15.8	-	-	-
Ratio of labour taxes to environmental taxes	ratio	2.9	2.7	2.8	3.0	3.1	3.4
Environmental taxes	% GDP	2.3	2.4	2.5	2.4	2.4	2.7
Sectoral							
Industry energy intensity	kgoe / €	0.39	0.41	0.37	0.39	0.36	-
Real unit energy cost for manufacturing industry	% of value added	25.8	25.8	25.8	-	-	-
Share of energy-intensive industries in the economy	% GDP	7.38	9.25	9.01	8.84	8.39	-
Electricity prices for medium-sized industrial users	€ / kWh	0.09	0.09	0.10	0.11	0.11	0.12
Gas prices for medium-sized industrial users	€ / kWh	0.03	0.03	0.03	0.04	0.04	0.04
Public R&D for energy	% GDP	0.02	0.01	0.01	0.01	0.01	0.01
Public R&D for environment	% GDP	0.02	0.01	0.01	0.01	0.01	0.01
Municipal waste recycling rate	%	7.8	9.4	9.7	15.8	16.9	-
Share of GHG emissions covered by ETS*	%	22.8	26.9	26.2	24.9	24.0	21.3
Transport energy intensity	kgoe / €	0.85	0.94	0.72	0.66	0.67	-
Transport carbon intensity	kg / €	2.38	2.56	1.93	1.77	1.78	-
Security of energy supply							
Energy import dependency	%	60.4	45.5	59.9	56.4	55.9	-
Aggregated supplier concentration index	HHI	59.9	20.7	56.5	60.6	62.2	-
Diversification of energy mix	HHI	0.30	0.30	0.29	0.30	0.30	-

Country-specific notes:

General explanation of the table items:

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: 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 000MWh and 10 000–100 000 GJ; figures excl. VAT.

Municipal waste recycling rate: ratio of recycled municipal waste to total municipal waste

Public R&D for energy or for the environment: government spending on R&D (GBAORD) for these categories as % of GDP

Proportion of greenhouse gas (GHG) emissions covered by EU Emission Trading System (ETS): based on greenhouse gas emissions

(excl land use, land use change and forestry) as reported by Member States to the European Environment Agency)

Transport energy intensity: final energy consumption of transport activity (kgoe) divided by transport industry gross value added (in 2005 EUR)

Transport carbon intensity: greenhouse gas emissions in transport activity divided by gross value added of the transport sector

Energy import dependency: net energy imports divided by gross inland energy consumption incl. consumption of international bunker fuels

Aggregated supplier concentration index: covers oil, gas and coal. Smaller values indicate larger diversification and hence lower risk.

Diversification of the energy mix: Herfindahl index over natural gas, total petrol products, nuclear heat, renewable energies and solid fuels; * European Commission and European Environment Agency

Source: European Commission (Eurostat) unless indicated otherwise