



# OECD Economic Surveys

# Latvia

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OVERVIEW



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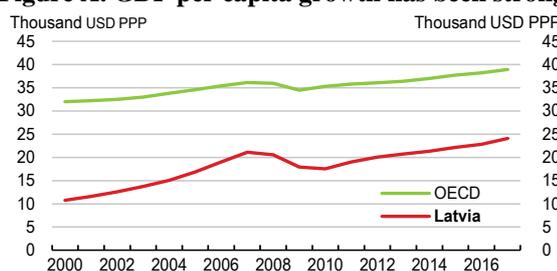
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### Strong growth is set to moderate

**The economy is in a broad-based upswing led by domestic demand.** Fast earnings increases are supporting private consumption. A strong rebound of investment pushed GDP growth rates above 4% in 2017 and 2018. GDP growth is expected to slow around 3% in 2019 and 2020, as world trade weakens and investment slows to a more sustainable pace.

**Figure A. GDP per capita growth has been strong**

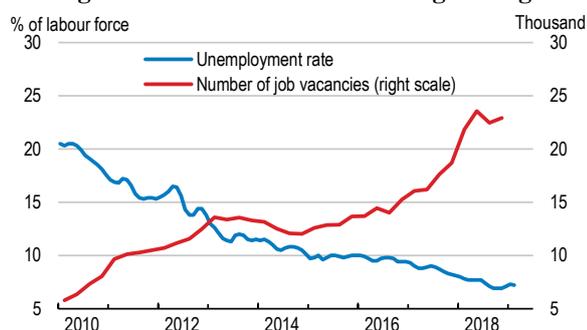


Source: OECD National Accounts Database.

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**Unemployment has been decreasing fast and job vacancies are continuing to grow.** Latvia continues to lose workers through migration and more than 40% of all emigrants between 2009 and 2016 were high-skilled. This contributes to rising skill shortages. Along with a 13% rise in the minimum wage in 2018 this has fuelled wage growth, which is running at roughly 8%. Exporters still enjoy rising market shares and strong profitability, although continued increases in unit labour costs could ultimately undermine their competitiveness.

**Figure B. The labour market is tightening**



Source: Central Statistical Bureau of Latvia; Eurostat.

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**Macroeconomic policies are sound.** The ECB's policy interest rates are low and fiscal policy is broadly neutral, as the phasing in of personal and corporate income tax reform is compensated by higher excise taxes and spending restraint in some other areas.

**While wage growth has been buoyant, for now, inflation looks stable and credit growth is weak.** Core inflation has been firmly anchored around 2%. While private sector debt and non-performing loans have fallen fast to comfortable levels and the banking sector is well capitalised, credit growth remains close to nil. Banks remain cautious after heavy losses, partly caused by inefficient insolvency procedures, in the aftermath of the 2008 crisis. The widespread under-declaration of income also plays a role.

**Table A. Economic growth will remain robust**

Growth rates, unless specified	2018	2019	2020
Gross domestic product (GDP)	4.8	2.7	2.7
Private consumption	4.5	3.8	3.6
Government consumption	4.0	2.6	2.0
Gross fixed capital formation	16.4	3.9	3.9
Exports of goods and services	1.8	1.3	3.0
Imports of goods and services	5.1	2.0	4.1
Unemployment rate (% of labour force)	7.4	7.0	6.8
Consumer price index (harmonised)	2.6	2.6	2.5
General government net lending (% of GDP)	-1.0	-0.8	-0.8

Source: OECD Economic Outlook 105 database.

**Anti-money laundering efforts have been stepped up.** Latvia banned its banks from servicing certain types of high risk "shell companies" and oversaw a reduction in non-resident deposits by more than 60% to reduce money-laundering risks. Based on recommendations of international experts (Moneyval, 2018) the new government, assisted by the OECD, works on implementing an action plan that would strengthen the quality and capacity of Latvia's supervisory, control and law enforcement bodies and enhance international cooperation on anti-money laundering and combating of terrorism financing.

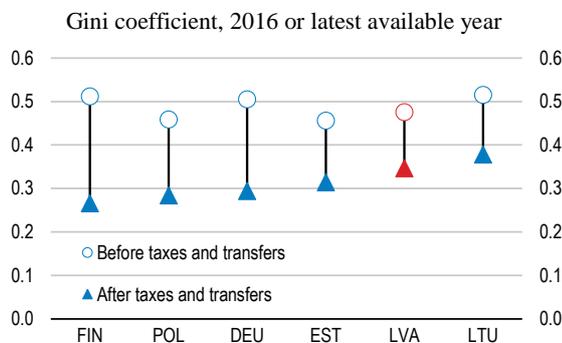
### Making growth more inclusive and greener

**Income inequality and poverty remain high.** Living standards have improved fast overall, but regional disparities in income per capita are pronounced. Social protection is limited and

housing conditions are poor for a relatively large share of the population. Taxes and benefits could do more to lower inequality.

**Personal income tax reform has lowered labour taxes for some lower-income households.** Yet, a new social contribution earmarked for health spending has limited this effect. Taxes on higher-income workers and progressivity remain limited, as more than 90% of taxpayers pay the lowest rate of 20%. Social assistance remains low and while they improved, work incentives for accepting low wage jobs remain limited for benefit recipients.

**Figure C. Taxes and benefits could do more to lower inequality**



Source: OECD Income Distribution database (IDD).

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**Municipalities are relatively small.** This undermines the provision of high-quality public services, including education and public transport. The government has initiated a territorial reform aiming at reducing the number of municipalities significantly. This should entail large efficiency gains and help address the deepening rural-urban divide.

**Healthcare financing has increased from a low level, but a recent reform involves serious risks.** Despite a fast increase life expectancy is still among the lowest in the OECD and highly unequal. A recent reform reduced high out-of-pocket payments that induce many patients to miss doctors' appointments. But workers not paying mandatory social contributions and pensioners, who receive their pension from another country now have to pay a voluntary levy, otherwise they will be excluded from parts of the healthcare package, endangering their health. The new

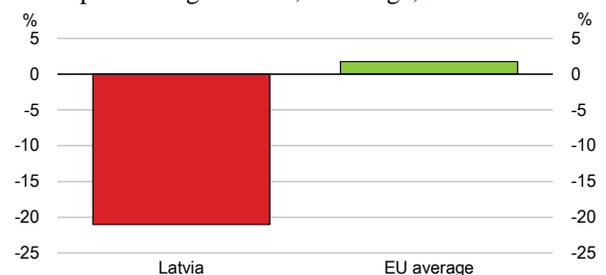
government's proposal to abolish this levy and restore universal access to healthcare services is thus welcome.

**Improvements in energy efficiency could provide for lower emissions.** A lack of integrated land and transport planning has led to urban sprawl and limited the attractiveness of public transport. Most households are homeowners and many lack access to credit and financial resources to invest in energy efficiency. Homeownership associations have often been overwhelmed with complicated decision-making procedures and the logistics of energy efficiency investments, hindering a stronger uptake of dedicated EU and other public subsidies.

### ***Faster productivity growth is essential for well-being, as the population declines***

**Latvia needs stronger productivity growth to improve living standards.** This would help to counteract the effects of ageing and emigration of high-skilled workers. Productivity growth has slowed down after 2008, as the financial crisis impaired the credit channel impeding stronger capital deepening and investment in innovation. Shortages in skills needed to take up digital technologies and weak competition in some sectors with an important presence of state-owned and municipal enterprises (SOEs) hold back productivity, too.

**Figure D. The working age population is falling**  
Population aged 15-64, % change, 2000-17



Source: United Nations, Department of Economic and Social Affairs, Population Division (2017), World Population Prospects: The 2017 Revision, DVD Edition.

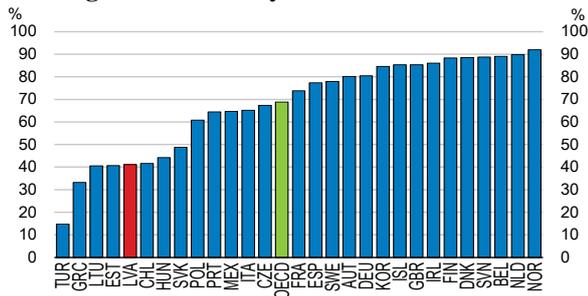
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**High informality hinders stronger investment growth and inclusiveness.** A widespread practice of under-declaration of income weighs on tax revenues, much needed to invest in education and

infrastructure, on workers' training opportunities and on firms' access to finance. It also makes for patchy pension contribution records. The government is working to strengthen the capacity of the tax administration and other law enforcement agencies, but progress with filling vacancies has been slow and lenient sentences continue to impede the fight against tax crime.

**The very low recovery rate in insolvencies negatively affects access to credit and investment.** Fraud with low penalties for abusers and low accountability of insolvency administrators eroded investors' trust in the past. Recent insolvency administration reforms improve transparency and monitoring of proceedings, but trust in the independence of the judiciary and its capacity to deal with economic and other crimes should be strengthened. Encouraging swift initiation of insolvency proceedings could help restructure viable firms and liquidate unprofitable ones faster.

Figure E. Recovery in insolvencies is low



Note: The recovery rate is calculated based on the time, cost and outcomes of insolvency proceedings and is recorded as cents on the dollar recovered by secured creditors.

Source: World Bank, Doing Business 2019 database.

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**Governance of SOEs needs to improve to avoid undermining fair conditions for competition.**

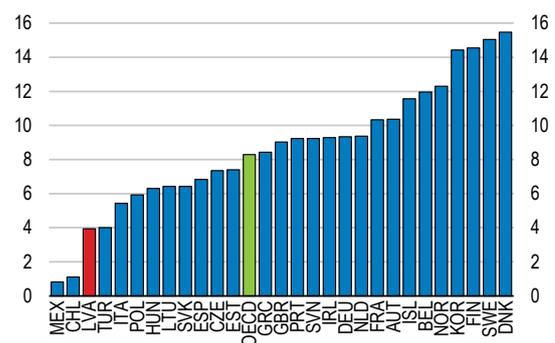
The rationale for state ownership is not rigorously applied, preventing evidence-based decisions on privatisation. Enterprises owned by municipalities are not subject to the framework that monitors SOEs and ensures their good governance. Unlike in many OECD countries the competition authority cannot intervene against administrative acts that endanger fair conditions for competition.

**Innovation performance is weak.** Only a few firms innovate and R&D spending is relatively low. The supply of researchers and research

quality are weak. Various measures to promote knowledge transfer are in place but researchers have little incentive to collaborate with industry. The government has reformed institutional financing to reward performance and promote consolidation. Taking these reforms further would improve efficiency and make room for higher wages and better working conditions for researchers to attract more qualified personnel.

Figure F. Supply of researchers is weak

Per thousand of total employed, 2017



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### Skill shortages need to be addressed

**Education and training have to become more responsive to labour market needs.** Vocational training curricula have been updated with the involvement of social partners, a welcome move. But Latvia's many small enterprises often lack the capacity to offer the full extent of work-based learning programmes. Promoting the provision of joint training could be a solution.

**Participation in adult learning is increasing, but remains low among the low-skilled.** Spending on active labour market policies has been shifted from public work schemes to more effective training and activation measures, but remains low.

**Limited access to affordable housing in dynamic areas impedes access to jobs.** Unemployment and income differences between Latvia's regions are large, but buying a new home in booming areas is out of reach for most workers. Both the private rental and the social housing sectors are very small. The government plans to develop the private rental market by supporting access to long-term finance and housing with limits on rents, a welcome move.

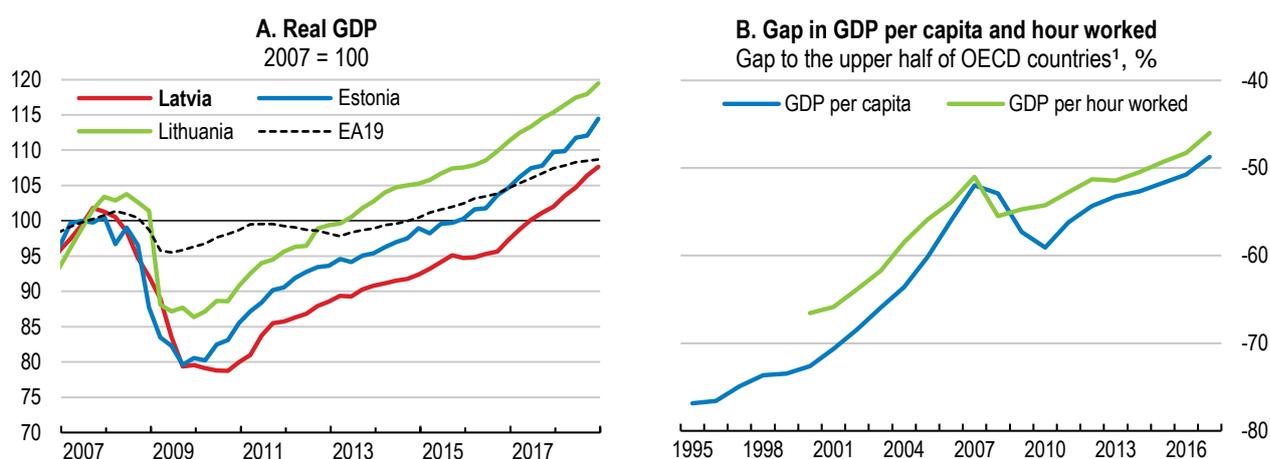
MAIN FINDINGS	KEY RECOMMENDATIONS
<b>Improving well-being, inclusiveness and green growth</b>	
<p>Informality, such as under-declaration of income and tax evasion, is high, weighing on the access of workers to social security and training, on productivity and on tax revenues that are much needed for higher spending.</p> <p>Spending on healthcare is low and high out-of-pocket payments limit access to healthcare of low-income households. Denying parts of the healthcare package to some workers and pensioners that do not pay the new levy risks undermining their health status.</p> <p>The average size of municipalities is low, undermining the provision of high quality public services, including education and public transport.</p> <p>Social transfers and work incentives for low wage earners are low.</p>	<p>Continue the engagement of social partners in the fight against informality through sectoral agreements.</p> <p>Offer sufficiently high wages to attract qualified personnel in law enforcement agencies.</p> <p>Increase spending on healthcare to reduce out-of-pocket payments.</p> <p>Ensure that all residents have access to the full healthcare package as envisaged.</p>
<p>A lack of integrated transport planning for the Riga metropolitan area and the country as a whole limits the attractiveness of public transport, increasing car traffic, congestion and pollution.</p> <p>Effective tax rates on CO<sub>2</sub> and air pollutants are low.</p>	<p>Increase the size of municipalities by merging local administrations.</p> <p>Increase the guaranteed minimum income and consider tapering its withdrawal further.</p> <p>Consider building an association of public transport buyers for the Riga metropolitan area and possibly for the country as a whole to coordinate transport planning and provision.</p> <p>Increase energy taxes and align the effective taxation of emissions of CO<sub>2</sub> and other pollutants across different fuels and uses.</p>
<p>The housing stock is old and has low energy efficiency. Many homeowners lack financial resources and decision-making procedures in homeowner associations are complicated.</p>	<p>Encourage housing management agencies to initiate and manage energy efficiency investment for a large set of buildings and provide lower-income homeowners with grants covering up to 100% of the costs.</p> <p>Introduce means-tested tax incentives for the refurbishment of basic amenities.</p>
<p>A lack of affordable housing in dynamic areas exacerbates skill shortages and weighs on well-being.</p>	<p>Provide more public funding for affordable rental and social housing.</p>
<b>Fiscal policy</b>	
<p>Public debt is low and the deficit under control.</p> <p>Despite recent personal income tax reform, taxation of labour income remains high for lower income earners and progressivity limited. A new social contribution earmarked for health spending increased the tax burden on some vulnerable groups.</p>	<p>Reduce the deficit as planned.</p> <p>Monitor the impact of personal income tax reform, especially on low-income households.</p> <p>In the longer run, consider abolishing the social contribution earmarked for healthcare and further steps to make the personal income tax more progressive.</p>
<b>Strengthening productivity</b>	
<p>The provision of work-based learning is low, as many small firms do not have the capacity to provide training.</p> <p>Participation in adult learning is increasing, but remains low for low-skilled and elderly workers. Scarcities in general and digital skills need to be addressed.</p> <p>Competition looks weak in sectors with a strong involvement of state-owned enterprises.</p> <p>Spending on active labour market policies is low and heavily dependent on EU Funds. The caseload of counsellors is high.</p>	<p>Promote joint training offers involving several firms.</p> <p>Implement as early as possible the planned financial support for firms providing training to employees, with stronger financing for the low skilled.</p> <p>Develop more detailed guidelines to review the rationale for state ownership and apply them more rigorously. Strengthen the authority of the Competition Council to intervene against anti-competitive behaviour by state-owned and municipal enterprises.</p> <p>Hire more counsellors in Public Employment Services.</p> <p>Evaluate EU funded training to identify the most effective programmes.</p> <p>Plan for the financing of EU funded training beyond the current EU budgetary cycle, if necessary from national sources.</p>
<p>The quality of research is low and science-industry collaboration is weak.</p> <p>Abuse of insolvency procedures in the past has undermined the judiciary's credibility and the recovery of bank credit growth. Trust in the independence of the judiciary and its effectiveness in addressing corruption is low and its capacity to deal with economic crimes, including under-declaration of income and tax evasion, needs to be strengthened.</p> <p>Dealing with money laundering issues that came mainly from banks specialised in foreign customer services has been a challenge.</p>	<p>Promote sharing of resources among universities and research institutions.</p> <p>Improve wages, working conditions and career prospects for researchers in public institutions and provide stronger incentives to collaborate with industry.</p> <p>Improve the quality and speed of judgement through training and specialisation of judicial staff.</p> <p>Ensure the accountability of judges, including by extending the deadlines for dealing with disciplinary cases.</p> <p>Ensure continued commitment at the highest level of the government to swiftly implement the government action plan, strengthening the anti-money laundering and combating of terrorism financing framework.</p>

## Key policy insights

### Growth is strong, but inequality remains high, and ageing is a challenge

Economic growth is strong and income convergence continues, even though at a slower pace than before 2008 (Figure 1). The labour market is tight, as unemployment fell to its lowest rate in ten years and vacancies are rising fast. Wage growth has been strong supporting household purchasing power. Despite increasing labour costs, Latvian exporters have remained competitive and gained market shares. The macroeconomy appears balanced overall with inflation, public debt and the deficit under control. Financial markets look stable, sustained by sound macroprudential policy.

**Figure 1. GDP growth is strong and income convergence continues**



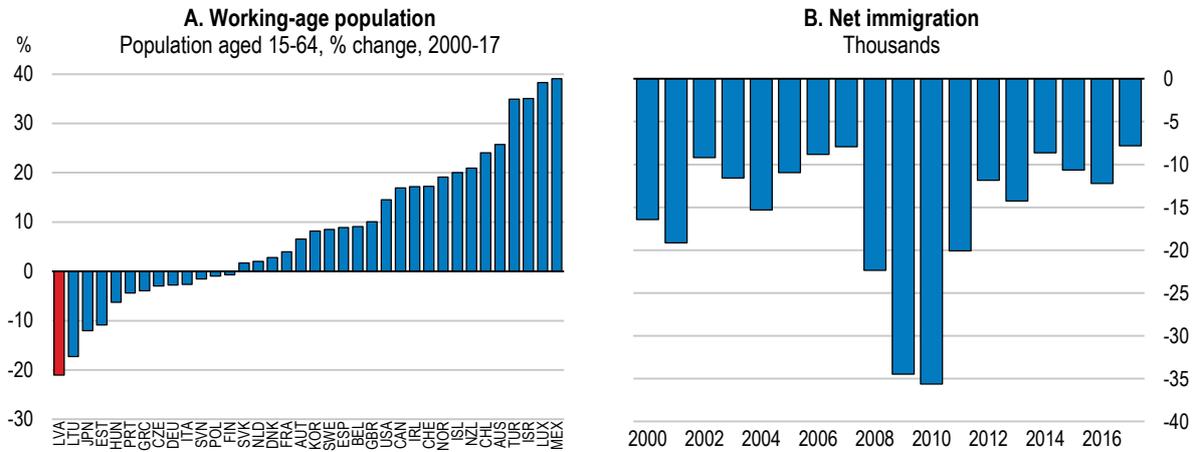
1. Percentage gap with respect to the weighted average using population weights of the highest 17 OECD countries in terms of GDP per capita and GDP per hour worked (in constant 2010 PPPs).

Source: OECD National Accounts Database; OECD (2019), *Economic Policy Reforms 2019: Going for Growth* (forthcoming).

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Latvia faces considerable headwinds from a rapid demographic transition. The working age population is declining fast (Figure 2) owing to ageing and outmigration, which has reduced the population by 20% since 2000. A large fraction of emigrants is skilled, contributing to skill shortages, dampening economic growth and putting pressure on the adequacy of pensions and health care. Latvia has taken action to confront these challenges, including by upgrading its education system and active labour market policies.

**Figure 2. The working age population is shrinking fast**



Source: United Nations, Department of Economic and Social Affairs, Population Division (2017), World Population Prospects: The 2017 Revision, DVD Edition; Central Statistical Bureau of Latvia.

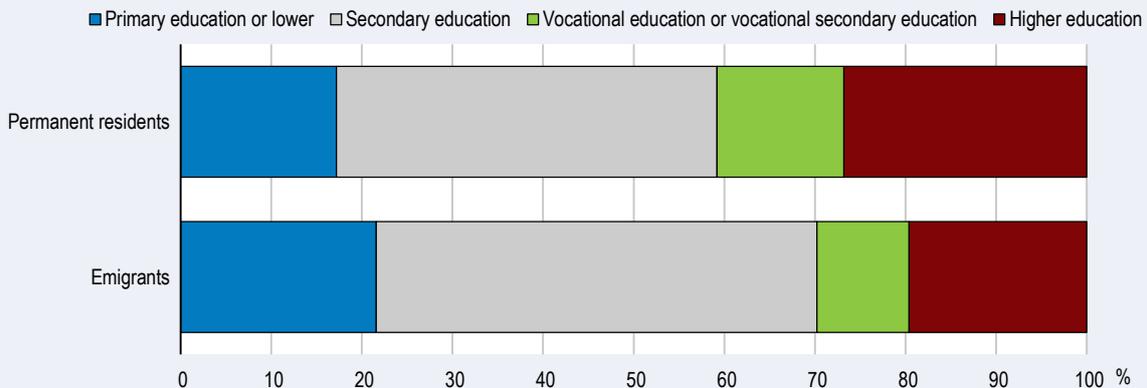
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**Box 1. Latvia’s emigration challenge**

Between 2008 and 2017, about 260 thousand people emigrated from Latvia, amounting to 13.5% of the population in 2017. The emigration flow peaked in 2009 and 2010 when Latvia lost a little less than 2% of its population in each year. In 2017 more than 80% of emigrants were of working age, and more than half were aged between 20 and 39, according to the data by the Central Statistical Bureau of Latvia. The pace of emigration has stabilised since 2014 to 19 thousand people per year. According to the OECD International Migration Database, the most popular emigration destinations have been the United Kingdom where 119 thousand Latvian emigrants resided in 2017, Germany, Ireland and Nordic countries. Emigrants are overall less skilled than permanent residents (Figure 3). Nevertheless, 20% of emigrants had higher education attainment in 2016, implying a sizable brain drain.

**Figure 3. Emigrants are relatively less skilled**

The composition of emigrants and permanent residents, 2016



Source: Central Statistical Bureau of Latvia.

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While emigration intentions are generally stronger among less educated Latvians, many young people of all educational backgrounds express a desire to emigrate, mostly due to Latvia's large earning gaps with high-income European economies (OECD, 2016b). Large emigration resulted in a sizable inflow of remittances, which amounts to more than 1 billion euros every year according to data from the Bank of Latvia, equivalent to roughly 4 ½ % of Latvia's Gross National Income.

Like in other OECD countries, productivity growth has fallen after the global crisis of 2008/2009. Since then it has been mainly driven by resource reallocation to more productive firms. Yet, among Latvia's large pool of small firms, many have experienced little or no productivity growth, pointing to weaknesses in their capacity to absorb new technologies and innovate. They need better management, access to skills and use of digital technologies, requiring investments in education and training, the quality of research and science-industry collaboration. Weak competition in some sectors with a high share of state-owned enterprises also holds back productivity growth. The government has been simplifying regulations and improving the functioning of the judiciary to ensure the protection of property rights and access to finance as well as facilitate innovation. These efforts need to continue.

#### **Box 2. The new government's key policy priorities**

The new government of Latvia was established in January 2019, as a coalition of five centre-right parties. Its policy priorities with relevance to this Survey's recommendations among others include the following:

##### **Anti-money laundering**

The government developed an action plan to strengthen the quality and capacity of supervision, control and law enforcement bodies regarding anti-money laundering and combating of terrorism financing, following the July 2018 mutual evaluation report by an international group of experts (Moneyval, 2018) and an OECD report (OECD, 2019a). The action plan will be implemented with the technical assistance of the OECD under the supervision of the Financial Sector Development Council, which is chaired by the Prime Minister and includes prosecutors, relevant ministers, representatives of the central bank, financial market regulators and other stakeholders. The 2019 budget foresees funds to increase the capacity of law enforcement agencies to combat money laundering through more hiring and training. The government is actively working to pass laws that will help to strengthen the authorities' capacity to detect, investigate and prosecute money laundering activities.

##### **Effectiveness of the judiciary**

In order to enhance the capacity of the judiciary, large-scale training programmes for judicial staff are underway, funded by the European Social Fund.

##### **Competition policy**

The new government amended the competition law to endow the Competition Council with the authority to intervene when public administrative bodies favour enterprises that they control.

### Social cohesion and skills

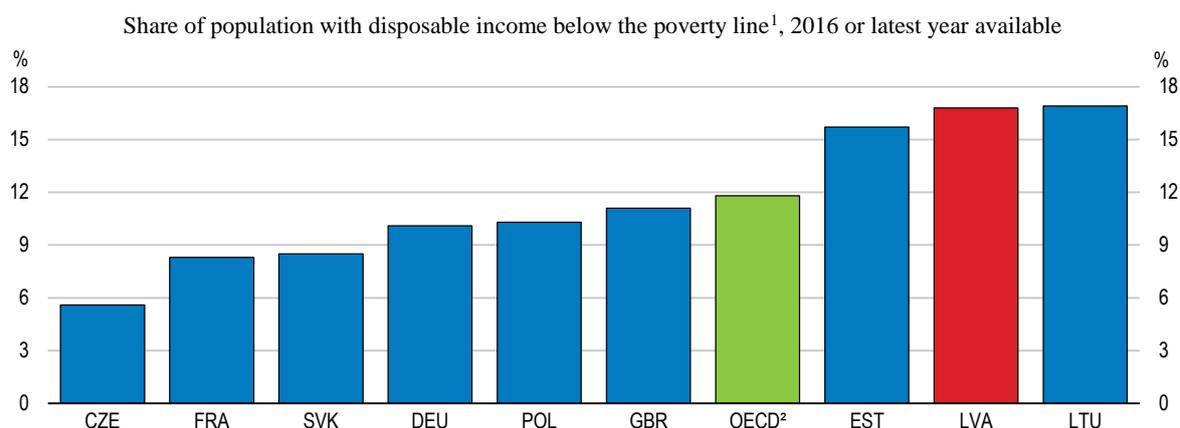
The government decided to ensure universal healthcare by abolishing the system that would exclude some residents from parts of healthcare basket. It is also elaborating proposals to increase social transfers to low-income individuals. A comprehensive Skills Strategy is being developed in collaboration with the OECD.

### Administrative territorial reform

In line with the coalition agreement and a mandate from the parliament, the Ministry of Environmental Protection and Regional Development set forward a proposal to merge municipalities.

There are important inequalities in income, well-being and access to public services to address. Income inequality and poverty (Figure 4) remain high and many workers under-declare income limiting access to social protection, training and better career prospects. Job insecurity is high (Figure 5). Informality, including under-declaration of income and tax evasion, also weighs on productivity and tax revenues. Life expectancy and self-reported health are low and, in fact, highly unequal, with big gaps between men and women and different income groups. Housing conditions are poor for many people (Figure 5).

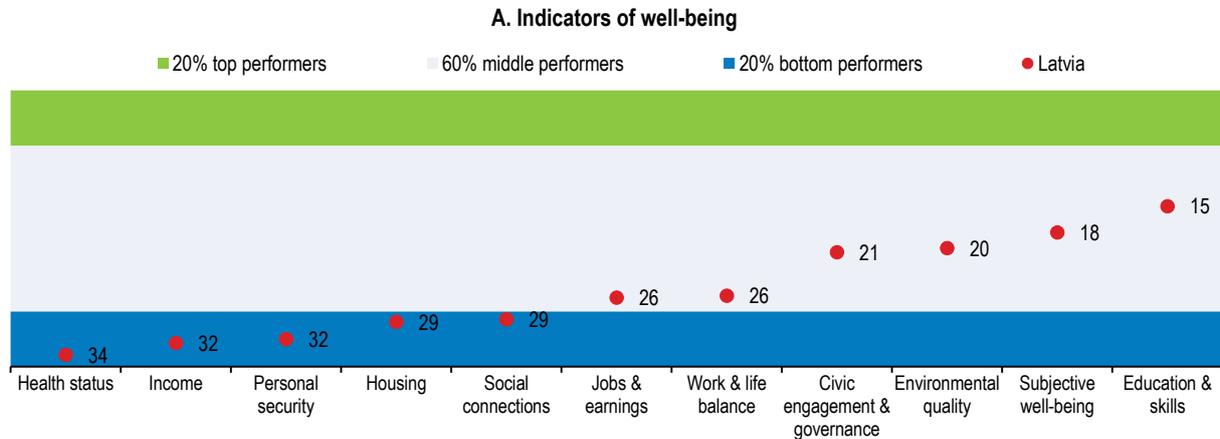
**Figure 4. Poverty is high**



1. The poverty threshold is 50% of median household disposable income. Household income is adjusted to take into account household size.

2. Unweighted average of available countries.

Source: OECD Income Distribution database (IDD).

**Figure 5. Latvia lags behind in some dimensions of well-being**Better Life Index, country rankings from 1 (best) to 35 (worst), 2017<sup>1</sup>**B. Latvia well-being sub-indicators selected rankings**

	Sub-indicator	Rank	Measure	OECD	
				Latvia	average
Highest rankings	Employees working very long hours	3	% of dependent employed working 50 hours or more per week	2.1	12.6
	Educational attainment	7	Number of adults aged 25 to 64 holding at least an upper secondary degree, %	89	74
Lowest rankings	Household net financial wealth	30	US dollars at current PPPs per capita	17105	90570
	Labour market insecurity	30	Percentage of the employed people	6.8	4.9
	Self-reported health	32	Population aged 15 years old and over who report "good" or better health, %	46	69
	Personal earnings	33	US dollars at current PPPs	22389	44290
	Time devoted to leisure and personal care	33	Hours per day	13.8	14.9
	Household net adjusted disposable income	34	US dollars at current PPPs per capita	15269	30563
	Homicide rate	34	Per 100,000 population	6.6	3.6
	Dwellings without basic facilities	35	Population living in a dwelling without indoor flushing toilet for the sole use of their households, %	12.9	2.1
	Life expectancy	35	Years	74.6	80.1

1. Each well-being dimension is measured by one to four indicators from the OECD Better Life Index set.

Source: OECD (2017), *OECD Better Life Index*, [www.oecdbetterlifeindex.org](http://www.oecdbetterlifeindex.org).

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Against this background, this Survey has four main messages:

- Growth is strong and the macroeconomy appears balanced overall.
- Investments in skills, research and innovation and efforts to strengthen competition would help support productivity and address the demographic challenges related to ageing and migration.
- A more inclusive society requires more spending on health, social protection and housing.

- Strengthening the judiciary and law enforcement agencies would help improve trust in institutions, address corruption, widespread under-declaration of income, or informality and tax evasion, and money laundering issues.

Reforms proposed in this Survey would have a positive impact on Latvia's growth prospects, illustrated in Box 3.

### Box 3. Structural reforms can raise growth and living standards

The effect of selected reforms proposed in this *Survey* can be gauged using simulations based on historical relationships between reforms and growth outcomes across OECD countries (Égert and Gal, 2017). The model on which the estimates are based captures the reform recommendations only very roughly in some instances. The policy changes that are assumed (Table 1) corresponds to scenarios where Latvia's current policy settings converge to the average settings of OECD countries.

While reforms such as a reduction of personal income tax rates have implications for government finances, the model imposes a restriction that these reforms are budget neutral in order to leave the fiscal stance unchanged (see Gal and Theising, 2015). The fiscal measures laid out in Box 4 can be seen as one example how the reforms assessed in this box could be implemented in a budget neutral way.

**Table 1. Illustrative GDP-per-capita impact of recommended reforms**

Reform	Percentage increase in GDP per capita	
	10 year effect	Long-run effect
Increase spending on Active Labour Market Policy	1.6%	3.3%
Increased spending on R&D	0.9%	2.4%
Personal income tax reform	0.7%	0.9%
Improve the rule of law	1.9%	5.0%
Strengthening competition and enhancing privatisation	1.8%	4.8%

*Notes:* The policy changes assumed for the simulations are:

1. Spending on active labour market policies as a share of GDP is increased by 0.24 percentage points to reach 75% of the level of the OECD average.
2. R&D business sector funding is increased by 0.6% of GDP, closing half of the gap to the OECD average level.
3. The tax wedge is reduced by 1 percentage point for single earners and 3 percentage points for one-earner couples with two children. This includes the reforms that the government has been phasing in since 2018 and further reductions in social contributions as laid out in Rastrigina (2019).
4. The rule of law measured by the World Bank's World Governance indicator is improved by closing half of the gap with the OECD average
5. Privatising commercial activities of state-owned enterprises and strengthening the authority of the Competition Council is assumed to close the gap to the OECD average in the PMR - barriers to trade and investment index

*Source:* OECD calculations based on Égert and Gal (2017).

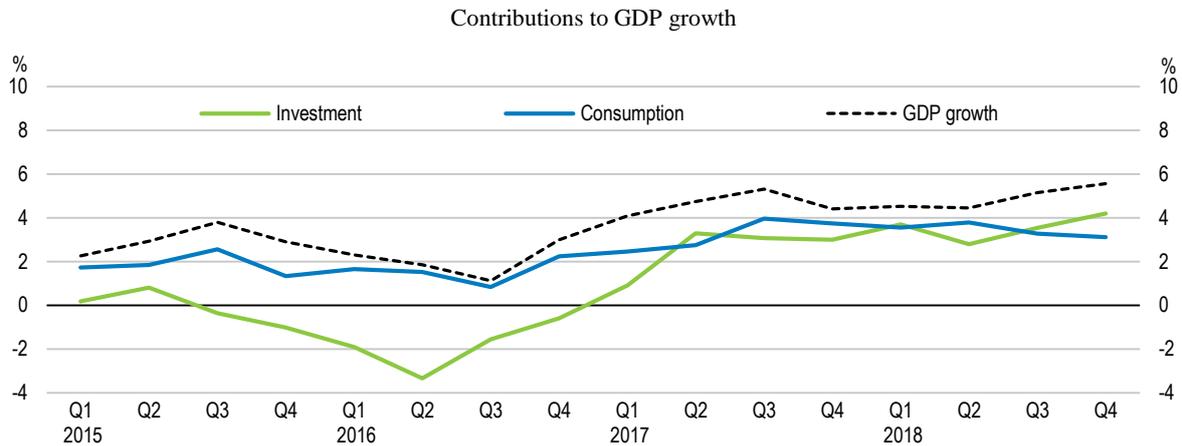
## Macroeconomic policies are sound

### *The short-term economic outlook is strong*

The economy is in a broad-based upswing (Figure 6), led by domestic demand. A strong labour market and fast increases in earnings are supporting private consumption. Following a slump, investment surged in late 2017 and 2018, as private and public investors learned the new rules to draw on EU Funds. A strong rebound of public and private investment

pushed GDP growth rates above 4% in 2017 and 2018. Investment will continue to be supported by EU Funds, but its growth rates should moderate towards a more sustainable pace. GDP growth is expected to slow to around 3% in 2019 and 2020, as the cycle matures and world trade weakens. Growth in Europe will lose momentum, weighing on external demand and business expectations.

**Figure 6. Investment and consumption contribute to GDP growth**

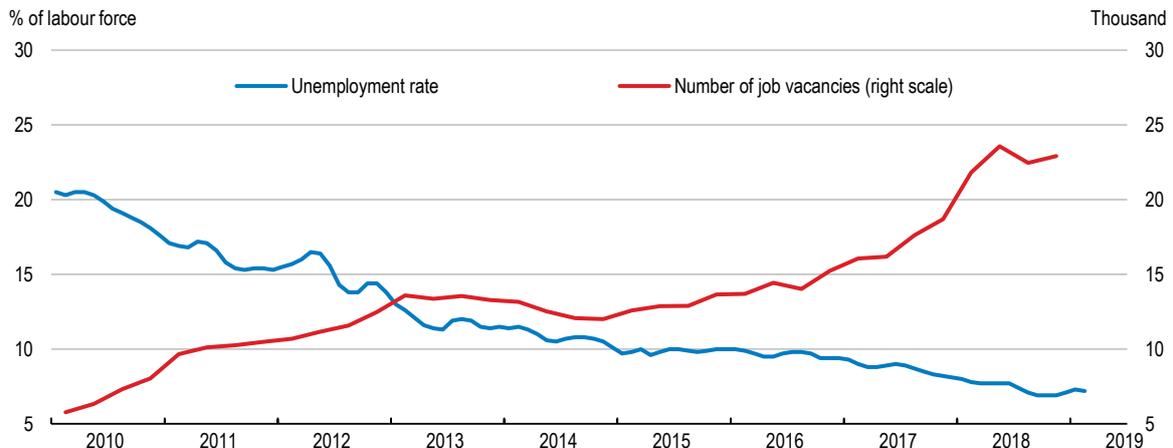


Source: OECD Economic Outlook Database.

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Unemployment has been decreasing fast and vacancies are continuing to grow (Figure 7), although a broader measure of unemployment that includes involuntary part-time and workers that are ready to work, but not actively seeking jobs for various reasons, is still above 14%. Vacancies are particularly high in the Riga region, Latvia's main economic centre, and some other cities are suffering from labour shortages. Given a lack of affordable housing, workers find it difficult to relocate. Continued outmigration also contributes to skill mismatches and shortages. Along with a 13% rise in the minimum wage in 2018, this has fuelled wage growth, which is running at roughly 8%. While the effect of the rise in the minimum wage should fade over time, the wage growth is likely to remain high as skill mismatches and labour shortages will persist in the short run.

**Figure 7. Unemployment is falling and vacancies are rising**



Source: Central Statistical Bureau of Latvia; Eurostat.

StatLink  <https://doi.org/10.1787/888933926072>

Although wage growth has surged considerably since 2016 (Figure 8), the effect on core inflation has been muted, so far. Increases in unit labour costs have been absorbed in firms' profit margins. Credit growth to households and non-financial corporations is close to nil and while non-bank lending is growing faster, its share is too low to contribute to stronger demand. Higher excise taxes and sharp increases in energy prices contributed to a faster increase in headline inflation in 2018. As these effects are fading, inflation is expected to stabilise below 3%.

**Table 2. Macroeconomic indicators and projections**

Annual percentage change, volume (2010 prices)						
	2015				Projections	
	Current prices (billion EUR)	2016	2017	2018	2019	2020
<b>Gross domestic product (GDP)</b>	<b>24.3</b>	<b>2.1</b>	<b>4.6</b>	<b>4.8</b>	<b>2.7</b>	<b>2.7</b>
Private consumption	14.7	1.4	4.1	4.5	3.8	3.6
Government consumption	4.4	3.9	4.1	4.0	2.6	2.0
Gross fixed capital formation	5.4	-8.4	13.1	16.4	3.9	3.9
Housing	0.6	-19.1	-10.4	22.8	2.8	3.9
Final domestic demand	24.4	-0.3	5.9	6.9	3.6	3.4
Stockbuilding <sup>1</sup>	0.0	2.3	0.5	0.2	-0.3	0.0
Total domestic demand	24.4	2.1	6.3	6.8	3.1	3.3
Exports of goods and services	14.7	4.4	6.2	1.8	1.3	3.0
Imports of goods and services	14.8	4.4	8.9	5.1	2.0	4.1
Net exports <sup>1</sup>	-0.1	0.0	-1.5	-2.0	-0.4	-0.6
<b>Other indicators</b> (growth rates, unless specified)						
Potential GDP	..	2.3	2.9	3.2	3.3	3.3
Output gap <sup>2</sup>	..	-2.7	-1.0	0.5	-0.1	-0.6
Employment	..	-0.3	0.2	1.6	0.3	0.1
Unemployment rate (% of labour force)	..	9.6	8.7	7.4	7.0	6.8
GDP deflator	..	0.9	3.2	4.2	4.1	3.7
Consumer price index (harmonised)	..	0.1	2.9	2.6	2.6	2.5
Core consumer price index (harmonised)	..	1.2	1.7	1.9	2.2	2.4
Household saving ratio, net (% of disposable income)	..	-5.3	-6.0	-3.8	-2.1	-0.7
Current account balance (% of GDP)	..	1.6	0.7	-1.0	-1.5	-1.3
General government financial balance (% of GDP)	..	0.1	-0.6	-1.0	-0.8	-0.8
Underlying general government financial balance <sup>2</sup>	..	1.1	-0.2	-1.2	-0.8	-0.6
Underlying government primary financial balance <sup>2</sup>	..	1.9	0.5	-0.6	-0.5	-0.4
General government gross debt (Maastricht, % of GDP)	..	40.3	40.0	35.9	35.6	35.4
General government net debt (% of GDP)	..	19.7	18.8	17.4	17.1	16.9
Three-month money market rate, average	..	-0.3	-0.3	-0.3	-0.3	-0.3
Ten-year government bond yield, average	..	0.5	0.8	0.9	0.8	0.9

1. Contribution to changes in real GDP.

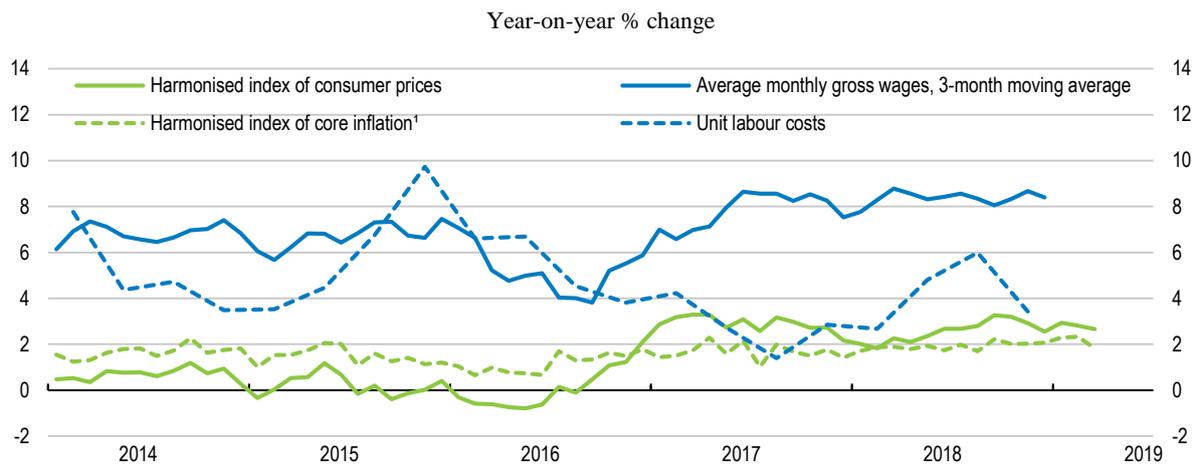
2. As a percentage of potential GDP.

Source: OECD Economic Outlook 105 database.

The fiscal deficit widened in 2018 as the government increased spending on healthcare by making use of the flexibility mechanisms within the EU fiscal rules. The government also

started to phase in corporate and personal income tax reforms in 2018. The resulting decrease in fiscal revenue will be compensated by higher excise taxes and spending restraint in a number of areas. Higher social contributions are financing a part of the increase in health spending. The fiscal stance is projected to remain broadly neutral. This is appropriate given limited inflationary pressures and the need for more spending in particular on healthcare, education and training to address skills shortages and inequalities in access to social services. Yet, it may have to be tightened should inflationary pressures intensify more than expected.

**Figure 8. Wage growth is strong, but inflation remains stable**



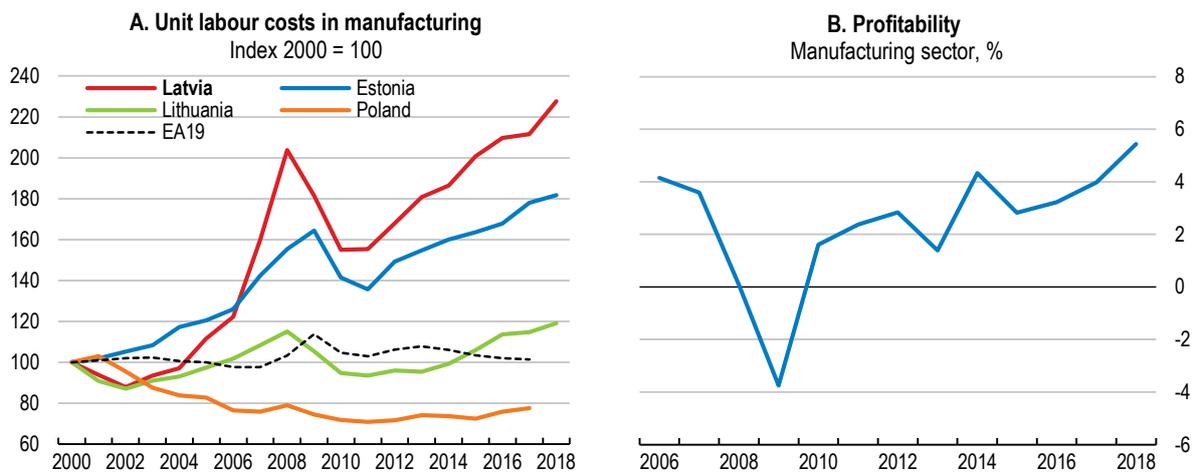
1. Harmonised index of consumer prices excluding food, energy, alcohol and tobacco.

Source: Central Statistical Bureau of Latvia; Economic Outlook Database; OECD Productivity Database.

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Despite strong wage growth, Latvian exporters have remained competitive and continued to gain market share. Unit labour costs have risen more than in neighbouring countries (Figure 9, Panel A). However, profitability continues to be high in manufacturing (Panel B), so there is room to absorb further wage increases in profit margins.

**Figure 9. Unit labour costs are rising, but profitability remains strong**



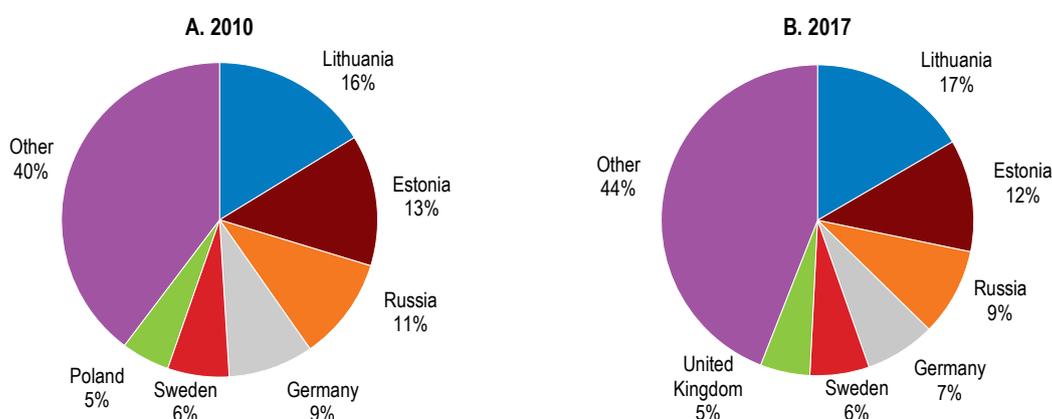
Source: OECD Productivity Database; Central Statistical Bureau of Latvia.

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Latvia has diversified its exports and maintained strong performance despite headwinds from Russia (Figure 10). Services exports have been growing over the past decade, resisting adverse events in transport and the financial sector, as business services outsourcing, and in particular, ICT services, have been rising fast. Strong growth in tourism has compensated for a decline in transit traffic from Russia and in financial services of banks specialising in serving non-EU depositors following a tightening of anti-money laundering regulations. The share of agriculture, food products and raw materials in exports, although still large, has been falling, as higher-tech exports have fared well (Figure 11).

**Figure 10. Latvia has diversified its trading partners**

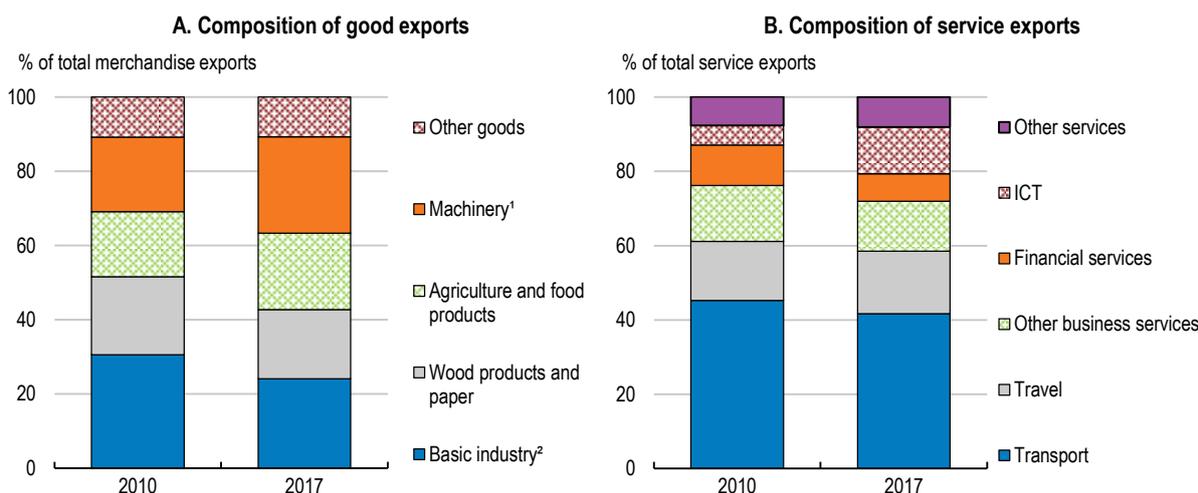
Exports of goods, shares by partner, % of total



Source: Central Statistical Bureau of Latvia.

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**Figure 11. Exports have become more sophisticated**



1. Includes mechanical appliances; electrical equipment; transport vehicles; optical instruments and apparatus (inc. medical); clocks and watches; musical instruments.

2. Includes products of the chemical and allied industries; plastics and articles thereof; rubber and articles thereof; base metals and articles of base metals; and mineral products.

Source: Central Statistical Bureau of Latvia; Bank of Latvia.

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There are both positive and negative risks to this outlook. The decision of the UK, an important trading partner (see Figure 10), to leave the European Union may affect exports, in particular if Brexit were to prove disorderly. Additional trade restrictions between the EU and the US would reduce external demand further. Wage growth has been well above productivity gains, and if it failed to moderate, costs would rise in the tradeable sector, hurting exports and encouraging imports. On the other hand, rising incomes and consumer confidence could strengthen consumption more than expected leading to a more sustained pick-up in domestic business confidence and investment. Continuing to improve re-training opportunities, internal labour mobility and social protection, will contribute to addressing labour shortages and strengthen the economy's potential to grow faster in the longer term. Shocks, which would completely alter the economic outlook, include the intensification of geopolitical risks related to Russia (Table 3) and rising trade tensions between the United States and its main trading partners.

**Table 3. Potential vulnerabilities of the Latvian economy**

Vulnerability	Possible outcome
Intensification of geopolitical risks related to Russia.	Geopolitical tension with Russia could jeopardise exports and investment. An immediate halt of the transit of Russian exports through Latvia would lower Latvian GDP by 3-4% according to estimates by the Bank of Latvia.
Rising trade tensions between the US and China	If the US were to impose tariffs on a much wider range of goods imported from China and China were to retaliate, this would jeopardize the EU's and Latvia's exports and investment. The Bank of Latvia estimates that EU GDP could be reduced by 1% after two years and Latvia's GDP by more than that, if the US was to impose a tariff of 25% on goods that amount to roughly to 46.2 billion of imports from China (10% of the total) and China would retaliate with tariffs on a list of imported goods from the US with a total value of a similar size (49.8 billion US dollars or 38.2% of the total) (Bank of Latvia, 2018).
A sharp reduction of EU funding of structural programmes in the next funding period starting from 2021.	A deterioration in funding would severely hamper implementation of the government's development strategies.

### *Credit growth is low and the financial market is stable*

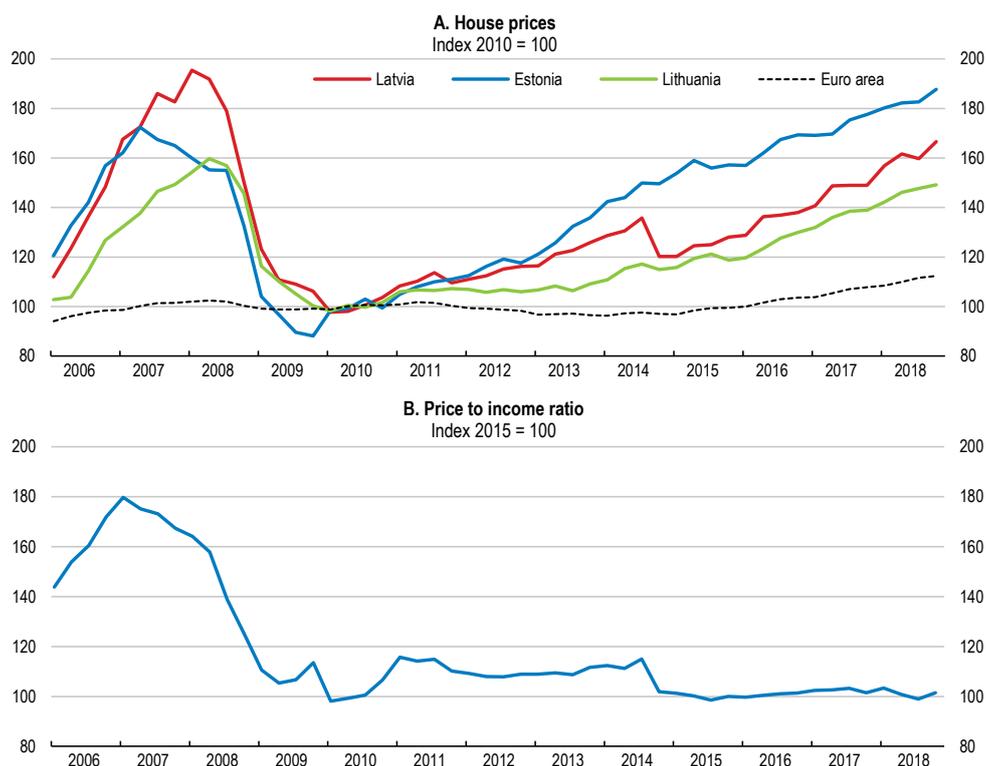
Credit growth remains subdued. The debt of private households and non-financial corporations has fallen from 180% of GDP in 2010 to 120%, below levels seen in most other European countries (Figure 12, panel A). While private sector debt reduction has lowered financial risks, weak credit growth is holding back stronger investment, weighing on Latvia's development potential. Slow credit growth to business and private households (Panel B) partly reflects over-indebtedness of many lower-income households and difficulties of many firms and households to document their income because of widespread under-declaration.



Measures to strengthen the independence of the justice system and to improve effectiveness of the insolvency framework have been put in place, but are too recent to evaluate their effectiveness. The credibility and effectiveness of the judiciary can be reinforced by improving investigations of disciplinary offences committed by judicial staff (CEPEJ, 2018). The transparency and consistency of investigations could be improved by establishing a judicial inspectorate that is common in many OECD European countries. Time limitations for initiating disciplinary procedures and for imposing a sanction should also be lengthened in light of international best practices.

Financial soundness indicators of banks are strong overall. The tier 1 capital ratio stood at close to 20% at the end of 2018, above levels seen in most other EU countries. The leverage ratio was also high at close to 10%, well above the 3% required by Basel III standards. Stress tests seem to suggest a high ability to withstand shocks of Latvian banks that specialise in serving domestic customers. The share of non-performing loans has also fallen significantly and is now close to the EU average of 5%. House prices have been rising faster than in most European countries, but increases have been in line with income growth and prices remain well below their peak in 2008 (Figure 14). Lending standards have eased with an increase of the share of new mortgage credit with a loan-to-value ratio above 80%. Since household debt continues to decline, risks from excessive lending to households appear limited.

**Figure 14. House prices are rising in line with income growth**



*Note:* The price-to-income ratio is given by the ratio of nominal house prices to nominal household disposable income per capita.

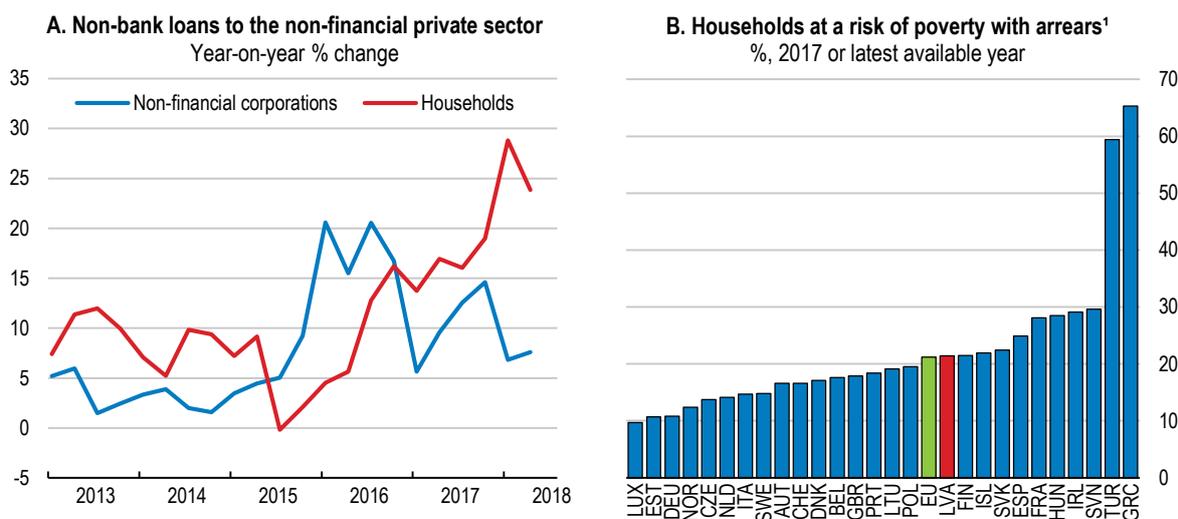
*Source:* Eurostat; OECD Housing prices Database.

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Lending from the non-bank financial sector rises rapidly, although from a low level, including expensive consumer credit and pay-day loans to households. Non-bank loans accounted for 40% of household's interest expenses at end-2017, although the stock of outstanding loans from the non-bank sector stood at around 20% of the total bank loans portfolio. The share of households at risk of poverty who are in arrears is above the EU average (Figure 15). According to the ECB's Household Finance and Consumption Survey the 10% most heavily indebted households in Latvia have to devote more than half of their income to pay down their debt, higher even than in Greece and more than twice as high as in Finland and Poland.

Since January 2019, both bank and non-bank lenders have to assess clients' creditworthiness using information on their overall loan portfolios, including non-bank loans, available through licensed credit bureaus. Total costs, including interest, for pay-day loans will also be capped from July 2019. Higher fines for lending to households who cannot afford it, currently capped at 43 000 euros, may be necessary for effective enforcement. Rolling out municipality-led counselling for debtors throughout the country would be useful, as it is not available everywhere in the country and it is not free of charge, unlike for example in Germany. The cost of initiating private insolvency procedures of approximately 900 Euros is out of reach for many low-income households and should be waived for the poorest.

**Figure 15. Non-bank loans are rising fast, as many households have problems re-paying debt**



1. Households below 60% of median equalised income having arrears on mortgage or rent payments, utility bills, hire purchase instalments or other loan payments.

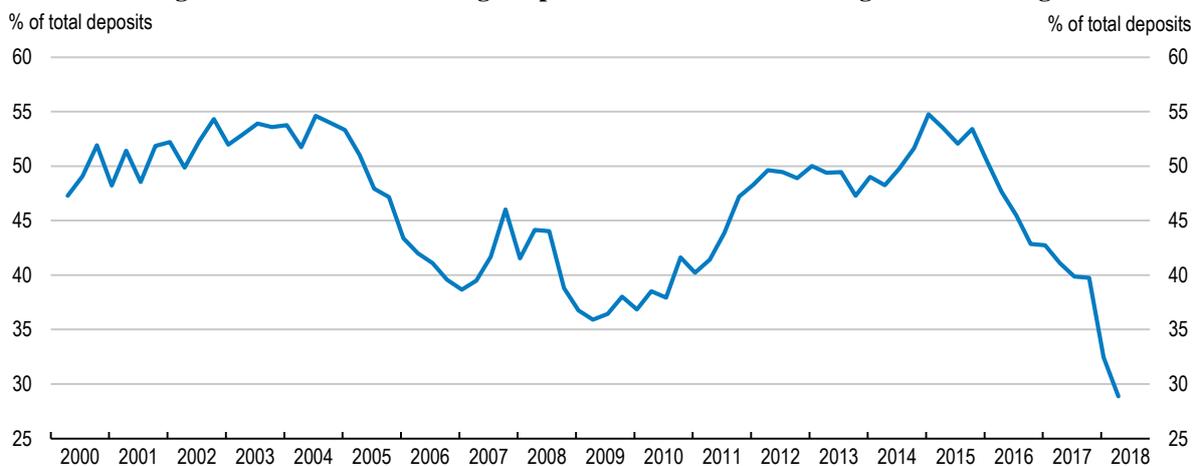
Source: Bank of Latvia; Eurostat.

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There are challenges in relation with the unwinding of the large share of foreign deposits following money laundering allegations. The related downfall of ABLV, Latvia's then third-largest bank, in the summer of 2018 highlighted the need for further action. Since then Latvia banned its banks from servicing certain types of high risk "shell companies" and oversaw a reduction in non-resident deposits by more than 60 % following a tightening of anti-money laundering and combating of terrorism financing (AML/CFT) framework in 2016 and 2018 (Figure 16). A number of banks in Latvia have specialised in serving foreign

clients, whose funds originate mainly from the Commonwealth of Independent States. Foreign deposits have fallen quickly. So far, Latvian banks serving mainly foreign customers have managed to maintain high levels of capitalisation and liquidity, but the future of these banks depends on their ability to change their business model. Linkages of banks serving foreign clients to the domestic lending market and banks serving domestic clients are limited and so are risks for repercussions on overall financial stability. Strengthening AML supervision would require increasing resources dedicated to inspections in the foreign deposit banking sector (Moneyval, 2018; OECD, 2019a). The authorities have initiated an overhaul of the anti-money laundering system to ensure the highest standards of supervision, regulation and transparency (see Box 2), which should be presented in spring 2019, a welcome step.

**Figure 16. The share of foreign deposits in the Latvian banking sector is falling**



Source: Financial and Capital Market Commission.

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## Tax and spending reform for a stronger and more inclusive economy

### *The budgetary framework is sound*

Latvia has a rigorous budgetary framework with an independent fiscal council and transparent national fiscal rules and medium-term budgetary planning designed to ensure compliance with the EU's Stability and Growth Pact. Overall, the fiscal position is sound with a low debt and deficit. Spending efficiency is high (IMF, 2018).

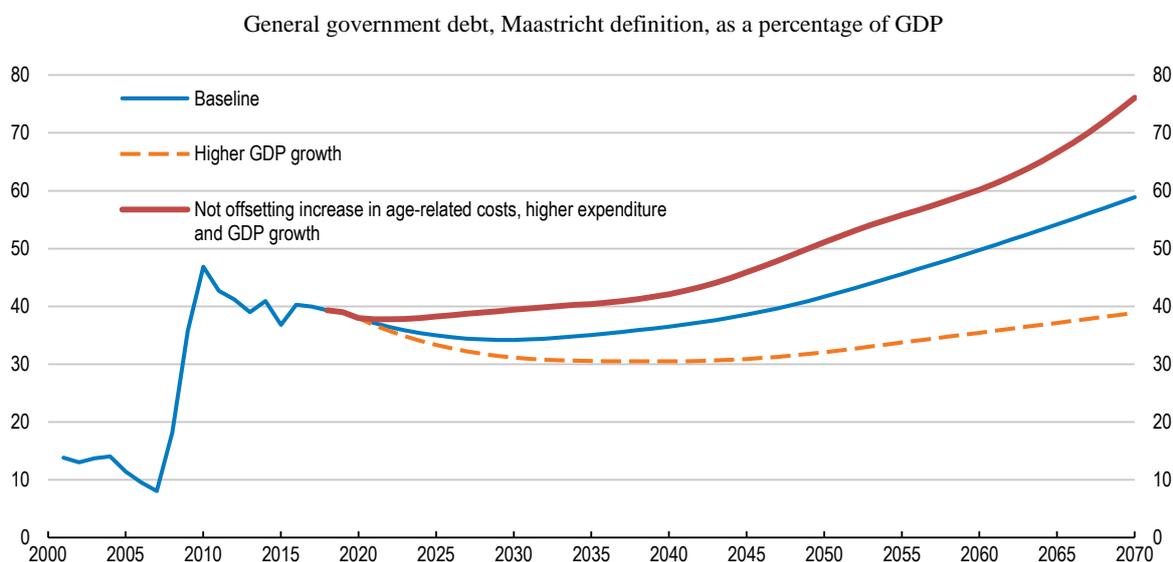
Despite a fast increase in the old-age dependency ratio, ageing-related spending is not forecast to increase over the coming decades. Public pension expenditure automatically adjusts downwards when the working-age population falls, the importance of the private pre-funded pillar is rising and pension indexation falls short of wage growth (European Commission, 2018b). Sustainability concerns are limited from today's perspective if the current system is maintained (Figure 17), but reducing old age poverty from its current high level and maintaining replacement rates would require additional spending on public pensions.

Another challenge will be to prepare for a possible fall in available EU structural funds in the next financing period. Latvia is one of the largest recipients of EU funds relative to its GDP. The successful absorption of EU funds has boosted employment and investment over

the past years (Benkovskis et al., 2018). Latvia relies heavily on the EU budget to finance public investment and policies support to innovation and skills development. This has created problems with policy continuity during the switchover of EU Fund Programming Periods, as financing of some very effective programmes was interrupted. As it is unclear how the availability of these funds will develop in the next Programming Period, it will be important to identify the most effective EU funded policy measures through evaluations and plan for national financing of these measures.

Increasing debt after 2045 due to a slowdown in growth, as in the baseline scenario (blue line), could be prevented by strengthening productivity growth through structural reforms proposed in this Survey (orange line). In that case, debt would stay below 80% of GDP until 2070 even if the government were not to offset ageing-related spending increases through higher taxes. It could even add a further percentage point of GDP to pension and healthcare spending to improve adequacy without higher taxes (red line). Offsetting these spending increases through mildly higher taxes would keep debt constant.

**Figure 17. Illustrative public debt paths**



*Note:* The baseline scenario assumes a constant primary deficit of 0.3% of GDP, inflation of around 2% and annual real GDP growth slowly decreasing from around 2% in the 2020s to around 1% in the 2050s, in line with assumed convergence of productivity growth with the European Union average (Guillemette and Turner, 2018). The age-related cost assumptions in the “Not offsetting increase in age-related costs, higher expenditure and GDP growth” scenario assumes public spending and GDP growth are 1 percentage point higher than in the baseline scenario. The ‘Higher GDP growth’ scenario assumes that real GDP growth is 1 percentage point higher than in the baseline.

*Source:* Adapted from OECD (2018), OECD Economic Outlook: Statistics and Projections (database), November; Guillemette, Y. and D. Turner (2018), “The Long View: Scenarios for the World Economy to 2060”, OECD Economic Policy Paper No. 22., OECD Publishing, Paris; and European Commission (2018), “The 2018 Ageing Report – Economic and budgetary projections for the 28 EU Member States (2016-2070)” Directorate-General for Economic and Financial Affairs.

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### ***Making taxing and spending more inclusive***

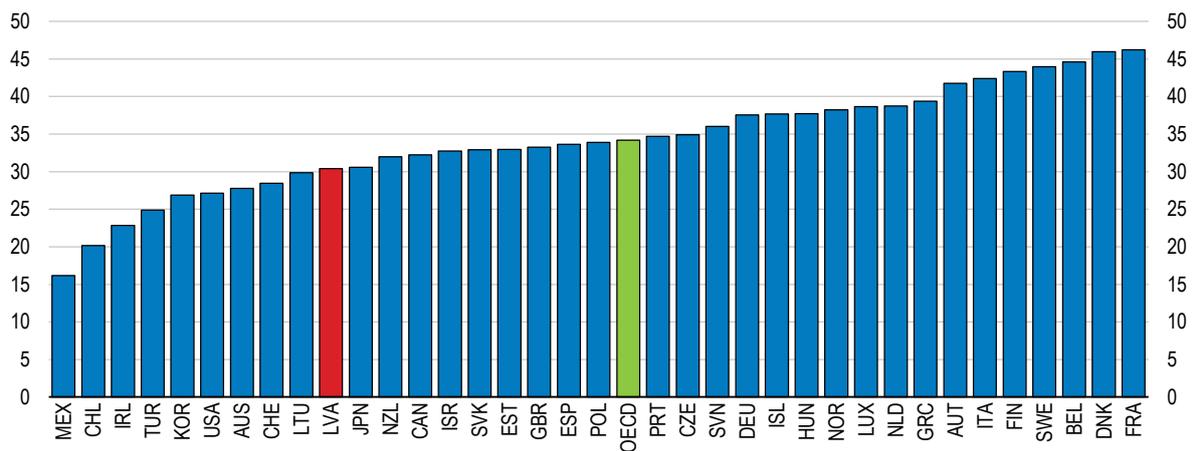
Tax revenues as a share of GDP are well below the OECD average (Figure 18). Overall, tax and benefits could have a larger impact on poverty and equity (Figure 19). This is

because the size of social transfers and the progressivity of personal income taxation are limited. The personal income tax schedule is essentially flat and effective tax rates on labour for low-income earners are relatively high (Figure 20). The guaranteed minimum income, or social assistance, provides single households with 10% of the median household income in Latvia, compared with an EU average of 25%. It hardly covers costs for a healthy diet in the Riga region, let alone other basic necessities (European Commission, 2018c).

A 2018 reform made personal income taxes somewhat more progressive and lowered the tax burden on labour income. It increased the income-dependent tax allowance, particularly for lower-income workers, and introduced a progressive tax schedule. Nevertheless, in practice a 20% rate is applied to more than 90% of taxpayers (Pluta and Zasova, 2017). In addition, this measure does not help the lowest income earners who do not pay income tax. There is thus room to strengthen the redistributive impact of the tax system further. In the longer run, tax cuts better targeted on low-income households and effective increases in personal income tax rates on medium to high incomes would bring more progressivity in the system.

**Figure 18. Tax revenues are relatively low as a share of GDP**

General government, tax revenues, % of GDP, 2017 or latest available year

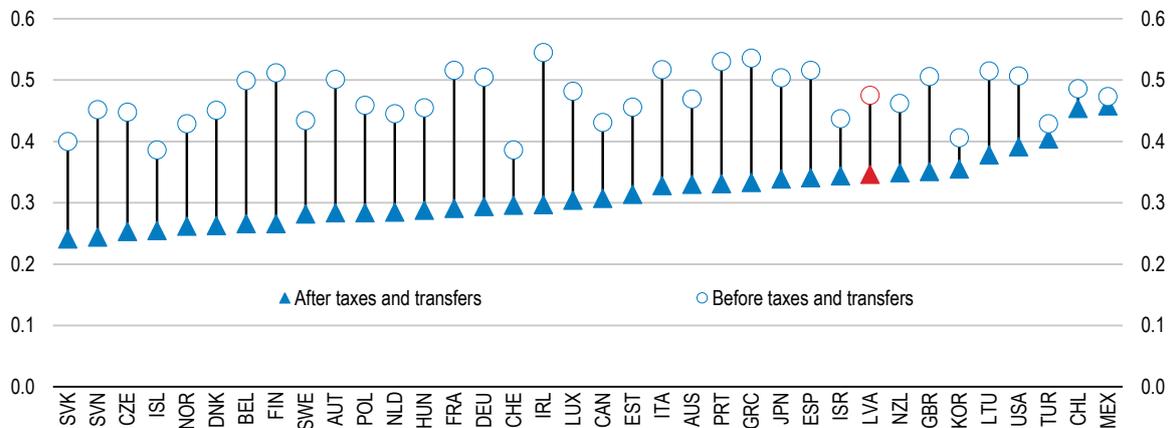


Source: OECD Revenue Statistics Database.

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**Figure 19. The tax-and-benefit system could do more to lower high inequality**

Gini coefficient, scale from 0 “perfect equality” to 1 “perfect inequality”, 2016 or latest available year



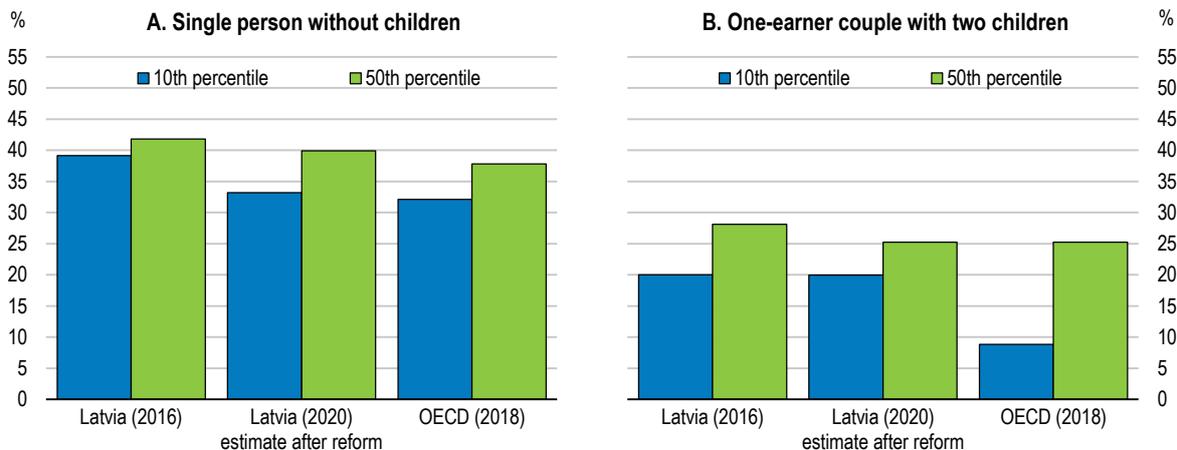
Source: OECD Income Distribution database (IDD).

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The government introduced a new social contribution of 1% of payroll to finance higher health spending. As a result, the effective tax rates on labour will not decrease for some low-income households (Figure 20, Panel B), remaining well above the OECD average, although the tax burden will fall for lower- and middle-income households, who benefit more from the reduction of the tax allowance. Financing higher healthcare spending from general budget revenues rather than earmarked social contributions would improve labour market outcomes and equity while simplifying the tax system. Reducing the tax burden on labour income has led to higher formal employment in Colombia (Kugler et al., 2017) and in Turkey (Betcherman et al., 2010). Informality in those countries is higher than in Latvia, but still these research suggest that increasing social security contributions risks being counterproductive.

**Figure 20. Taxation of labour income will decrease for some households**

Effective tax rates on labour at different earnings levels, % of labour costs



Source: Rastrigina, O. (2019), “Reform Options to Reduce the Effective Tax Rate on Labour in Latvia”, Technical Background Paper for the OECD Economic Survey: Latvia 2019. ECO/EDR(2019)10/ANN3.

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There have been plans to increase the guaranteed minimum income, or social assistance, for some time, but implementation remains incomplete. Benefits were increased substantially only for pensioners and families with children. Since 2017, earnings up to the minimum wage are exempted from the benefit means-test for three months after starting a job. But afterwards, the social assistance benefits are withdrawn one-for-one when income rises, thus implying a 100% marginal effective tax rate, entailing considerable negative work incentives. In fact, for a single-earner family with two children, there is almost no financial gain from taking up a minimum-wage job, creating an inactivity trap (European Commission, 2018c).

The three-month earnings disregard may prove insufficient to strengthen work incentives durably. Withdrawing the benefit more gradually as income rises, for instance by offering permanent income disregard as done in Lithuania and Finland, would be a useful follow-up reform. Simulations show that increasing the guaranteed minimum income to bring it to 40% of the median income (and 20% for work-able recipients), while tapering it off more gradually, would come at a substantial budget cost of around 1% of GDP. At the same time, it would reduce poverty by almost 9 percentage points (European Commission, 2018c).

Since a recent reform, taxes on capital income are aligned at a 20% rate and the taxation of corporate income is deferred until the distribution of profits. The nominal tax rate on corporate profits and dividends of 23.5 % has been lowered, while the rates on interest and capital gains have been increased from 10 % and 15 % to 20% from 2018. Aligning tax rates on different forms of capital income reduces distortions and is thus welcome. No corporate tax is payable on undistributed profits, mimicking an earlier reform in Estonia. Authorities are hoping that this will entice more companies to fully declare their profits, improving access to credit. There is evidence that companies in Estonia reacted mainly by accumulating liquid assets (Hazak, 2009) and studies struggle to find positive effects on investment or productivity (Pikkanen and Vaino, 2018; Staehr, 2014). The government should carefully evaluate the impact of the reform on tax revenues, incentives for businesses to incorporate, formality, investment and firm performance to assess whether such a costly reform yields the expected benefits.

Indirect tax revenues are set to increase with rising excise duties (Table 4). Measures to improve value added tax (VAT) compliance, such as lowering the threshold for VAT registration and stricter requirements to report VAT transactions in more detail, are expected to increase revenues (European Commission, 2018a). The shortfall of VAT revenues compared with its potential has been falling, but remains substantial at 12.9 % of potential revenues according to data from the tax authorities, suggesting significant room to further improve compliance.

**Table 4. Past OECD recommendations on taxation and spending**

Topic and summary of recommendations	Summary of action taken since 2017 Survey
Reduce the labour tax wedge on low earnings	An increase in the income-dependent tax allowance reduces the tax wedge on some workers.
Raise more taxes from the taxation of real estate and energy	Excise taxes on fuel, alcohol, tobacco and gambling were increased in 2018. Annual vehicle taxation will be based on CO <sub>2</sub> emissions for cars that are registered after 2008, but for older cars taxation will still be based on gross weight or gross weight, engine capacity and engine power. Moreover, there will be tax reliefs for agriculture and large families and exemptions for handicapped persons.
Gradually withdraw benefits targeted at low-income earners when they take up a job	The guaranteed minimum income can now be retained for three months after finding a job.

Property tax revenues are almost a full percentage point of GDP lower than on average in OECD countries. Increasing property tax rates would help generate revenues to lower labour taxes and increase social spending. It would also be progressive because property wealth is highly concentrated in Latvia (Household Finance and Consumption Survey, 2017). That said, sufficiently high tax allowances or exemptions for lower-income households are already in place. The re-assessment of cadastral values is ongoing and should allow aligning the tax base with market values, as done in the Netherlands, Denmark and Sweden. This would increase economic efficiency and equity. The tax and spending reforms proposed throughout the Survey would have a budgetary impact, which is illustrated in Box 4.

#### Box 4. Quantifying the fiscal impact of structural reforms

The following estimates (Table 5) roughly quantify the long-run fiscal impact of selected recommendations. These estimates do not take into account any consequent effects on GDP. Since the assessment of the reform impact of recommendations on GDP in Box 3 is estimated in a budget neutral way, it already incorporates any negative effect of GDP of tax increases described in this box. The fiscal estimates below do not take into account any consequent effects of reforms on GDP and hence fiscal revenues, because these seem too uncertain.

**Table 5. Illustrative fiscal impact of recommended reforms**

Measure	Annual fiscal balance effect % of GDP
<b>Deficit-increasing measures</b>	1.5
Increase the guaranteed minimum income and taper its withdrawal	0.5
Increase investment in ALMP	0.2
Increase spending on healthcare	0.5
Provide more public funding for affordable rental and social housing	0.1
Improve wages and conditions for researchers and provide incentives to collaborate with industry	0.1
Strengthen the capacity of enforcement personnel	0.1
<b>Offsetting tax measures</b>	1.5
Labour tax reform	0.3
Energy tax reform	0.5
Property tax increase	0.8

*Notes:* The policy changes assumed for the estimation are the following:

1. The guaranteed minimum income is increased to 20% of the median income with a tapering of the withdrawal, a variant of the calculation in EC (2018c).
2. Spending on active labour market policies as a share of GDP is increased by 0.24 percentage points to reach 75% of the level of the OECD average
3. Increasing spending on public funding for affordable housing as a share of GDP to 50% of the OECD average
4. The personal income tax reform assumed for this calculation includes abolishing the social contribution earmarked for healthcare financing, reducing social security contribution on low incomes, and increasing progressivity of the personal income tax as described in Rastrigina (2019).
5. Changes in the energy tax regime consists in harmonising the tax rate for diesel, oil products and gasoline.
6. Property tax as a share to GDP is increased to the average level in the OECD.

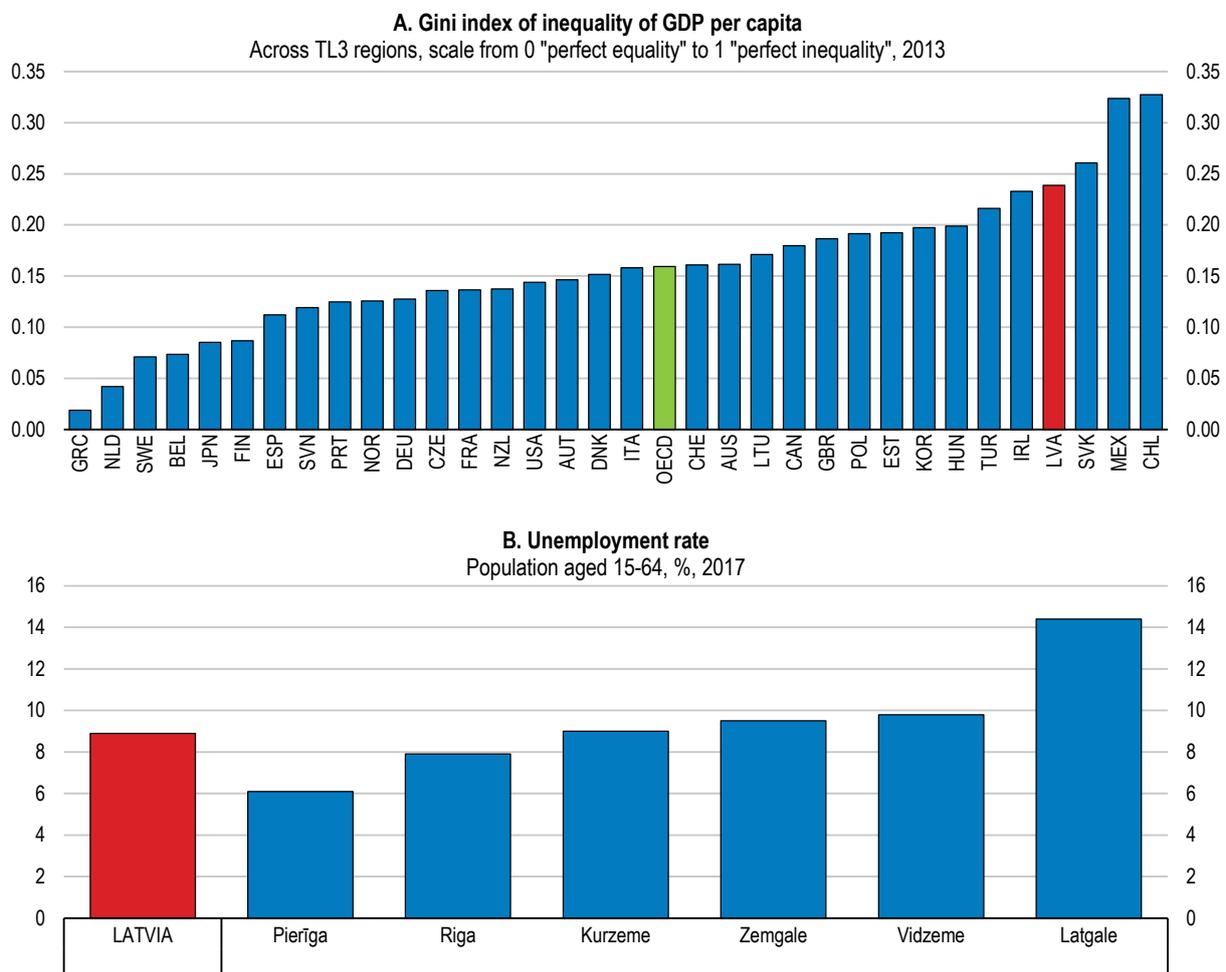
*Source:* OECD calculations.

### Improving fiscal equalisation and the quality of local public services

All municipalities need sufficient financing to provide their citizens with high quality public services, including education and training, and promote social mobility. Local governments rely on earmarked central government grants and personal income and real estate taxes. Local government spending accounts for approximately 28% of the total and includes school provision, housing, social transfers, local infrastructure and economic development.

Regional disparities in income per capita are unusually pronounced in Latvia, and so are differences in unemployment (Figure 21). As a result, per capita tax revenues differ markedly across municipalities and are three times higher in Riga than in some rural municipalities. A much larger share of the population in poorer municipalities typically receives social transfers, further limiting financial resources for infrastructure and education spending.

**Figure 21. Regional disparities are large**



Source: OECD (2016), OECD Regions at a Glance 2016; Central Statistical Bureau of Latvia.

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Fiscal equalisation was reformed in 2016 and it does reduce revenue inequalities quite effectively, although post-equalisation inequality is still at the high end compared to other

countries with a similar structure (Table 6). To make up for municipalities' losses resulting from the tax reform a new central government grant was introduced in 2016, which is linked to municipal personal income tax revenues, thus reinforcing inequalities. Linking central government grants instead to the costs of service provision would help improve the capacity of poorer municipalities to invest in education and training and key municipal infrastructure.

**Table 6. The strength of equalisation in OECD countries**

Unitary countries	Ratio of highest to lowest tax-raising capacity decile, 2012		Ratio of highest to 6th tax-raising capacity decile, 2012	
	Before equalisation	After equalisation	Before equalisation	After equalisation
Latvia (2017)	2.9	1.4	2.0	1.3
Denmark	1.4	1.2	1.3	1.1
Finland	1.8	1.4	1.4	1.2
Norway	2.1	1.2	1.7	1.2
Sweden	1.5	1.1	1.3	1.2
Average	1.9	1.3	1.5	1.2

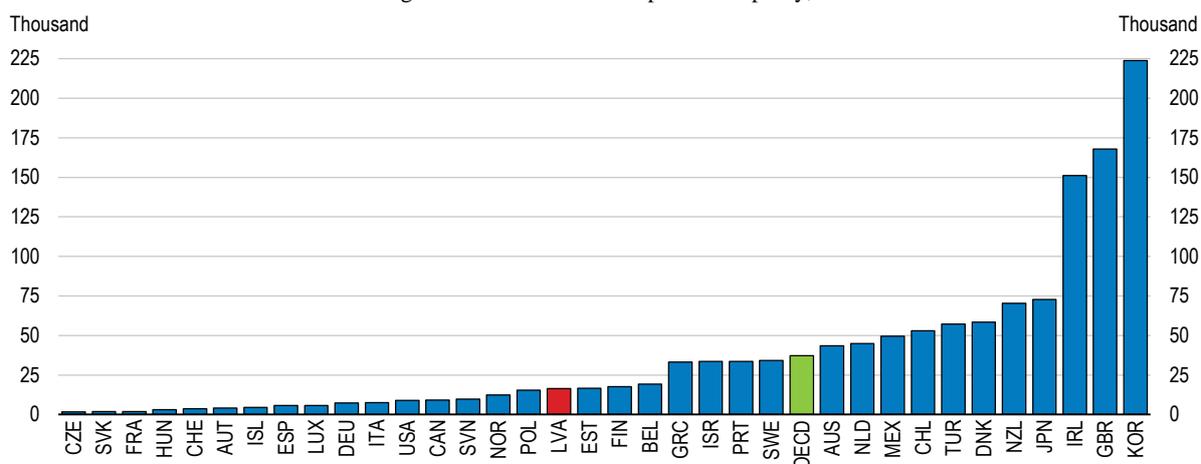
Source: OECD calculations

Latvia has a two-tier government structure comprising the central state and municipalities. A 2009 reform reduced the number of local governments from over 500 to 119, but the average size of municipalities is still much smaller than in other countries where municipalities play an important role in education provision, such as Denmark, Sweden and the Netherlands (Figure 22).

The creation of groups of municipalities that could manage some tasks at the group level has been envisaged in 2018. This was a good starting point to improve the efficiency of local public service provision, in particular by easing consolidation of the school network and coordination of urban and transport planning. Merging small municipalities would free up more resources, but is politically difficult. It is thus welcome that the new government recently initiated an ambitious territorial reform to revise the administrative map and create larger municipalities before the next municipal elections in 2021.

**Figure 22. The average size of municipalities is small**

Average number of inhabitants per municipality, 2016



Source: OECD (2018), Subnational government structure and finance database.

## Addressing skill shortages

### *Providing high-quality education to all*

Given growing skills shortages and the rapid decline in the working age population, the education system needs to equip all children with solid cognitive skills. PISA results are above the OECD average in Latvia, but the urban-rural divide is sharp, well above the OECD average (Echazarra and Radinger, 2019). High-quality early childhood education can improve learning outcomes throughout life. In fact, lower PISA results in rural areas may partly reflect a large attendance gap in early childhood education between urban and rural areas at the time when today's teenagers were pre-schoolers (Echazarra and Radinger, 2019). Since then the government has invested heavily in early childhood education and the attendance gap has narrowed. Reaching out to parents in rural areas to ensure full attendance to early childhood education while improving the monitoring of early childhood services would be useful.

Highly qualified and motivated teachers are key to improving students' skills (Chetty et al., 2014; OECD, 2013). Yet, due to low wages, limited career options and low prestige, teaching is not considered as attractive in Latvia (OECD, 2016a; OECD, 2018a). The teaching workforce is ageing fast and raising teacher salaries and developing interesting career options should be a priority to attract competent new recruits, in particular in rural schools with struggling children. Latvia could look to Australia, Estonia, the Netherlands, New Zealand and Singapore, which have developed human resource models to attract teachers. The teacher workforce would also benefit from investment in more systematic and continuous personal development, as required training hours for teachers are low and there is a lack of induction programmes (OECD, 2016a).

Urban-rural inequalities in educational outcomes can be partly traced to the fact that a disproportionate share of resources is used for the maintenance of a fragmented school network rather than for teaching and learning. Many schools are too small to be viable and some smaller and poorer municipalities lack the capacity to effectively manage their local education systems. In addition, municipalities can top up state-financing for schools, resulting in a large variation of per-pupil spending and teacher salaries across municipalities. The ongoing consolidation of the school network could be accentuated to achieve economies of scale. Resulting savings could be used to offer higher salaries, better career prospects and continuing training options.

A recent reform foresees diminishing the scope of non-Latvian language teaching in general secondary education by the 2020/2021 school year. Currently, 27% of students study up to 40% of lesson hours in another language, primarily in Russian, but also other languages, such as Polish and Estonian. The reform aims at ensuring all pupils have high proficiency in Latvian, not least to facilitate their integration in the labour market. The authorities plan to provide teacher training, teaching aid and material to achieve this objective in the envisaged timeframe while preserving educational outcomes of pupils. The authorities should ensure that all schools receive sufficient resources and monitor outcomes closely, as switching the language of instruction risks being challenging for some teachers.

### *Providing adequate skills*

Addressing skill shortages requires making education more responsive to quickly changing labour market needs. In vocational education, the government made important progress in this respect by involving social partners in updating curricula through Sectoral Expert Councils. The government is working to expand work-based learning, but while student

numbers are increasing, they remain low and tend to concentrate in sectors such as hotel and restaurant services and beauty services (Ministry of Education and Science, 2019). Latvia's numerous small and medium enterprises often shy away from offering workplace training due to the logistical difficulties of setting it up. Promoting joint work-based learning as in Germany or Austria can be helpful. Similarly, stronger reach-out mechanisms for small firms, for example intermediary bodies that handle the logistics of work-based learning for them, such as placing students in firms and engaging with schools to ensure that they address their needs, have helped to place more students in enterprises in Australia and Scotland.

The government has made considerable efforts to invest in adult learning and participation has increased fast, albeit from a low level. As in other OECD countries, participation is much lower for older and low-skilled workers and addressing this requires providing more information about the programmes on offer and good counselling. Financial support for firms, perhaps focussed on training for low-qualified workers as in Germany, or scholarships for workers with limited means who wish to engage in training would be helpful.

Spending on active labour market policies has been low. There has been a welcome re-focussing from public works to more training measures and activation for the long-term unemployed, as such programmes have a better impact on employment (OECD, 2019b). Participation in activation measures for the long-term unemployed more than doubled in 2017. Caseloads can be high, varying between 350 and 500 cases per months in 2017. Hiring more counsellors can be effective in intensifying counselling and reducing unemployment spells, as experience in Germany and the Netherlands has shown (Hainmüller et al., 2016; Koning, 2009).

### *Making Latvia more attractive for foreign and domestic workers alike*

Making Latvia more attractive for foreign and domestic workers alike will also be important to address skill shortages. Emigration intentions are particularly strong among students and younger workers (Hazans, 2015). Most emigrants and people considering emigration cite financial concerns and a desire to improve their material living conditions as reasons for their decision (OECD, 2016b), but limited social protection also features high on the list (Hazans, 2015). Promoting economic development and improving access to social protection and services are thus important to make Latvia more attractive for domestic and foreign workers.

While the inflow of the foreign-born population has increased, this surge has been much stronger in nearby Estonia and Poland. Both countries receive many workers from Ukraine and Belarus owing to simplified procedures to hire workers from those countries and fast-track access to residence permits for skilled migrants from non-EU countries. In Latvia, the law imposes Latvian only in almost all official contexts and strict Latvian proficiency requirements for a wide range of professions. This can be a hindrance to skilled migration, including for the return of Latvian emigrants with foreign-born partners or children, even though programmes to learn Latvian are widely available (OECD, 2016b). The government recently eased procedures for immigration of skilled workers in some professions with shortages (Table 7), but they are not covered by public health insurance. Foreign graduates are not exempted from labour market tests.

Expecting large waves of return migration would be unrealistic, as only a fifth of emigrants indicate plans to return within the next five years. Still strong engagement with the diaspora can alert emigrants to opportunities to invest, do business or help promote Latvia as a

destination for investment and tourism. The government runs information campaigns in countries with a high concentration of Latvian emigrants and offers help with finding housing, work and business opportunities in Latvia. It is also setting up a database of Latvian researchers abroad and their interest in research and teaching collaboration with Latvian institutions is substantial.

**Table 7. Past OECD recommendations on education and labour market policies**

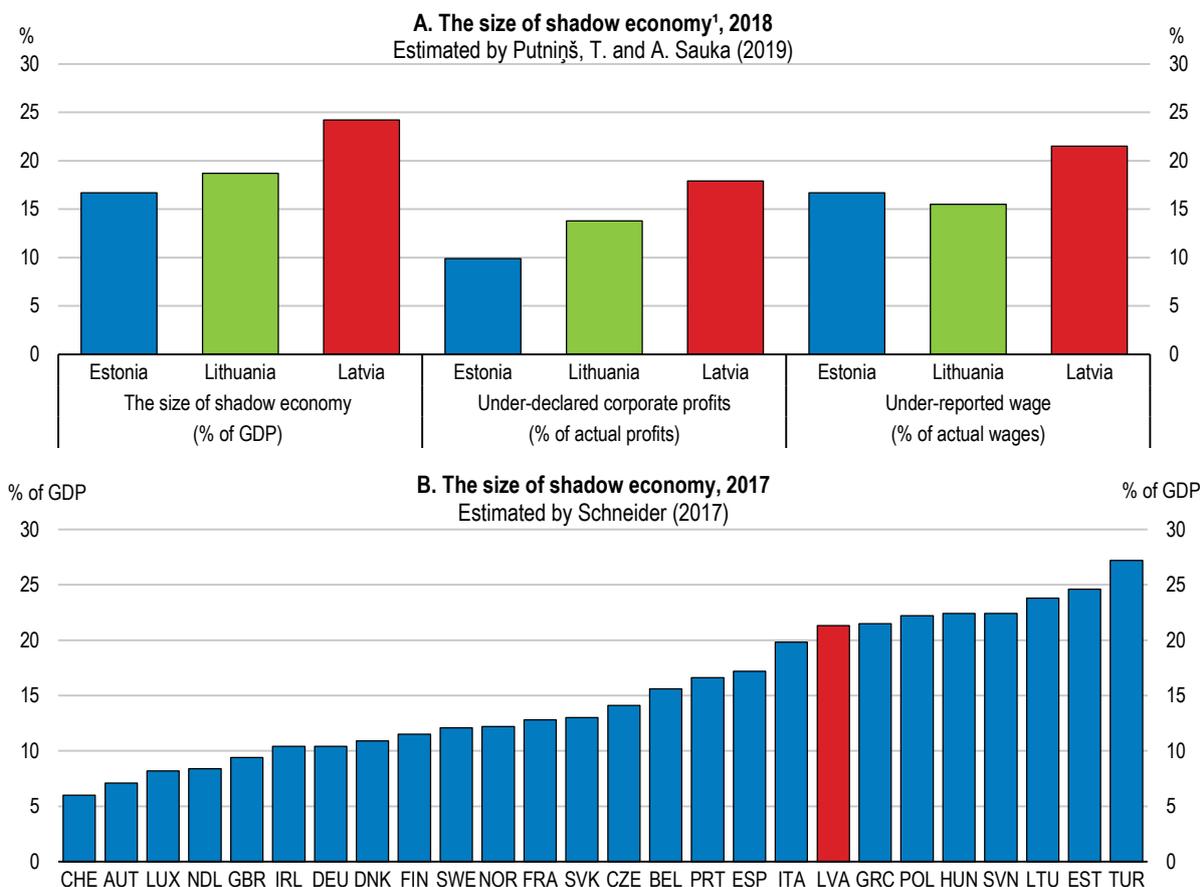
Topic and summary of recommendations	Summary of action taken since 2017 Survey
Provide more generous grants for students attending vocational schools who are from low-income families	There is a programme financed from EU Funds that provides financial help and counselling for students at risk of early school leaving.
Expand grants for university students and target them to students from low-income families	The government plans to provide social grants to studying parents.
Accelerate the development of modular programmes in VET, professional qualification exams and professional standards	The development of modular programmes, professional qualification exams and professional standards is ongoing.
Promote the provision of adult education in VET schools	Pilot programmes train staff in vocational education schools to develop adult education programmes.
Reduce labour market test and language requirements for highly skilled immigrants	For a list of professions with skill shortages the labour market test has been eased, as the vacancy has to be registered with the public employment service only for ten days as opposed to 30 days before a foreigner can apply. Authorities' deadline for processing the application for an EU Blue Card for these professions has been shortened from 30 to 10 days and applicants now only need to prove that they have five years of work experience in the field rather than provide an education certificate. Their wage needs to be only 20% above the national average as opposed to 50% before.
Support the employment of foreign students by shortening the process for obtaining work visa and labour market tests	The residence permits for foreign students is issued for a term exceeds the required study period that for 4 months. After this period a student is entitled to apply for a job-searching permit for 9 months.

## Fighting informality to improve productivity and access to social services

Informal activities remain widespread, although estimates on the size of the shadow economy vary across estimation methods (Figure 23). Tax revenue losses due to under-declaration of income – a criminal activity in Latvia as it is in other countries - limit the government's ability to invest in infrastructure and social services. Informal firms often work with outdated technologies and are reluctant to grow, as they are trying to hide their activities. Their workers rarely have access to training. All of this is holding back productivity growth. A high share of informality can also hold back investment from formal firms who may fear unfair competition from enterprises that keep their costs low by failing to comply with tax laws and business regulation (Distinguin et al., 2016). Finally, informal workers typically have limited pension rights, resulting in a high risk of old-age poverty.

For all of these reasons it is important for the Latvian government to continue coordinated efforts across all ministries to develop a strategy to fight informality. Weak enforcement of tax and labour laws are the main issues, while compliance with product market regulations, which are relatively business friendly overall, is less a matter of concern. To reduce undeclared work, a recent agreement with social partners in the construction sector, where informality is widespread, seems promising and could be extended to other sectors. The government has also developed guidelines for public procurement procedures to help buyers assess bidders' compliance risks, including with tax and labour laws. The length of court procedures for tax crimes has declined and electronic case management system is in place.

**Figure 23. Informality is widespread**



1. The size of shadow economy is estimated from firm-level information. Under-declared corporate profits and under-reported wage payments by registered firms in the three Baltic countries are based on survey data.

Source: Sauka, A and T. Putniņš (2019), *Shadow Economy Index for the Baltic Countries 2009-2018*, Stockholm School of Economics in Riga (SSE Riga); Schneider, F. (2017) “Implausible Large Differences in the Sizes of Underground Economies in Highly Developed European Countries? A Comparison of Different Estimation Methods” *CESifo Working Paper* No. 6522, Munich.

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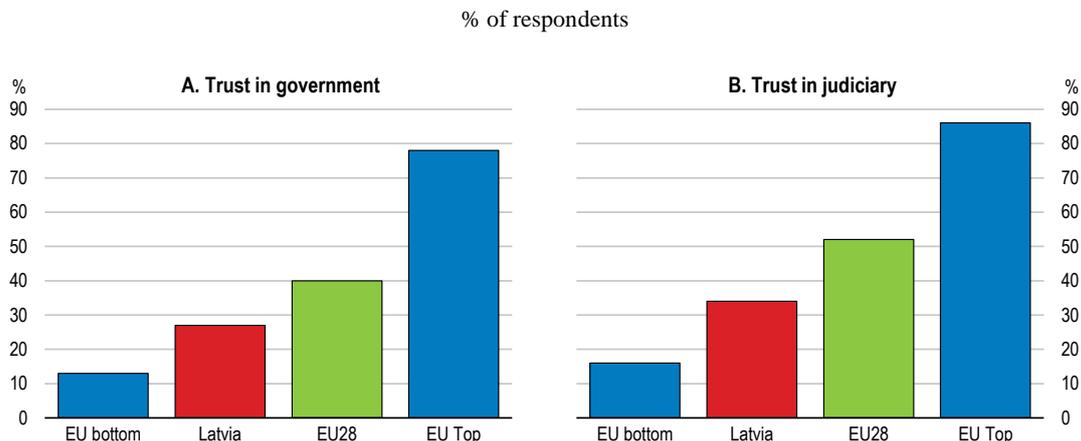
Research shows that raising tax morale, i.e. voluntary compliance with tax laws, is crucial in the fight against informality (Williams and Horodnic, 2015). Tax authorities have improved wages and career prospects to attract more qualified personnel and are working towards making better use of information and communication technology (ICT) and strengthening the analytical capacity of the State Revenue Service to target audits at taxpayers with a high probability of committing tax evasion (Table 8). Information exchange and cooperation between different law enforcement agencies is being improved and these important efforts need to continue. Tax authorities have rated individual compliance records and risks. Taxpayers will be allowed to share their rating to enhance their reputation. The hope is that this will encourage formality, as taxpayers can control each other to some extent.

However, mild sentences continue to impede the fight against economic crimes, including under-declaration of income and tax evasion. For example, during 2014-2016 there were only three prison sentences for tax crimes. Yet, higher detection risks and fines have been

shown to be very effective in strengthening tax morale and combatting informality, including in Latvia (Mickiewicz et al., 2017). They can also help increase productivity by helping to better allocate workers to higher productivity jobs (Meghir et al., 2015). The government foresees amendments to the Tax and Duties Law that would strengthen fines for tax code violations, which is welcome.

Raising trust in the fairness and impartiality of government institutions, which is now low (Figure 24), would help fight informality and improve compliance with tax laws (Mickiewicz et al., 2017). Providing for transparency and consultation in law-making and ensuring that law enforcement agencies build good relations with businesses and citizens, helping them to comply with laws, will thus be equally important as fines for infractions. The recent “Consult first” initiative can be helpful in this respect. Under this initiative, large law enforcement agencies, including the tax and insolvency administrations, will support business compliance rather than fine immediately, provided that infractions are non-essential. A model-based approach will help target enforcement at the highest risks and there will be regular client surveys.

**Figure 24. Trust in national institutions is low**



Source: European Union (2017), Special Eurobarometer 461 “Designing Europe’s future”.

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The government has also foreseen larger budgets and new posts for several law enforcement agencies, including the Financial Regulator, the Financial Intelligence Unit and the Corruption Prevention and Combating Bureau (KNAB). This is welcome and demonstrates Latvia’s strong commitment to fight informality and corruption. Nevertheless, actual hiring procedures have been slow, partly due to security protocols, and staff has not increased as planned in any of these institutions. Providing attractive wages and career prospects would facilitate hiring of qualified personnel. Finally, as stressed in previous Economic Surveys, budgetary independence of the KNAB would improve public trust in its capacity to fight corruption in all spheres of the Latvian society (Table 8).

**Table 8. Past OECD recommendations on informality**

Topic and summary of recommendations	Summary of action taken since 2017 Survey
Strengthen the budgetary independence of the Corruption Prevention and Combating Bureau (KNAB)	The budget has been significantly increased, but continues to be proposed by the Council of Ministers and approved by parliament annually.
Make better use of information and communication technologies for tax law enforcement	Regulation is underway that would require companies using electronic devices for the registration of sales and taxes, such as electronic record keeping cash registers, to transmit monthly sales data to the State Revenue Service. The State Revenue Service's tax debt collection department is implementing ICT and data analysis systems to better target audits at high-risk tax payers. New regulations facilitate regular transmission of bank account data of persons or companies suspected of tax fraud or illicit financial transactions. The State Revenue Service is working on a system that would allow it to match data received from foreign tax authorities automatically with its own data. Currently matching is performed manually. The State Revenue Service is working with the World Bank on developing better tax gap indicators.

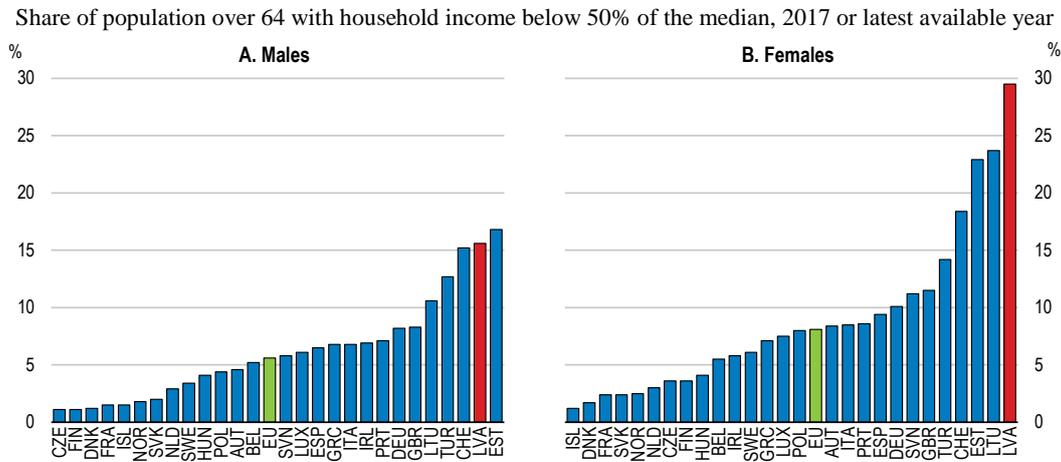
## Improving access to social services

### *Improving pension adequacy*

Latvia's pension system comprises a notional defined benefits (NDC) pillar and a mandatory funded pillar. Basic and minimum pensions for people with insufficient contributions are very low and they were not automatically indexed until recently. As a result, old-age poverty is high (Figure 25), particularly among women. The government rightly increased minimum pensions and indexed them to inflation as of 2020. In particular, the basic pension for seniors without entitlement to social insurance pensions will reach about 11% of the average wage in 2019, compared to 20% on average in the OECD. Starting in 2019 survivors receive 50% of their deceased spouses' pension benefits for twelve months after their death, but beyond this period there are no survivors' pensions. Indexation was made more favourable for individuals with long contributions histories in 2019 and premia for each contribution year were increased. These are welcome steps, although more may be needed to noticeably lower old-age poverty. The increase in the statutory pension age to 65 years by 2025 is another step in the right direction. Linking it to life expectancy after that, as in Denmark, would take some pressure off the system and help lower the number of workers that retire with a pension that is too low.

The share of pensioners claiming minimum or basic pensions is projected to increase sharply owing to volatile employment, high informality and a falling weight of pre-1996 contributions. The self-employed and workers under the microenterprise regime – together around a quarter of employment – pay lower pension contributions, increasing the risk that they will receive no more than a minimum pension. In fact, until end-2017 the majority of the self-employed have not made any contributions at all. Contributions should be aligned across different employment statuses to strengthen contribution records. Introducing mandatory pension savings for all, as in Denmark, should be considered in the longer term.

**Figure 25. The poverty rate for elderly people is high**



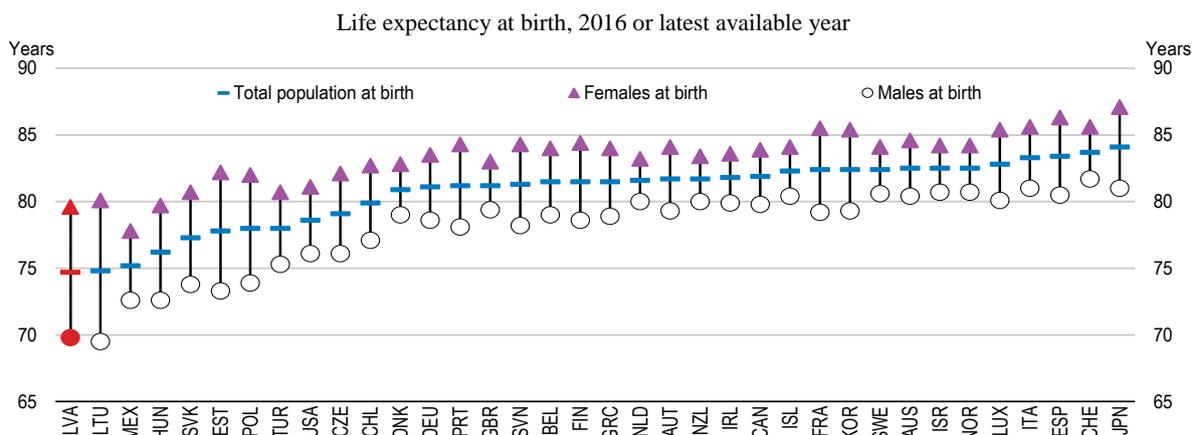
Source: Eurostat.

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**Improving healthcare services**

While life expectancy has increased quite rapidly over the last 15 years it is still among the lowest in the OECD (Figure 26) and there are large differences by income and sex. Both the gap between men and women and between Latvians with high and low educational attainment is about ten years. Risky behaviour plays a role, as men and people with lower education and income are more likely to smoke or consume alcohol excessively. The incidence of obesity is also high in socio-economically disadvantaged groups. The government is taking action with higher taxes on alcohol and tobacco and information campaigns on the benefits of a healthy lifestyle and some extra training for pharmacists (Table 9). These important efforts need to continue. But limited access to healthcare for lower-income groups due to high out-of-pocket payments also plays a role.

**Figure 26. Life expectancy remains low and unequal**



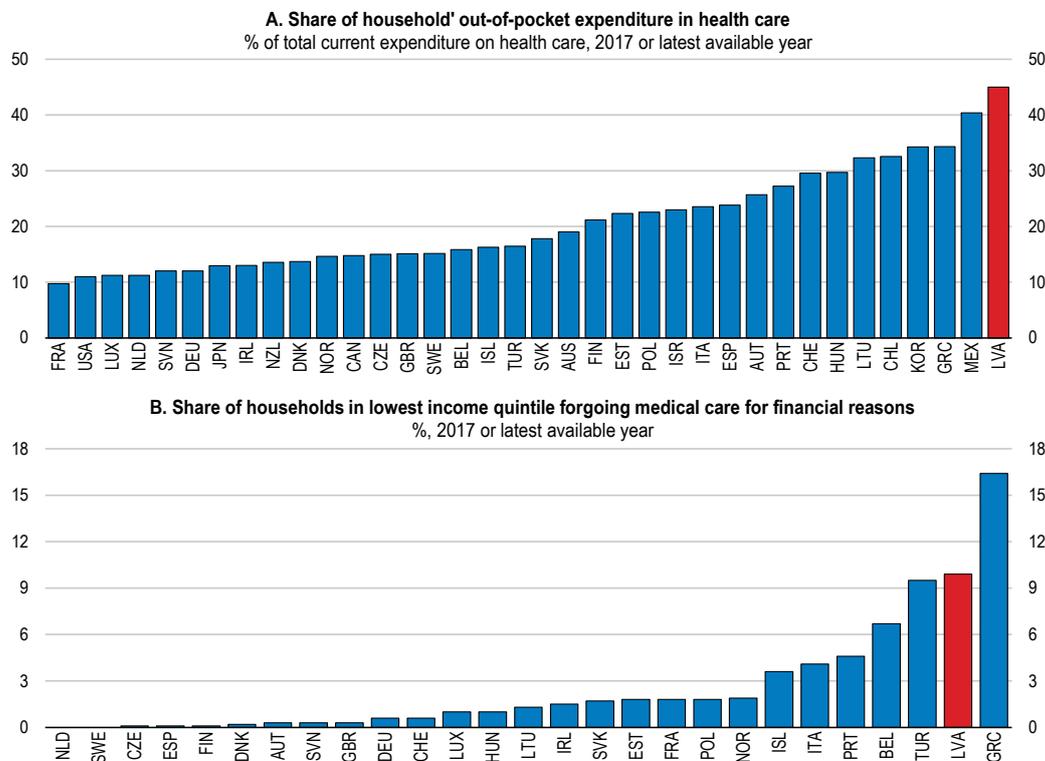
Source: OECD Health Statistics Database.

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**Table 9. Past OECD recommendations on healthcare and pension services**

Topic and summary of recommendations	Summary of action taken since 2017 Survey
Lower operating costs of the compulsory pension system, for example by introducing a low-cost fund as the default choice.	Legislation passed in late 2017 lowered the cap on the fixed part of the fee and imposed stricter requirements for performance-related higher charges.
Reduce out-of-pocket payments, especially for the low-income population	Higher financing for healthcare helped reduce waiting lines and out-of-pocket payments.
Develop key service quality and performance indicators for health care providers at national, local and provider-level	There are various ongoing initiatives financed by EU Structural Reforms Support Program to develop performance indicators, including at the provider-level data to guide health inspections.
Deliver preventive care more effectively by expanding the activities nurses and pharmacists are allowed to carry out, notably in rural areas where services are scarcer.	Pharmacists now receive training for cardiovascular risk identification.

Public spending on healthcare, funded via general tax revenues, is 3.8 % of GDP, well below the OECD average and neighbouring Estonia and Lithuania. Out-of-pocket payments and, as a result, the share of patients who forego doctors' visits are high (Figure 27). Since 2017, the government has lifted annual limits on services, in particular for cancer treatment, which forced patients to either wait for treatment the following year or pay by themselves. This has led to a welcome reduction in waiting times and out-of-pocket payments. Yet, more could be done to improve access to healthcare. The cap on total annual contributions for inpatient and outpatient treatment is too high and should be reduced: it amounts to around 570 euros (excluding the purchasing of drugs, spectacles and dental services), compared with 300 euros in Estonia and 90 euros in the Czech Republic (WHO, 2017).

**Figure 27. Many Latvians skip doctors' appointments to avoid high out-of-pocket payments**

Source: OECD Health Statistics Database; Eurostat Database.

In 2018, the government has increased spending on healthcare by 22% and planned to finance it partly through a new earmarked social contribution. As of 2019, self-employed, workers under the microenterprise regime and pensioners receiving their pension from a foreign country have to pay a levy increasing to 5% of the minimum wage by 2020, otherwise they will only have access to a minimum basket of health services. Risk that a high share of the population affected by the reform does not pay the levy is non-negligible. At end 2018, only around 5% of this population at risk of being excluded from parts of the healthcare basket had paid social security contributions. Excluding parts of the population from the full basket of healthcare services is likely to endanger their health status and lead to higher costs later on. In addition, raising a new levy will almost certainly involve considerable administrative costs. The fact that the reform was postponed to mid-2019, as doctors found it impossible to determine patients' insurance status with the available IT system, is a case in point. It seems preferable to keep universal healthcare, as now envisaged by the new government, and finance spending increases via general taxes.

Analyses of the hospital system performance highlight that despite progress in reorganising the hospital system, much remains to be done to improve its efficiency and the quality of services (OECD, 2018b). For instance, the 30 day mortality after admission for a heart attack in Latvia is the highest in the EU and twice the average (OECD/EU, 2018). The envisaged centralisation of complex services and the development of cooperation areas for local hospitals would be steps in the right direction and could be accompanied by a broader review of performance, accountability and governance mechanisms in hospitals. Shortages of skilled medical staff are growing and could be eased by improving wages and working conditions while facilitating return migration and immigration of medical professionals.

## Improving environmental outcomes and regional cohesion

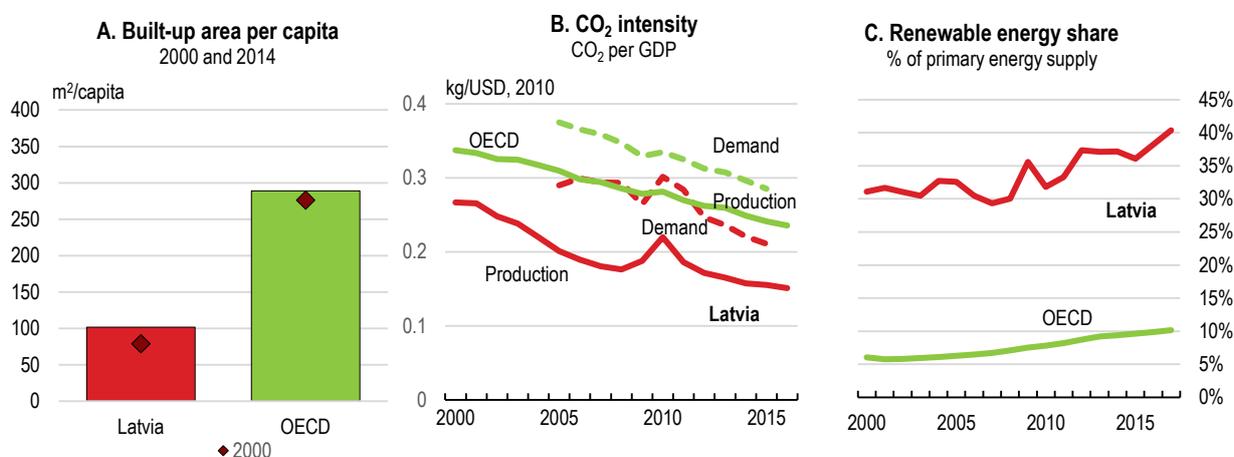
### *Regional disparities are high and environmental outcomes should improve*

Regional disparities in income per capita are large and relate to a rapid depopulation and ageing (European Commission, 2019). All regions besides the Riga metropolitan area have lost a considerable share of their younger population, as a result of internal and external migration. The Latgale and Vidzeme regions, where GDP per capita is less than 40% of what it is in Riga, suffer from their remoteness. Better transport infrastructure and services and better access to affordable housing would strengthen labour mobility and thus improve economic opportunities for workers in disadvantaged regions. Together with increasing use of digital technologies, this would also facilitate regional specialisation and interregional sharing of knowledge, innovations, amenities, resources.

Latvia is richly endowed with pristine forests as well as beautiful sea and landscapes and well-established nature conservation traditions. Forests cover 54% of the national territory, one of the largest shares in the OECD. Built-up area per capita is low, though rising faster than elsewhere (Figure 28, panel A). Latvia's per capita CO<sub>2</sub> emissions from fossil fuel combustion are lower than anywhere else in the OECD, thanks to an unusually large share of renewable energy production (Panels B and C). It mostly consists of hydropower and biomass, which meets most energy needs in the housing, commercial and industrial sectors. Biomass production needs to become more sustainable, though. Together with a vibrant wood industry it is endangering the role of Latvia's forests as a carbon sink. The contribution of land use, land use change and forestry to reducing greenhouse gas emissions has diminished significantly since 2004 and net emissions from this source were actually positive in 2014 and 2015.

The energy intensity is below the OECD average, but has not fallen over the past 10 years (Figure 29, panel A). Although CO<sub>2</sub> intensity is low, a steeper decline is needed for Latvia to meet its target to reduce its greenhouse gas (GHG) emissions outside the EU Emissions Trading System (ETS) by 6% relative to 2005 levels by 2030 (European Environment Agency, 2017). Most of Latvia's GHG emissions fall outside of the EU emissions trading system and investments in energy efficiency, renewable energy and public transport are necessary to meet emission reduction targets. This would also improve health outcomes. Despite notable progress with reducing air pollution, most of the population remains exposed to small particle emissions above the limit of 10 micrograms per cubic meter recommended by the World Health Organisation (panel B). Growing urban transport in fuel-inefficient cars and the burning of biomass, often in inefficient furnaces continue to play a role.

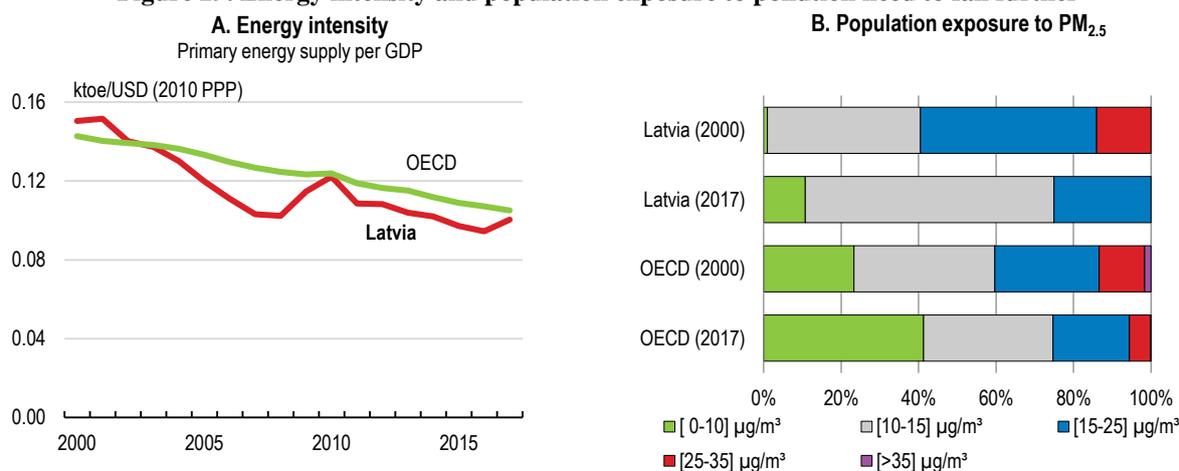
**Figure 28. The renewable energy share is high and CO<sub>2</sub> intensity is relatively low**



Source: OECD (2018), Land cover, OECD Environment Statistics (database); OECD (2018), Green Growth Indicators, OECD Environment Statistics (database), OECD National Accounts (database) ; IEA (2018), IEA World Energy Statistics and Balances (database).

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**Figure 29. Energy intensity and population exposure to pollution need to fall further**



Source: IEA (2018), IEA World Energy Statistics and Balances (database), OECD (2018) National Accounts (database); OECD (2018), Exposure to air pollution, OECD Environment Statistics (database).

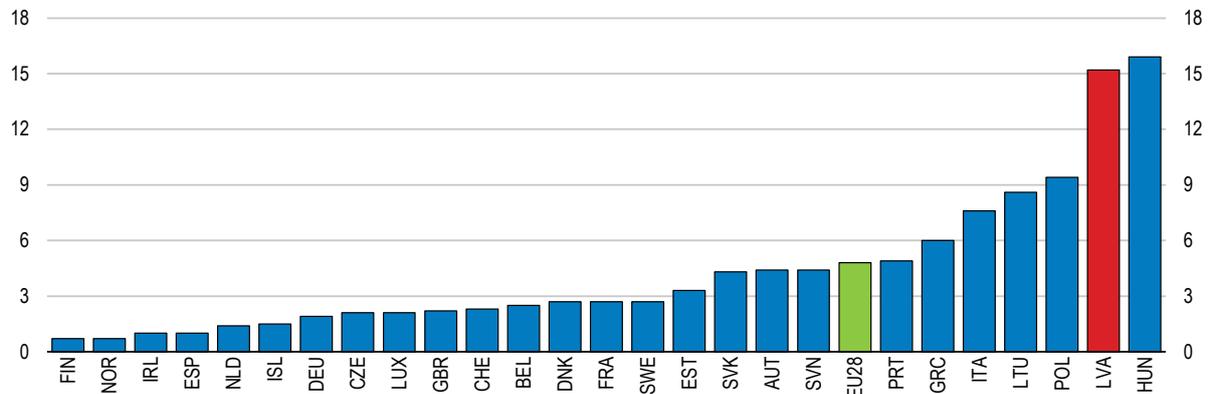
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**Improving access to affordable housing, its quality and energy efficiency**

Improving access to affordable and energy-efficient housing would help address skill shortages and improve environmental outcomes. Housing conditions are poor in Latvia (Figure 30) and a lack of affordable housing in the Riga region and other cities with good employment opportunities hinders better job matches. This is partly responsible for high regional disparities in employment. Residential housing development has stagnated over the past 25 years, as only 3% of the residential housing stock was built after 1993. Heating bills in old apartment blocks can easily be three times higher than in newly constructed multi-unit buildings (Eurofund, 2016) and many lower-income households have trouble keeping their house warm (Figure 31, Panel A). While there have been improvements in energy efficiency, energy consumption per dwelling is significantly lower in neighbouring Lithuania (Panel B), suggesting that further improvements are possible with beneficial effects for well-being, air quality and Latvia’s contribution to lowering CO2 emissions.

**Figure 30. Many families live in substandard housing**

Severe housing deprivation rate<sup>1</sup>, %, 2017 or latest available year



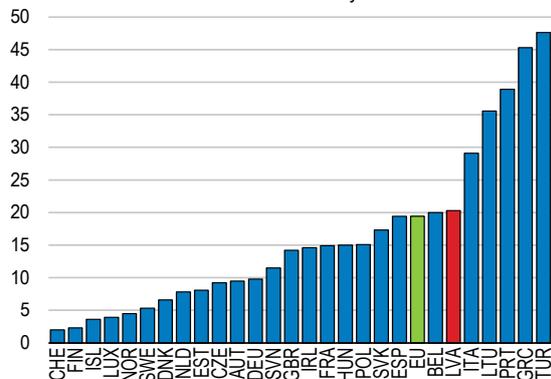
1. Severe housing deprivation rate is defined as the percentage of population living in the dwelling that is considered as overcrowded and exhibiting at least one of the housing deprivation measures (leaking roof, no bath/shower and no indoor toilet, or a dwelling considered too dark).

Source: EU statistics on income and living conditions (EU-SILC).

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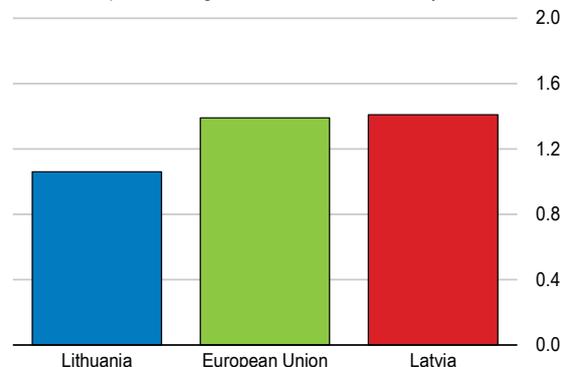
**Figure 31. Higher building energy efficiency would bring benefits for well-being**

**A. Inability to keep home adequately warm**  
Households below 60% of median income, %, 2017 or latest available year



Source: Eurostat; Odyssee Database.

**B. Energy consumption per dwelling at normal climate**  
Toe per dwelling, 2016 or latest available year



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After 1990 the transfer of ownership to sitting tenants at below market prices led to very high home ownership rates, as in other Central and Eastern European countries. More than 70% of the population own their home without a mortgage, but many lack the resources to maintain it. More than 80% of the population would not be able to buy or rent a home without spending more than 30% of their disposable income on housing according to data collected by the Ministry of Economy, making it very difficult to move. Social housing makes up less than 1% of the housing stock. Only few households are eligible and waiting times are long. Candidates can only apply in the municipality where they already live, making it difficult to move for a job. The quality of social housing is also low due to a lack of adequate maintenance, for which many municipalities lack resources. Overall, the rental market is under-developed in Latvia: 13% of households live in rented dwellings compared to about 24% on average across OECD countries. Informal renting is widespread and about a quarter of tenants in Latvia did not have a written contract in 2015 (Kull et al., 2015).

The profitability of residential buildings is low, partly because there is a lot of competition through informal renting (Hussar, 2016). This creates legal uncertainty for transactions and investment, as buyers often find that their newly acquired apartment is subject to an informal rent agreement that cannot be easily dissolved. A draft law foresees a requirement for rental contracts to be registered in the land register. Non-compliant landlords will not have access to a new accelerated dispute settlement procedure, which is expected to shorten procedures from 2-4 years to 4 months, while tenants will not be protected when the owner changes. This is expected to improve the enforcement of tax laws and strengthen investment incentives.

To address skill shortages the government plans to support municipalities, except Riga, to build affordable rental apartments for skilled workers. Including Riga municipality in the programme would yield more efficient results, as shortages are particularly high in this area. In addition, the needs of other income groups have to be addressed, as well, and this requires stronger engagement to preserve the existing housing stock and develop both social housing and affordable opportunities to rent and buy on the private market. The government should advance quickly with its plan to develop a Strategy for Affordable Housing.

A vibrant rental market requires protection of landlords' property rights to ensure acceptable returns to investment for them and thereby to stimulate investment. But experience from OECD countries with the most developed rental markets suggest that ensuring a degree of tenancy safety and soft rent control for existing contracts can ultimately be in the interest of both parties, as it creates stable demand (Kemp and Kofner, 2010; de Boer and Bitetti, 2014). In contrast, low tenant protection, a high incidence of fixed-term contracts and complete deregulation of rents, can hamper demand for rental housing and hence the development of the rental market sector (de Boer and Bitetti, 2014). The government plans to allow only fixed-term contracts in the future, but fast and efficient dispute settlement procedures may be a better way to balance landlords' and tenants' rights.

Take up of EU structural funds to finance energy efficiency investments increased considerably since 2009, but still only 3% of the multi-owner housing stock were renovated until 2017. The government plans to renovate another 4% until 2023. Given the age and low energy efficiency of the building stock, this target could be more ambitious, but it requires overcoming barriers to investment.

Home ownership associations have been overwhelmed with the complex decision-making and management of energy efficiency investments. In pre-fabricated panel buildings from the Soviet era they can comprise up to 400 owners with very different financial possibilities

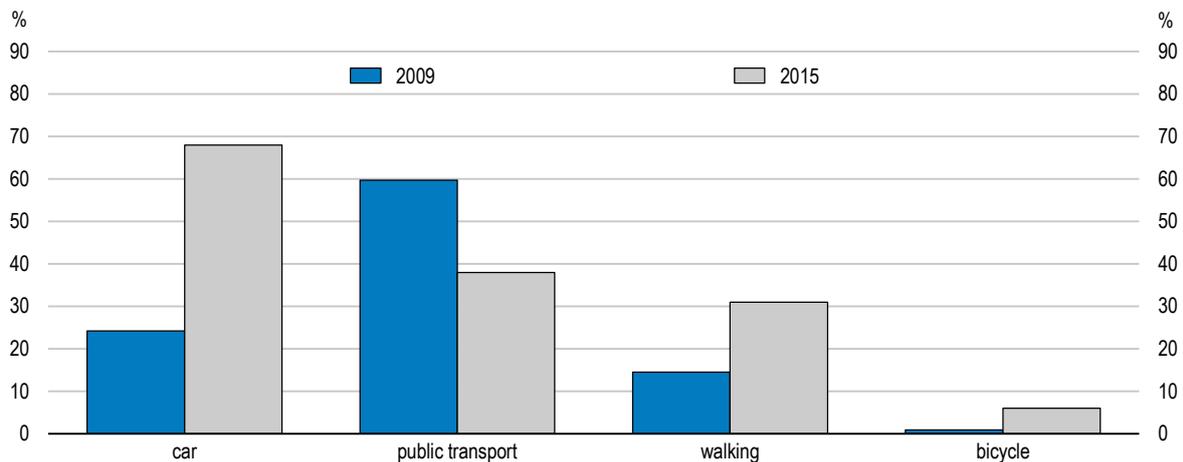
and attitudes. Latvia has a few trained energy efficiency specialists to assist them. Lithuania with its EnerVizija programme has had municipalities initiate retrofitting projects for several multi-owner departments, allowing them to reap economies of scale and scope, and manage maintenance and energy efficiency investment needs in a comprehensive way along with its repercussions on district heating demand. Authorised building administrators take over the loan for homeowners and manage all financial and technical aspects of the project. Lithuania offers grants covering 100% of investment costs to poor homeowners and makes heating subsidies conditional on their consent to planned building renovation, thus avoiding that their financial constraints hold back investment for entire buildings. This helped make progress with economically and environmentally efficient projects on a large scale (Syrvidis, 2014). Tax incentives could also be offered for the refurbishment of basic amenities to ensure compliance with modern standards. However, such measure should be targeted to credit-constrained households to avoid excessive costs.

### *Better integrated urban and transport policies are needed*

Better policy coordination in urban and transport planning would reduce urban sprawl and emissions. Riga has experienced rapid suburbanisation, as many middle- to higher-income households have moved to surrounding municipalities in the Pieriga region, often into detached houses. New settlements are often dispersed and have low density (Benovska, 2017), as municipalities converted greenfields into building land to attract higher-income households and thus increase their tax revenues, contributing to residential segregation (OECD, 2017a). This process has been largely uncoordinated without integrated planning of public transport and other urban infrastructure. Private car traffic and congestion have increased along with commuting (Figure 32), contributing to high emissions from the transport sector.

**Figure 32. Commuting by car has increased substantially**

Distribution of the principal means of going to work, Riga



*Note:* Respondents were given the option to mention more than one means of transport for going to work (shares may rise to over 100%).

*Source:* Eurostat.

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A governance platform for the greater Riga area would improve environmental outcomes and help reap agglomeration externalities. Bringing together all municipalities within commuting distance to the city would facilitate more integrated and efficient land and

transport planning. Such a metropolitan governance platform could make decisions about the desired density of developments and their location and coordinate urban and transport planning and schools across municipalities. Giving priority to the development of brownfields would reduce land use and planning the necessary infrastructure at the same time as new housing development would be much cheaper than adding infrastructure after new settlements have emerged (OECD, 2017b). Metropolitan governance arrangements result in higher labour productivity, and thus durably higher wages, less urban sprawl and pollution as well as more satisfaction of residents with public transport (Ahrend et al., 2014). Specific types of metropolitan governance arrangements may not be entirely transferable given regional specific contexts. Nevertheless, experience from other OECD countries (Germany, Denmark, Korea and France) can serve as an inspiration for designing, implementing and sustaining reforms (OECD, 2015).

Property tax reform could provide for more efficient urban development. Municipalities in Latvia use property tax reductions to attract high-income individuals, eroding overall revenues, contributing to urban sprawl and regional income inequality. Their property tax losses are compensated by higher income tax revenues, which are only partially redistributed through fiscal equalisation. One possibility to avoid such harmful tax competition would be to set property tax rates at a higher government level. At a minimum, the government should consider disallowing municipalities' practice of offering property tax rebates for registering with them as an inhabitant.

A lot can be done to promote public transport in Latvia. Accessibility to Riga is much better in private car and public transport planning is not integrated, in particular in the Riga Metropolitan Area (OECD, 2017a). There is a room to develop pedestrian and cycle facilities. Unlike in other OECD countries there is no transport association or similar platform that would provide for integrated ticketing and coordinate public transport provision across different municipalities and transport modes. This makes public transport costly and often inconvenient. Developing a nationwide integrated digital information and ticketing system that extends different modes, while allowing passengers to combine long- and short-distance transport can go a long way in making public transport more popular (Yatskiv et al., 2017). Municipalities could organise a joint transport association across the whole country to coordinate public transport provision and a common fare system, as in Berlin-Brandenburg, Germany, comprising the Berlin metropolitan area and the largely rural Land of Brandenburg with altogether 6 million inhabitants compared to less than 2 million in Latvia.

Taxing environmental externalities in line with their costs would also help reduce emissions from transport and other sources. Effective tax rates on CO<sub>2</sub> emissions from energy use in transport are low by international standards (Figure 33). In other sectors, emissions from fuel use (in particular natural gas and biomass) are fully exempt (OECD, 2018c). Increasing energy taxation by eliminating exemptions and taxing CO<sub>2</sub> emissions and other pollutants at the same rate across different fuels and sectors would help to reduce emissions in a more efficient way.

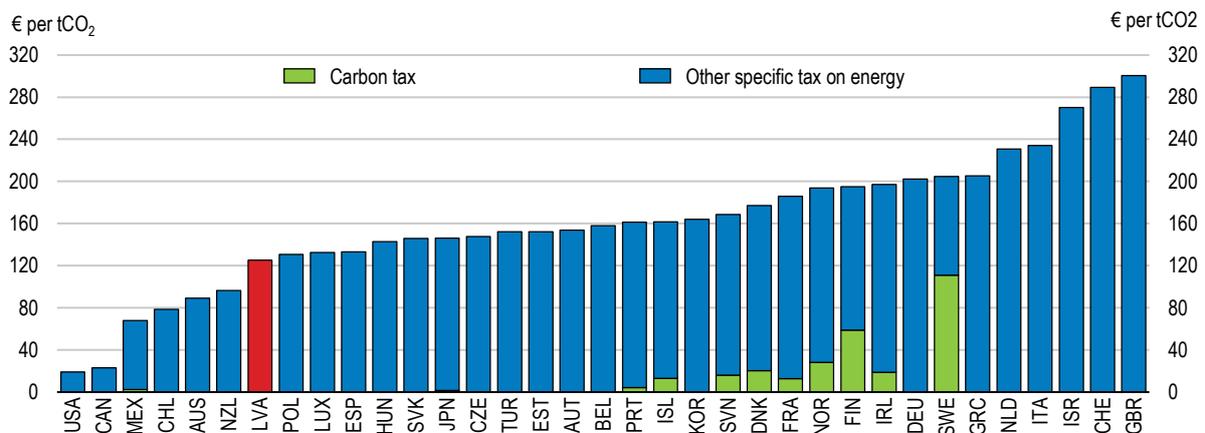
Latvia has a relatively old and fuel-intensive car fleet, with around 77% of cars older than 10 years. Higher taxes on CO<sub>2</sub> and other pollutants would set incentives for car owners to switch faster to more fuel efficient cars. While fuel taxes are being increased, diesel is still taxed significantly less than gasoline although it emits more CO<sub>2</sub> per litre and pollutes more. Gradually restricting the use of polluting cars in cities would also be useful. These measures need to be combined with investments in public transport, to ensure access to

affordable and environmentally friendly mobility and avoid excessive and sudden increases in transport costs for low-income households.

As of 2019 Latvia's annual vehicle taxation will be based on CO<sub>2</sub> emissions, but only for newer cars, due to a lack of reliable data on emissions of older cars. There will be exceptions for some groups (see Table 4). Since the oldest cars are typically those that pollute most, progressively taxing all cars based on the same principles would improve the impact on the environment. Differentiating vehicle taxes based on both CO<sub>2</sub> emissions and local air pollutants, such as particulate matter and nitrogen oxides, as done in Israel, would be an alternative to consider, not least to limit the use of diesel cars (OECD, 2016c).

**Figure 33. Effective tax rates on CO<sub>2</sub> are relatively low**

Road transport, average effective tax rates from excise taxes and specific taxes on carbon, 2015

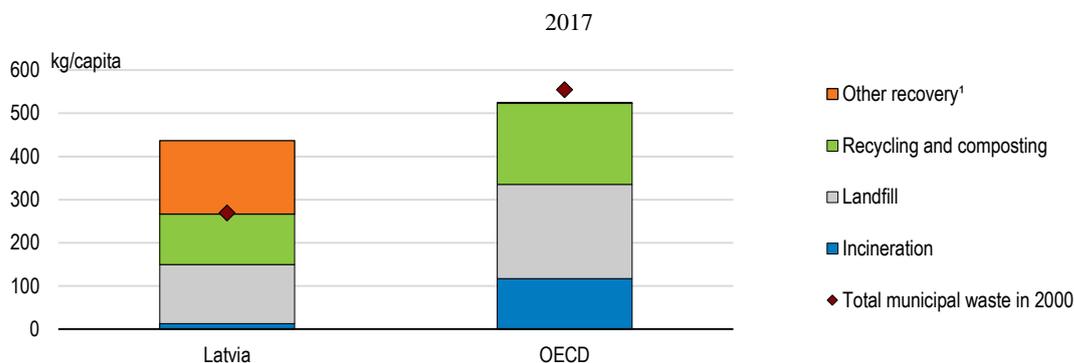


Source: OECD (2018), *Taxing Energy Use 2018: Companion to the Taxing Energy Use Database*.

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While there has been significant progress in the recovery of municipal waste and a reduction in landfill, its share is still relatively high (Figure 34). Landfilling tends to raise energy consumption and greenhouse gas emissions, in part because landfilled materials are not reused, recovered or recycled. Plans to continue the phased increase of landfill taxes are therefore welcome (OECD, 2019c, *forthcoming*)

**Figure 34. The share of landfill in municipal waste treatment remains high**



1. For Latvia, anaerobic digestion of biodegradable waste with biogas recovery (isolated waste disposal cells; operational since 2016).

Source: OECD (2018), *Municipal waste*, OECD Environment Statistics (database).

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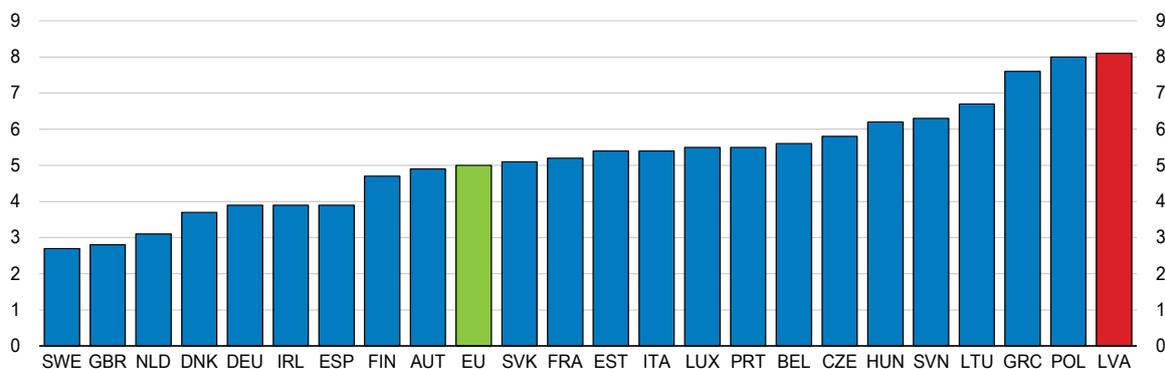
### *Building better transport and energy infrastructure*

One element to strengthen economic development and quality of life in Latvia's more remote regions would be better infrastructure. The quality of transport infrastructure lags behind neighbouring countries (OECD, 2017a). For instance, train connections to Riga from Daugavpils and Rēzekne, the main cities in the Latgale region, are slow and infrequent. Roads connecting the largest regional cities to neighbouring countries are single-lane, for the most part, and lead through small villages, slowing down traffic and making it more dangerous. While the number of road accidents has decreased, they are still among the highest in the EU (Figure 35).

Multiple-lane roads connecting the largest regional cities to Riga and capitals of neighbouring countries, while circumventing villages, would promote economic development and safety. Cooperating with neighbouring countries to better develop cross-border transport services and infrastructure, including rail and roads, would help develop tourism and transit trade. Better access to services concentrated in the Riga metropolitan area, such as Competence Centres (i.e. platforms that promote joint innovation between firms and research institutions), would improve attractiveness of these regions. Reducing speed limits and building pedestrian-friendly infrastructure in urban areas, in particular around public transport stops and schools, would also improve pedestrian safety and quality of life, as would stricter enforcement of speed limits, requirements to wear seatbelts and abstain from drunk driving (Table 10). Separating high-speed road traffic from pedestrians and other modes of transport can reduce accidents significantly, as evidenced by Spain's experience.

**Figure 35. Road accident fatalities are high**

People killed in road accidents, per 100 000 persons, 2016



Source: European Commission, Directorate-General for Mobility and Transport (DG MOVE).

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Electrification of train lines is low (14%) and this contributes to slow travel times and low energy efficiency. The planned electrification of railway lines is welcome as it should increase the efficiency of transportation, promote the use of environmentally friendly technologies, and increase the international competitiveness of the Latvian railway transit corridor. The programme could be stepped up based on careful cost-benefit analysis (Table 10). Two-thirds of rail cargo are linked to transit trade to Russia, which has been decreasing, as Russia is shifting its freight transport to its own ports. Current efforts to build better rail freight links to China via Kazakhstan and the Rail Baltica project linking Warsaw

via Vilnius, Riga and Tallinn to Helsinki will likely provide welcome diversification. Cargo from Belarus increased by more than 20% in 2018. But rail passenger transport declined by 15% between 2011 and 2017, as the ageing infrastructure does not allow for fast and reliable transport provision. Electrification can change this, but a combination of higher prices and subsidies and integration with other transport modes will also be needed (OECD, 2017a).

Lifting barriers to invest in wind energy infrastructure would help reduce emissions, complementing a more sustainable biomass production. Current installed capacity is low and has increased only slightly since 2013. A feed-in tariff to promote renewable energy generation has been put on hold for a couple of years now due to concerns over a fast increase in costs. Several countries use competitive tenders or procurement auctions, whereby the government issues a call for the installation of a certain amount of renewable energy capacity and interested bidders provide a price at which they would be able to realize the investment, allowing the government to choose the best offer. Recent wind procurement auctions in Northern Europe and large-scale solar photovoltaic auctions in the Middle East and South Asia have resulted in record-low bids. The advantage of competitive auctions is that governments retain control over renewable energy capacity and its cost. The most recent example in Europe is Germany's new Renewable Energy Act, which has worked well. Experience from Poland shows that it is key to move fast to provide clarity on the frequency of auctions, auctioned capacities and conditions and ensure clear and stable investment conditions.

**Table 10. Past OECD recommendations on transport**

Topic and summary of recommendations	Summary of action taken since 2017 Survey
Create a platform to coordinate policies of all municipalities where most residents commute to Riga.	No action taken
Apply the same cost-benefit tests to large national projects as are applied to EU-funded projects.	No action taken
Make use of the latest technologies to favour demand-responsive collective road transport services tailored to the needs of customers in rural areas.	No action taken
Raise the priority of investment in safer road infrastructure. Improve maintenance of rural roads, Raise the quality of the most densely trafficked roads with investments in motorway sections and develop pedestrian-friendly infrastructure in urban areas.	No action taken

## References

- Ahrend, R., C. Gamper and A. Schumann (2014), “The OECD Metropolitan Governance Survey: A quantitative description of governance structures in large urban agglomerations”, *OECD Regional Development Working Papers*, Paris, <http://dx.doi.org/10.1787/5jz43zldh08p-en>
- Bank of Latvia (2018), *Financial Stability Report 2018*, Riga.
- Benovska, M. (2017), *Urban sprawl in the post-Soviet sphere. A comparison of Lviv, Ukraine, and Riga, Latvia*, Estonian University of Life Sciences, Tartu.
- Benkovskis, K., O. Tkacevs and N. Yashiro (2018), “Do EU Funds boost productivity and employment?: Firm level analysis for Latvia”, *OECD Economics Department Working Papers*, No. 1525, OECD Publishing, Paris.
- Betcherman, G., D. Meltem, and C. Pagés. “Do employment subsidies work? Evidence from regionally targeted subsidies in Turkey”, *Labour Economics*, vol. 17, pp. 710–722.
- de Boer, R. and R. Bitetti (2014), “A Revival of the Private Rental Sector of the Housing Market?: Lessons from Germany, Finland, the Czech Republic and the Netherlands”, *OECD Economics Department Working Papers*, No.1170, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5jxv9f32j0zp-en>
- European Commission for the Efficiency of Justice (CEPEJ) (2018), *Evaluation of the Latvian Judicial System*, Brussels. Retrieved from: [http://www.ta.gov.lv/UserFiles/Faili/CEPEJ\\_Evaluation\\_Report\\_Latvia\\_Final\\_En.pdf](http://www.ta.gov.lv/UserFiles/Faili/CEPEJ_Evaluation_Report_Latvia_Final_En.pdf)
- Chetty, R., J. Friedman and J. Rockoff (2014), “Measuring the Impacts of Teachers I: Evaluating Bias in Teacher Value-Added Estimates”, *American Economic Review*, vol. 104, pp. 2593-2632.
- Distinguin, I., C. Rugemintwari and R. Tacneng (2016), “Can Informal Firms Hurt Registered SMEs’ Access to Credit? ”, *World Development*, vol. 84, pp. 18-40.
- Echazarra, A. and T. Radinger (2019), "Learning in rural schools: Insights from PISA, TALIS and the literature", *OECD Education Working Papers*, No. 196, OECD Publishing, Paris, <https://doi.org/10.1787/8b1a5cb9-en>.
- Égert, B. and P. Gal (2017), "The quantification of structural reforms in OECD countries: A new framework", *OECD Journal: Economic Studies*, vol. 2016/1, pp. 91-108.
- Eurofound (2016), *Inadequate housing in Europe: Costs and consequences*, Publications Office of the European Union, Luxembourg.
- European Commission (2019), *Country Report Latvia 2019*, Brussels. Retrieved from: [https://ec.europa.eu/info/sites/info/files/file\\_import/2019-european-semester-country-report-latvia\\_en.pdf](https://ec.europa.eu/info/sites/info/files/file_import/2019-european-semester-country-report-latvia_en.pdf)
- European Commission (2018a), *Country Report Latvia 2018*, Brussels. Retrieved from: [https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-latvia-en\\_1.pdf](https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-latvia-en_1.pdf)
- European Commission (2018b), “The effect of taxes and benefits reforms on poverty and inequality in Latvia”, *Analytical Web Note 2/2018*, Brussels. [https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070\\_en](https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en)
- European Commission (2018c), *The 2018 Ageing Report - Economic and Budgetary Projections for the EU Member States (2016-2070)*, Brussels. Retrieved from: [https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070\\_en](https://ec.europa.eu/info/publications/economy-finance/2018-ageing-report-economic-and-budgetary-projections-eu-member-states-2016-2070_en)

- European Commission (2017), *Eurobarometer – Corruption*, Brussels.
- European Environment Agency (2017), *Latvia GHG and energy 2017 country profile*, Brussels.  
Retrieved from: <https://www.eea.europa.eu/themes/climate/trends-and-projections-in-europe/trends-and-projections-in-europe-2017/country-profiles-greenhouse-gases-and-energy/latvia-ghg-and-energy-country-profile.pdf/view>.
- Gal, P. and A. Theising (2015), "The macroeconomic impact of structural policies on labour market outcomes in OECD countries: A reassessment", *OECD Economics Department Working Papers*, No. 1271, OECD Publishing, Paris. <https://doi.org/10.1787/5jrqc6t8ktjf-en>.
- Hainmueller, J. et al. (2016), "Do Lower Caseloads Improve the Performance of Public Employment Services? New Evidence from German Employment Offices", *The Scandinavian Journal of Economics*, vol. 118, pp. 941-974.
- Hazak, A. (2009), "Companies' financial decisions under the distributed profit taxation regime of Estonia", *Emerging Markets Finance and Trade*, vol. 45, pp. 4-12.
- Hazans, M. (2015), "Emigration from Latvia: Return intention of post-2000 emigrants from Latvia", paper for the OECD. Based on the project "The Emigrant Communities of Latvia: National Identity, Transnational Relations, and Diaspora Politics" implemented by the Institute of Philosophy and Sociology, University of Latvia in co-operation with the Faculty of Economics and Management, University of Latvia and supported by ESF Project 2013/0055/1DP/1.1.1.2.0/13/APIA/VIAA/040.
- Heckman, J. J. (2006), "Skill formation and the economics of investing in disadvantaged children", *Science*, vol.312, pp.1900-1902.
- Hussar, A. (2016), "Tenancy Law and Housing Policy in Multi-level Europe Intra-team Comparison Report for Estonia, Latvia, Lithuania", *Zentrum für europäische Rechtspolitik*, University of Bremen, Germany.
- International Monetary Fund (IMF) (2018), *Latvia – IMF Country Report 18/266*, Washington D.C.
- Jacobs, B. et al. (2017), *Latvia tax review*, World Bank Group, Washington, D.C. Retrieved from: <http://documents.worldbank.org/curated/en/587291508511990249/Latvia-tax-review>
- Kemp, P. and S. Kofner (2010), "Contrasting Varieties of Private Renting: England and Germany", *International Journal of Housing Policy*, vol. 10, pp. 379-398,
- Krisjane, Z. et al. (2012), "Who are the typical commuters in the post-socialist metropolis? The case of Riga, Latvia", *Cities*, vol.29, pp.334–340.
- Koning, P. (2009), "The effectiveness of Public Employment Service workers in the Netherlands", *Empirical Economics*, vol. 37, pp. 393-409.
- Kugler, A.D., M. Kugler and L.O. Herrera-Prada (2017), "Do Payroll Tax Breaks Stimulate Formality? Evidence from Colombia's Reform," *Economia*, vol. 0, pp.3-40.
- Kull, I., J. Kolomijceva and A. Hussar (2017), "Comparative remarks on residential tenancy law in Latvia", *Journal of the University of Latvia Law*, vol.8, pp. 5-21.  
[https://www.journaloftheuniversityoflatvialaw.lv/fileadmin/user\\_upload/lu\\_portal/projekti/journaloftheuniversityoflatvialaw/No8/1.Irene\\_Kull\\_Julia\\_Kolomijceva\\_Ave\\_Hussar.pdf](https://www.journaloftheuniversityoflatvialaw.lv/fileadmin/user_upload/lu_portal/projekti/journaloftheuniversityoflatvialaw/No8/1.Irene_Kull_Julia_Kolomijceva_Ave_Hussar.pdf)
- Lihtmaa, L., Hess, D. B. and K. Leetmaa (2018), "Intersection of the global climate agenda with regional development: Unequal distribution of energy efficiency-based renovation subsidies for apartment buildings", *Energy Policy*, vol.119, pp.327-338.

- Mickiewicz, T., Rebmann, A., and A. Sauka (2017). “To Pay or Not to Pay? Business Owners’ Tax Morale: Testing a Neo-Institutional Framework in a Transition Environment”, *Journal of Business Ethics*, pp.1-19.
- Ministry of Education and Science (2019). *Informative Report On Implementing and Developing the System of Work-Based Learning to Increase the Proportion of Work-Based Learning in Vocational Education*, reviewed at the Cabinet of Ministers on April 2, 2019. Retrieved from: <http://tap.mk.gov.lv/lv/mk/tap/?pid=40470715>
- Meghir, C., R. Narita and J.M. Robin (2015), “Wages and informality in developing countries”, *American Economic Review*, 2015, vol. 105, pp.1509-46.
- Moneyval (2018), *Anti-money laundering and counter-terrorist financing measures: Latvia*, Fifth Round Mutual Evaluation Report, Council of Europe, Strasbourg. Retrieved from: <https://rm.coe.int/moneyval-2018-8-5th-round-mer-latvia/16808ce61b>
- OECD/EU (2018), *Health at a Glance: Europe 2018: State of Health in the EU Cycle*, OECD Publishing, Paris/EU, Brussels, [https://doi.org/10.1787/health\\_glance\\_eur-2018-en](https://doi.org/10.1787/health_glance_eur-2018-en)
- OECD (2019a), *Combating Money Laundering and the Financing of Terrorism in Latvia : Overview*, Retrieved from: [www.oecd.org/finance/Combating-Money-Laundering-and-the-Financing-of-Terrorism-in-Latvia-Overview.htm](http://www.oecd.org/finance/Combating-Money-Laundering-and-the-Financing-of-Terrorism-in-Latvia-Overview.htm)
- OECD (2019b), *Evaluating Latvia's Active Labour Market Policies: Connecting People with Jobs*, OECD Publishing, Paris, <https://doi.org/10.1787/6037200a-en>.
- OECD (2019c), *Environmental Performance Reviews: Latvia 2019*, OECD Publishing, Paris, forthcoming.
- OECD (2018a), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/eag-2018-en>.
- OECD (2018b), Secretariat Note on Latvia's implementation of the Health Committee Recommendations
- OECD (2018c), *Taxing Energy Use 2018: Companion to the Taxing Energy Use Database*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264289635-en>.
- OECD (2017a), *OECD Economic Surveys: Latvia 2017*, OECD Publishing, Paris. [http://dx.doi.org/10.1787/eco\\_surveys-lva-2017-en](http://dx.doi.org/10.1787/eco_surveys-lva-2017-en)
- OECD (2017b), *The Governance of Land Use in OECD Countries: Policy Analysis and Recommendations*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264268609-en>.
- OECD (2016a), *Education in Latvia: Reviews of National Policies for Education*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264250628-en>.
- OECD (2016b), *OECD Reviews of Labour Market and Social Policies: Latvia 2016*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264250505-en>
- OECD (2016c), “Israel's Green Tax on Cars: Lessons in Environmental Policy Reform”, *OECD Environment Policy Papers*, No. 5, OECD Publishing, Paris, <https://dx.doi.org/10.1787/5jlv5rmnq9wg-en>.
- OECD (2015), *Governing the City*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264226500-en>.
- OECD (2014), *Teacher Remuneration in Latvia: An OECD Perspective*, OECD Publishing, Paris. <http://www.oecd.org/education/policyreviewslatvia.htm>.

- OECD (2013), *PISA 2012 Results (Volume IV): What Makes a School Successful: Resources, Policies and Practices*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264201156-en>
- Pikkanen, P., and K. Vaino (2018), “Long-Term Effects of Distributed Profit Taxation on Firms: Evidence from Estonia” *Lund Student Papers*, Lund University, Lund.
- Pluta, A. and A. Zasova (2017), “Latvia stumbling towards progressive income taxation: Episode II”, *Baltic international Centre for Economic Policy Studies Occasional paper* No. 10, Riga.
- Rastrigina, O. (2019), “Reform Options to Reduce the Effective Tax Rate on Labour in Latvia”, *Technical Background Paper for the OECD Economic Survey: Latvia 2019*. ECO/EDR(2019)10/ANN3
- Roy, R. and N. Braathen (2017), “The Rising Cost of Ambient Air Pollution thus far in the 21st Century: Results from the BRIICS and the OECD Countries”, *OECD Environment Working Papers*, No. 124, OECD Publishing, Paris, <https://dx.doi.org/10.1787/d1b2b844-en> .
- Sauka, A. and T. Putniņš (2019), *Shadow Economy Index for the Baltic Countries 2009–2018*, Stockholm School of Economics at Riga, Riga.
- Schneider, F. (2017), “Implausible Large Differences in the Sizes of Underground Economies in Highly Developed European Countries? A Comparison of Different Estimation Methods” *CESifo Working Paper*, No. 6522, Munich.
- Syrvidis, V. (2014), *The residential energy efficiency program in Lithuania – case study*, The World Bank, Washington D.C.
- Staehr, K. (2014), “Corporate Income Taxation in Estonia. Is It Time to Abandon Dividend Taxation?”, *TUTECON Research Brief*, No. RB-2014/1, Tallinn University of Technology, Department of Economics and Finance. Tallinn.
- Transparency International (2017), *Corruption Perceptions Index 2017*, Berlin.
- Yatskiv, I. et al. (2017), “Review of intelligent transport solutions in Latvia”, *Transportation Research Procedia*, vol. 24, pp. 33-40.
- Williams C. and I. Horodnic (2015), “Explaining and tackling the shadow economy in Estonia, Latvia and Lithuania: a tax morale approach”, *Baltic Journal of Economics*, vol. 15, pp. 81-98.
- WHO (2017), *Financial protection in high-income countries: a comparison of the Czech Republic, Estonia and Latvia*, World Health Organisation, Geneva. Retrieved from: [http://www.who.int/health\\_financing/events/who\\_europe\\_uhc\\_day\\_report\\_web.pdf](http://www.who.int/health_financing/events/who_europe_uhc_day_report_web.pdf).
- Zvaigznitis, K. et al. (2015), “Energy efficiency in multi-family residential buildings in Latvia. Cost benefit analysis comparing different business models”, *Energy Procedia*, vol. 72, pp. 245-249



## Annex. Progress in structural reforms

*This Annex reviews actions taken on recommendations from previous Economic Surveys that are not covered in tables within the main body of the Key Policy Insights. Recommendations that are new to this Survey are listed at the end of the Executive Summary and the relevant chapters.*

Main recommendations	Action taken since September 2017
<b>Fiscal Policy</b>	
Reinforce countercyclical liquidity buffers.	A fiscal security reserve was included in the 2017 and 2018 budgets and is foreseen in budgetary plans for 2019 and 2020.
Continue to comply with the European Union's fiscal rules and make full use of available fiscal space, including the flexibility mechanisms, to fund structural reforms.	Budgetary plans comply with the EU and national fiscal rules and use allowed deviations for implementing structural reforms (e.g. 0.4% and 0.5% of GDP in 2018 and 2019 respectively to finance healthcare reforms).
Ensure that local governments are sufficiently resourced and autonomous by increasing their tax revenues, reducing the share of earmarked revenues, and improving the equalisation system.	Since 2018, to ensure the stability and predictability of tax revenues, local governments receive a special grant from the state budget. The "Medium-Term Budget Framework for 2018, 2019 and 2020" stipulate that the amount of local governments tax revenues together with the special grant should reach 19,6% of total state budget tax revenue. An evaluation of the financial equalisation system is planned.
<b>Fighting informality</b>	
Restore the funding of the State Audit Office to at least pre-crisis levels.	The funding for the State Audit office has increased in 2018 and is set to reach its pre-crisis level in 2019. The allocation of resources and performance indicators have improved.
Remove political influence in the appointment of judges.	Powers of the Judicial Council have been strengthened in 2018. The Council appoints court presidents, transfers judges to vacant positions and determines the procedure for nominating and appointing candidate for the office of the Chief Judge of district and regional courts.
<b>Improving the insolvency framework</b>	
Strengthen the specialisation of judges	The judicial map reform has been completed in 2018, making the specialisation of judges possible. Specialisation also occurs at the court level in specific areas (e.g. industrial property rights, competition rights).
Establish a transparent framework for out-of-courts settlements such as arbitration or mediation for commercial and business cases.	Amendments to the Arbitration Law which strengthened supervision of out-of-court procedures entered into force in 2017.
Improve the skills of law enforcement officials and insolvency administrators to deal with fraud.	A large training programme to enhance the capabilities of law enforcement officials and judges is ongoing. In particular, extensive training is provided on insolvency, economic and financial crimes (e.g. the "Justice for Growth" project initiated in 2018), and corruption prevention.
<b>Improving competition</b>	
Introduce boards in all commercially oriented state-owned enterprises.	All large commercially oriented state-owned enterprises have boards since end-2016. The introduction of boards in medium-sized state-owned enterprises is being evaluated and discussed with business representatives and the Competition Council.
Extend corporate management best practices to port authorities and municipal corporations.	Annual reports on port activities and decisions by port authorities are published online. Draft legislation to strengthen information requirements for municipal companies (scope and monitoring) is under discussion in parliament.
Strengthen co-operation with border agencies of neighbouring countries by aligning border procedures and formalities.	Cooperation agreements have been signed with Russia and Belarus to improve border procedures as well as transport crossings in 2018.
Continue improving the connectivity of energy networks with the rest of the European Union.	In June 2018, Latvia signed with other Baltic countries the Political Roadmap which aims at the synchronisation of the electricity networks with the Continental European Network by 2025. In January 2019, Latvia and Estonia have started the construction works of the Latvia – Estonia third power transmission network interconnection.
Introduce incentive regulation for the prices of monopoly services set by the infrastructure manager and the incumbent rail service operator.	No action taken.

Set wages of managerial staff in the railway regulator independently from the Transport Ministry.

Discussions on options to strengthen the Independence of the Latvian Railway Administration are ongoing.

#### Improving access to affordable housing

Improve legal certainty in rental regulation and encourage out-of-court procedures.

A draft law foresees a requirement for rental contracts to be registered in the land register. Non-compliant landlords will not have access to a new accelerated dispute settlement procedure, which is expected to shorten procedures from 2-4 years to 4 months. Information campaigns to promote mediation services have been organised in 2017 and 2018

Simplify the administrative process for obtaining a building permit.

The administrative burden in construction is being gradually reduced, with additional exemptions for the approval of the Construction Board and harmonisation of electronic construction plans.

Provide more funding for low-cost rented housing in areas of expanding employment.

The government plans to support municipalities to build affordable rental apartments by providing long-term loans from the State Treasury at low interest rates.

Expand the mobility programme, which provides temporary support for relocation and transport.

Since March 2018 the mobility allowance is available for workers relocating to Riga. Its scope and amount have also been raised.

Create a nation-wide registry that allows eligible persons to apply for housing assistance where they expect better job opportunities.

No action taken. Housing assistance is provided only by municipalities and according to local rules.

Require housing developers to allocate a proportion of their dwellings as affordable units.

No action taken.

#### Strengthening innovation capabilities

Increase government funding of innovation support programmes with strong evaluation results.

The government expanded the innovation voucher scheme that finances firms' purchase of technology extension services.. Discussions have been started about the design of the Norwegian Grants programme "Business Development, Innovation and SMEs" that will provide subsidies to firms for the development and implementation of new innovative products and technologies. It is expected that the programme will be opened in 2020 with a total budget of EUR 14.7 million.

#### Green Growth

Ensure that feed-in tariffs for renewable energy production are cost-effective.

Feed-in tariffs to promote renewable energy generation remain on hold and a reform of the existing support scheme for the electricity produced from renewables has been initiated in spring 2018.

Offer financial support to foster energy efficiency gains in the housing sector, in particular to credit-constrained households.

In some municipalities (e.g. Riga, Daugavpils, Jēkabpils), property tax rates are reduced against energy efficiency investments.

Provide stronger incentives to improve efficiency in district heating.

In 2017 and 2018, two selection rounds were organised for EU-funded projects on energy efficiency in district heating. 104 projects have been implemented, with co-financing amounting to around EUR 53 million.



## Thematic chapter



## 1. Policies for stronger productivity growth

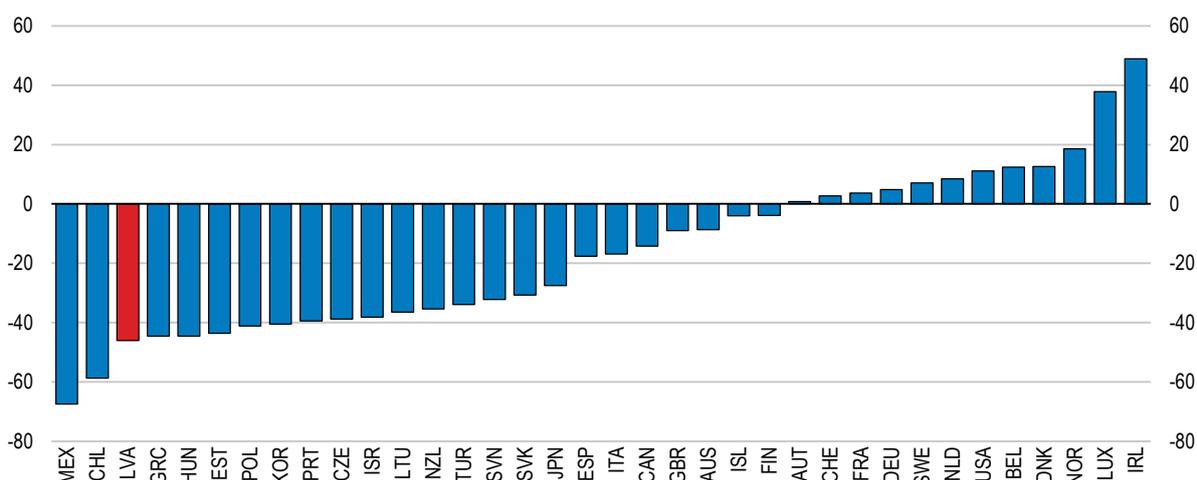
*Latvia's productivity growth is held back by weak innovation and inefficient resource allocation. The shortage of skilled workers which constrains innovation and the adoption of digital technologies must be addressed through further alignment of vocational and tertiary education with labour market demand. Strengthening the innovation ecosystem by improving the quality of research and collaboration between firms and research institutions would help to diffuse digital technologies more widely across the economy. Fighting widespread informality, improving the low debt recovery through a more efficient insolvency regime, and reducing substantial state ownership would improve the allocation of resources. Latvia also relies heavily on EU funds to finance its important structural policies. The continuity of the most effective EU funded policy instruments needs to be ensured in the medium term, by integrating them into the national budget.*

## Productivity growth is held back by low innovation and inefficient resource allocation

Given a rapidly declining working-age population, Latvia needs strong productivity growth for continuous convergence of living standards with other OECD countries. Labour productivity growth in Latvia resumed quickly after a decline in the aftermath of the financial crisis. However, it has slowed down considerably compared to the pre-crisis period when it was fuelled by large capital inflows, rapid debt accumulation and a real estate boom, which was unsustainable (Blanchard et al., 2013). Productivity growth needs to pick up from current levels considering that the gap in labour productivity against high-income OECD countries remains larger than for other Baltic or Central European countries (Figure 1.1). It has to be driven by stronger innovation, a better use of skills and a more efficient allocation of scarce resources. Improving access to finance, training and support for innovation for Latvia's less productive small and medium enterprises will help them improve their productivity and strengthen inclusive growth.

**Figure 1.1. The labour productivity gap is large**

The gap in GDP per hour worked against 17 richest OECD countries, 2017



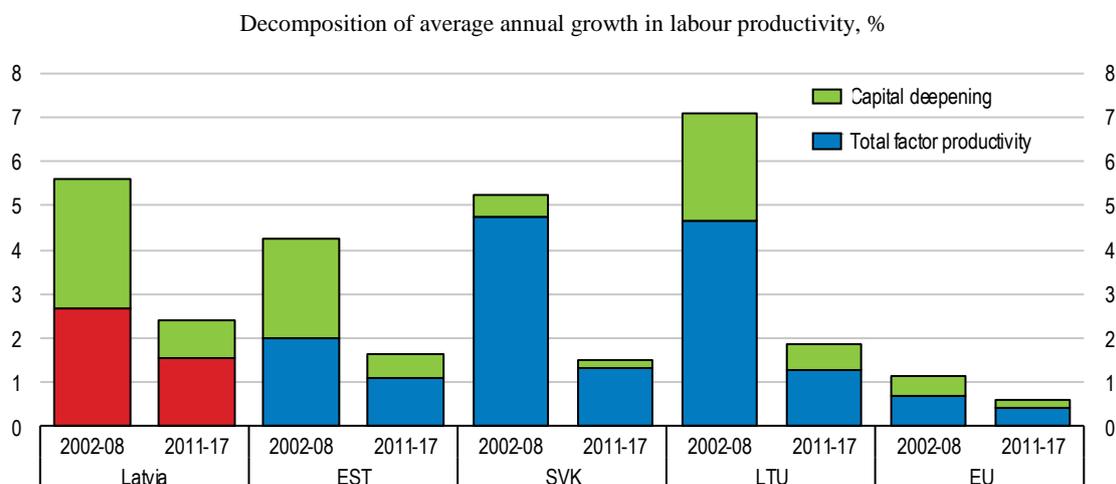
*Note:* Compared to the weighted average using population weights of the 17 OECD countries with highest GDP per capita in 2017 based on 2017 purchasing power parities (PPPs). Labour productivity is measured as GDP per hour worked.

*Source:* OECD (2019) Going for Growth.

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The marked slowdown of labour productivity growth after 2008 resulted partly from a deceleration in capital deepening, as investment was subdued (Figure 1.2). Sluggish business investment was the consequence of the restructuring of large debt in the aftermath of the global financial crisis. Access to finance tightened significantly, as bank lending to non-financial enterprises kept decreasing until recently and remains negligible. A slow and inefficient insolvency regime with low recovery rates and a large share of undeclared earnings have contributed to the sluggish recovery of lending. This prevented productive firms from financing investment, contributing to misallocation of capital (Benkovskis, 2015).

**Figure 1.2. The contribution of capital deepening to labour productivity growth has diminished**



Source: OECD (2019) Going for Growth 2019 Edition.

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Latvia's labour productivity in the manufacturing sector is constrained by the low levels of productivity within Latvian firms and modest allocative efficiency, that is, the extent to which firms with higher productivity levels have larger shares in employment (Box 1.1, Figure 1.3). The reallocation of labour toward more productive firms has progressed to some extent after the crisis (Box 1.1, Figure 1.4). This was partly due to tighter competition in the domestic market that forced unproductive firms to scale down their production or exit the market (Benkovskis, 2015). However, very unprofitable firms continue to operate, particularly in knowledge-intensive services.

This may be partly the result of vigorous entrepreneurship in Latvia, as young and small firms are often unproductive when they start to operate. Some of them experience fast productivity growth as they catch up to the frontier, while some others remain unprofitable (Berlingieri et al., 2019). It is important to ensure the smooth exit of nonviable firms, so that resources can be reallocated to more productive and innovative firms (Adalet-McGowan et al., 2017). Also, informal economic activities such as under-declaration of corporate profits, employment or wage payments, are widespread (Sauka and Putniņš, 2019; Schneider, 2017). Informal firms are generally less productive than formal firms and they distort resource allocation and competition, making it harder for formal productive firms.

### Box 1.1. The role of resource allocation in Latvia's productivity growth

Joint research of the OECD and the Bank of Latvia (Benkovskis et al., 2019) analyses the extent to which the efficiency of resource allocation contributes to productivity growth in Latvia.

#### The contribution of resource allocation to labour productivity level

Sector-level productivity  $P_t$  at time  $t$ , can be decomposed into the simple mean of firm-level productivity and the covariance between productivity and firms size as below, following Olley and Pakes (1996):

$$P_t = \frac{1}{N_t} \sum_i P_{i,t} + \sum_i (\theta_{i,t} - \bar{\theta}_t)(P_{i,t} - \bar{P}_t) \quad (1)$$

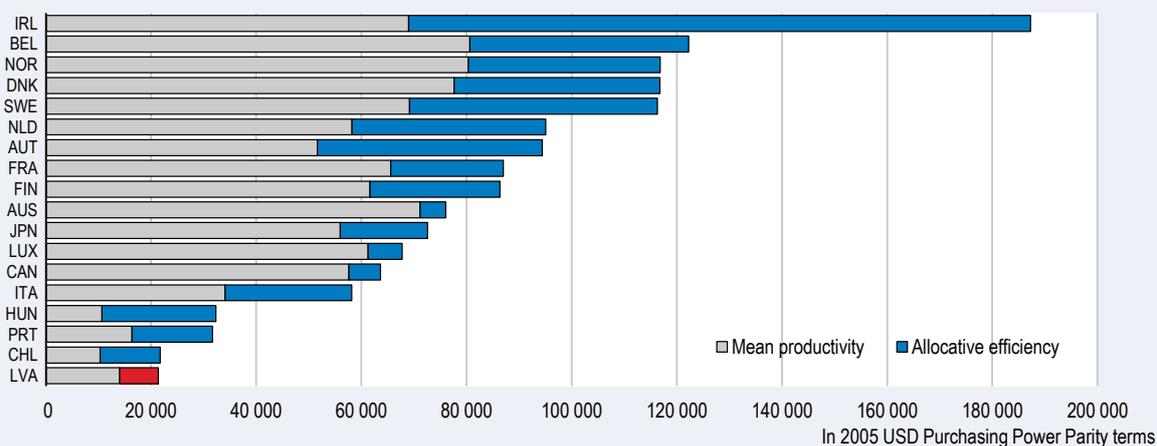
$P_{i,t}$  is the productivity level of a firm  $i$  at time  $t$ ,  $N$  represents the number of firms in a sector,  $\theta_{i,t}$  is the employment share of firm  $i$  at time  $t$ ,  $\bar{P}_t$  and  $\bar{\theta}_t$  are sector-level averages.

The second term, referred to as allocative efficiency, captures to what extent more productive firms are larger than others in terms of employment, or in other words the extent to which resources are efficiently allocated to the most productive firms, helping them grow.

Latvia's labour productivity in the manufacturing sector is low compared to high-income OECD countries partly due to low productivity of Latvian firms. But the contribution to productivity from more efficient resource allocation is also low (Figure 1.3). The larger size of more productive firms (allocative efficiency) contributes about 35% to aggregate productivity, lower than some countries like Hungary where this share is 67%.

**Figure 1.3. Firm-level productivity and efficiency of resource allocation are low**

Decomposition of labour productivity into mean productivity and allocative efficiency, manufacturing sector



*Note:* Data refer to 2011 due to limited availability of data for other countries in more recent years.

*Source:* Latvia data are from Benkovskis, K., O. Tkacevs and N. Yashiro (2019), "The role of resource allocation in Latvia's productivity", OECD Economics Department Working Papers, OECD Publishing, Paris, forthcoming. The Ireland data are from: Papa, J., Rehill, L., and O'Connor, B., "Patterns of Firm Level Productivity in Ireland", OECD Productivity Working Papers, 2018-15, OECD Publishing, Paris. Other countries' data are from Berlingieri, G., et al. (2017), "The Multiprod project: A comprehensive overview", OECD Science, Technology and Industry Working Papers, No. 2017/04, OECD Publishing, Paris.

### The contribution of resource allocation to labour productivity growth

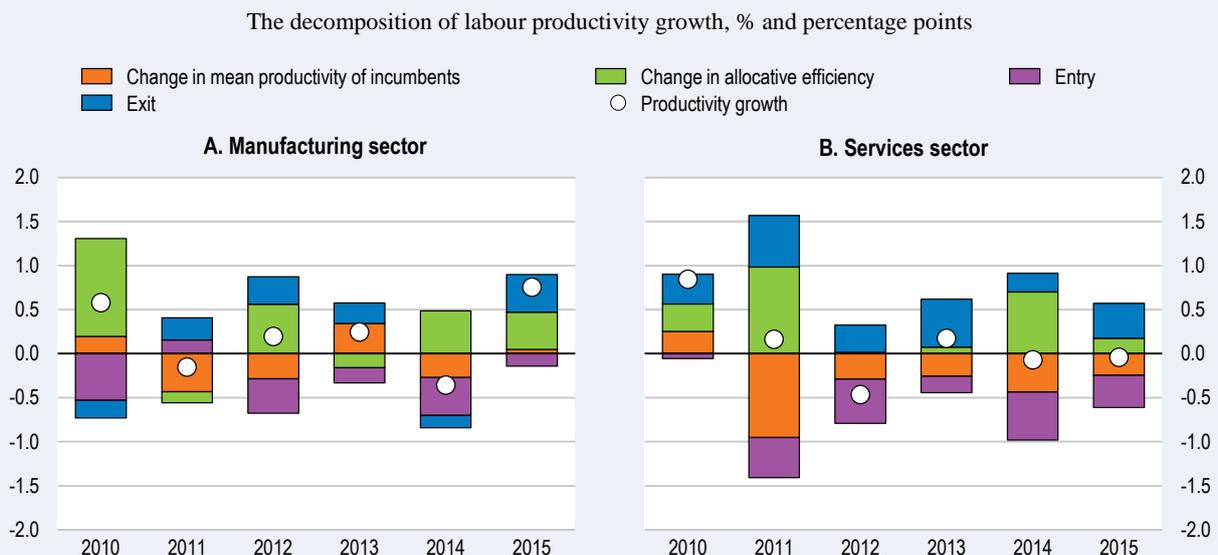
Sector-level productivity growth  $\Delta p_t$  can also be decomposed into the contribution of improving resource allocation and the mean productivity growth of Latvian firms as well as the entry of new firms and the exit of unproductive firms, following the dynamic version of the Olley-Pakes decomposition developed by Melitz and Polanec (2015):

$$\Delta p_t = \frac{1}{N^C} \sum_{i \in C} (p_{it} - p_{it-1}) + \Delta \text{cov}_{i \in C}(\theta_{it}, p_{it}) + \left( \sum_{i \in E} \theta_{it} \right) \cdot (p_t^E - p_t^C) + \left( \sum_{i \in X} \theta_{it-1} \right) \cdot (p_{t-1}^C - p_{t-1}^X) \quad (2)$$

The first term is the unweighted change of the productivity of incumbents; the second term is the change in allocative efficiency among incumbent firms through stronger growth of more productive firms; and  $p_t^E$ ,  $p_t^C$ ,  $p_{t-1}^X$  are the weighted productivity averages of respectively entering, incumbent and exiting firms computed in the relevant time period.  $\theta_{i,t}$  is the employment share that sums up to one when aggregated across firms within each group.

The improvement in allocative efficiency contributed positively to labour productivity growth in both manufacturing and service sectors, along with the exit of unproductive firms (Figure 1.4).

**Figure 1.4. Better resource allocation has contributed to productivity growth**



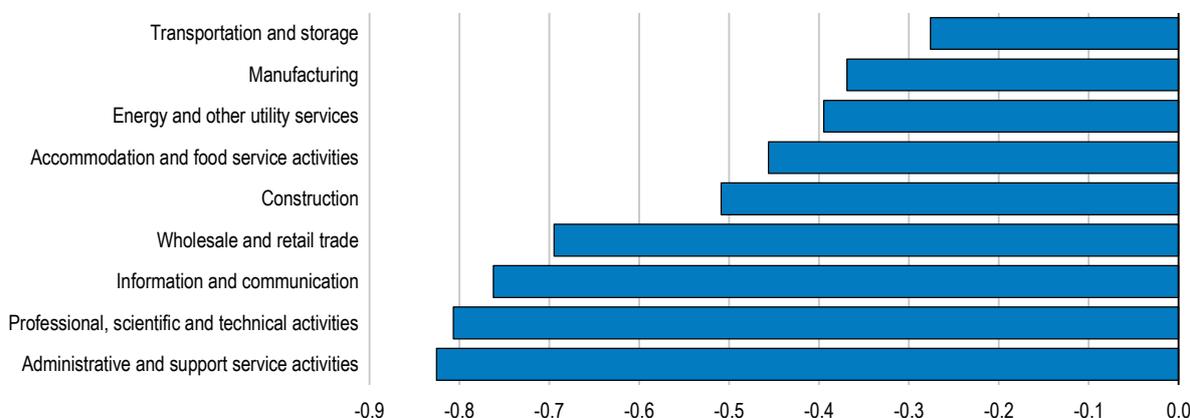
*Note:* Allocative efficiency refers to the extent to which firms with higher productivity have larger shares in employment.

*Source:* Benkovskis, K., O. Tkacevs and N. Yashiro (2019), "The role of resource allocation for Latvia's productivity", OECD Economics Department Working Papers, OECD Publishing, Paris, forthcoming.

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**Figure 1.5. Very unprofitable firms are operating especially in some service sectors**

The mark-up of least profitable firms compared to the median mark-up, average over 2011-2015



*Note:* The chart displays for each sector the gap between the mark-ups of the least productive firms (defined as firms corresponding to the bottom decile of the productivity distribution) and the median mark-ups. A larger gap indicates a larger variance in mark-ups in the lower half of the distribution (firms with profits that are below the median). Mark-ups are computed from the microdata of Latvian firms, as the ratio of value added excluding labour costs and turnover. Mark-ups are averaged over the period 2011-15.

*Source:* Benkovskis, K., O. Tkacevs and N. Yashiro (2019), “The role of resource allocation in Latvia’s productivity”, OECD Economics Department Working Papers, OECD Publishing, Paris, forthcoming..

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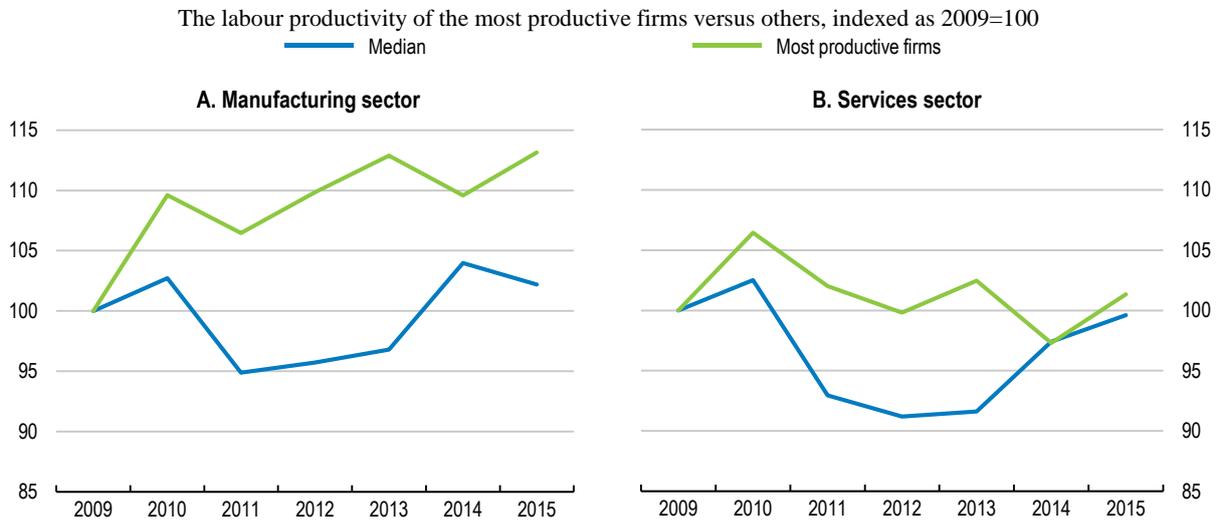
Productivity growth of incumbent firms has been subdued or negative, especially in the service sector (Box 1.1, Figure 1.4). Only the most productive manufacturing firms experienced robust productivity growth after the crisis, while productivity growth was subdued among other less productive firms (Figure 1.6, Panel A). Such divergence in productivity across firms suggests that only the most technologically advanced firms have capitalised on new technologies while their diffusion throughout the economy has been limited, as observed across several OECD countries (Andrews et al., 2016). In services, productivity growth was weak even for the most productive firms (Figure 1.6, Panel B), unlike in other OECD countries where those firms realised considerably faster productivity growth (Andrews et al., 2016). The weak performance of the frontier firms in the service sector might be due to limited competition and a large role of state-owned enterprises in some service sectors.

Only a few Latvian firms adopt new technologies or introduce organisational improvements and more efficient production techniques. In particular, Latvia lags considerably behind other OECD countries in the use of digital technologies (Figure 1.7). Although the take-up of high speed broadband is above the EU average (European Commission, 2018a), poor ICT skills and skills that complement ICT, such as advanced management, limit the capacity of Latvian firms to make the best use of the latest digital technologies such as big data analysis. For instance, a half of the population lack basic digital skills (European Commission, 2018a).

The share of small firms is particularly large in Latvia (Figure 1.8). Their productivity is considerably lower than that of large firms, and such gap in productivity is larger than in many other OECD countries (Figure 1.9). This reflects the lower capacity of small firms to adopt new technologies and improve the efficiency of production procedures. Indeed, the share of innovating SMEs is among the lowest in the OECD (Figure 1.10). Policies to

improve skills and access to finance and to stimulate innovation therefore always have to adapt to the specific needs of small enterprises.

**Figure 1.6. Only the most productive manufacturing firms enjoyed high productivity growth**

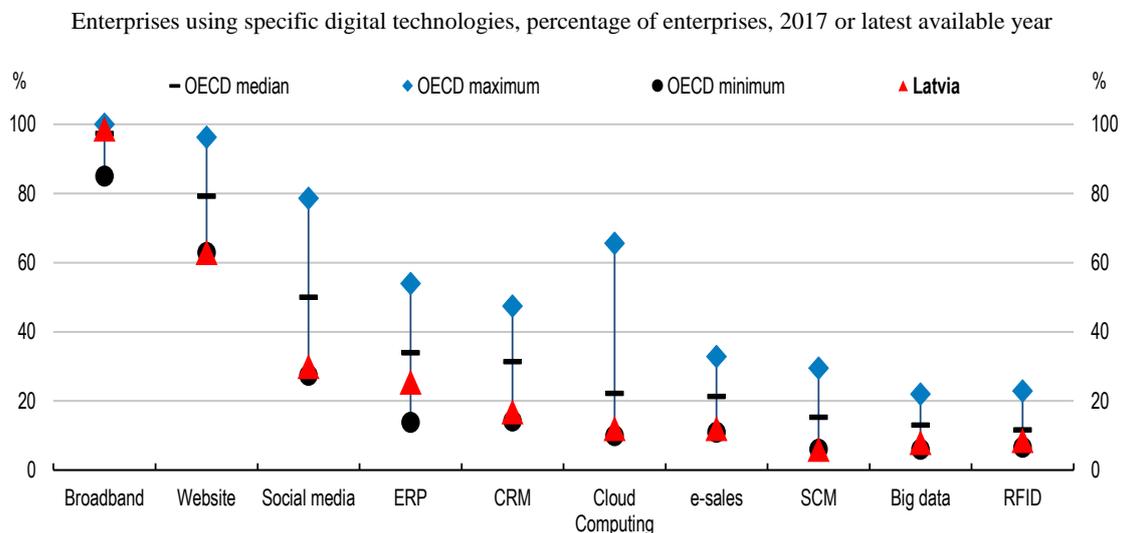


*Note:* The most productive firms are those at the top decile of the productivity distribution of the corresponding sector. The other firms are represented by the median of the productivity distribution. Only the firms that were active during 2007-2015 are analysed. The top decile and median firms can differ from year to year.

*Source:* Benkovskis, K., O. Tkacevs and N. Yashiro (2019), “The role of resource allocation in Latvia’s productivity”, OECD Economics Department Working Papers, OECD Publishing, Paris, forthcoming..

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**Figure 1.7. Latvian firms lag behind in the use of digital technologies**

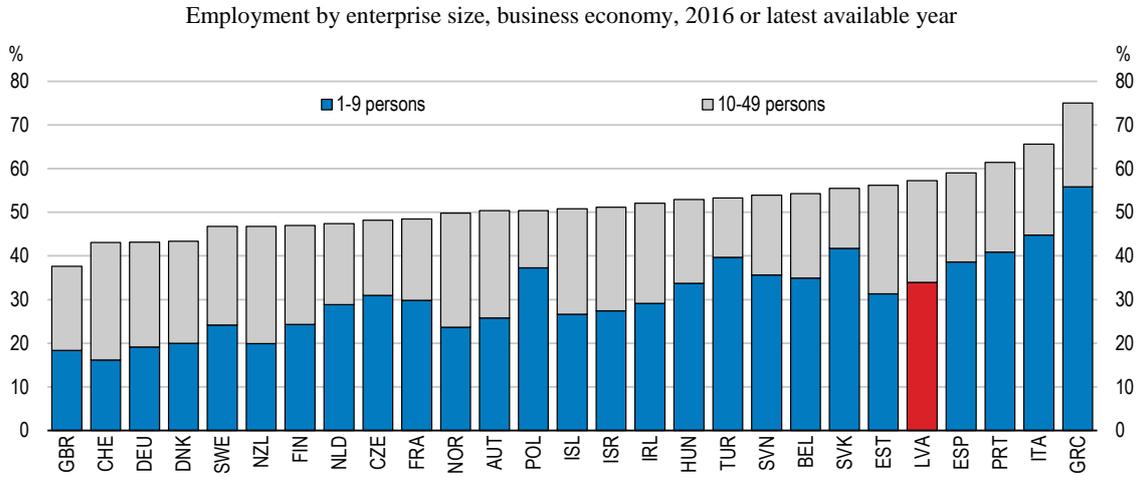


*Note:* Data cover 26 OECD countries and correspond to the share of businesses with ten or more employees with broadband connection (fixed or mobile); with a website or home page; using social media; using Enterprise Resource Planning (ERP) software; using Customer Relationships Management (CRM) software; purchasing cloud computing services; receiving orders over computer networks; sharing electronically information with suppliers and customers (SCM); using Radio Frequency Identification (RFID) technology; and having performed big data analysis (2018 data).

*Source:* OECD ICT Access and Usage by Businesses Database and Eurostat.

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**Figure 1.8. Employment is concentrated in small firms**



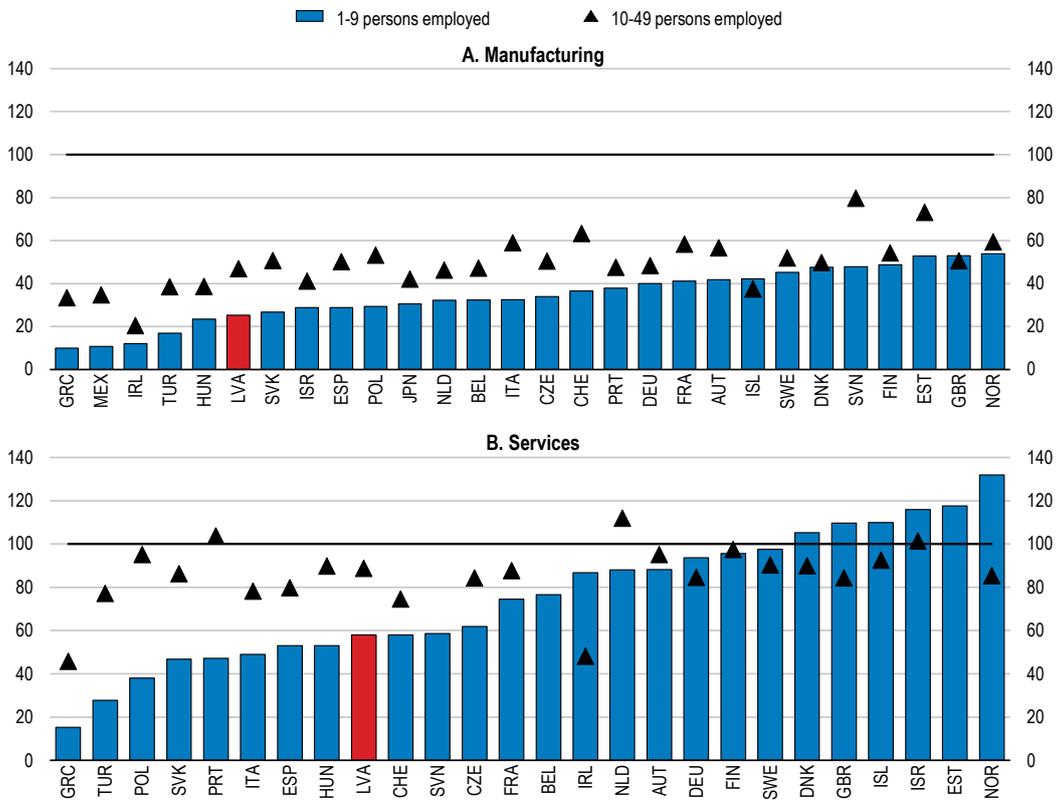
Note: Percentage of all persons employed.

Source: OECD Structural and Demographic Business Statistics (SDBS) database.

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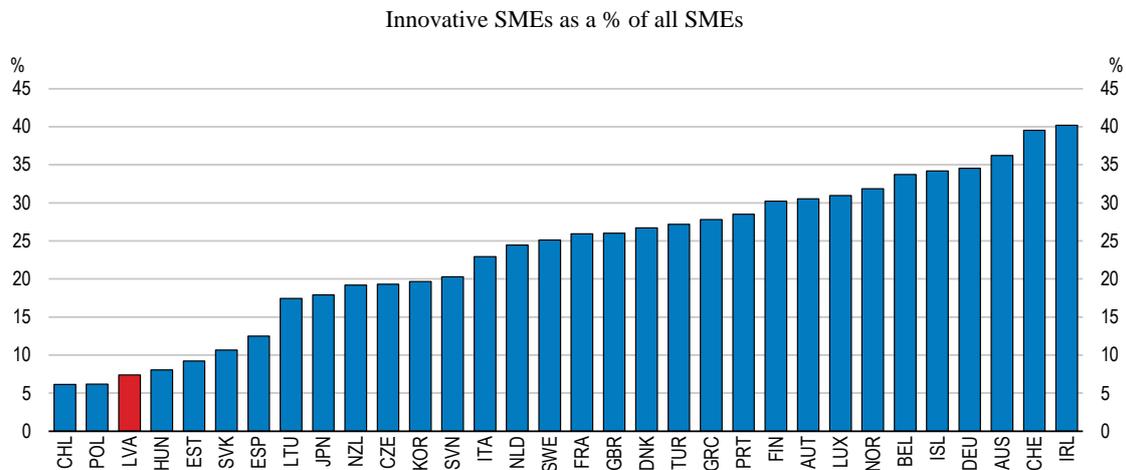
**Figure 1.9. The productivity gap between large and small firms is wide**

Value added per person employed, index 250+ (large enterprises) =100, 2016 or latest available year



Source: OECD Structural and Demographic Business Statistics database.

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**Figure 1.10. Only a small share of SMEs innovate**

*Note:* Innovating SMEs are those introducing product, process, marketing or organisational innovation.

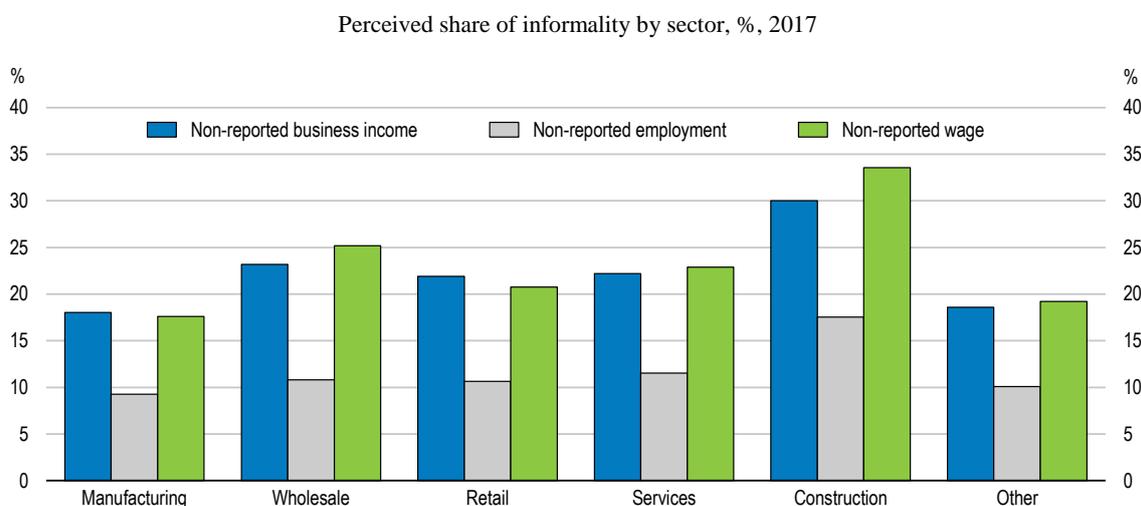
*Source:* OECD (2017), OECD Science, Technology and Industry Scoreboard 2017: The digital transformation, OECD Publishing, Paris.

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The next section discusses how reducing the high level of informality can contribute to productivity growth. It is followed by a section on policies to strengthen capital allocation through improved bank lending and SME's access to finance. The chapter then discusses policies to ensure fair competition in markets dominated by state-owned enterprises. This is followed by a review of policies to strengthen workers' skills and better align them with labour market needs, and policies to improve the quality of research, innovation and knowledge transfer from research institutions to firms. The chapter then highlights the need to ensure the continuity of a wide range of essential policy measures financed by EU funds and enhance their effectiveness in boosting productivity growth. The final section discusses the importance of establishing an effective institution that is tasked to promote productivity growth.

### Fighting informality

The shadow economy, which comprises under-declared corporate income, income of unregistered firms, and income from illegal activities has decreased since the financial crisis, but is considered to have amounted to 24% of Latvia's GDP in 2018 (Sauka and Putniņš, 2019). Informal economic activities such as under-declaration of business income, employment or wage payment, are especially high in the construction sector, while they are relatively low in the manufacturing sector (Figure 1.11).

**Figure 1.11. Informality is particularly high in the non-manufacturing sectors**

*Note:* The chart summarises the perceived share of informal economic activities by the surveyed firm managers in the sector they operate.

*Source:* Survey on Latvian firm managers conducted by the Baltic International Centre for Economic Policy Studies (BICEPS) under the Latvian State Research Programme SUSTINNO.

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Widespread informality constrains productivity growth. For instance, firms under-declaring their revenues cannot prove their profitability and creditworthiness, making it difficult to access credit to finance their investment. There are also negative spillovers, as formal firms operating in sectors where a perception of informality is high can face tighter lending conditions (Distinguin et al., 2016). The inability to finance their investment prevents firms from improving competitiveness and may lock them in the informal sector. Unfair competition with firms under-declaring corporate profits and employment and thus saving on tax and social security contributions erodes the market shares and profits of formal firms. This would reduce the ability of formal firms to finance investment and grow.

### *Engaging social partners to fight informality*

The government has been engaging in extensive efforts to reduce informality. Co-ordination between relevant ministries was improved to make the fight against informality more effective. Ministers meet regularly to discuss progress and define the way forward. A recent agreement with the construction sector increased the sectoral minimum wage, while introducing real-time electronic record keeping of workers on construction sites, making under-reporting of wages and working hours more difficult. Declared working hours have increased substantially as a result and similar agreements with other sectors are planned. The government has also developed guidelines for public procurement procedures to help buyers assess bidders' compliance risks, including with tax and labour laws.

Improving trust in the government and the rule of law is essential for strengthening tax morale and incentives for compliance by firms and workers (OECD, 2017a). The government has foreseen larger budgets and new posts for several law enforcement agencies, including the Financial Regulator, the Financial Intelligence Unit and the Corruption Prevention and Combating Bureau (KNAB). However, actual hiring procedures have been slow and staff have not increased as planned in any of these institutions.

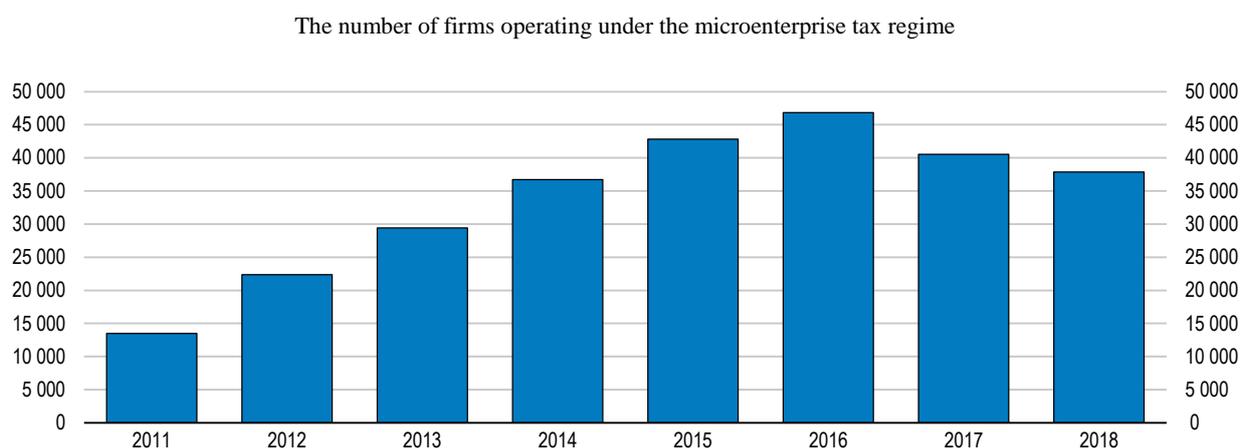
Providing for transparency and consultation in law-making and ensuring that law enforcement agencies build good relations with businesses and citizens help them comply with laws. Such efforts are equally important as fines for infractions. The recent “Consult first” initiative is welcome. Under this initiative, large law enforcement agencies, including the tax and insolvency administrations, support business compliance, instead of fining firms immediately for infractions.

### *Adequate tax reforms can reduce informality*

Some features of the tax system likely encourage under-declaration of profits. Some Latvian firms may hide part of their revenue to remain eligible for the special tax regime for microenterprises. The microenterprise tax regime adopted in 2010 provides strong incentives for firms to stay small or split into smaller units to avoid growing above the eligibility threshold (Jacobs et al., 2017). This effect was most pronounced in sectors with high labour costs, such as professional services. The loss of efficiency due to such threshold-induced distortions can be significant. It is estimated at around 3.5% of GDP in the case of France (Garciano et al., 2016).

The number of firms under the microenterprises tax regime increased by 350% between 2011 and 2016 (Figure 1.12), accounting for 24% of all economically active firms at its peak in 2016 according to the Central Statistical Bureau. The share of enterprises declaring low profits increased significantly during the same period (Benkovskis et al., 2019). The number of microenterprises decreased after 2016 as the eligibility for the regime was tightened, but remains large (Figure 1.12). The government should phase out the microenterprise tax regime, considering its potentially negative impact on productivity growth. The regime can be replaced for instance by a tax credit targeted at new firms, which offsets corporate income tax payments or social security contributions for a limited period of time after their birth (Jacobs et al., 2017).

**Figure 1.12. The number of firms using the microenterprise tax regime remains large**



Source: The Bank of Latvia

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The corporate tax reform in 2018 that deferred the taxation of corporate income until its distribution was partly intended to entice more companies to fully declare their profits, improving access to credit. However, there are considerable uncertainties about the extent

to which the tax reform will reduce informality, increase investment and support productivity growth. In particular, the reform may undermine productivity growth by creating distortions to capital allocation (OECD, 2009). For instance, by discouraging the payment of dividends, it may impede capital mobility and lock in capital in old and potentially less productive firms.

One assessment of a similar tax reform in Estonia argued that the reform increased reported corporate profits (Praxis Center for Policy Studies, 2010). On the other hand, Hazak (2009) concluded that Estonian companies reacted mainly by accumulating liquid assets rather than investing. The evidence regarding effects of the tax reform on productivity is also mixed (Staeher, 2014; Masso et al., 2013). The government should carefully evaluate the impact of the reform on formality, investment and firms' performance to assess whether this reform yields the expected benefits.

## Improving the allocation of capital

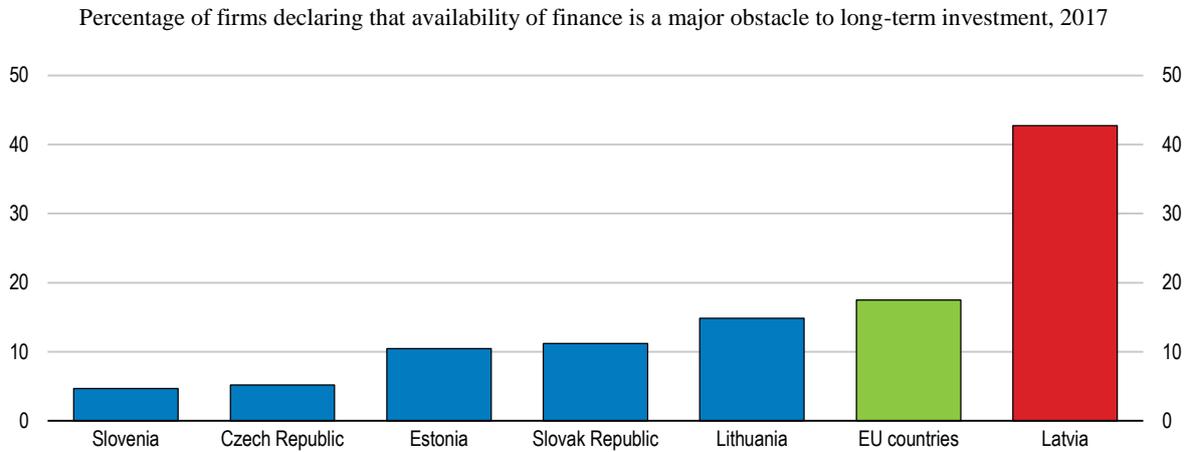
### *Access to finance remains tight for small young firms*

Good access to finance at a reasonable cost is a necessary condition for cash-constrained firms to invest in productivity-enhancing capital (OECD, 2015a). In addition, smooth allocation of capital to more productive firms boosts Latvia's overall productivity by allowing those firms to become larger (Midrigan and Xu, 2014; Moll, 2014). In Latvia, low debt recovery rates and strict capital requirements for banks induced a substantial tightening of lending standards in the aftermath of the global financial crisis. Although corporate indebtedness has declined significantly since then, investment remained weak and the allocation of capital improved little (Benkovskis, 2015).

Lending to non-financial corporations in Latvia has remained subdued even though borrowing costs have reached historically low levels, supported by accommodative ECB monetary policy. The weak credit growth can be partly attributed to the weak demand for banking credit from the corporate sector. In fact, since 2009, corporate savings have significantly exceeded business investment on the aggregated level. This suggests that the appetite for investment by Latvian firms remains moderate overall, even if they could finance investment with internal funds.

At the same time, some firms are subject to credit constraints, and the share of such firms is well above the EU average or levels seen in neighbouring countries (Figure 1.13). Like in most OECD countries, small firms lack sufficient collateral and business history, which makes it harder for them to access credit (OECD, 2019a). According to a survey conducted by the Bank of Latvia, less than half of Latvian SMEs complied with lending standards for the review of their loan application (Bank of Latvia, 2017). Other indicators also point to small firms' apprehension when applying for debt and using banking services. The share of firms that do not apply for bank financing because of possible rejection or do not feel confident talking about financing with banks is among the highest in the EU (Figure 1.14).

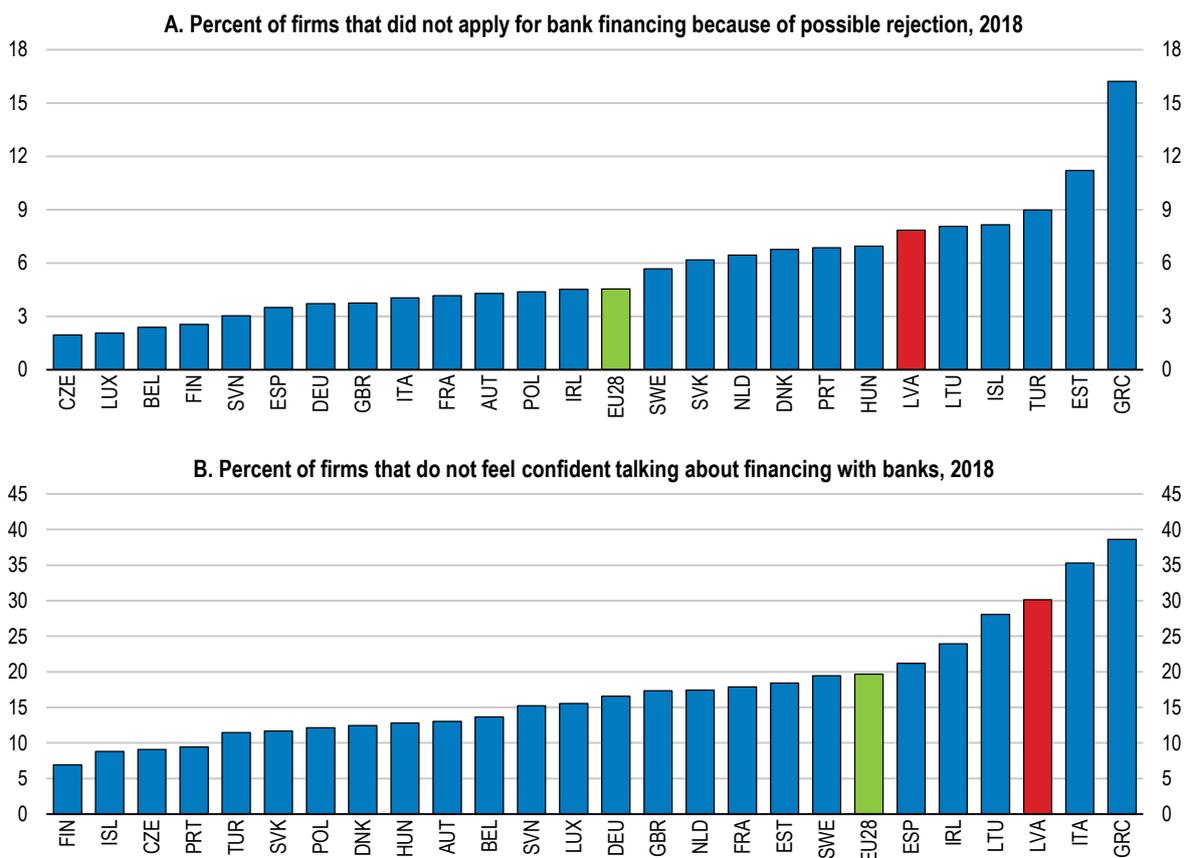
**Figure 1.13. Access to finance remains an obstacle to investment**



Source: European Investment Bank - EIBIS, EIB Investment Survey

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**Figure 1.14. A significant share of firms are reluctant to apply for bank loans**



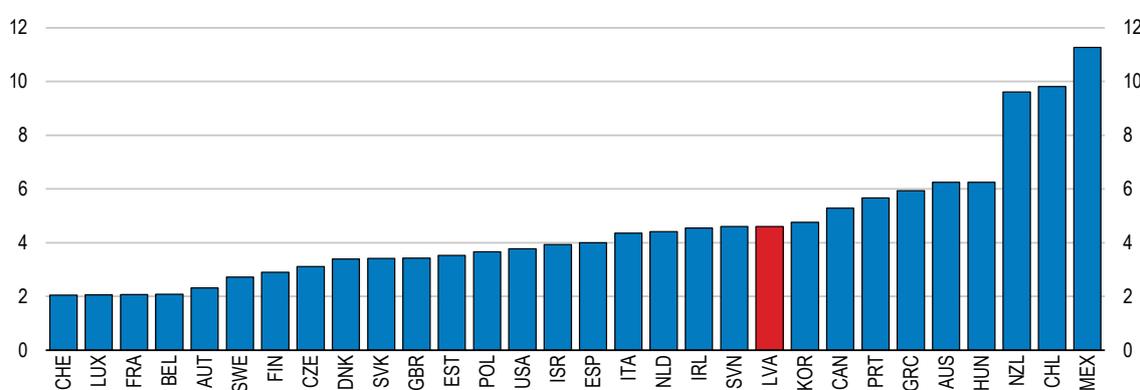
Source: 2018 SAFE Survey on the access to finance of enterprises.

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Tight collateral requirements and conservative lending standards have changed little since the financial crisis (OECD, 2019a). Low debt recovery rates in the aftermath of the crisis owing to an inefficient insolvency regime resulted in large losses by credit institutions and a high perceived lending risk (European Commission, 2018b). This perception still prevails, as indicated by higher borrowing costs in Latvia compared to other euro area countries (Figure 1.15). The bank lending survey conducted by the ECB also reveals that credit institutions plan to maintain a conservative lending stance (Bank of Latvia, 2018). Raising the debt recovery rate which remains among the lowest in the OECD (Figure 1.16) is essential for facilitating access to credit by small young firms. At the same time, alternative channels of allocating capital to firms with high growth potential need to be developed.

**Figure 1.15. Borrowing costs are relatively high**

SME interest rates, average 2011-17

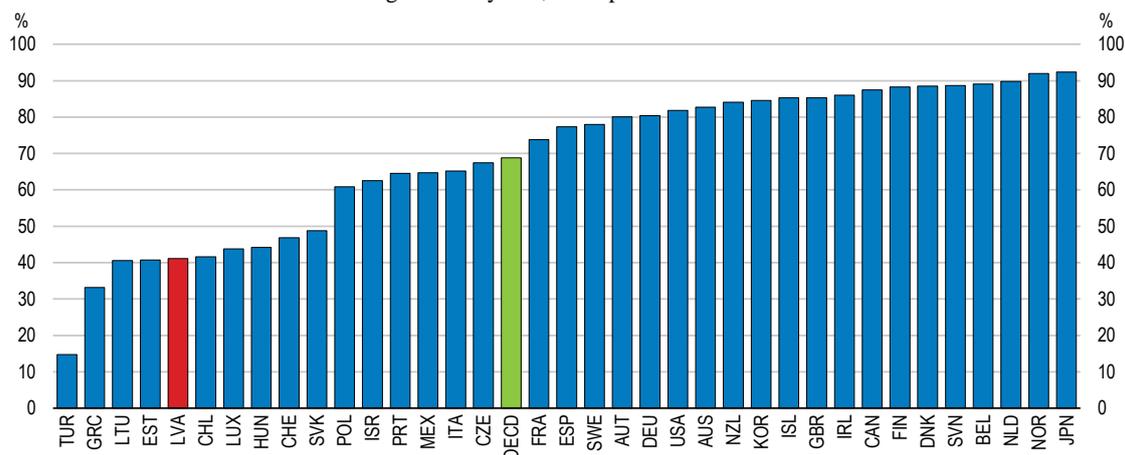


Source: *Financing SMEs and Entrepreneurs: An OECD Scoreboard* (dataset).

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**Figure 1.16. The debt recovery rate is low**

Average recovery rate, cents per a dollar of credit



Note: The recovery rate is calculated based on the time, cost and outcomes of insolvency proceedings and is recorded as cents on the dollar recovered by secured creditors. The calculation takes into account whether the business emerges from the proceedings as a going concern or the assets are sold piecemeal. The costs of the proceedings are deducted. The value lost as a result of the time the money remains tied up in insolvency proceedings is also deducted. The recovery rate is the present value of the remaining proceeds.

Source: World Bank, *Doing Business 2019* database.

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### *Building a transparent and efficient insolvency regime*

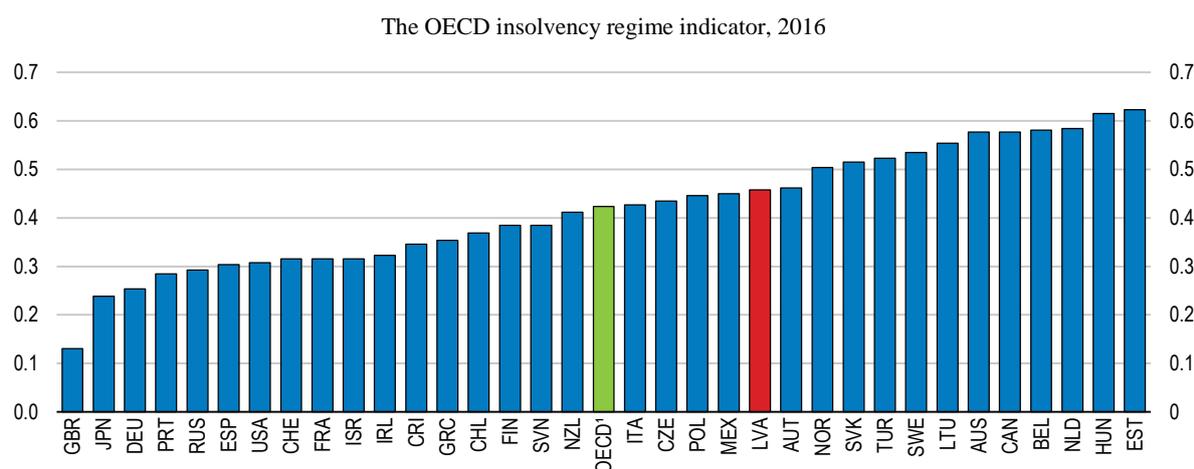
An efficient insolvency regime plays an important role in improving the resource allocation in Latvia. It would contribute to higher credit growth by raising the debt recovery rate and facilitate the exit of unproductive firms, so that scarce resources like skilled workers can be reallocated to more productive firms (Adalet-McGowan et al., 2017).

Latvia's insolvency regime was plagued by fraudulent behaviour due to low penalties for abusers and low accountability of insolvency administrators (OECD, 2017a). Improving transparency of insolvency proceedings has thus been high on the political agenda over the past decade. A comprehensive reform simplified the insolvency administration and introduced more stringent requirements for the certification and selection of insolvency administrators as well as the disclosure of their income and assets.

### *The insolvency framework needs further improvement*

The OECD indicator of insolvency regime, which covers a wide range of measures that facilitate smooth exit of non-viable firms and debt recovery aside those increasing the transparency of insolvency proceedings (Adalet McGowan et al., 2017), indicates that Latvia can further enhance the efficiency of its insolvency regime by incorporating some best practices among OECD countries (Figure 1.17).

**Figure 1.17. The insolvency regime could be more efficient**



1. Unweighted average of available countries.

*Note:* A higher value corresponds to an insolvency regime that is most likely to delay the initiation of and increase the length of insolvency proceedings. Composite indicator based on 13 components: time to discharge; exemption of assets; early warning mechanisms; pre-insolvency regimes; special insolvency procedures for SMEs; creditor ability to initiate restructuring; availability and length of a stay on assets; possibility and priority of new financing; possibility to 'cram-down' on dissenting creditors and dismissal of management during restructuring; degree of involvement of courts; distinction between honest and fraudulent entrepreneurs and the rights of employees. For more details, see Source.

*Source:* Adalet McGowan, M., D. Andrews and V. Millot (2017), "Insolvency Regimes, Zombie Firms and Capital Reallocation", OECD Economics Department Working Papers, No. 1399

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For instance, swift initiation of preventative restructuring can prevent the liquidation of viable firms that are experiencing financial distress. Delaying these procedures reduces the chance of survival and is likely to lower the liquidation value of failing firms, resulting in low debt recovery (Adalet McGowan and Andrews, 2018). In Latvia unlike in other OECD

countries, creditors are given the right to initiate liquidation but not restructuring. The government should consider endowing creditors with this right, considering that firm managers may not initiate restructuring sufficiently early. Indeed, they often need to be nudged by creditors to initiate the proceedings. At the same time, adequate conditions must be attached to the initiation. In the United Kingdom, where both the debtor and creditors can initiate restructuring, the proceedings can only begin when the initiator can convince the court that the firm is or likely to be insolvent, and that the restructuring is likely to allow the firm's rescue or to achieve a better result for creditors than a liquidation. If the liquidation cannot be avoided, the restructuring is approved only if it ensures an orderly distribution of the proceeds from the sale of the firm's assets to creditors (Eurofound, 2017a).

It is equally important that firms facing risks of insolvency take adequate measures at an early stage, so that they can avoid entering insolvency proceedings in the first place. Latvia's insolvency regime includes a pre-insolvency regime that allows out-of-court settlement, such as a voluntary agreement to reduce debt payments. However, at that stage, the insolvency proceedings can only be avoided if all creditors agree to keep the company going (OECD/European Commission/ETF, 2014). The government should introduce early-warning mechanisms, like the one provided in Denmark whereby entrepreneurs can receive a state-funded confidential assessment of the viability of their firm and support from experts to turn around a company facing potential risks. Such a service would be particularly useful for Latvian firms because they are often small and not professionally managed, and therefore more exposed to risks of financial distress from bad managerial decisions.

High fees such as insolvency deposits and complex procedures associated with insolvency proceedings can discourage small firms from filing for insolvency. Court fees to start judicial proceedings in Latvia are higher than in other European countries (European Commission, 2018c). Furthermore, the provision of legal aid is limited in terms of financial resources and scope (CEPEJ, 2018). The income threshold for the eligibility for legal aid is more than 20% below the poverty line, a level that is lower than in other European countries, including Estonia and Lithuania (European Commission, 2018c). Access to legal aid is thus limited for small business owners. As a result, small firms with very low profitability may linger in the market, preventing the reallocation of resources (Adalet McGowan et al., 2017). In order to improve access to the insolvency regime, the government should consider easing the eligibility for legal aid and allowing administrative expenses of insolvency proceedings to be paid in instalments.

### *Improving the quality of court decisions*

Measures to improve the quality of the judicial system are a necessary complement to the reform of insolvency administrative procedures. The reorganisation of the judicial map completed in 2018 has reduced the number of courts by 70%. The resulting concentration of judges into larger courts will allow some of them to specialise in insolvency cases, which could help strengthen expertise and ensure more uniform and predictable judgements (OECD, 2018a). There is also an ongoing large scale training programme for judicial staff aimed at enhancing capabilities in managing judicial processes and professional knowledge.

Nevertheless, the judicial system's capacity to deal with professional misconduct by judges has been a concern (European Commission, 2018b). Disciplinary investigations rarely result in sanctions, suggesting that judicial discipline has weak deterrent effects (CEPEJ,

2018). The credibility and effectiveness of judicial discipline can be reinforced by improving the system of investigating disciplinary offences committed by judges (CEPEJ, 2018). Currently, complaints are first received by different judicial bodies including the Judicial Ethics Committee, the Minister of Justice, or presidents of courts, which carry out preliminary investigations. Those bodies then report to the Judicial Disciplinary Committee (JDC). However, investigation approaches can differ among them and there are considerable uncertainties about how the cases are handled or whether they are neutral in term of investigating judges. In order to ensure consistency in the judicial disciplinary process, the government should consider establishing a judicial inspectorate, as is common in other OECD European countries. In addition, the deadlines for dealing with disciplinary cases should be lengthened in light of international best practices. In particular, the time limit of three months for running investigations could be extended for complex cases to ensure high-quality decisions by the JDC.

### *Diversifying credit supply*

Bank loans remain the major channel of credit supply in Latvia. Non-bank loans are increasing, but account for only 19% of total domestic loans to the non-financial private sector. The value of outstanding loans of non-bank financial institutions was five times smaller than that of credit institutions (Bank of Latvia, 2018). Furthermore, domestic banking is dominated by large foreign-owned banks. This may be contributing to the relatively high reluctance of SMEs to apply for bank loan (see Figure 1.14), as large credit institutions often apply more stringent requirements for lending applications (Bank of Latvia, 2017), and foreign-owned banks tend to engage less in relationship lending (Stein, 2002; Havrylchuk, 2012; Havrylchuk and al., 2012). A potential issue in Latvia could be that subsidiaries of foreign banks make little efforts to acquire tacit information on firms' competitiveness through repeated interactions, as they are subject to the lending policy of parent banks, which bases the lending decision on corporate financial reports and lending history (Rupeika-Apoga and Solovjova, 2017).

Strengthening the role of relationship lending can support SMEs' financing and improve stability of business finance, not least during credit cycle downturns (Beck et al., 2015; Banerjee et al., 2017). For instance, credit unions (e.g. not-for-profit member-owned financial cooperatives funded largely by voluntary member deposits) provide credit to small firms that lack credit history, liquidity and physical collateral (Mazure, 2011). There are 33 credit unions operating in Latvia, mostly in rural areas. They are however minor players, with total assets amounting to only EUR 29.3 million in 2017. However, expanding their role would require subjecting them to stricter prudential regulations.

Crowdfunding is another promising alternative source of finance, but it remains, for now, mainly focused on providing consumer loans to foreign borrowers (Bank of Latvia, 2018). To support the development of a crowdfunding market and to increase its role in financing the investment of Latvian firms, licencing and transparency requirements comparable to credit institutions should be introduced. Furthermore, information on creditors' rights and risks should be provided to reinforce protection of investors. Strengthening investors' confidence would help platforms scale up and entrepreneurs to access a wider base of funders.

### *Strengthening start-up and growth financing*

Small innovative firms often lack sound collateral and an established credit history needed to access bank loans. They therefore need start-up and growth financing to finance their

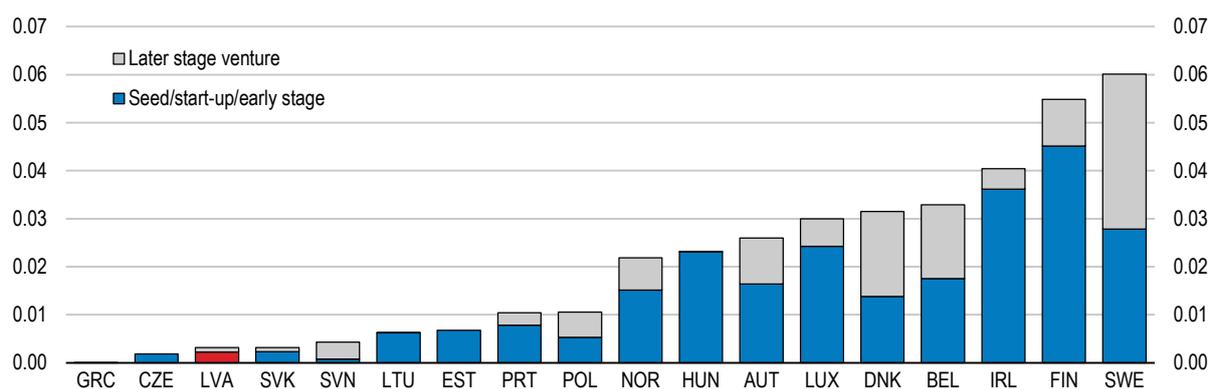
investment. The availability of seed and early-stage financing is found to help firms adopt digital technologies, across OECD countries (Andrews et al., 2018).

The government established a single development financing institution Altum, offering a wide range of start-up and growth financing through public loans, credit guarantees, and microfinance measures. In 2018, conditions for access to loans for small new businesses have been relaxed to broaden the scope of clients. Such steps are welcome although the government should be mindful of the risk that generous public loans crowd out private risk-oriented finance.

Venture capital funds have grown fast in Latvia in the past few year, thanks to the injection of substantial public financing. Recent policy action focused on developing pre-seed, seed and venture stage capital, as previously available measures were dominated by later-stage growth financing. The absolute size of the venture capital market however remains low (Figure 1.18), due to a difficulty in identifying good investment projects. The development of venture capital should be further enhanced by reducing administrative burdens, for instance by simplifying registration procedures and reporting obligations for running a fund. Plans to reduce information requirements for venture capital funds while remaining in line with EU regulation are thus welcome.

**Figure 1.18. Venture capital investments remain low**

Venture capital investments, % of GDP, 2017 or latest available year



Source: OECD (2018), Entrepreneurship at a Glance Highlights 2018.

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## Enhancing competition

### *Competition can be strengthened in some sectors*

A healthy degree of competition, through vigorous market entry or import penetration, can encourage innovation and corporate efforts to trim inefficiency (Aghion et al., 2005; Pavcnik, 2002). Also, more competition friendly regulatory settings are associated with a higher share of firms adopting digital technologies (Andrews et al., 2018). More competitive markets facilitate the allocation of resources to the most productive firms, allowing innovative firms to grow faster while promoting the exit of unproductive firms (Arnold et al., 2011).

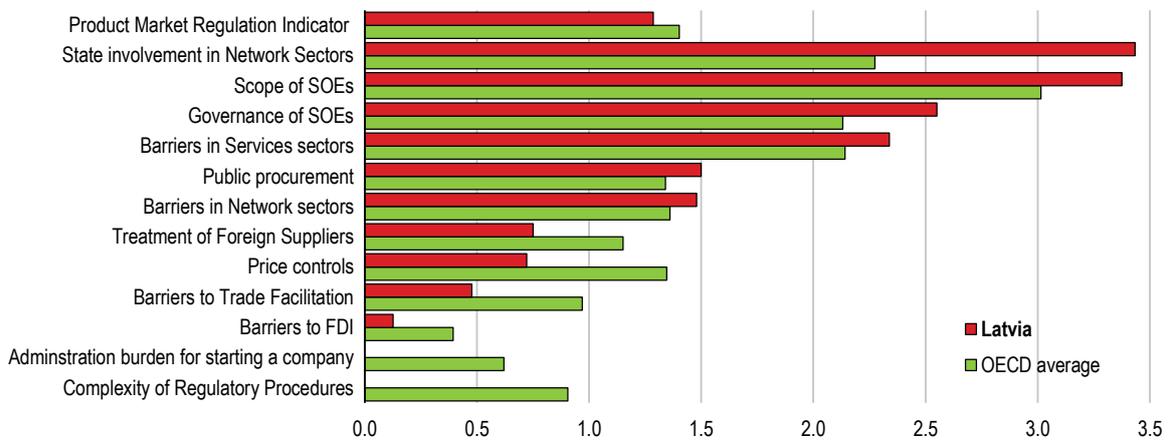
Overall, Latvia's regulatory settings are competition friendly, and administrative burdens for starting up a company are among the lowest in the OECD (Figure 1.19). This supports strong business dynamics with firms entering and exiting the market accounting for 16% and 9% of the total number of firms in 2016, whereas the EU average of such ratios was

9% and 7% respectively according to Eurostat data. On the other hand, state-involvement in network sectors is stronger than the OECD average, mainly due to the prevalence of state-owned enterprises (SOEs).

Latvia’s mark-ups are higher than in many advanced OECD economies (Figure 1.20). Mark-ups are particularly high in the electricity and gas sectors (Figure 1.21). In the electricity sector in particular, state-owned enterprises (SOEs) retain a large market share, despite the liberalisation of the retail markets and unbundling of network providers from suppliers (European Commission, 2018b).

**Figure 1.19. Regulatory settings are competition friendly overall**

OECD 2018 Product Market Regulation indicator and selected components (provisional)

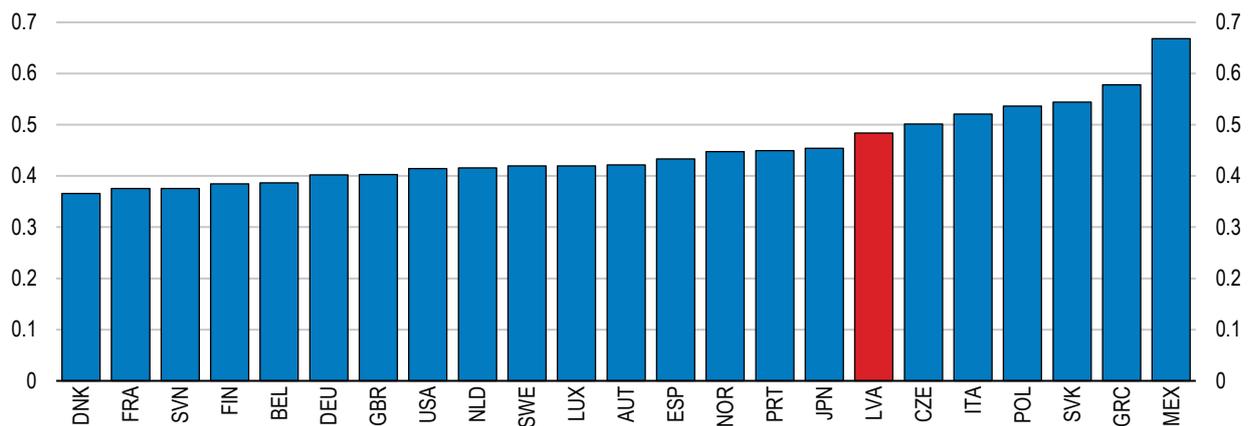


Note: The OECD average values are subject to change.  
 Source: OECD (2018) Product Market Regulation Indicators (preliminary).

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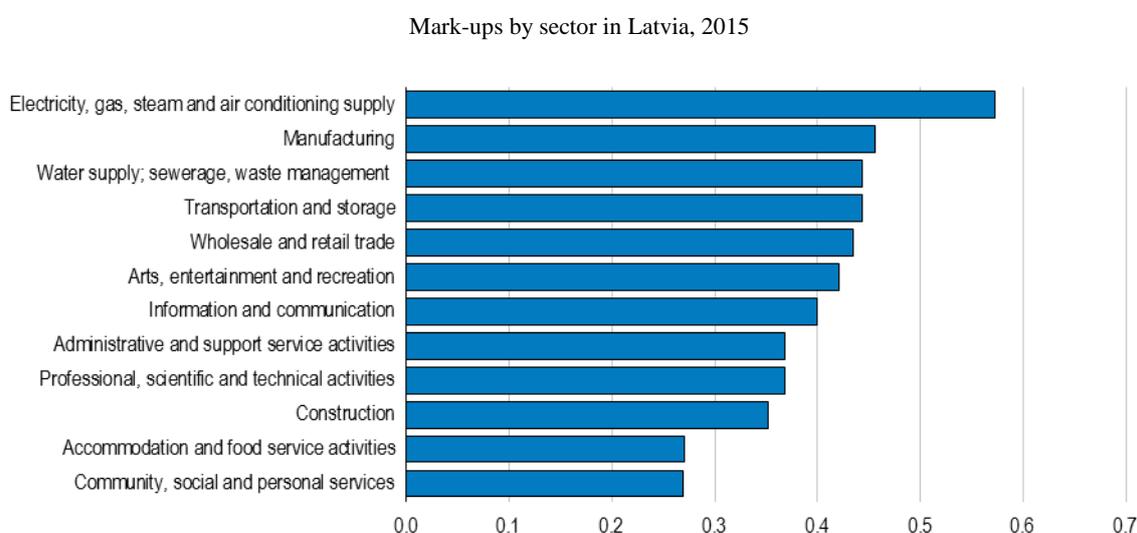
**Figure 1.20. Mark-ups are relatively high in Latvia**

Mark-up, averaged over 2011-2015



Note: Mark-ups are computed from the OECD STAN industry-level database, as the ratio where the numerator is the value added subtracted by the labour and capital costs and the denominator is the value added.  
 Source: Égert, B. and A Vindics (2019) “Mark-ups and product market regulation in OECD countries: what do the data whisper?” OECD Economics Department Working Paper, forthcoming.

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**Figure 1.21. Mark-ups are higher in sectors with many SOEs**

*Note:* Mark-ups are computed from the OECD STAN industry-level database, as the ratio where the numerator is the value added subtracted by the labour and capital costs and the denominator is the value added.

*Source:* Égert, B. and A Vindics (2019) “Mark-ups and product market regulation in OECD countries: what do the data whisper?” OECD Economics Department Working Paper, forthcoming.

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## *Ensuring fair competition between state-owned and private enterprises*

### *Reducing state ownership*

State-owned enterprises (SOEs) in Latvia account for a larger share of the economy than in many other OECD countries (OECD, 2017b). At the end of 2017, they comprised about 5.6% of turnover and 5.4% of employment in Latvia’s business sector. Such shares are higher if enterprises owned by municipalities are included. The largest SOEs by assets are found in electricity, transportation and telecommunication, where they have an important economic weight. Mark-ups tend to be high in such sectors (Figure 1.21). SOEs can distort competition if they have softer budget constraints and thus weaker incentives to increase efficiency. Reducing state ownership where it is sufficiently justified, would promote competition. Also, the full independence of the competition authority and sector regulators that oversee SOEs needs to be ensured.

Latvia introduced a new law regulating SOEs in 2015. Whenever necessary, but no less frequently than every five years, shareholder ministries must submit a re-assessment of the rationale for state ownership. However, the guidelines explaining the criteria for state ownership are vague and the first assessment in the end of 2015 and in 2016 resulted in little reduction of state ownership (OECD, 2017b). The Cross-Sectional Coordination Centre (CSCC), examines the assessment submitted by the line ministries and provides its opinion. However, the Competition Council and stakeholders such as business associations play only an advisory role. The government should use the forthcoming assessments as an opportunity for careful analysis of options for cutting back state ownership. More rigorous guidelines should be adopted on the scope of market failures that justify state ownership, and the services, goods and properties that are “of strategic importance” and thus need to

be supplied by SOEs. The government should engage in a transparent discussion involving social partners and the Competition Council in producing the new guidelines.

The holder of state capital shares submits to the Cabinet of Ministers the assessment of state ownership in the respective enterprise and the conformity of such ownership with conditions set out in the law. The rationale for state ownership is decided at the Cabinet of Ministers meeting. The Coordination Institutional Council (CIC) may also provide recommendations on the assessment and participate at the meeting, if its opinion is necessary for decision making or it has objections. These recommendations are not binding, however. The CIC consists of the shareholding ministries, representatives from the local governments, employers' associations and trade unions. To ensure that recommendations do not violate the principle of competitive neutrality, the Competition Council should be included in the CIC as a full member.

### *Improving the governance of SOEs*

When the privatisation of commercial activities by SOEs is not possible, the governance of SOEs should be strengthened further. The SOEs in Latvia are potentially exposed to undue political influence, due to a lack of supervisory boards (OECD, 2017b). Since 2015 the 12 largest commercially-oriented SOEs have a supervisory board, but the shareholding ministries have a strong influence in nomination committees. Giving the CSCC the authority to lead the nomination committee would strengthen the independence of the selection process.

Smaller SOEs still lack supervisory boards and are therefore governed by the shareholding ministries, although those mostly are non-commercially oriented enterprises or enterprises with mixed objectives. As recommended by the OECD Corporate Governance Accession Review of Latvia and the 2017 Economic Survey, the government should introduce supervisory boards at all commercially-oriented SOEs, regardless of their size, to improve their governance (OECD, 2017b). Such a provision is currently foreseen for medium-sized companies in a draft law.

Municipalities in Latvia are often eager to set up their own companies rather than promoting the entry of private firms into municipal services (OECD, 2018b). There is a concern that municipalities distort competition in public procurement by including conditions that favour their own enterprises (FICIL, 2018). Municipal enterprises account for 40% of the employment by all SOEs (European Commission, 2018b). While they are to a large extent subject to the same law that regulates SOEs, they are not monitored by the CSCC. A framework to keep in check the establishment and the scope of municipal enterprises and monitor their corporate governance needs to be strengthened, for instance, by extending the monitoring of large commercially-oriented municipality-owned enterprises by the CSCC.

## ***Bolstering competition law enforcement***

### *Strengthening the independence of the Competition Council*

An effective competition authority is vital to ensure competitive product and services markets, which in turn is central to efficient resource allocation. Although the Competition Council is granted independence by law to enforce the Competition Law, it remains a sub-organisation of the Ministry of the Economy. The Chairperson and the Council members are appointed and can be removed at the Minister of Economy's discretion. This increases the risk that the Competition Council may be subjected to the influence of shareholding

ministries when investigating anti-competitive behaviour by their SOEs, given ministries' interest in raising revenue through their companies. For instance, 90% of the profit of the electricity network operator is transferred to the government (European Commission, 2018b). At the same time, there have been large withdrawals from this particular SOE's equity to compensate for government decisions related with changes in renewable energy policies.

Strengthening the Council's independence could improve the confidence of market participants in fair conditions for competition, and thus incentives to invest, grow and improve efficiency. It would also improve the Council's position when negotiating with potential infringers about remedies. The Competition Council should also report directly to the parliament through its annual reports, as done in other OECD countries such as France and Germany (OECD, 2017b).

### *Endowing the Competition Council with adequate resources*

A sufficiently large, well-trained and specialised staff is essential for the effective enforcement of competition law and competition advocacy. However, the budget allocated to the Competition Council is smaller than those of authorities in countries of a similar size and disproportionately smaller compared to those in larger countries (Table 1.1). The Competition Council has struggled to fill vacancies for specialists with the right qualifications, partly because it cannot offer competitive compensation. Wages are below those of the private sector and other law enforcement agencies and regulators, causing a steady drain of staff. In 2017, there were 51 positions in the Competition Council, but only 44 were filled, and staff turnover was relatively high (Competition Council, 2018). Although a legislative step in 2017 enabled the Council to offer more competitive remuneration, the Council did not receive the additional funding needed to increase wages (Competition Council, 2018).

**Table 1.1. Resources allocated to the competition authority are low**

Data from 2017, unless otherwise indicated

	Non-administrative staff focused on enforcement and mergers <sup>1</sup> , 2017	Budget (EUR million)	Population (Millions)
Latvia	33	1.2	1.9
Denmark <sup>2</sup>	58	11.2	5.8
Finland <sup>2</sup>	45	10.6	5.5
Lithuania	43	2.3	2.8
New Zealand <sup>3</sup>	94	11.2	4.8
Slovenia	19	1.8	2.1

1. Excludes staff involved in advocacy and support-staff. 2. The Danish and Finnish competition authorities also integrate consumer protection functions. 3. New Zealand Commerce Commission "General Markets" budget which covers both competition and consumers.

Source: OECD.

The Council relies on the Ministry of Economics to acquire its annual budget. To secure the Competition Council's operational freedom, it is desirable that it be financed through an autonomous, stand-alone budget, as is the case in several OECD and EU countries. There are also several ways for competition authorities to fund themselves. Some jurisdictions impose a small duty on the amount of the initial share capital, and of each

capital increase by limited liability companies (such as Greece), while others may keep a share of the fines imposed, as in Portugal (OECD, 2018a). Since 2016, the revenue from the levy on merger notifications has been allocated to the Competition Council. While this is welcome, more needs to be done to alleviate the resource shortage.

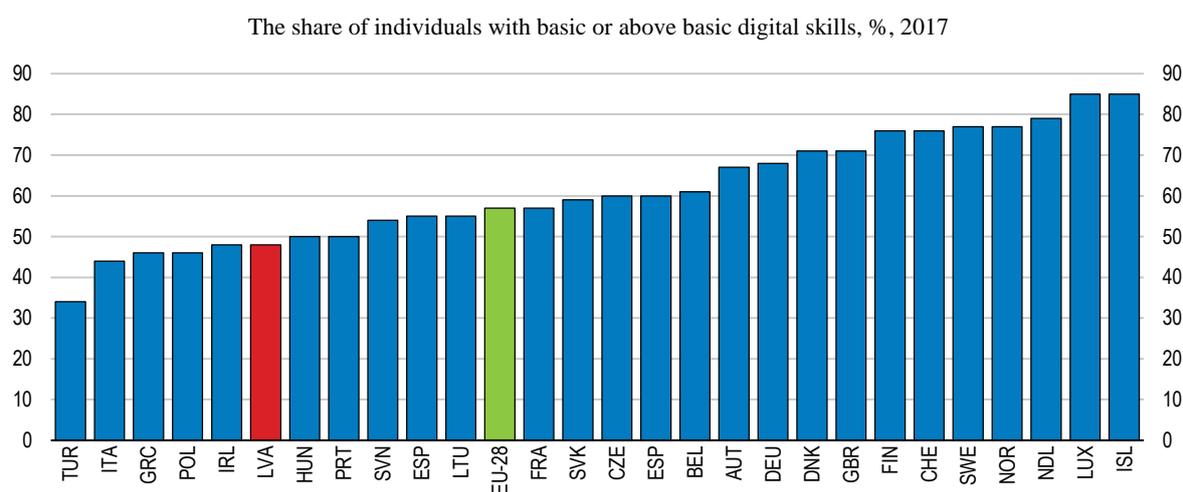
### *Strengthening the authority of the Competition Council*

Unlike competition authorities in some other jurisdictions, the Competition Council has limited statutory powers to intervene against public bodies including municipalities, to ensure equal conditions for competition for state-owned and private businesses. A new amendment to the Competition Law grants the Council the right to impose legal obligations and penalties up to 3 per cent of turnover on municipal enterprises and SOEs to redress their commercial activities that violate competitive neutrality. However, the Council will need to first attempt to negotiate for a solution, and will not be able to fine municipalities. Furthermore, it will not be given the right to effectively intervene in public policies that distort competition.

## Strengthening skills

The difficulty in hiring skilled personnel is one of the most important impediments to firm growth and investment in Latvia. Poor access to skills holds back the capacity of Latvian firms to innovate, adopt advanced technologies and to participate in global value chains, all of which are important for productivity growth (OECD, 2017a). In particular, the severe shortage of digital skills constrains the use of digital technologies in corporate activities like supply chain management, which would boost the productivity of Latvian firms (Figure 1.22). Shortages of qualified personnel are also considered as one of the largest barriers to capital investment by Latvian firms, suggesting that making the best of new equipment requires advanced skills (European Investment Bank, 2018).

**Figure 1.22. The shortage of digital skills is severe**



Source: Eurostat.

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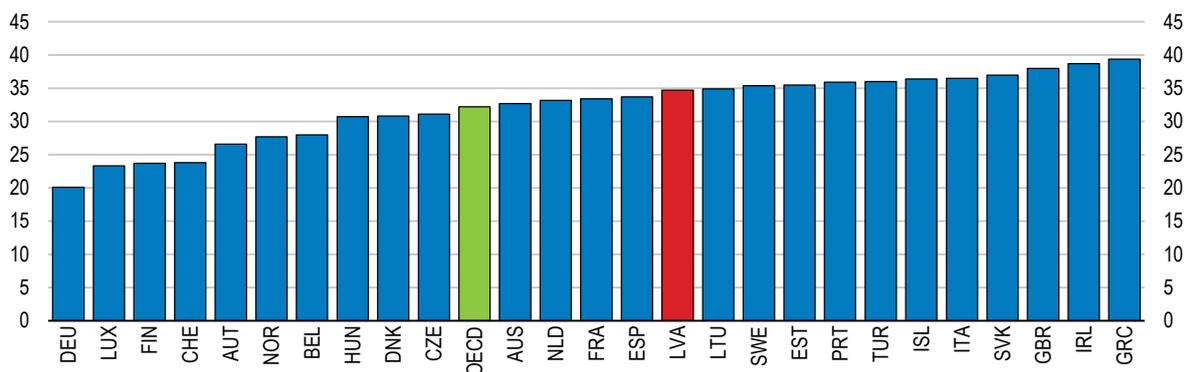
The emigration of skilled workers exacerbates shortages: highly educated workers accounted for 40% of net outward emigration between 2009 and 2016 (European

Commission, 2018b). To counter this, Latvia needs to attract talent and skills from abroad, in addition to enhancing upskilling and retraining of the labour force. In 2018, the government eased the labour market tests for the hiring of foreign skilled workers in 237 professions where severe skills shortages are foreseen. More can be done to increase the inflow of foreign skilled workers. The government can consider enrolling those workers in the public health insurance scheme, so that they do not need to purchase private health insurance at an additional cost. It can also reduce the scope of occupations subject to Latvian language proficiency requirements (OECD, 2017a). Foreign students graduating from Latvian universities could benefit from the simplified labour market test for skilled foreign workers, or be exempt from labour market tests.

Severe skill shortages are also due to skill mismatches. 35% of Latvian workers report that the expertise required at work does not match the field of their study (Figure 1.23). The Ministry of Economics estimates that the supply of personnel in natural sciences, mathematics and information technology will fall short of demand by 20% in 2025 (Ministry of Economics, 2018). A similar magnitude of mismatch is foreseen in engineering, manufacturing and construction as well. Yet, tertiary education graduates have been concentrated in social science fields (OECD, 2016). Addressing skills mismatches requires increasing the responsiveness of education and training to changing labour market demand and providing students and workers with the most relevant skills.

**Figure 1.23. Skill mismatches are large**

Field-of-study mismatch, % of employed aged 15-64, 2016



*Note:* Field-of-study mismatch arises when workers are employed in a different field from what they have specialised in.

*Source:* OECD, Skills for Jobs database.

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The Latvian population needs to be endowed with solid cognitive and non-cognitive skills to adapt to fast changes in labour market needs. Improving access to high-quality early childhood and primary education would contribute to developing the learning ability and adaptive capacities of Latvian children throughout their lives (OECD, 2017d). Furthermore, the urban-rural divide in PISA scores needs to be addressed (OECD 2018c). Fewer resources are devoted to rural schools and shortages of qualified teachers have emerged, due to an ageing teaching workforce and unattractive working conditions (OECD, 2016). Higher remuneration and better career prospects should be offered to teachers, in particular in rural schools with many struggling students. Accelerating the ongoing consolidation of the school network could help raise resources for this.

### *Engaging more firms in vocational education and training*

During the last decade the government has made important progress in upgrading the content of vocational education and training (VET). This includes developing new occupational standards and qualifications for a wide range of professions, as well as modular programmes and qualification exams that correspond to those standards (OECD, 2017a). The social partners participate in such reforms through the Sectoral Expert Councils (SECs), which includes representatives of the Latvian Employers' Confederation (LDDK), of the Free Trade Union Confederation of Latvia (LBAS) and of relevant ministries. The SECs play a central role in developing new programmes and evaluating the labour market relevance of curricula. Such close involvement of social partners is welcome as it is essential for the formulation of curricula, particularly in vocational education and training (Box 1.2).

However, there is a concern that SECs are not representative enough of all stakeholders that need to be involved. Members of the Latvian Employers' Confederation (LDDK) represent firms employing 44% of workers, but small firms are weakly represented (European Commission, 2018b), probably because membership of employers association is not compulsory (Eurofound, 2017b). Union coverage in Latvia is also low. Members of the Free Trade Union Confederation of Latvia (LBAS) are likely to have accounted for only 11% of total employees in 2016 (Eurofound, 2017b). Further efforts are needed to engage under-represented small firms in VET programme design.

The government has also improved the implementation of VET by consolidating VET schools and gradually upgrading VET schools with more than 500 students into Vocational Education Competence Centres (VECCs). VECCs are tasked with disseminating the latest VET programmes and providing pedagogical assistance to other VET schools, providing adult education and accrediting professional competencies acquired through informal trainings (OECD, 2016). The VECCs are certified by the government as providing excellence in teaching quality and act as regional hubs for collaboration with employers. The 22 VET schools currently certified as VECCs receive additional financial resources. While the majority of the 46 VET schools are funded by the central government, 6 are municipality funded (one of which is certified as VECC) and 8 are private. To coordinate the provision of training programmes and ensure that the upgraded VET curriculum is implemented throughout the country, VECCs could be giving a stronger leadership role in their region for coordinating VET programmes.

#### **Box 1.2. Involvement of social partners in vocational education and training**

Strong involvement of the social partners, namely employer associations and unions, helps to ensure that the overall design of the vocational education and training (VET) system, the content of programmes, and the workplace training meet labour market needs. The level of such involvement varies considerably across OECD countries but is usually higher in countries with good representation of employers and employees and strong apprenticeship systems.

##### **Germany**

Employer associations and professional organisations define the content of advanced vocational examinations as well as the courses taught at the technical schools (*Fachschule*) (Fazekas and Field, 2013a). Business chambers organise advanced vocational examinations, contributing to the high quality of graduates' skills. Many employers provide financial support to employees attending postsecondary VET studies and/or allow

time off work to attend courses. The chambers provide some grants to students in need and also provide preparatory courses. Enrolment in chambers is compulsory for firms. While this increases the costs of doing business, it addresses free-rider issues regarding the financing of training and exams.

#### **Austria**

The compulsory membership of firms and employees into the Economic Chambers and the Austrian Trade Union Federation facilitates markedly strong engagement of social partners in the post-secondary VET system (Musset, P., et al., 2013). Social partners have their own training institutions. The Economic Promotion Institute (*Wirtschaftsförderungsinstitut*) affiliated to the Economic Chambers provides education on management and corporate leadership to managers and training for specific sectors to apprentices. The Vocational Training Institute (*Berufsförderungsinstitut*) affiliated to the Austrian Trade Union Federation provides a wide range of education and trainings to employees as well as to the unemployed and those in risk of unemployment.

#### **Switzerland**

Employer and professional organisations define the content of professional examinations as well as VET programmes. They also regularly revise the professional qualifications which underpin examinations. Most employers support their employees during their VET studies financially and some employer associations provide grants to students in need. In some sectors, when firms are too small or too specialised to train an apprentice, alliances are created so that firms can provide training jointly. In 13 sectors, all firms are required to contribute to a fund that finances costs of apprenticeships (Fazekas and Field, 2013b).

### *Expanding work-based learning*

An adequate combination of general knowledge taught at VET schools with work-based learning is essential for ensuring high labour market relevance of VET programmes (OECD, 2010). Training at companies is also important for more effective adult education and training for the unemployed. Latvia's VET has been biased toward school-based learning, which constrained its labour market relevance (OECD, 2016). Work-based learning was introduced in 2013 and was expanded in mid-2017, when the government launched a programme financed by the European Social Fund. Yet, only a small share of VET students have participated so far. Furthermore, a large share of students in work-based learning is concentrated in sectors such as hotel and restaurant services and beauty services (Ministry of Education and Science, 2019). Addressing the severe skill shortages in sectors such as ICT and financial services requires an extension of work-based learning to the higher education level, including college, and involving more firms that can provide training in these areas.

The major challenge in expanding work-based learning in Latvia is the prevalence of small and medium-sized enterprises (SMEs), which often shy away from offering work placements due to the logistical difficulties and administrative costs involved. Also, because small firms are often more specialised than large firms, they may not have the capacity to teach all the skills students need to acquire (Kuczera, 2017). Encouraging SMEs to offer training jointly, as done in many OECD countries, would facilitate their participation in work-based learning. For example, in Germany, the lead firm that bears the overall responsibility for workplace training can outsource parts of the training to various partner firms (Poulsen and Eberhardt, 2016). Several small firms can also form a

consortium to take on students. In Austria, firms that cannot fulfil certain standards for workplace training can form training alliances. They receive help from the Economic Chambers in finding partners (Kuczera, 2017).

In Latvia, joint work-based training is coordinated by the vocational education institutions, including VET Competence Centres, in partnership with the Latvian Employers' Confederation (LDDK). The VET schools place students in multiple firms and ensure that all required skills are acquired. But smaller firms may need more relief from administrative procedures to be persuaded to participate and they may need assistance when it comes to planning and implementing on-the-job training. Furthermore, VET schools who cooperate with participating firms to plan and design work-based learning need to take stronger measures to engage also with small firms and address their skill needs.

In Australia, Group Training Organisations (GTOs) employ apprentices and hire them out to firms that provide workplace training. The GTOs receive public funding as well as contributions from employers (Kuczera, 2017). A similar role could be played by the LDDK in Latvia or possibly another organisation that concentrates exclusively on assisting small firms. Such an organisation would also be an adequate platform to gather information about the skill needs of small firms and feed them back into the design of VET curricula and work-based learning.

The introduction of joint work-based learning should be coupled with efforts to raise awareness of its benefits. According to studies in other OECD countries, despite the initial costs and administration burden associated with providing work-based learning, the net benefits quickly turn positive (OECD, 2010). Conducting a rigorous cost-benefit analysis and advertising the results could encourage small firms to participate in the work-based learning scheme.

### *Increasing financial support to VET students*

The graduation rate of VET students is considerably lower than that of students enrolled in general upper secondary education (OECD, 2018c). As highlighted in the 2017 Economic Survey of Latvia, the average level of financial assistance for VET students is very low. This increases the risk that students, especially those from low-income households, to leave schools before academic completion. Such early school leaving is undesirable even though it is often due to employment, because without a valid upper secondary degree students risk facing poorer wage progression later in their career. Also, they will have fewer options to continue training, for example, at university. Since 2017, a project funded by the European Social Fund provides students at risk of leaving school early with financial and material support, which is welcome. Yet, a more sustainable solution that is available for all lower-income students would be desirable.

### *Making tertiary education more responsive to labour market needs*

Labour shortages in ICT, engineering, and sciences are set to intensify over the next few years (Ministry of Economics, 2018). Extensive efforts have been made to increase the number of graduates in the Science, Technology, Engineering and Mathematics (STEM) fields. The government has reallocated a larger share of state-funded free study places from social science to STEM fields to attract students. The new higher education financing model includes performance-related components, which would allocate additional funding to universities that increase their share of students in STEM fields (OECD, 2016). Nevertheless, the share of graduates in STEM fields remained around 20% between 2015 and 2017, which is lower than in other Baltic or some Central European countries (OECD,

2017c). Also, their absolute number has not increased due to the overall decline in the number of students.

Unlike many other OECD countries, Latvia does not provide means-tested financial assistance to university students. This prevents students from poor households from pursuing studies at universities, even when they are eligible for free study places (OECD, 2017a). Introducing such financial assistance, first targeting STEM studies, would relax the financial constraints faced by those students and increase the number of STEM graduates.

Latvia is one of the few OECD countries where external stakeholders are not included in the governance boards of the higher education institution (Borowiecki and Paunov, 2018). External stakeholders are only involved in consultative bodies (the Conventions). Universities in Latvia are governed by the Senate elected by staff and students, and rectors act on behalf of the Senate to implement its decisions and strategy. Such traditional collegial governance holds back the ability of Latvian universities to respond swiftly and strategically to the changing economic and societal needs (European Commission, 2018d). Since 2017, the government has required higher education institutions to coordinate their development strategies and infrastructure investment plans with industry representatives. The government should consider including stakeholders such as industry and union representatives in universities' governing boards, as in many OECD countries. In most cases, industry representatives are from large firms, but in some countries such as Iceland and Ireland, representatives from SMEs also participate (Borowiecki and Paunov, 2018).

High quality tertiary education is central to providing a highly qualified workforce into the labour market. The accreditation and licensing system for study programmes in tertiary education has been improved, and the national accreditation agency was registered in the European Quality Assurance Register for Higher Education (EQAR) in 2018. On the other hand, an insufficient knowledge base has made it difficult for many Latvian students to complete a Bachelor's degree in STEM studies (Kuļikovskis et al., 2017). To improve upon this, mandatory state exams in natural sciences were introduced at the end of upper secondary education.

## *Improving the skills of the adult population*

### *Enhancing the quality of adult education*

The government has expanded adult education programmes since 2017 using European Social Fund financing. Adult education is provided by diverse bodies, such as the central government, municipalities, craft and professional associations as well as private institutions. The government introduced a horizontal governance model in 2016, which involves relevant ministries, local governments and social partners. The Ministry of Education and Science is responsible for planning policies and improving the qualification of employed adults, whereas the Ministry of Welfare has responsibilities for endowing the unemployed with suitable skills. Adult education is also better targeted than before the 2016 reforms, as it focusses on occupations where significant skill shortages are foreseen in the labour market forecasts by the Ministry of Economics.

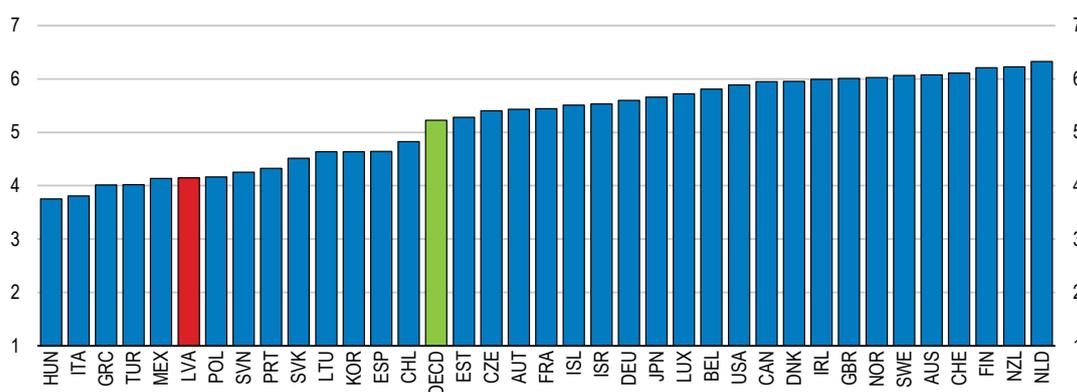
Private providers of non-formal education programmes that are not registered as education institutions are required to obtain a licence from the local government, which in some cases evaluates the content and qualifications of teachers. The scope and quality of adult education offered by municipalities vary considerably depending on their fiscal resources (OECD, 2016). Its quality can be enhanced by giving Vocational Education Competence Centres (VECCs) a stronger leadership role in planning the provision of adult training in

their region in order to avoid duplication and strengthen synergies. This could include closing ineffective programmes or merging them with stronger alternatives. The pedagogical assistance provided by the VECCs to VET schools could be extended to adult education providers. The VECCs could also act as the platform for coordinating education programmes offered by VET schools and providers of municipality-funded training.

It is particularly important that adult education addresses the severe shortages of digital skills. Adult education should also help workers improve the ability to make the best of digital technologies. This includes advanced managerial skills, which are needed to lead organisational transformations that maximise the productivity gains from adopting digital technologies (Andrews et al., 2018). Relatively few Latvian firms have access to professional managerial skills (Figure 1.24), making such organisational changes challenging. The state-funded adult education programmes offer courses in ICT-related subjects (including the manufacturing of digital equipment), which were particularly popular. Developing advanced management courses for professionals at higher education institutions that can be attended part-time could improve the uptake.

**Figure 1.24. Relatively few firms are managed by professional managers**

Reliance on professional management, score from 1 (lowest) to 7 (highest), 2017-18



Note: Score based on responses to the question: “In your country, who holds senior management positions in companies? [1 = usually relatives or friends without regard to merit; 7 = mostly professional managers chosen for merit and qualifications]”.

Source: World Economic Forum (2017), The Global Competitiveness Index Historical Dataset 2007-2017..

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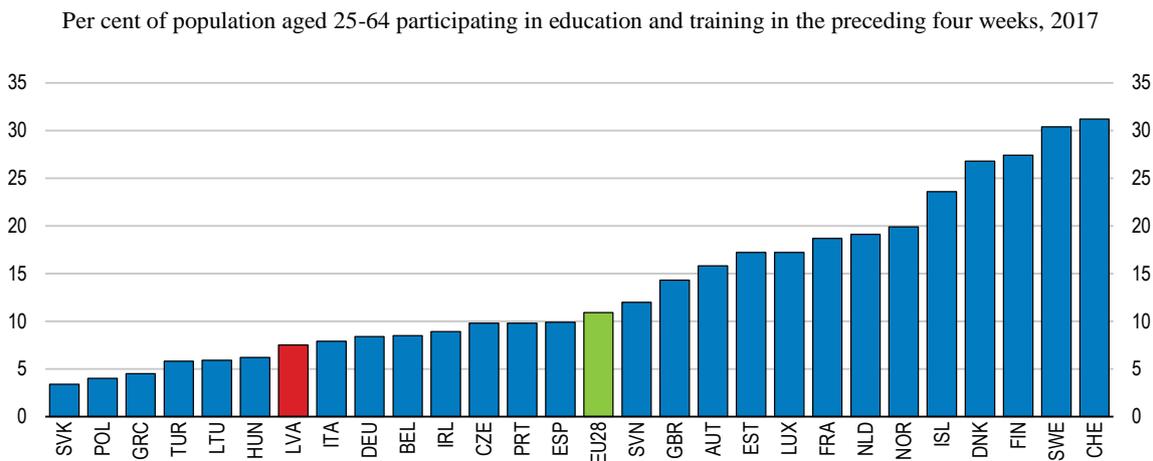
### *Promoting the participation in adult education*

The rate of participation in adult education in Latvia is lower than in many OECD countries (Figure 1.25), despite significant skill mismatches. As in many other countries, it is particularly low among workers with low educational attainment. In 2016, less than 3% of the working age population with less than lower secondary education attainment participated, while 11% of those with tertiary education attainment did (Eurostat, 2016). Some adult education programmes are targeted at the low-skilled. Yet, less than 20% of participants were low-skilled in the latest round of the programmes offered.

In countries with high levels of participation in adult education such as Switzerland, employers assume a large share of training costs, whether in the form of financial support for direct costs or of permission to make use of paid working hours (OECD, 2018d). Some countries, such as France and the Netherlands, endow workers with individual training accounts that provide them with rights to receive a certain amount of state-funded education

and training. Although the government introduced regulation to provide financial support to employers granting additional education and training to employees as early as in 2012, the implementation of the support scheme was postponed several times. It is currently foreseen for the end of 2022. The government should implement such support earlier, perhaps focussing it on workers looking to acquire skills that are in short supply or on low-skilled workers. The financial support could also target the retraining of workers without qualifications or those that were engaged for some time in a job unrelated to their initial training, as in Germany (OECD, 2017e).

**Figure 1.25. Participation in adult learning is low**



Source: Eurostat.

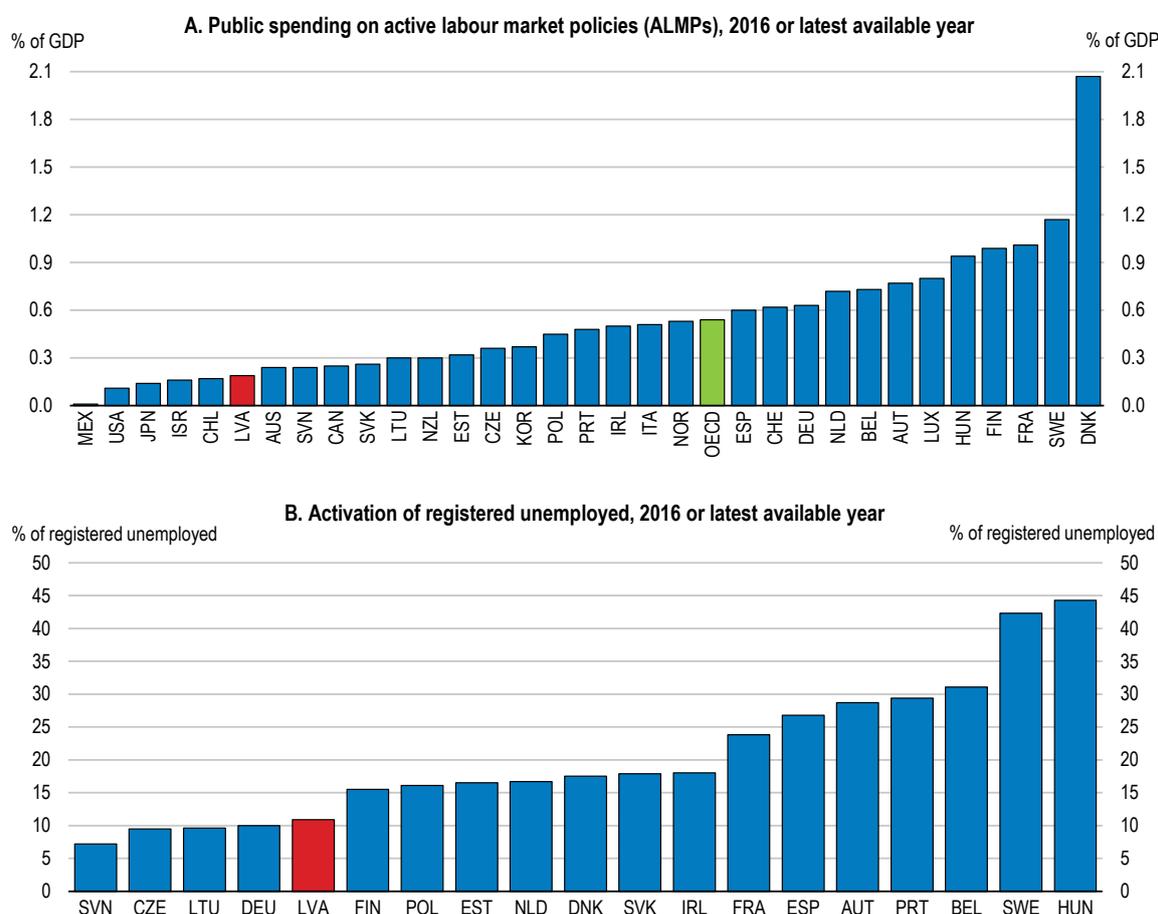
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### *Active labour market policies should receive more stable funding*

Latvia's active labour market policies (ALMPs) are characterised by low participation and spending compared to many other European countries (Figure 1.26). They have been re-focused from public employment schemes to measures that promote labour mobility, and activation programmes for the long-term unemployed have expanded dramatically. A large share of ALMP participants benefits from training measures, which are effective in increasing the chance of finding employment (OECD, 2019b).

Competent caseworkers that direct unemployed persons into adequate support measures are key for the effectiveness of ALMPs. However, the State Employment Agency (SEA) is mainly financed by EU funds, which induced volatility in staff employment of the SEA every time a large EU funded ALMP programme expired. This risks undermining the effectiveness of ALMPs by increasing the caseload per caseworker, making it difficult for them to spend sufficient time per unemployed person (OECD, 2019b). Integrating the most effective ALMP measures into the national budget would stabilise the SEA's manpower.

The number of caseworkers should also be increased as caseloads can be high. Hiring more counsellors can be effective in intensifying counselling and reducing unemployment spells, as experience in Germany and the Netherlands has shown (Hainmüller et al., 2016; Koning, 2009). The government has reallocated the counsellors previously hired for an EU-funded project that expired recently to public employment services. However, increasing the net number of counsellors is difficult due to the cap on the number of government employees.

**Figure 1.26. Participation in active labour market policies is low**

Note: Active policies include expenditure on the PES or other administration, training, employment incentives, supported employment, direct job creation and start-up incentives.

Source: OECD Labour Force Statistics; European Commission, Labour Market Policy database.

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## Strengthening innovation and knowledge transfer

### *Latvia's innovation performance is weak*

Innovation activity in Latvia is weak compared to many other OECD countries, especially in the business sector. At 0.14% of GDP, business-based research and development (R&D) expenditure is among the lowest in the OECD. The share of Latvian SMEs engaging in product or process innovation or introducing new managerial practices is low, even compared to other Baltic and Eastern European countries (Figure 1.10). Latvia needs stronger innovation in order to ensure productivity growth in the long-term. The major challenge is to initiate a virtuous circle of stronger demand for innovation by Latvian firms and capacity of higher education and research institutions to offer innovative solutions.

### *The quality of research can be improved*

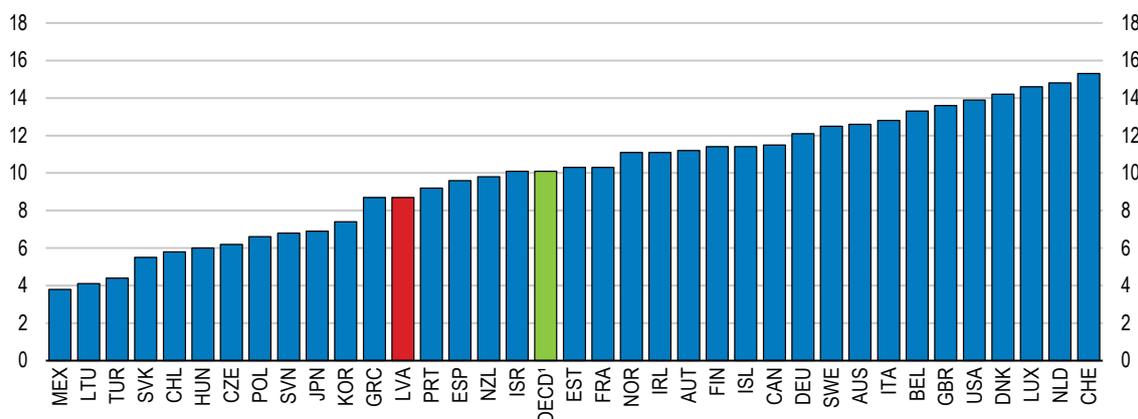
The excellence of academic research is a pre-requisite for the growth of industrial R&D and research-intensive start-ups. While Latvia performs better than many other Eastern European countries in term of well-cited academic publications, it lags behind the OECD average (Figure 1.27).

The research funding and working conditions for researchers in Latvia are not conducive to research excellence. According to the OECD Main Science and Technology Indicators, R&D expenditure by higher education and research institutions was 0.19% of GDP in 2016, which is low compared to the OECD average (0.41%). Research positions are unstable due to the lack of a tenure system (OECD, 2016). Researchers are also often subject to overwork and receive uncompetitive salaries (European Commission, 2018d). Such unattractive working conditions make it difficult to address the scarcity of qualified researchers. The proportion of older-age researchers is high, and there are few researchers in the middle age-groups, implying that the research workforce will shrink fast (European Commission, 2018d).

The financial resources for research are thinly spread across a fragmented system of higher education and research institutions. In 2016, Latvia had 29 higher education institutions per million inhabitants, which is considerably more than in Estonia (19) or Lithuania (16) (Kuļikovskis et al., 2017). Research institutions have been consolidated after 2014 mostly through more focused allocation of base funding and EU funds to larger institutions and those that performed well in the 2014 Research Assessment Exercise (Kuļikovskis et al., 2017). However, the consolidation happened mostly at the level of administration: while smaller institutions are now managed as sub-sections of larger better-performing institutions, their facilities were not shut down and researchers did not relocate (Kuļikovskis et al., 2017). The government envisages strengthening the sharing of research facilities and collaboration between consolidated research institutions. While such efforts are welcome, the government should consider further consolidation of research institutions, should the forthcoming Research Assessment Exercise (expected in 2020) find that some institutions are performing poorly. Financial resources saved from such consolidation could be reallocated to improve the working conditions of researchers.

**Figure 1.27. The quality of academic research can be improved**

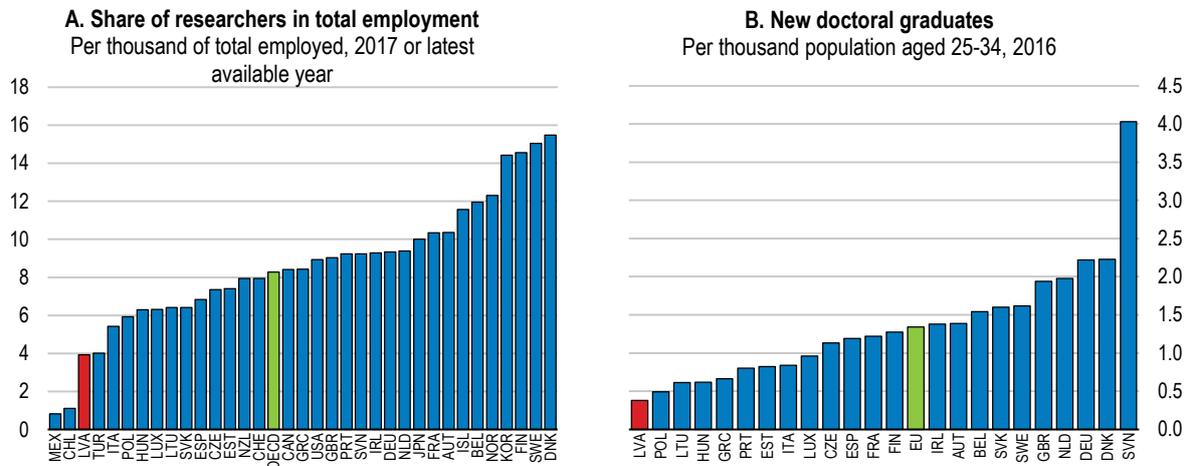
Percentage of publications included among the world's 10% most cited, 2015



1. Unweighted average of available countries.

Source: OECD Science, Technology and Industry Scoreboard 2017.

**Figure 1.28. The research workforce is small**

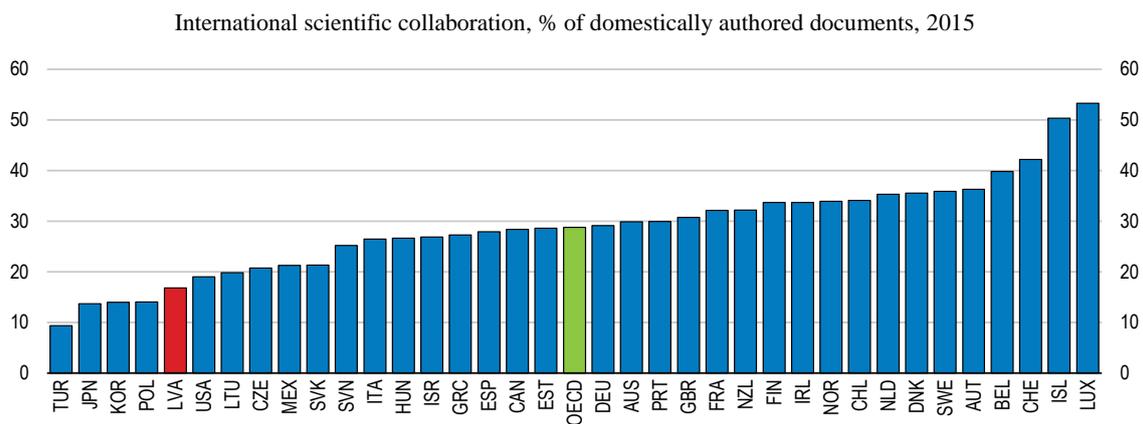


Source: OECD Main Science and Technology Indicators database; European Commission, Research and Innovation Observatory – Horizon 2020 Policy Support Facility, <https://rio.jrc.ec.europa.eu/en/stats>.

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The quality of research can also be improved by international collaboration. However, only 17% of academic publications in Latvia were the fruit of international collaboration in 2015, a share that is considerably lower than in other Baltic or Eastern European countries (Figure 1.29). International exchange of scholars and researchers in Latvia is coordinated by the State Education Development Agency (SEDA). The SEDA has granted scholarships to students and researchers from non-EU countries that concluded bilateral agreements on co-operation in education and science with Latvia. However, strict Latvian-language proficiency requirements for some occupations, including in higher education, can hinder international academic exchanges. As an example, limited Latvian language skills have delayed the appointment of rectors in at least two higher education institutions where teaching has been in English for almost two years and resulted in the resignation of one of them.

**Figure 1.29. International collaboration in research is limited**



Note: International collaboration is defined as the number of domestically authored publications incorporating institutional affiliations of other countries or economies, expressed as a percentage of all publications attributed to authors with an affiliation in the reference economy. This includes a relatively small proportion of documents by single authors with affiliations in different economies.

Source: OECD Science, Technology and Industry Scoreboard 2017.

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### *Enhancing knowledge transfer*

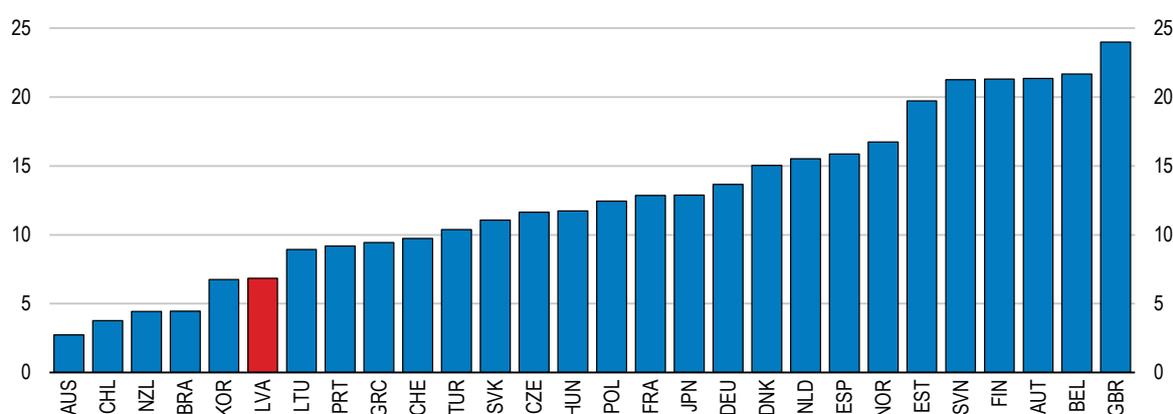
Collaboration with higher education and research institutions could improve the innovation capabilities of Latvian firms through transfer of new technologies. With digitalisation, this is likely to become even more important (OECD, 2019c). Yet, the share of SMEs engaging in such collaboration in Latvia is low compared to many other OECD countries, including its Baltic or Eastern European peers (Figure 1.30).

The new higher education financing system currently under implementation rewards universities engaging in research collaboration with firms, by reallocating more funding to them. EU funded measures also support the training of academic personnel in firms. However, until now, universities put a large weight on academic publications in career evaluation and have not credited research collaboration with the industrial sector as much (European Commission, 2018d). It may take some time before universities adjust their career evaluation systems to the new financial incentives. Meanwhile, this holds back mobility of researchers between universities and firms, which is an important channel of knowledge transfer (OECD, 2019c). Only a few universities, for instance Riga Technical University, are actively exchanging personnel with firms.

Simplifying the administrative procedures can facilitate research collaboration. The government plans to develop methodological guidelines for knowledge transfer processes and to provide training in these to research institutions.

**Figure 1.30. There is little collaboration between SMEs and research institutions**

Share of SMEs collaborating on innovation with higher education or research institutions, 2012-14



Note: As a percentage of product and/or process-innovating SMEs.

Source: OECD Science, Technology and Industry Scoreboard 2017.

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### *Stimulating R&D demand for business innovation*

Latvian firms are oriented toward incremental process innovation that does not involve R&D or patent application (Muizniece and Cepilovs, 2017), and consequently may not consider research inputs to be relevant for their success. Also, firms in medium to low technology manufacturing and services, which are dominant in Latvia, often seek to solve specific technical problems through case-by-case interaction with university researchers, also referred to as technology extension services, rather than exploring novel inventions through formal research collaboration (Johnston and Huggins, 2017). Technology

extension services are effective in supporting knowledge transfer to those types of firms, and can also be a first step toward more formal research collaboration (OECD, 2019c). The government expanded the innovation voucher scheme that finances firms' purchase of technology extension services. It also reorganised the Technology Transfer Offices (TTOs) in universities into a one-stop shop in the Latvian Investment and Development Agency (LIDA), in line with recent efforts by OECD countries to enhance efficiency of technology transfer (Box 1.3).

Small firms often need to be nudged to participate in research collaboration. Evidence from OECD countries indicates that campaigns to raise awareness on the benefits of innovation encourage small firms to participate in support measures for formal research collaboration (Lanahan and Feldman, 2015). For small firms, informal interactions with researchers through events like technology fairs are often as effective as a channel of knowledge transfer as formal research collaboration (OECD, 2019c). The government has been implementing the Innovation Motivation Program, which organises numerous networking events and promotion of innovative entrepreneurship especially among the youth. Such efforts should be continued until a significant improvement in the share of SMEs engaging in innovation and research collaboration is observed.

### **Box 1.3. Trends in knowledge transfer policies across OECD countries**

The policy instruments for promoting knowledge transfer from higher education and research institutions to industry have been evolving, responding to new demand for industry-science research collaborations brought about partly by the digitalisation that increased the complexity of innovation (OECD, 2019c).

#### **“Off-campus” technology transfer offices (TTOs) and intermediary organisations**

New types of regional or sectoral TTOs that pool services of traditional TTOs at each university and research institutions are being created, to improve efficiency and quality of technology transfer. Latvia created a one-stop shop at the Latvian Investment and Development Agency (LIDA), which dispatches groups of researchers stationed in universities across the country (technology scout teams) to firms to help them deal with technological issues or commercialise their innovation. France created a total of 14 “transfer acceleration companies” (SATTs) across the country, each pooling specific services of TTOs in the region. The role of specialised research institutions dedicated to strengthening the innovation capabilities of SMEs is also increasing. For instance, the Canadian Technology Access Centres (TAC) transfer talent, expertise and technology from affiliated technical universities or colleges to SMEs. A network of 30 TACs is coordinated by a Canadian college that receives a public grant (Innovation, Science and Economic Development Canada, 2019).

#### **From knowledge transfer to knowledge co-creation**

Joint research laboratories where research institutions and firms share resources and risks to engage in long-term research agendas are being developed with the support of public funds. Such a scheme builds closer and lasting research collaboration compared to a simple technology transfer, as it involves setting up joint infrastructure and mixed teams. Latvia hosts 6 Competence Centres, EU-funded consortiums between firms and research institutions that promote joint innovation in fields of Smart Specialisation Strategy. The United Kingdom hosts 10 Catapult centres, where firms, scientists and engineers work on late-stage R&D in strategic industries and technologies (Digital Catapult, 2019). Each

Catapult has several physical centres spread across the UK. Portugal recently launched collaborative laboratories (CoLAB), mainly privately funded organisations that integrate research activities by research institutions and firms, and focus on market-driven research and professional R&D services for industry.

#### **Attracting foreign research institutions for knowledge transfer**

Some countries have developed dedicated programmes to attract world-class foreign research institutions to establish new research centres locally in collaboration with national universities and firms. Chile launched in 2009 the International Centres of Excellence programme, providing public funding to 8 international universities and research institutions including the University of California, Davis and Germany's *Fraunhofer* Institute, to create local R&D centres that collaborate with Chilean firms (Ministry of Economy, Development and Tourism of Chile, 2019). Some of the centres have developed new intermediary institutions to promote technology transfer.

#### *Enhancing the efficiency of support measures*

The implementation of support measures for innovation and research collaboration are fragmented across several agencies. From 2014, the measures funded by EU funds are administered by the Central Finance and Contracting Agency (CFCA) affiliated to the Ministry of Finance, separately from the measure funded by the national budget. This provided a one stop shop to applicants for EU funded measures, contributing to a smooth absorption of EU funds. However, it also led to duplication of the capacity developed by the CFCA for this new task and those of agencies affiliated to the Ministry of Education and Science and the Ministry of Economics, which have been implementing innovation support until then. This also complicated the implementation of support measures, for instance due to agencies competing for the reviewers needed for the selection and evaluation of projects that receive support (European Commission, 2018b). Considering the small size of research community in Latvia, the implementation of innovation support should be consolidated into one agency to maximise the efficiency of policy resources and synergies across various support measures.

### **Using EU funds more effectively to promote productivity**

#### *Ensuring the continuity of the most effective EU-funded policy measures*

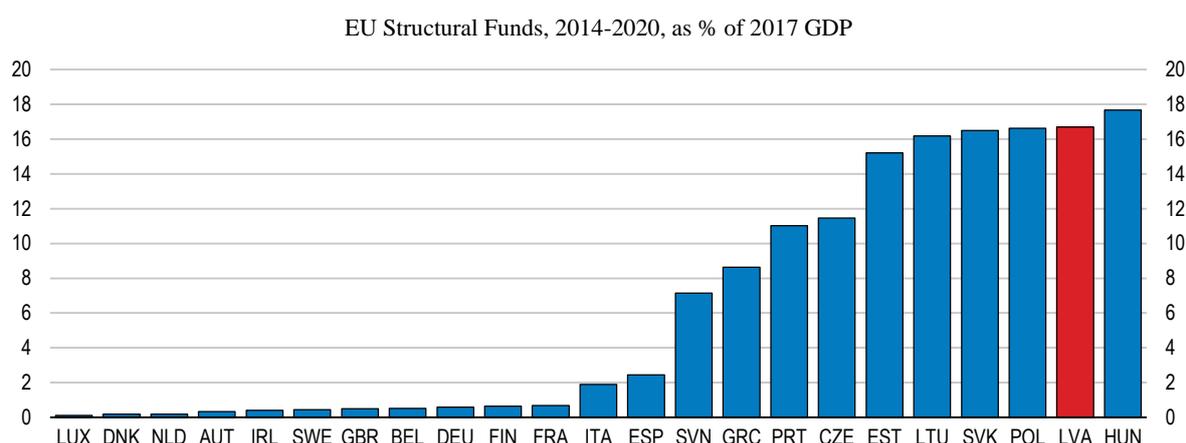
Latvia is one of the largest recipients of EU funds (Figure 1.31). A wide range of important policy instruments aimed at facilitating access to credit, improving skills and employment and boosting innovation rely heavily on EU funds. Some of the most essential activities have been disrupted in the past during the switchover between EU Funds programming periods, because of slower disbursement of EU funds. For instance, the funding for developing new curricula for vocational education was discontinued temporarily in 2016 (OECD, 2017a). Gross R&D expenditure dropped from 0.63% of GDP in 2015 to 0.44% in 2016, as about 50% of Latvia's business-based R&D and 44% of higher education R&D expenditure were financed by EU funds in 2015 (OECD, 2017c).

As it is unclear how the availability of EU funds will develop in the long run, the government must ensure the continuity of essential policy measures by gradually reducing their dependence on the EU budget. This requires identifying the most effective measures currently financed by EU funds and planning for national financing of these programmes

beyond the current EU budgetary cycle. For instance, 75% of active labour market policies (ALMPs) are financed by EU funds. The recent assessment by the OECD (OECD, 2019b) on the effectiveness of various types of ALMP measures should be used to identify the measures to receive stable funding. Support measures to promote innovation and knowledge transfer that are mainly financed by EU funds should also be evaluated and streamlined. Finally, the long-term fiscal strategy should anticipate a possible need for additional revenues from 2022 onwards.

The government should also seek a larger role of the private sector and the financial market in financing productivity-enhancing activities like risk financing, vocational education and training (VET), and joint innovation activities between firms and research institutions. For instance, the public financial institution Altum plans to diversify financing sources for its public loan programmes, which currently rely heavily on EU funds. VET curricula reforms and work-based learning should be financed by employers to a larger extent, for instance, through their contributions to employer associations, as in Germany and Austria, given that they benefit from more effective VET providing highly relevant skills. The government should also foster profit-based research collaborations.

**Figure 1.31. Latvia is one of the largest recipients of EU funds**



*Note:* EU funds are European Regional Development Fund, European Social Fund, Cohesion Fund, and Youth Employment Initiative for the 2014-2020 period, allocated after the adoption of the Partnership Agreements. They do not include country-wise allocation of interregional co-operation, urban innovative actions and technical assistance.

*Source:* European Structural and Investment Funds database.

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### *Improving access to EU funds*

EU funds should be allocated toward areas where the highest needs and largest gains are foreseen. The European Regional Development Fund (ERDF) provides co-financing to investment projects proposed by Latvian firms, offering them an opportunity to increase investment, scale up their production and boost productivity (Box 1.4). The positive effect of the ERDF on productivity is largest among firms with an initially lower productivity level. This suggests that the effectiveness of the ERDF in boosting productivity can be enhanced by strengthening access to co-financing for small young firms with a large potential for productivity catch up.

However, the ERDF co-financing tends to be awarded to larger and more productive firms, which can be expected to have better access to credit (Box 1.4). The application process

for EU fund co-financing involves complex procedures and the management of EU funded projects is subject to onerous compliance costs (OECD, 2018e). Indeed, firms sometimes hire professional consultants to write the applications, which implies substantial upfront costs. Such administrative burdens prevent smaller and less productive firms from accessing the ERDF co-financing.

Some measures are in place to facilitate the access by smaller firms to EU fund co-financing. The Competence Centres and the Latvian Investment and Development Agency (LIDA) provide technical support and consultation services to SMEs for their application. However, they do not actually process the applications procedures for the SMEs. The six Competence Centres are mostly located in Riga, making it difficult for firms in rural areas to access such services. Access to EU funds can be further improved by simplifying application procedures and streamlining regulations set by authorities on the management of EU-funded projects. Basing the selection process more on an interaction with potential applicants, for instance through face-to-face interview as envisaged in Poland (OECD, 2018f), would increase the chances of small, young and innovative firms to receive co-financing.

#### **Box 1.4. The effect of EU funds on the performance of Latvian firms**

Joint research by the OECD and the Bank of Latvia (Benkovskis et al., 2018) investigates empirically the effect of launching a project co-financed by the European Regional Development Fund (ERDF) on the performance of Latvian firms. It finds that launching an ERDF co-financed project results in the following in the third year of the launch:

- A 28% increase in the capital stock per employee
- A 17% increase in the number of employees
- A 20% increase in the turnover
- A 12% improvement in labour productivity

The observed surges in capital stock and employment are not surprising as the ERDF finances investment and firm's capacity to expand employment is an important criterion for the selection of projects. The improvement in the productivity is highly heterogeneous across ERDF recipients: it is significantly larger for recipients with an initially low productivity level.

The research also shows that firms that are more likely to obtain the ERDF co-financing are larger and more productive to begin with. Furthermore, hiring a manager who previously worked in a firm that acquired the ERDF co-financing increases the possibility of the current employer to obtain the co-financing. This indicates that the application to and the management of EU fund projects involve significant fixed costs that only larger and more productive firms can bear. Such costs are generated by administrative procedures that require specific knowledge and skills.

### **Establishing an effective productivity board**

Policies that directly or indirectly affect productivity growth touch upon a wide range of areas and are administered by multiple public actors, making their coordination challenging. Furthermore, productivity-enhancing policies may lead to losses for some

influential groups and thus face strong political headwinds (Banks, 2015). To address such difficulties, many OECD countries have established institutions that analyse the productivity challenges and provide a comprehensive strategy for productivity-enhancing reforms. Those institutions can improve policy coordination and advocate the importance of reforms to a wide audience (Renda and Dougherty, 2017). EU countries, particularly euro area countries, were advised by the Council of the European Union to establish a national productivity board, as the improvement in productivity was deemed essential for the reduction of current account imbalances and adjustment to country-specific shocks within the monetary union (Council of the European Union, 2016).

While there is not an optimal approach to establish a productivity board, the institution tends to be more effective when it is backed by a strong political commitment (as in Mexico or Ireland), is endowed with sufficient resources to conduct high quality research, and is engaging with stakeholders (Renda and Dougherty, 2017). The effectiveness of a productivity board is particularly high when it is directly involved in the policy-making processes bearing on productive performance, or is in a position to directly influence decision-making in those areas (Banks, 2015).

Two organisations in Latvia may take on the task of the productivity board: Latvia's Forum for Productivity, Effectiveness, Development, and Competitiveness (LV PEAK) and the Competitiveness and Sustainability Tripartite Co-operation Sub-Council (KITSA). The LV PEAK, established in May 2018 by the University of Latvia and led by academics and experts, conducts independent analysis on productivity issues and formulates policy recommendations. It has a co-operation agreement with the Ministry of Economics, but its funding is limited. The KITSA, established also in May 2018 under the National Tripartite Council, is comprised of representatives of relevant ministries, the employers' association (the LDDK) and the Free Trade Union Confederation of Latvia (LBAS), and fosters co-operation in important policy areas for competitiveness, such as digitalisation. The experiences from other OECD countries suggest that the government should consider merging the LV PEAK and the KITSA into one institution that boasts high research capabilities and strong involvement in policy-making. This would allow the productivity board to produce high-quality policy recommendations and enjoy strong political support.

### Policy recommendations for stronger productivity growth

(Key policy recommendations are bolded)

#### Fighting Informality

- **Continue the engagement of social partners in the fight against informality through sectoral agreements.**
- **Offer sufficiently high wages to attract qualified personnel in law enforcement agencies.**
- Phase out the microenterprise tax regime.

#### Improving the allocation of capital

- Allow creditors to initiate restructuring and introduce early warning mechanisms of financial distress.
- **Improve the quality and speed of judgement through training and specialisation of judicial staff.**
- **Ensure the accountability of judges, including by extending the deadlines for dealing with disciplinary cases.**

#### Enhancing competition

- **Develop detailed guidelines for the review of the rationale for state ownership and apply them more rigorously.**
- **Strengthen the authority of the Competition Council to intervene against anti-competitive behaviour by state-owned and municipal enterprises.**
- Extend the monitoring framework for state-owned enterprises to large commercially-oriented municipality-owned enterprises.
- Provide the Competition Council with sufficient funds to hire qualified experts.

#### Strengthening skills

- **Promote joint training offers involving several firms.**
- Consider setting up mechanisms that help small firms handle all the logistics and administrative procedures to offer work-based learning.
- Raise awareness of the benefits of work-based learning by conducting rigorous cost-benefit analysis and advertising its findings.
- Use the Vocational Education Competence Centres (VECCs) as a platform to coordinate and ensure the quality of vocational and adult training.
- Introduce means-tested financial assistance for tertiary students
- **Implement as early as possible the planned financial support for firms providing training to employees with stronger financing for the low skilled.**
- **Hire more counsellors in Public Employment Services.**

- **Evaluate EU funded training to identify the most effective programmes**
- **Plan for the financing of EU funded training beyond the current EU budgetary cycle, if necessary from national sources.**

**Strengthening innovation and knowledge transfer**

- **Promote sharing of resources of universities and research institutions.**
- **Improve wages, working conditions and career prospects for researchers in public institutions and provide stronger incentives to collaborate with industry.**
- Consolidate the implementation of innovation support into one agency.

**Using EU funds more effectively to promote productivity**

- Simplify the application procedure for EU funds and streamline the regulations on the management of EU-funded projects.

**Establishing an effective pro-productivity institution**

- Establish a productivity board with a high research capacity and strong involvement in the policy-making process.

## References

- Adalet McGowan, M., D. Andrews and V. Millot (2017), “Insolvency Regimes, Technology Diffusion and Productivity Growth : Evidence from Firms in OECD Countries”, *OECD Economics Department Working Papers*, No. 1425, OECD Publishing, Paris.  
<http://dx.doi.org/10.1787/36600267-en>
- Adalet McGowan, M. and D. Andrews (2018), “Design of insolvency regimes across countries”, *OECD Economics Department Working Papers*, No. 1504, OECD Publishing, Paris.  
<http://dx.doi.org/10.1787/d44dc56f-en>
- Aghion, P. et al. (2005) “Competition and Innovation: An Inverted-U Relationship”, *The Quarterly Journal of Economics*, vol. 120, pp. 701-728.
- Andrews, D., G. Nicoletti and C. Timiliotis (2018), "Digital technology diffusion: A matter of capabilities, incentives or both?", *OECD Economics Department Working Papers*, No. 1476, OECD Publishing, Paris, <https://doi.org/10.1787/7c542c16-en>.
- Andrews, D., C. Criscuolo and P. Gal (2016), "The Best versus the Rest: The Global Productivity Slowdown, Divergence across Firms and the Role of Public Policy", *OECD Productivity Working Papers*, No. 5, OECD Publishing, Paris, <https://doi.org/10.1787/63629cc9-en>.
- Arnold, J., G. Nicoletti and S. Scarpetta (2011), “Regulation, resource reallocation and productivity growth”, *European Investment Bank Papers*, vol. 16, pp. 90-115.
- Banerjee, R.N., Gambacorta, L. and E. Sette (2017) “The real effects of relationship lending” *Bank for International Settlements Working Papers* No. 662.
- Bank of Latvia (2017), *Financial Stability Report 2017*, Riga.
- Bank of Latvia (2018), *Financial Stability Report 2018*, Riga.
- Banks, G. (2015), “Institutions to promote pro-productivity policies: Logic and lessons”, *OECD Productivity Working Papers*, No. 1, OECD Publishing, Paris. <https://doi.org/10.1787/5jrql2tsvh41-en>.
- Beck, T., Degryse, H., De Haas and N.R. van Horen (2015) “When Arm’s Length Is Too Far. Relationship Banking over the Credit Cycle”, *SRF Discussion Paper* No. 33.
- Berlingieri, G. et al. (2019), “Last but not least: laggard firms, technology diffusion and its structural and policy Determinants”, *OECD Science, Technology and Industry Working Papers*, OECD Publishing, Paris. Forthcoming.
- Berlingieri, G. et al. (2017), “The Multiprod project: A comprehensive overview”, *OECD Science, Technology and Industry Working Papers*, 2017/04, OECD Publishing, Paris.  
<http://dx.doi.org/10.1787/2069b6a3-en>
- Benkovskis, K., O. Tkacevs and N. Yashiro (2019), “The role of resource allocation in Latvia’s productivity”, *OECD Economics Department Working Papers*, OECD Publishing, Paris. Forthcoming.
- Benkovskis, K., O. Tkacevs and N. Yashiro (2018), “Do EU Funds boost productivity and employment?: Firm level analysis for Latvia”, *OECD Economics Department Working Papers*, No. 1525, OECD Publishing, Paris. <https://doi.org/10.1787/98e0a368-en>.
- Benkovskis, K. (2015), “Misallocation of Resources in Latvia: Did Anything Change During the Crisis?”, *Working Papers* 2015/05, The Bank of Latvia. Riga.

- Blanchard, O., M. Griffiths. and B. Gruss, (2013), *Boom, Bust, Recovery: Forensics of the Latvia Crisis*, *Brookings Papers on Economic Activity, Economic Studies Program*, vol. 44, pp 325-388.
- Borowiecki, M. and C. Paunov (2018), "How is research policy across the OECD organised?: Insights from a new policy database", *OECD Science, Technology and Industry Policy Papers*, No. 55, OECD Publishing, Paris, <https://doi.org/10.1787/235c9806-en>.
- European Commission for the Efficiency of Justice (CEPEJ) (2018), *Evaluation of the Latvian Judicial System*, Brussels. Retrieved from: [http://www.ta.gov.lv/UserFiles/Faili/CEPEJ\\_Evaluation\\_Report\\_Latvia\\_Final\\_En.pdf](http://www.ta.gov.lv/UserFiles/Faili/CEPEJ_Evaluation_Report_Latvia_Final_En.pdf)
- Competition Council of Latvia (2018), *Annual Report 2017*, Riga.
- Council of the European Union (2016), *Council Recommendation of 20 September 2016 on the establishment of National Productivity Boards*, OJC 349, 24.9.2016, 1–4.
- Digital Catapult (2019), "Digital Catapult", Country policy case study contribution to the OECD TIP Digital and Open Innovation project.
- Distinguin, I., C. Rugemintwari and R. Tacneng (2016), "Can Informal Firms Hurt Registered SMEs' Access to Credit?" *World Development*, vol. 84, pp. 18–40.
- Égert, B. and A. Vindics (2019), "Mark-ups and product market regulation in OECD countries: what do the data whisper?" *OECD Economics Department Working Paper*, forthcoming.
- European Central Bank (2018), *ECB Bank Lending Survey*, Brussels.
- European Commission (2018a), *Digital Economy and Society Index (DESI) 2018 Country Report Latvia*, Brussels. Retrieved from: <https://ec.europa.eu/digital-single-market/en/scoreboard/latvia>
- European Commission (2018b), *Country Report Latvia 2018*, Brussels. Retrieved from: [https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-latvia-en\\_1.pdf](https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-latvia-en_1.pdf)
- European Commission (2018c), *2018 EU Justice Scoreboard*, Brussels. Retrieved from: [https://ec.europa.eu/info/policies/justice-and-fundamental-rights/effective-justice/eu-justice-scoreboard\\_en](https://ec.europa.eu/info/policies/justice-and-fundamental-rights/effective-justice/eu-justice-scoreboard_en)
- European Commission (2018d) *The Latvian Research Funding System*, European Commission Directorate-General for Research and Innovation, Brussels. Retrieved from: <https://rio.jrc.ec.europa.eu/en/library/specific-support-latvia-final-report-%E2%80%93-latvian-research-funding-system>
- Eurofound (2017a), *United Kingdom: Rescue procedures in insolvency*, <https://www.eurofound.europa.eu/observatories/emcc/erm/legislation/united-kingdom-rescue-procedures-in-insolvency>
- Eurofound (2017b), *Living and working in Latvia*, <https://www.eurofound.europa.eu/country/latvia>
- European Investment Bank (2018) *EIB Group Survey on Investment and Investment Finance Country Overview: Latvia*, European Investment Bank (EIB). Retrieved from: <https://www.eib.org/en/infocentre/publications/all/econ-eibis-2018-latvia.htm>
- Fazekas, M. and S. Field (2013a), *A Skills beyond School Review of Germany*, *OECD Reviews of Vocational Education and Training*, OECD Publishing. <http://dx.doi.org/10.1787/9789264202146-en>
- Fazekas, M. and S. Field (2013b), *A Skills beyond School Review of Switzerland*, *OECD Reviews of Vocational Education and Training*, OECD Publishing. <http://dx.doi.org/10.1787/9789264062665-en>

- Garicano, L., C. Lelarge, and J. Van Reenen (2016) “Firm Size Distortions and the Productivity Distribution: Evidence from France”, *American Economic Review*, vol.106, pp. 3439–3479.
- Hazak, A. (2009) “Companies’ financial decisions under the distributed profit taxation regime of Estonia”, *Emerging Markets Finance and Trade*, vol. 45, pp. 4-12.
- Havrylchyk, O. (2012), “The effect of foreign bank presence on firm entry and exit in transition economies”, *Journal of Banking and Finance*, vol. 36, pp. 1710-1721.
- Havrylchyk, O. et al. (2012), “Foreign bank entry and credit allocation in emerging markets”, *Journal of Banking and Finance*, vol. 36, pp. 2949-2959.
- Innovation, Science and Economic Development Canada (2019), “The Technology Access Centres (TAC) programme in Canada”, Case study produced for the OECD TIP Knowledge Transfer project.
- Jacobs, B. et al. (2017), *Latvia tax review*. World Bank Group, Washington, D.C. Retrieved from: <http://documents.worldbank.org/curated/en/587291508511990249/Latvia-tax-review>
- Johnston, A. and R. Huggins (2017), “University-industry links and the determinants of their spatial scope: A study of the knowledge intensive business services sector”, *Papers in Regional Science*, Vol. 96, pp.247-260.
- Kalvane, I. (2015) “Business Model Choice for Latvian Public Employment Service: What is the Best for Labour Force Competitiveness?” *Procedia - Social and Behavioral Sciences*, vol. 213, pp. 99-104.
- Kuczera, M. (2017), “Striking the right balance: Costs and benefits of apprenticeship”, *OECD Education Working Papers*, No. 153, OECD Publishing, Paris. <http://dx.doi.org/10.1787/995fff01-en>
- Kuļikovskis, G, D., Petraitytė, and B. Stamenov (2018), *RIO Country Report 2017: Latvia*, Publications Office of the European Union, Luxembourg.
- Kuļikovskis, G, D., Petraitytė, and B. Stamenov (2017), *RIO Country Report 2016: Latvia*, Publications Office of the European Union, Luxembourg.
- Lanahan, L. and M.P. Feldman (2015), “Multilevel innovation policy mix: A closer look at state policies that augment the federal SBIR program”, *Research Policy*, vol. 44, pp. 1387-1402.
- Masso, J., Meriküll, J. and P. Vahter (2013) “Shift from gross profit taxation to distributed profit taxation: Are there effects on firms?” *Journal of Comparative Economics*, vol. 41, pp. 1092–1105.
- Mazure, G. (2011), “Development of Credit Unions as Instrument for Expansion of Crediting”, *Proceedings of the Fifth International Scientific Conference “Rural Development 2011”*, vol5, pp.136-143.
- Melitz, M. J. and S. Polanec (2015), “Dynamic Olley-Pakes productivity decomposition with entry and exit”, *The RAND Journal of Economics*, vol.46, pp. 362–375.
- Midrigan, V. and D. Xu (2014), “Finance and Misallocation: Evidence from Plant-Level Data,” *American Economic Review*, vol.104, pp.422-458.
- Ministry of Economics (2018) *Informative Report on Medium and Long-term Labour market forecasts*, Riga. Retrieved from: [https://www.em.gov.lv/en/economic\\_development/informative\\_report\\_on\\_medium\\_and\\_long\\_term\\_1\\_about\\_market\\_forecasts/](https://www.em.gov.lv/en/economic_development/informative_report_on_medium_and_long_term_1_about_market_forecasts/)
- Ministry of Economy, Development and Tourism of Chile (2019), “Public policy to promote technology transfer in Chile: Licensing and technology transfer offices and technology transfer hubs”, case study produced for the OECD TIP Knowledge Transfer project.

- Ministry of Education and Science (2019). *Informative Report On Implementing and Developing the System of Work-Based Learning to Increase the Proportion of Work-Based Learning in Vocational Education*, reviewed at the Cabinet of Ministers on April 2, 2019. Retrieved from: <http://tap.mk.gov.lv/lv/mk/tap/?pid=40470715>
- Moll, B. (2014), “Productivity Losses from Financial Frictions: can self-financing undo Capital Misallocation?”, *American Economic Review*, Vol.104, pp.3186-3221.
- Muizniece, L. and A. Cepilovs (2017), “Supporting university technology transfer-struggles and barriers in Latvia” *Ekonomiska misao i praksa*, vol.1, pp. 321-342.
- Musset, P., et al. (2013), *Skills beyond School Review of Austria*, *OECD Reviews of Vocational Education and Training*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264200418-en>
- OECD (2019a), *Financing SMEs and Entrepreneurs 2019: An OECD Scoreboard*, OECD Publishing, Paris, [https://doi.org/10.1787/fin\\_sme\\_ent-2019-en](https://doi.org/10.1787/fin_sme_ent-2019-en).
- OECD (2019b), *Evaluating Latvia's Active Labour Market Policies: Connecting People with Jobs*, OECD Publishing, Paris, <https://doi.org/10.1787/6037200a-en>.
- OECD (2019c), *University-Industry Collaboration: New Evidence and Policy Options*, OECD Publishing, Paris, <https://doi.org/10.1787/e9c1e648-en>.
- OECD (2018a), *Access to Justice for Business and Inclusive Growth in Latvia*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264303416-en>.
- OECD (2018b), “Competition Law and State-Owned Enterprises: Contribution from Latvia”, Global Forum on Competition, DAF/COMP/GF/WD(2018)49
- OECD (2018c), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/eag-2018-en>.
- OECD (2018d), *OECD Economic Surveys: Switzerland 2018*, OECD Publishing, Paris.
- OECD (2018e), *OECD Economic Surveys: European Union 2018*, OECD Publishing, Paris.
- OECD (2018f), *OECD Economic Surveys: Poland 2018*, OECD Publishing, Paris.
- OECD (2017a), *OECD Economic Surveys: Latvia 2017*, OECD Publishing, Paris. [http://dx.doi.org/10.1787/eco\\_surveys-lva-2017-en](http://dx.doi.org/10.1787/eco_surveys-lva-2017-en)
- OECD (2017b), *Corporate Governance in Latvia*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264268180-en>
- OECD (2017c), *OECD Science, Technology and Industry Scoreboard 2017: The digital transformation*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264268821-en>.
- OECD (2017d), *Starting Strong V: Transitions from Early Childhood Education and Care to Primary Education*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264276253-en>.
- OECD (2017e), *Financial Incentives for Steering Education and Training, Getting Skills Right*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264272415-en>.
- OECD (2016), *Education in Latvia, Reviews of National Policies for Education*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264250628-en>.
- OECD (2015a), *The Future of Productivity*, OECD Publishing, Paris.
- OECD (2015b), *OECD Economic Surveys: Latvia 2015*, OECD Publishing, Paris.

- OECD (2010), Learning for Jobs, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, <https://doi.org/10.1787/9789264087460-en>.
- OECD (2009), OECD Economic Survey, Estonia 2009, OECD Publishing, Paris.
- OECD/The European Commission/ETF (2014), *SME Policy Index: The Mediterranean Middle East and North Africa 2014: Implementation of the Small Business Act for Europe*, OECD Publishing, Paris. <https://doi.org/10.1787/9789264218413-en>.
- Olley, G. S. and A. Pakes (1996), “The Dynamics of Productivity in the Telecommunications Equipment Industry”, *Econometrica*, vol. 64, pp. 1263–1297.
- Papa, J., Rehill, L., and B. O’Connor “Patterns of Firm Level Productivity in Ireland”, *OECD Productivity Working Papers*, 2018-15, OECD Publishing, Paris. <https://doi.org/10.1787/1a04730d-en>.
- Pavcnik, N. (2002), “Trade Liberalization, Exit, and Productivity Improvements: Evidence from Chilean Plants”, *Review of Economic Studies*, vol.69, 245-76.
- Poulsen, S. and C. Eberhardt (2016), “Approaching Apprenticeship Systems from a European Perspective”, *Discussion Papers*, No. 171, BIBB, Bonn. Retrieved from: [www.bibb.de/veroeffentlichungen/en/publication/show/id/7987](http://www.bibb.de/veroeffentlichungen/en/publication/show/id/7987).
- Praxis Center for Policy Studies (2010), *Impact of Non-taxable Retained Profits on Investments and Economic Development (Ettevõtete jaotamata kasumi mittemaksustamise mõju investeringutele ja majandusarengule)*, Tallinn. <http://www.praxis.ee/en/works/impact-of-non-taxable-retained-profits/>
- Renda, A. and Dougherty, S., “Pro-Productivity Institutions: Learning From National Experience”, *OECD Productivity Working Papers*, 2017-07, OECD Publishing, Paris. <https://doi.org/10.1787/d1615666-en>.
- Rupeika-Apoga, R. and I. Solovjova (2017), “Access to Finance for Latvian SMEs” *European Research Studies Journal*, vol. 20, pp. 57-68.
- Sauka, A. and T. Putniņš (2019), *Shadow Economy Index for the Baltic Countries 2009–2018*, Stockholm School of Economics at Riga, Riga.
- Staehr, K. (2014), “Corporate Income Taxation in Estonia. Is It Time to Abandon Dividend Taxation?”, *TUTECON Research Brief*, No. RB-2014/1, Tallinn University of Technology, Department of Economics and Finance. Tallinn.
- Stein, J. (2002), “Information Production and Capital Allocation: Decentralized Versus Hierarchical Firms”, *Journal of Finance*, vol. 57, pp. 1891-1921.