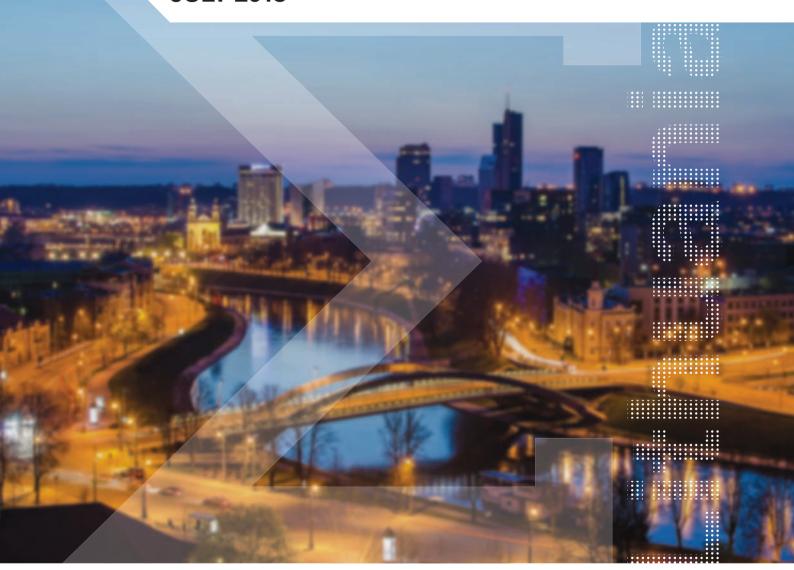


OECD Economic Surveys LITHUANIA

JULY 2018





OECD Economic Surveys: Lithuania 2018



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This Survey was discussed at a meeting of the Economic and Development Review Committee on 5 March 2018. The draft was revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 11 April 2018. The Survey is published on the responsibility of the Secretary-General of the OECD.

The Secretariat's draft report was prepared for the Committee by Hansjörg Blöchliger and Vassiliki Koutsogeorgopoulou under the supervision of Piritta Sorsa. Analytical and statistical research was provided by Demetrio Guzzardi and Hermes Morgavi and editorial assistance was provided by Carolina González.

The previous Survey of Lithuania was issued in March 2016.

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Basic Statistics of Lithuania, 2017

LAND	. PEOPLE A	ND ELECT	ORAL CYCLE		
Population (million)	3.1		Population density per km²	45.5	(37.2)
Under 15 (%)	14.5	(17.9)	Life expectancy (years, 2015)	74.5	(80.5)
Over 65 (%)	17.3	(17.0)	Men	69.2	(74.5)
Foreign-born (%, 2016)	0.6	(- /	Women	79.7	(79.8)
Latest 5-year average growth (%)	-0.6	(0.6)	Latest general election		October
		CONOMY			
Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	47.2		Primary sector	1.7	(2.5)
In current prices (billion EUR)	41.9		Industry including construction	37.2	(26.9)
Latest 5-year average real growth (%)	3.0	(2.1)	Services	67.1	(70.6)
Per capita (000 USD PPP)	32.1	(43.8)			
		L GOVERN			
		cent of GDF			
Expenditure	33.3	(0.0)	Gross financial debt	48.0	(0.0)
Revenue	33.8	(39.3)	Net financial debt	17.8	(0.0)
		AL ACCOL			
Exchange rate (EUR per USD)	0.885		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	0.482		Wholesale and retail trade; repair of motor vehicles and motorcycles	41.2	
In per cent of GDP			Manufacture of chemicals and chemical products	9.8	
Exports of goods and services	81.3	(55.7)	Manufacture of food products	9.1	
Imports of goods and services	79.3	(51.3)	Main imports (% of total merchandise imports)		
Current account balance	0.4	(0.4)	Wholesale and retail trade; repair of motor vehicles and motorcycles	54.1	
Net international investment position	-37.8		Manufacture of coke and refined petroleum products	33.4	
			Manufacture of chemicals and chemical products	8.3	
LABOU	R MARKET,	SKILLS AN	ID INNOVATION		
Employment rate for 15-64 year-olds (%, 2016)	69.4	(67.0)	Unemployment rate, Labour Force Survey (age 15 and over) (%, 2016)	7.9	(6.3)
Men	70.0	(74.8)	Youth (age 15-24, %)	14.5	(13.0)
Women	68.8	(59.4)	Long-term unemployed (1 year and over, %)	3.0	(2.0)
Participation rate for 15-64 year-olds (%, 2016)	75.5	(71.7)	Tertiary educational attainment 25-64 year-olds (%)	39.7	(35.7)
Average hours worked per year (2016)	1 885	(1 763)	Gross domestic expenditure on R&D (% of GDP, 2015)	1.0	(2.4)
		IRONMENT			
Total primary energy supply per capita (toe, 2014)	2.2	(4.2)	CO2 emissions from fuel combustion per capita (tonnes, 2015)	3.3	(9.2)
Renewables (%, 2014)		(9.4)	Water abstractions per capita (1 000 m3, 2015)	0.1	
Exposure to air pollution (more than 10 g/m 3 of PM2.5, $\%$ of population, 2015)	94.6	(75.2)	Municipal waste per capita (tonnes, 2015)	0.4	(0.5)
		OCIETY			
Income inequality (Gini coefficient, 2015)	0.372	(0.313)	Education outcomes (PISA score, 2015)		
Relative poverty rate (%, 2015)	16.5	(11.2)	Reading	472	(493)
Median disposable household income (000 USD PPP, 2015)	12.7	(22.3)	Mathematics	478	(490)
Public and private spending (% of GDP)			Science	475	(493)
Health care (2016)	6.5	(8.7)	Share of women in parliament (%)	21.3	(28.7)
Pensions (2015)	6.9	(9.1)	Net official development assistance (% of GNI, 2016)	0.14	(0.38)
Education (primary, secondary, post sec. non tertiary, 2014)	2.6	(3.7)			

Note: Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 29 member countries.

Source: Calculations based on data extracted from the databases of the following organisations: OECD, International Energy Agency, World Bank, International Monetary Fund and Inter-Parliamentary Union.

Executive Summary

- GDP continues to converge
- Boosting productivity and inclusiveness
- Addressing an ageing society

GDP continues to converge



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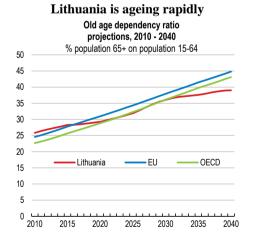
Boosting productivity and inclusiveness The productivity gap¹ remains large



1. Labour productivity gap with respect to the OECD average. *Source*: OECD Economic Outlook database.

StatLink http://dx.doi.org/10.1787/888933788149

Addressing an ageing society



Source: United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects.

StatLink <u>http://dx.doi.org/10.1787/888933788168</u>

Since renewed independence in 1991 and transition from a centrally planned to a market economy, Lithuania has substantially raised well-being of its citizens. Thanks to a market-friendly environment the country grew faster than most OECD countries over the past ten years. The financial system is resilient, and fiscal positions stabilised after a long period of deficits and rising debt. Yet productivity has remained subdued due to stringent labour market regulations, informality and skills mismatch. Wage and income inequality are high, fuelling emigration. The population is ageing fast and declining, particularly because of emigration, putting pressure on the pension system. A wide-reaching labour market, unemployment benefits and pension reform entitled "New Social Model" implemented in 2017 is expected to reinvigorate inclusive growth and underpin the sustainability of public finances.

Catch-up and more inclusive growth will require raising productivity that still remains well below the OECD average, and has slowed down in recent years. In addition to the New Social Model, this calls for further easing regulations on the employment of non-EU workers, financial constraints for productive firms, and reducing informality. Moreover, continuing governance reforms would enhance the performance of state-owned enterprises. Recent reforms, such as more relaxed regulations for high skilled non-EU workers and a modernisation of labour relations are welcome. Greater inclusiveness also requires a better tailoring of education to labour market needs and more effective help for those out of work to find a good job.

Rapid ageing and high emigration shrink the labour force by 1% every year, requiring a comprehensive approach to address the economic consequences. The pension part of the "New Social Model" strengthened the sustainability of the pension system, but did little to reduce old-age poverty. Health care is improving well-being of the elderly, but outpatient and long-term care remain hospital-oriented. The need to upgrade skills, especially of older workers, calls for a broad-based life-long-learning system. Better access to childcare would allow families to have more children and improve labour market opportunities for working parents. Migration policy, including a focused outreach to emigrants and a less restrictive approach to immigration, could help slow down the labour force decline.

MAIN FINDINGS	KEY RECOMMENDATIONS
Fiscal And Financial Policies	To Support Inclusive Growth
High taxation of labour and of low-incomes reduce labour supply and contribute to informality.	Reduce social security contributions, especially for low-income workers, while ensuring that benefits and deficit targets are maintained. Increase immovable property taxation, while exempting
The public spending mix fosters inclusive growth, but spending efficiency is weak, especially in education and health care.	low-income households Assess spending efficiency by carrying out regular spending reviews.
Debt is stabilising but the fiscal framework allows for some fiscal slippage.	Set a debt target and establish a credible frontloaded path to reach it.
Low interest rates and growing credit fuel housing market activity and prices.	Actively use macroprudential measures once imbalances threaten to emerge.
Promoting productive	ity and inclusiveness
The business environment is good but foreign investment remains low, state-owned enterprises dominate many sectors and governance could be improved; firms face barriers to finance while weak insolvency procedures hold back business dynamism.	Strengthen the monitoring capacity of the Governance Coordination Centre, building on the recent increase in its budget. Simplify bankruptcy procedures and establish more favourable conditions for restructuring.
Innovation remains weak and collaboration between business and research sectors is limited.	Continue the implementation of the institutional reform of innovation policy by improving coordination, and consolidate agencies and support programmes where overlaps exist. Give more weight on collaborative research when allocating funds to public research institutions.
Skill mismatch remain high, weighing on foreign investment, productivity and inclusiveness. The low efficiency of the education system contributes to skill mismatch	Strengthen work-based learning, including by linking the length of apprenticeships to the level of acquired competencies. Provide differentiated awards for tertiary courses with skills closely linked to labour market needs. Continue with overall reform of the education system at all levels, addressing skill mismatch.
Protection for the most vulnerable is low	Further increase the level of social assistance, while ensuring strong work incentives. Increase investment in active labour market programmes
Addressing an	upon a close monitoring of their outcomes.
The pension system is highly redistributive but not targeted at the poor. Social security contributions put a high tax wedge on labour contributing to informality.	Continue the shift of pensions from the pay-as-you-go system ("first pillar") towards pension funds ("second pillar"), and make payments to pension funds compulsory. Fund the wage-independent basic pensions through the general government budget rather than social security contributions.
The health care system remains hospital-care centred, while outpatient and long-term care for the elderly lags behind. Life-long learning is modest. Older workers in particular do not take part in adult education.	Continue reorganising the hospital sector; and improve outpatient- and long-term care. Provide financial incentives for life-long learning, involving both firms and ampleyees.
not take part in adult education.	both firms and employees.
The workload for working mothers is high. Emigration is still high and immigration restricted, contributing to population decline and skills shortages.	Extend and improve support for childcare. Implement a well-integrated migration policy, including a focused outreach to emigrants and a less restrictive approach to immigration.

Assessment and recommendations

- The economic situation is favourable
- Maintaining financial stability
- Fiscal policy for inclusive growth
- Greening the economy
- Promoting productivity and inclusive growth
- Ageing together

Lithuania, a country with less than three million people, has been successful in the transition from a centrally planned to a market economy since it renewed independence in 1991. The political and economic environment is overall democratic and market-friendly. Per-capita income growth over the last 25 years was above most OECD countries and exceeded other economies in the region, facilitating convergence towards OECD average incomes (Figure 1). Lithuania is closely integrated in the international community as it joined the World Trade Organization in 2001, the European Union in 2004 and the euro area in 2015. The country's fiscal position is sound, after a protracted period of deficits and rising debt. Since 2000 living standards increased rapidly, dented only by the global financial crisis of 2009 when especially foreign investment stopped abruptly and unemployment reached almost 18%, and in 2014 when exports were hit by the recession in Russia and a slowdown in other major trading partners.

Despite strong economic performance and bold reforms over the last 25 years, Lithuania faces several challenges going forward. Labour productivity is still at around two-thirds of OECD average, partially influenced by labour informality and skills mismatch (Figure 1). Wage inequality is high and job quality often unsatisfactory. High social security contributions and, until recently, stringent labour market regulation weigh on labour market opportunities, exacerbating inequality and diminishing tax revenues, and contribute to informality. Despite low barriers, foreign investment remains subdued. Demography is of particular concern. Lithuania's population is ageing fast and declining, particularly because of emigration of the young. The labour force continues to shrink by around 1% every year. Immigration of talent is held back by stringent regulation and the lack of attractive job opportunities.

Lithuania can be praised for having profoundly raised wellbeing of its citizens in the past, yet some areas remain below OECD levels and more could be done (Figure 2). The quality of housing is rapidly increasing as investment in residential housing is sustained, but many dwellings are still too small and poorly equipped. Health outcomes are improving thanks to a health care system which is becoming ever more efficient and more accessible, yet some health indicators such as low life expectancy suggest potential for improvement in the population's health status. Surveys and polls indicate that many Lithuanians are unhappy with the social and psychological climate in the country, pointing at a lack of community spirit. Finally, environmental quality is good in this country, which is rich in natural beauty, except that water quality is low in some lakes and rivers.

Income inequality and poverty are relatively high, especially among older Lithuanians and those living in rural areas. Household income inequality is higher than in most OECD countries, driven by unequal earnings, low social benefits and a tax system which is not very redistributive (Figure 3). The number of low-skilled and vulnerable workers is above OECD average. Around 17% of the population lives in relative poverty with an income below 50% of the median. Women, the youngest and the elderly are particularly affected. As with other countries, the risk of poverty in Lithuania tends to fall with the level of education, as those not having completed secondary education are facing a high risk. Regional disparities in income and unemployment remain considerable (Statistics Lithuania, 2016).

A. Real GDP per capita Average annual growth 2006-5 4 2 -2 Szech Republic Jnited States B. Labour productivity is low, 2017 USD PPP per worker 180 000 160 000 140 000 120 000 100 000 80 000 60 000 40 000 20 000 Switzerland Czach Rep. New Zealand Slovak Rep.

Figure 1. Lithuania is growing faster than most OECD countries

Source: OECD Economic Outlook database.

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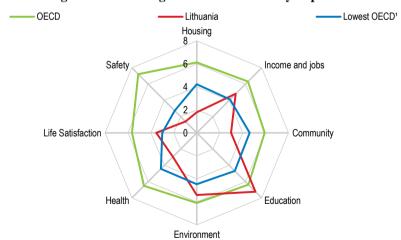


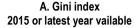
Figure 2. Well-being could be considerably improved

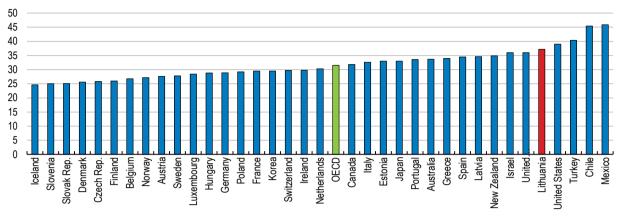
1. Lowest OECD refer to the 17 countries with the lowest score among the OECD countries. Data are for 2016 or latest available year.

Source: OECD Better life index indicators database; Eurostat; Gallup database; and World Bank World Development Indicators.

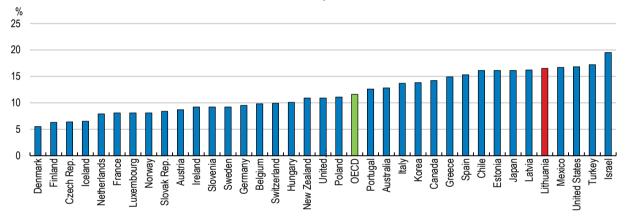
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Figure 3. Inequality and poverty rates are high





B. Relative poverty rate 2015 or latest year vailable



Note: The two indicators are calculated in disposable income after taxes and transfers. *Source*: OECD Income Distribution and Poverty database.

StatLink https://doi.org/10.1787/888933788225

The government has acknowledged these challenges and has initiated deep-reaching and comprehensive reforms to make growth more inclusive. These reforms, which entered into force in 2017 under the umbrella "new social model", bring a growth-enhancing labour market reform together with stronger social protection and more sustainable public finances (Box 1 and Figure 4).

Box 1. The New Social Model: a wide reaching structural reform

Reform efforts over the past years focused on the New Social Model, an encompassing reform of labour relations, unemployment insurance and pensions based on flexicurity. The reform entered into force in three stages in 2017 and 2018. The reform relaxed labour market regulations, increased unemployment benefits, strengthened active labour market policies, and put the pension system on a more sustainable path (Figure 4). In detail, the reform involved the following changes:

Labour Code

- Permanent employment contracts were eased by relaxing the rules on individual
 dismissal for employees with a permanent contract and reducing the notice period
 and severance pay for these employees. A central fund, out of social security
 contributions, will provide supplementary severance pay for workers with long
 tenure (five years or more).
- Temporary employment was also eased. As a safeguard, fixed-term contracts do not account for more than 20% of all employment contracts for a given employer. Moreover, the variety of contracts was increased, including for apprenticeships.
- Working-time arrangements also became much less regulated, including through the possibility of working-time averaging over a three-month period.
- Strengthening collective agreements through changes in collective representation. Work councils must be formed in all firms with 20 or more employees, apart from the cases where more than a third of employees belong to trade union. Moreover, the competencies of the trade unions and work councils at the company level are divided, with work councils having responsibility for all information and consultation activity and trade unions for representation and collective bargaining.
- Clarifying the procedure for minimum wage determination, strengthening the transparency of the payment system, applying the minimum wage for non-qualified employees.
- Lifelong learning is promoted by allowing employees to take up training for up to five partially paid days per year to attend non-formal adult education programmes.

The work—life balance is improved by offering parents more possibilities for part-time and remote working, flexible working schedules and individual working time arrangements. The new law introduces specific exemptions for small firms (up to 10 employees). Small-size firms are exempted from the obligation to approve the selection criteria for redundancy and to form a selection committee when dismissing employees on the ground on the initiative of employer, or to provide information to their employees regarding the company's situation in terms of fixed-term contracts and temporary work. In addition, these firms are not obliged to provide a payment of study leave for employees participating in non-formal training, but rather this payment is based on an agreement between the employer and the employee.

Pensions

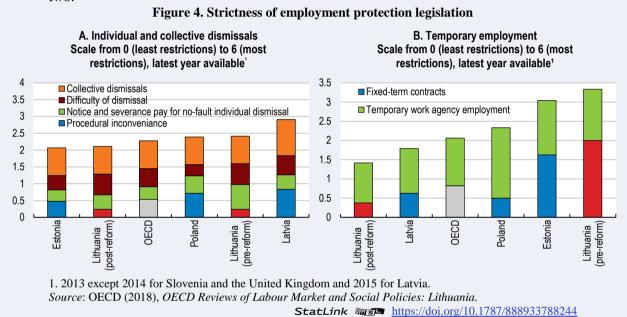
- Social security contributions for the first pillar pension system were reduced by one percentage point.
- Pensions not linked to former wage levels("basic pensions") will be gradually

moved from the pension fund to the general government budget.

- A first-time pension indexation rule links the growth of individual pensions to the average growth of the wage sum over 7 years: 3 previous years, current year and 3 coming years (projections made by the Ministry of Finance), replacing the former defined-benefit system.
- A transparent and simple formula (point system) by which contributions translate into pension rights was introduced.
- An increase of the mandatory insurance period for the full basic pension entitlement from 30 to 35 years will be gradually phased-in.

Taxation

Personal income tax exemptions for low-income households were increased by a factor of two.



Against this background, this Economic Assessment of Lithuania has two main messages:

- Boost productivity and inclusiveness: Labour productivity growth has slowed and inequality and poverty remain high. Income convergence and high well-being require that this twin challenge is addressed through a systematic policy approach that promotes business dynamism, provides individuals with the opportunities and skills needed to meet their productive potential, and supports the most vulnerable. Less informality is a win-win for both productivity and inclusiveness.
- Address the economic consequences of ageing: Lithuania is ageing fast, and
 emigration exacerbates the demographic pressure and contributes to skills
 shortages. Addressing the economic consequences of an ageing population
 requires a comprehensive approach that embodies several policy areas such as the
 pension and health care system, adult education and life-long learning, migration,
 and family policy.

According to OECD simulations, structural reforms as discussed in this Survey could boost new sources of growth substantially (Box 2).

Box 2. Illustrative simulations of the potential impact of structural reforms

Simulations, based on historical relationships between reforms and growth in OECD countries, allow gauging the impact of structural reforms proposed in this Survey. The simulations are based on specific examples of reforms in the area of product and labour market regulation, investment policy, and fiscal policy, and include the effect of new labour market policies which were implemented in 2017 as part of the "new social model" package (Table 1 and Table 2). The estimates assume swift and full implementation of the reforms. Results should be taken with care, and countries are advised to assess growth impacts using methodologies that reflect the situation in their country.

Table 1. Potential impact of structural reforms on GDP per capita after 10 years

Structural policy	Policy	change	Total effect on	t on Impact on supply side components		
	2016	After reform	GDP per capita	Productivity	Investment	Employment
				in percent	in percent	in pp2
Investment specific policies						
Increase in R&D expenditure	0.3%	0.6%	0.4	0.4		
Fiscal policy						
Reduce social security contributions	40%	35%	0.8			
Labour market policies						
Improve labour market regulations (regular contracts)	2.4	2.1	0.7		0.5	0.2
Increase spending on activation	5.7%	8.9%	0.3	0.1		0.2
Increase family benefits in kind	0.7%	1.0%	0.6			0.3

Source: OECD calculations based on Balázs Égert and Peter Gal (2017), "The quantification of structural reforms in OECD countries: A new framework", OECD Journal: Economic Studies, Vol. 2016/1 and Balázs Égert (2017), "The quantification of structural reforms: taking stock of the results for OECD and non-OECD countries", OECD Economics Department Working Papers, forthcoming.

Table 2. Type of reforms used in the simulations

Structural policy	Structural policy changes					
Investment specific policies						
Increase business spending in R&D	Increase business expenditure in R&D for 0.3% of GDP to 0.6% of GDP, bring it to around half of the OECD average.					
	Fiscal policy					
Reduce social security contributions	Reduce social security contributions, which fund pensions, health care and unemployment benefits, from 40% of gross wages to 35%.					
	Labour market policies					
Improve labour market regulations	Implement the regulations of the new labour code (individual and collective dismissal, severance pay etc.) adopted in 2017 as part of the new social model					
Increase spending on activation	Increase expenditure per unemployed as a percentage of GDP per capita from 5.7% to 8.9%					
Increase family benefits in kind	Increase family benefits in kind, such as childcare support, from 0.7% of GDP to 1%.					

The economic situation is favourable

Growth has strengthened

Economic activity strengthened in 2017, recovering from a slowdown in 2015 and 2016, and remains solid into 2018 (Table 3 and Figure 5). Household consumption is supported by falling unemployment, rapid wage increases and favourable credit conditions. After last year's impressive performance on the back of broad based external demand recovery, export growth weakened. Domestic investment rebounded in 2017, largely due to growing business investment in double digits. Knowledge-based investment growth was particularly strong. High capacity utilisation continues to spur private investment, although the investment rate in the business sector is well below its pre-crisis level (Figure 6). Low business confidence may be part of the explanation but other factors, including the difficulties faced by firms in finding adequately-skilled workers, and large informality can also deter investment. As a catching up economy Lithuania needs more investment to boost productivity and close the income gap. Inflation has receded in early 2018 as the impact of last year's hikes in some excise duties is abating (Figure 5, Panel E). Service price inflation remains elevated, however, reflecting strong wage and domestic demand growth.

Table 3. Macroeconomic indicators and projections

	onome mateurors and	1 0							
Annual percentage change, volume (2010 prices)									
	2014 current prices (EUR million)	2015	2016	2017	2018	2019			
Gross domestic product (GDP)	36 568	2.0	2.3	3.9	3.4	2.9			
Private consumption	22 777	4.0	4.9	3.8	3.7	3.5			
Government consumption	6 073	0.2	1.3	1.0	0.9	8.0			
Gross fixed capital formation	6 905	4.8	-0.5	7.3	7.6	5.3			
Final domestic demand	35 756	3.5	3.3	3.9	3.9	3.4			
Stockbuilding ¹		3.8	-0.8	-0.9	-0.5	0.0			
Total domestic demand	35 809	7.2	2.3	3.1	3.7	3.4			
Exports of goods and services	29 658	-0.4	3.5	13.6	6.9	4.4			
Imports of goods and services	28 898	6.2	3.5	12.8	7.1	5.1			
Net exports ¹		-5.2	-0.1	0.8	-0.1	-0.4			
Other indicators (growth rates, unless specified)									
Potential GDP		2.6	2.6	2.5	2.6	2.8			
Output gap²		0.1	-0.1	1.3	2.1	2.2			
Employment		1.2	2.0	-0.5	-0.4	-0.4			
Unemployment rate		9.1	7.9	7.1	6.6	6.2			
GDP deflator		0.3	1.0	4.2	3.1	2.8			
Harmonised consumer price index		-0.7	0.7	3.7	2.8	2.6			
Harmonised core consumer price index		1.9	1.7	2.6	2.0	2.5			
Current account balance ³		-2.9	-1.2	0.4	-0.2	-0.5			
General government financial balance ³		-0.2	0.3	0.5	0.5	0.5			
Underlying government financial balance ²		-0.5	0.2	0.1	-0.1	-0.2			
Underlying government primary financial balance ²		1.0	1.5	1.2	0.9	0.7			
General government gross debt³		53.8	51.7	48.0	43.1	41.6			
General government gross debt, Maastricht definition ³		42.6	40.1	39.7	34.8	33.4			

^{1.} Contributions to change in real GDP.

Source: OECD Economic Outlook 103 database and updates.

^{2.} As a percentage of potential GDP.

^{3.} As a percentage of GDP.

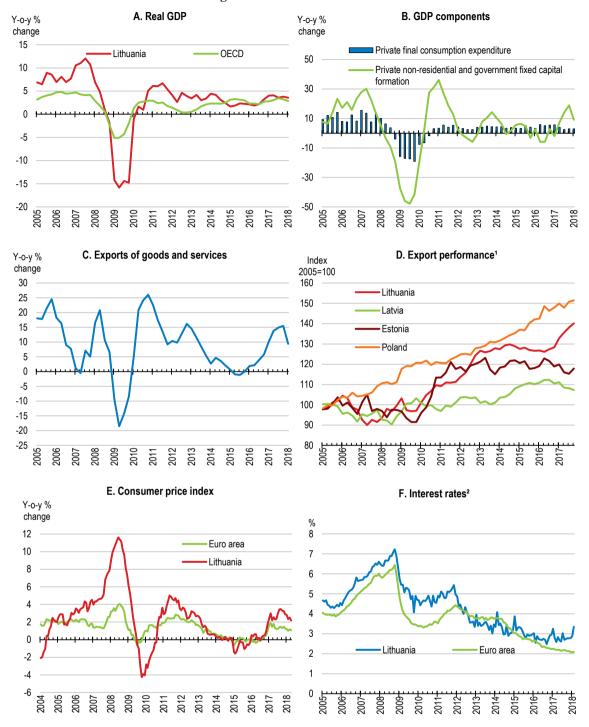


Figure 5. Economic indicators

- 1. Export performance is measured as actual growth in exports relative to the growth of the country's export market, which represents the potential export growth for a country assuming that its market shares remain unchanged.
- 2. Data refer to annualised agreed rate on loans other than revolving loans and overdrafts, convenience and extended credit card debt to non-financial corporations of less or equal to 1 million euros. *Source*: OECD Economic Outlook database; and Eurostat.

A. Investment rate B. Investment composition % of GDP % of GDP 40 25 Lithuania Business investment EA16 Latvia 35 Government investment 20 Estonia Households investment Poland 30 15 25 10 15 2005 2007

Figure 6. Investment rates remain low

Source: OECD Economic Outlook database; and Eurostat.

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Stronger activity has also helped reduce unemployment, which edged down to less than 7% of the labour force towards the end of 2017, more than 10 percentage points below its 2010-peak (Figure 7). Lower unemployment is due not only to the employment gains in sectors such as industry and services, but also reflects a shrinking labour force as a result of unfavourable demographics. At the same time, labour force participation, especially among older workers, rose potentially reflecting a rising retirement age and low pensions and social support.

External positions are sustainable with foreign debt at 83% of GDP in 2017 and the net international investment position on an improving trend (Figure 8) The deficit is financed essentially by a rise in foreign direct investment (FDI) and in portfolio investment. The inward FDI stock stood at around 37 % in 2017, less than in other Baltic countries. Many projects in recent years concerned shared services centres, which require little capital expenditure and hence do not contribute much to the FDI stock. By this token more FDI would not only improve external sustainability but help boost productivity with transfer of know how (OECD, 2016a). Therefore, improving the business environment to attract FDI remains important.

B. Population and labour foce participation A. Labour force, employment and unemployment rate Index, % labour Index. force 15-74 2005=100 2005=100 120 70 110 Total employment 68 105 18 100 Labour force 80 66 100 15 Unemployment rate 95 12 60 64 9 90 4١ 62 Population 15-74 85 6 20 60 Labour force participation rate (RHS) 58 80 2016 2013 2014 2015 2016 2017 2015 2017 2014 Index, D. Real wages and productivity C. Employment dynamics 2005Q1 =100 Average annualised quarterly contribution 2011-2017 Agriculture 160 Construction Labour productivity of the total economy -3% Others 9% Real wage rate, total economy 26% 150 Manufacturin g 13% 140 130 120 Professional 110 activities 28% 100 Trade 21% E. Minimum wage to median wage of full time F. Competitiveness indicator workers, 2016 (unit labour costs) Index, Lithuania EA16 Ratio 2005=100 Latvia Estonia 0.8 160 Poland 150 0.7 0.6 140 0.5 130 0.4 120 0.3 110 0.2 100 90 80 Hungari Lithuanis Australis Poland Israel Portuga France New Zealand Turkey E Germany Slovak Rep Greece United Kingdom

Figure 7. Labour market and wage developments

Source: OECD Labour force statistics database; OECD Economic Outlook database; and Eurostat.

Productivity needs a boost to maintain competitiveness

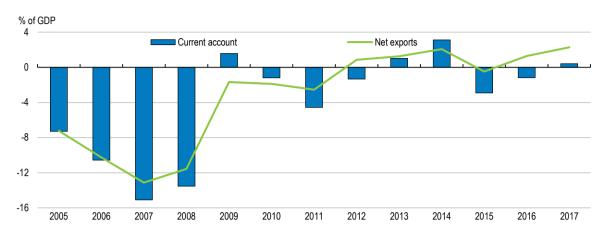
Wage growth has outpaced productivity growth in recent years without bearing much on competitiveness as reflected in export performance (Figure 5, Panel D and Figure 7, Panel D). Minimum wages grew by 64% between 2009 and 2016, bringing the ratio of minimum to the median wages even above the OECD average (Figure 7, Panel E). While boosting inclusiveness, such hikes have added to wage pressures, pushing up relative unit labour costs (Figure 7, Panel F). Official estimates suggest that the rise in the monthly minimum wage by 17% in 2016 might have increased the growth of average monthly gross wages by approximately 2 percentage points (Ministry of Finance, 2017). Maintaining price competitiveness going forward could prove challenging as supply-side constraints will keep pressures on wages, unless productivity growth picks up substantially. Wage developments should be monitored closely. The recent pick up in labour productivity is encouraging, though growth remains well below its past highs.

Productivity can be boosted by deepening integration in global value chains (GVCs) which enables knowledge transfer and provides access to more differentiated and better quality inputs (OECD, 2013). Lithuania's participation in GVCs is low in international comparison, although improving (Figure 9). Raising the export pattern towards higher value-added goods and services would help boost productivity. Exports are currently dominated by medium-low technology goods, such as resource-intensive goods, raw material and less-knowledge-intensive services (Figure 10). Transport accounted for around 60% of total export services in 2016 and keeps growing as the sector extended its activities towards Western markets (Bank of Lithuania, 2017a). Re-exporting activities constitute an important share of exports, making up around 40% of good revenues in 2013 (Notten, 2015).

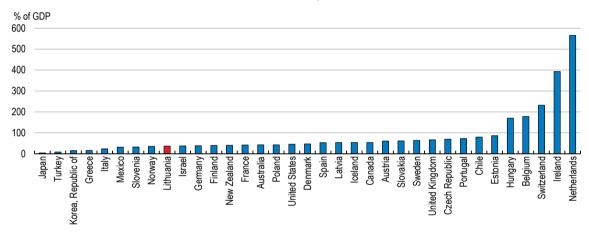
At the end of 2017 Lithuania established the National Productivity Board (NPB). The Board monitors productivity developments, assesses the risks and works on the proposals for further reforms/actions. The first annual productivity report by the NPB will be published by the end of 2018.

Figure 8. External positions appear sustainable

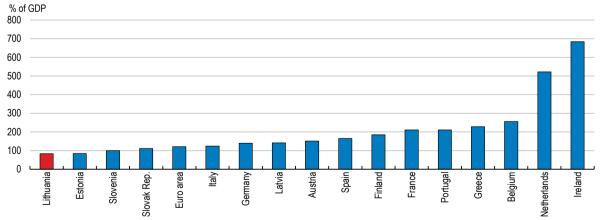
A. Current account



B. Stock of inward FDI, 2017



C. Gross external debt, 2017

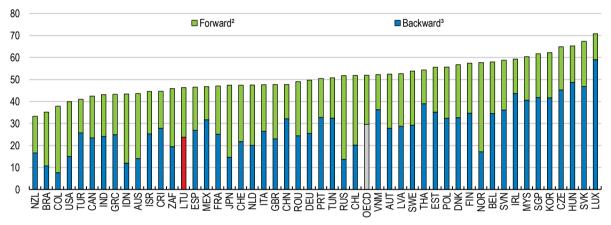


Source: IMF Balance of Payment database; OECD Economic Outlook database; and Eurostat.

A. Hirschman Herfindahl market concentration B. Share of export by complexity quartile¹ in index by export destination value, 2015 Lithuania Estonia Poland Latvia % 0.12 ■ 1st quartile ■2nd quartile ■3rd quartile ■4th quartile 100 More concentrated 90 0.11 Less concentrated 80 0.1 70 60 0.09 50 0.08 40 30 0.07 20 0.06 10 0 0.05 DECD CZE P USA FRA DAE MEX GBR Norld SA S Ζ

Figure 9. Export diversification indicators





- 1. Complexity is defined by the implied productivity of the product (PRODY) using the methodology of Hausmann et al. (2007), "What you export matters", Journal of Economic Growth, Springer, Vvol. 12(1). PRODY is calculated by taking a weighted average of the per capita GDPs of the countries that export the product. The weights are the revealed comparative advantage of each country in that product. The products are then ranked according to their PRODY level.
- 2. This indicator is calculated for the total value of source and exporting industries; it is estimated as being the VA contents of exports originated in the source country, and embodied in the exports of the exporting country, divided by the gross exports of the source country.
- 3. This indicator is calculated for the total value of source and exporting industries; it is estimated as the ratio between the VA of the source country embodied in the exports of the exporting country, and the gross exports of the exporting country.

Source: WITS database; UN Comtrade database; OECD TiVA database; and OECD calculations.

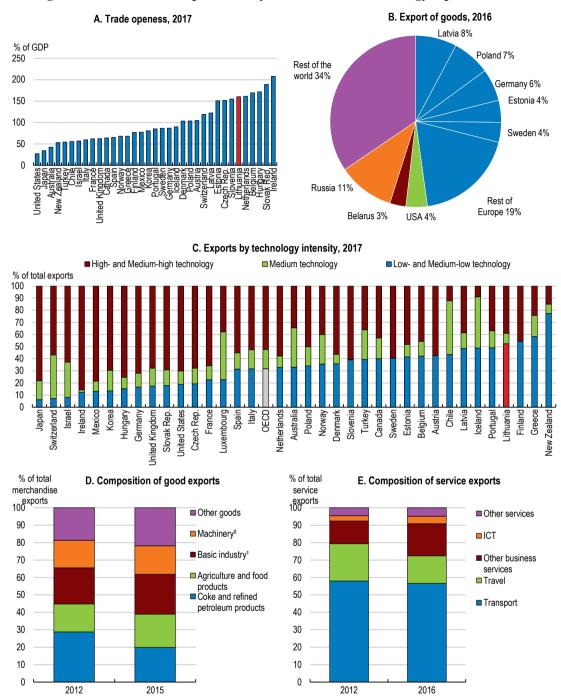


Figure 10. Lithuania is an open economy but low-medium technology exports dominate

- 1. The Basic industry sector includes the following sectors: Chemicals and chemical products; Basic pharmaceutical products and pharmaceutical preparations; Rubber and plastic products; Other non-metallic mineral products; Basic metals; and Fabricated metal products, except machinery and equipment.
- 2. The Machinery sector includes the following sectors: Computer, electronic and optical products; Electrical equipment; Machinery and equipment not elsewhere classified; Motor vehicles, trailers and semi-trailers; and Other transport equipment.

Source: OECD Economic Outlook database; OECD STAN Bilateral Trade Database in goods database; and Eurostat.

The policy mix is broadly supportive

The macro-economic policy mix is appropriately supportive of growth. Interest rates are low as euro area monetary policy remains accommodative and credit to the private sector is growing. The fiscal stance was slightly expansionary in 2017. This was appropriate, despite strong activity, to finance important structural fiscal reforms. The increase in the non-taxable income threshold in the personal income tax system boosts work incentives and inclusiveness and structural measures under the "New Social Model" make labour relations more flexible. Reforms also make unemployment and social insurance benefits more generous and active labour market policies broader in scope. Fiscal policy is poised to remain slightly expansionary in 2018, aiming at boosting productivity and reducing inequality and poverty, and become broadly neutral in 2019. Going forward and given the strong economy, a tighter stance could be appropriate to avoid procyclicality.

Growth will remain robust

Supportive financial conditions and solid investment will keep growth brisk at around 3.2% in 2018-19 (Table 3). Firms are projected to increase their investments in advanced technologies to offset the impact of the declining labour force. Increased roll-out of EU-funded projects and solid exports will also spur investment, even though some easing in investment growth is expected in 2019 as the flows of the structural funds return to normal levels. Tightening labour market conditions will continue supporting private consumption but constraints on the supply side will weigh on growth. Unemployment is set to fall further, while core inflation will keep rising as wage and demand pressures persist.

Lithuania's growth prospects depend on both external and domestic factors. A weaker than anticipated growth in the euro area would affect Lithuania's exports and investment. Brexit may affect the Lithuanian economy since it increases uncertainty in the European Union and may also lower Lithuanian emigrants' remittances. A shrinking labour force could limit employment growth more than projected, and wage increases could lead to a higher-than-foreseen increase in unit labour costs, impacting competitiveness. While good macro prudential measures are in place, housing market developments might destabilise the economy over the medium term. Finally, the economy may confront unforeseen shocks, whose effects are difficult to factor into the projections (Table 4).

Increase in geopolitical devents in and around Europe, especially relating to Russia, could jeopardise activity in Lithuania through the trade, confidence and investment channels.

Financial turbulence in the Nordic banking system

Rising protectionism in trade and investment

Rising protectionism in trade and investment

Rising protectionism would affect the external demand of the main trading partners.

Table 4. Possible extreme shocks to the Lithuanian economy

Maintaining financial stability

Credit to the private sector is firming up and housing activity is buoyant

Credit growth has gathered momentum since mid-2015, driven by a pick-up in loan demand and strong balance sheets among enterprises and households (IMF, 2016) (Figure 11). The debt overhang in many households and strong risk aversion on the part

of both potential borrowers and banks in the post-crisis years has kept credit growth sluggish, especially for small and medium-sized enterprises (SMEs). The ongoing expansion in credit also benefits SMEs, which bodes well for growth and job creation. Indeed, the total value of loans granted to enterprises rose by more than 5% in 2017, with the corresponding increase for SMEs reaching nearly 10% (Bank of Lithuania, 2017b).

Housing activity is buoyant amidst low interest rates, growing credit, and rising incomes (Figure 11). Housing affordability continued to improve, amid fast growing household income and low interest rates (Bank of Lithuania, 2017c). The number of housing transactions in 2016 came close to pre-crisis peaks, with the positive – though more sluggish – trend continuing in 2017. House prices have continued to trend upwards, with some slowing down since mid-2017. A significant share of funding for housing purchases comes from bank loans as approximately 40% of housing transactions involve mortgages. In the third quarter of 2017, loans for house purchases comprised 80% of the loan stock to households, or 40% of all loans to the private sector in 2016 (Bank of Lithuania, 2017c). Rental prices have also been rising but at a slower pace than sales prices. Developers have responded to the buoyancy in the real estate market by investing heavily in the expansion of the housing stock, which started to ease price pressures.

The financial system appears sound but vigilance is required

Lithuania's banking sector is highly concentrated and dominated by foreign-owned banks. At the end of 2017 there were 6 banks and 7 foreign branches accounting, respectively, for 84% and 8% of the market (by both assets and loans). The three largest banks (SEB, Swedbank and Luminor) covered, respectively, 81% and 83% of the market by assets and loans. The market share of foreign branches is set to increase to about one-third by the beginning of 2019. The financial system is resilient according to the IMF assessment (IMF, 2017a). Performance indicators suggest that the banking sector's solvency and liquidity indicators are above the required levels; capital adequacy is robust, and almost all bank capital consists of Common Equity Tier 1 (CET1) securities (Figure 12). The quality of loans has also improved. Net funding from parent banks, an important indicator for Lithuania's largely foreign-owned banking system, is down to less than 4% of GDP.

Lithuania has been strengthening the legal and institutional foundations of financial stability since the global crisis. A *Law on Financial Sustainability* was enacted in 2009; the Bank of Lithuania was granted an explicit mandate to conduct macro-prudential policy in 2014; and a *Strategy of Macroprudential Policy* was adopted in 2015. The central bank's macroprudential toolkit includes a countercyclical capital buffer and a buffer for systemically important institutions which are readjusted on a periodical basis, as well as requirements based on loan-to-value ratios (LTV), debt-service-to-income ratios (DSTI) and loan maturity indicators for borrowers (Box 3). It also includes a systemic risk buffer. This broad and flexible macroprudential policy toolkit is providing the Bank of Lithuania with the appropriate instruments needed to deal with the specific challenges of the financial system.

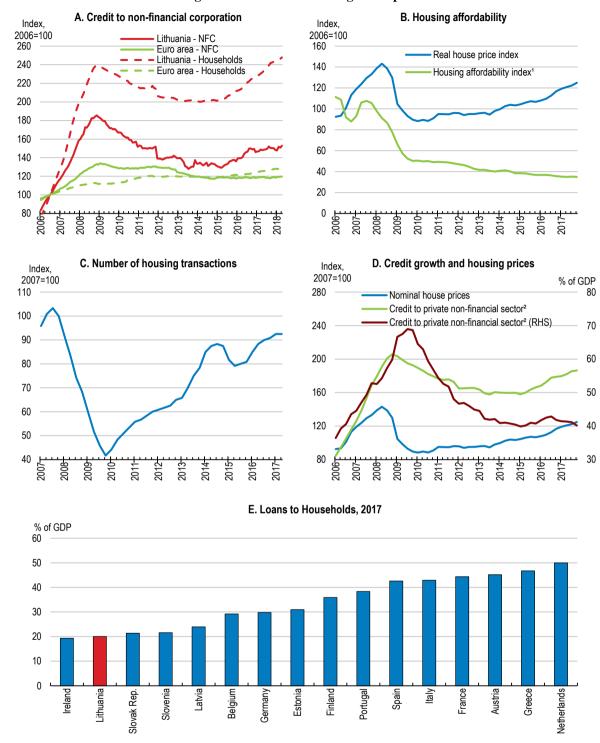


Figure 11. Credit and housing development

- 1. The housing affordability index is calculated by dividing the average annuity housing loan instalment by average net wage.
- 2. The private non-financial sector includes households and private non-financial corporations. *Source*: European Central Bank; Bank of Lithuania; OECD Economic Outlook database; and OECD House price index database.

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Nevertheless risks need to be monitored, including the relatively fast credit growth and buoyancy in the real estate market, which is approaching pre-crisis levels (Figure 11). With private sector indebtedness still modest and house prices well below their historical highs there are no immediate risks to financial stability. However, close attention is required as the financial cycle is gaining momentum, especially as credit growth is among the fastest in the European Union and many SMEs face a shortage of collateral (Bank of Lithuania, 2017c). The Bank of Lithuania reassesses the existing macroprudential policy stance periodically and is ready to take actions when needed. To increase the resilience of banks against a potential market downturn, in December 2017 the Bank raised the countercyclical buffer rate from 0% to 0.5%, effective from end-2018. This aims to build capital reserves during times of robust growth, when profitability of the banking sector is high, to cover potential losses and reduce credit cyclicality during bad times. If further actions were needed in light of rising house prices and strong demand for housing credit, the option of further raising the countercyclical buffer and/or reassessing Responsible Lending Regulations (RLR) could be considered.

A. Regulatory capital to risk-weighted assets B. Loans to deposit ratio Lithuania Poland Estonia Latvia 2009 2010 2011 2012 2013 2014 2015 2016 2017 D. Non-performing loans to total gross loans 2017 C. Non-performing loans to total gross loans % of total or latest year available gross loans

Figure 12. Soundness indicators

Source: IMF Financial Soundness Indicators database; and European Central Bank.

The high presence of Nordic banks in the banking sector, which own the lion's share of the sector, makes the Lithuanian economy particularly vulnerable to developments in the Nordic countries. Dealing with the spillovers from vulnerabilities in parent banks therefore calls for carefully monitoring those developments when assessing the resilience of Lithuanian banks to various types of stress. The Bank of Lithuania and the Ministry of Finance are part of the Baltic-Nordic co-operation agreement on cross-border financial stability and crisis management which foresees exchange of information, joint discussions on issues related to financial stability and regular joint financial crisis simulation exercises (Bank of Lithuania, 2018). The large concentration of the banking sector also makes the financial system highly dependent on a few large market players, which can massively disturb the financial system in case of imbalances. Indeed, the Bank of Lithuania identified four systemically important banks and set additional buffer requirements for them, effective from 31 December 2016 (Box 3).

Box 3. Prudential regulations in Lithuania

In line with the EU's Capital Requirements Regulation and Directive (CRD IV), new capital buffer requirements have been introduced for banks to reduce structural and cyclical risks. A 2.5% capital conservation buffer is now in place and the countercyclical capital buffer rate, currently at 0%, is set to increase to 0.5% end-2018. This level can be raised, if necessary, to bolster the resilience of the banking sector, as well as containing excessive credit growth and financial leverage (Bank of Lithuania, 2017c).

In addition, domestic systemically important institutions were identified at end-2015 and are now subject to additional capital buffer requirements. The O-SII buffers have been applied to the four systemically important banks since end-2016: an additional capital buffer of 5% has been applied to AB Šiaulių Bankas, and 2% buffer to the three largest banks – AB SEB Bankas, Swedbank AB and Luminor Bank AB.

Several measures have also been put in place to safeguard borrowers from excessive debt accumulation in the current low-interest, high growth environment. The Responsible Lending Regulations were amended in 2015, the maximum loan maturity was shortened from 40 to 30 years, and the interest rate sensitivity of the debt service to income (DSTI) requirement has been reduced, while providing limited flexibility to apply a higher DSTI ratio under specific circumstances without compromising the macro-prudential objectives.

The presence of foreign bank branches highlights the role of cross-border coordination of macroprudential policy. The Bank of Lithuania has a number of instruments at its disposal that could be activated and applied to bank exposures in Lithuania if cyclical or structural systemic risks increased. For some of them (such as the countercyclical capital buffer), reciprocity is mandatory, while for others (such as the systemic risk buffer) reciprocity by other EU members would be sought through the voluntary reciprocity framework promoted by the European Systemic Risk Board. The borrower-based requirements (LTV, DSTI, loan maturity) in Lithuania already apply to all lenders that provide housing loans in the country and hence no reciprocity arrangements are required.

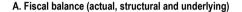
As in other countries, Lithuanian banks are facing the challenges associated with technological change in the financial industry, with the emergence of cyber security threats, for example, as well as the need to adjust to disruption in their business models due to the emergence of new products and market participants, such as FinTech, and their financial technologies (Bank of Lithuania, 2017c).

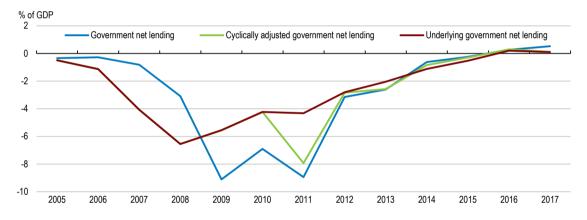
Fiscal policy for inclusive growth

Fiscal policy has become more sustainable

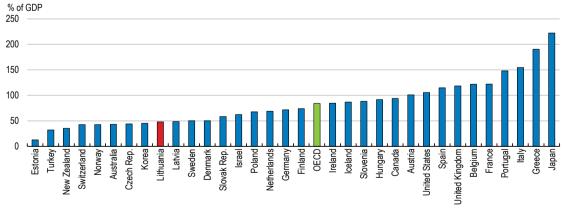
Lithuania's fiscal position is sound. After revenues fell sharply in the wake of the 2008 crisis, the government started consolidating public finances on the spending side by reducing the wage bill, lowering social spending and cutting infrastructure investment. The 2016 budget resulted in a 0.3% surplus, the first for more than a decade (Figure 13). As a result, gross debt is now stabilising at around 50% of GDP (OECD National Accounts definition), which is sustainable under various simulations (Fournier and Bétin, *forthcoming*). The budget remained positive in 2017 and is expected so in 2018. The New Social Model is expected to make the budget more sustainable and more inclusive, improving the budget balance by around 3% of GDP in the long term, while higher social benefits will increase spending by around 0.5% in the short-term.

Figure 13. Fiscal policy is relatively sound





B. Public debt, 2017 or latest year available



Note: Debt follows OECD National Accounts definitions.

Source: OECD Economic Outlook database.

Lithuania's fiscal framework has been strengthened by adopting the EU fiscal compact at the constitutional level and establishing an independent fiscal council, in operation since 2016.

- Fiscal rules. The fiscal rules framework comprises a budget and a spending rule. The budget rule requires the balance to reach the medium term objective currently set at minus 1% of GDP when GDP growth is below potential, and to improve until a structural surplus is reached when GDP growth is above potential. The spending rule limits expenditure growth to half of a multiannual average of the potential GDP growth, if a deficit is recorded for five years on average. The rules are considered rather tight and rely on potential growth, which is often hard to measure (European Commission, 2015). However, the multiannual budget framework is not fully binding, and with a three years planning period, is at the lower end of what is common today (OECD, 2014).
- Fiscal council. The fiscal council started to monitor compliance with the fiscal rules and the preparation of opinions and their submission to the Parliament. The remit of the Council is large, in line with OECD recommendations (OECD 2015a). However, alignment with the OECD principles for independent fiscal institutions has just started, and internal management and procedures have yet to be established (European Commission, 2017a). The council remains under the authority of the National Audit Office whose reputation is high, but tensions could arise should the objectives of the two institutions diverge.

The fiscal framework could be strengthened further

As a small open economy, Lithuania is vulnerable to external shocks and hence should keep debt low to have room for counter-cyclical fiscal policy. The authorities estimate fiscal buffers needed to cushion adverse shocks at 5% to 10% of GDP. The current deficit rule would reduce debt to around 40% of GDP in 2040 (OECD National Accounts definition), which is prudent in view of a declining population (Fall et al, 2015). However, this is only little below the debt level reached in 2017, and debt could rise quickly towards thresholds set by the European Union if the economy was hit by a recession (Figure 14). To reduce debt further and to strengthen counter-cyclical fiscal buffers, the long-term budget deficit should not exceed 0.5% per year.

The fiscal framework could be strengthened further by anchoring a long-term numerical debt target and establishing a credible frontloaded debt reduction path (Fall et al., 2015). Medium-term budgeting underpinning long-term plans should be extended to four or five years. The budgeting process should be well-coordinated and transparent. Finally, the fiscal council could be strengthened, by raising its institutional independence, and it could use its mandate more actively in the preparation of the budget.

The spending mix fosters inclusive growth, but spending could be more efficient

The composition of public spending – i.e. the allocation of spending across the various policy areas and functions – is conducive to inclusive growth (Table 5). The above-average quality of public spending relies on relatively high public investment, education, research and health spending, which tend to underpin both growth and equality, while subsidies are low (Figure 15). Spending quality fluctuates mainly in line with the rise and fall of public infrastructure investment. Social spending is still below par, but family and child benefits are increasing rapidly.

% of GDP 60 No deficit Deficit 1% of GDP Deficit 0.5% of GDP 55 50 45 40 35 30 25 20 15 10 2023 2024 2025 2026 2027 2028 2029 2030

Figure 14. The debt sustainability path under different structural deficit assumptions

Note: The "No deficit" scenario consists of projections for the Economic Outlook No. 103 until 2019. Thereafter, assumptions are: real GDP growth progressively closing the output gap and from 2020 growing by 2.5%; a budget balanced from 2025; inflation declining progressively to 2% by 2030 and an average effective interest rate converging to 3% by 2030. Surpluses arising in the pension system (Figure 3.3.) are not taken into account. The debt and deficit to GDP ratio is calculated using the national account method. *Source*: OECD calculation.

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Quality of public spending indicators 15 0.5 Spending quality for inclusive growth Spending quality for growth -1.52002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Figure 15. The spending mix favours inclusive growth

Note: The quality of public spending indicator is derived from a set of multivariate regressions linking the spending mix to average growth and income inequality in around 30 OECD countries and normalised to zero. An indicator value of greater than 0 means that Lithuania's spending mix was more growth-enhancing than those of an average OECD country in that year.

Source: Bloch, D. and J. Fournier (2018), "The deterioration of the public spending mix during the global financial crisis: Insights from new indicators", OECD Economics Department Working Papers, No. 1465, OECD Publishing, Paris, http://dx.doi.org/10.1787/2f6d2e8f-en.

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Public spending efficiency is more of a concern. Education performance as measured by PISA is below peer countries, and gaps between students from rural and urban areas persist. Schools are often too small, and particular attention should be given to the quality of teachers (OECD, 2017c). Research output is below OECD average, although the number of researchers per capita is slightly above (OECD, 2016a). Health status is

relatively low compared to OECD averages. Public investment projects are frequently delayed, though cost overruns are small. While the underlying reasons for low public spending efficiency vary across spending area, a common cause seems to be the lack of public sector performance targeting and surveillance. Developing a culture of performance, *e.g.* by setting and enforcing targets for publicly-financed goods, and by carrying out regular spending reviews, could help provide better public services at lower cost. Establishing uniform cost-benefit analysis to assess public investment projects would also foster public sector outcomes.

Table 5. Lithuania's spending and revenue mix, 2016

General government expenditure	34.2	Total revenue	34.6
General public services	4.1	Taxes on production and imports	11.6
Public order and safety	1.5	Current taxes on income, wealth, etc.	5.4
Economic affairs	3.0	Capital taxes	0
Health	5.8	Social contributions	11.9
Education	5.2	Property income	0.4
Social protection	11.2	Other	5.3
Others	3.4		

Source: Eurostat and Ministry of Finance of Lithuania.

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The tax system should become more inclusive

The tax system leans strongly towards taxation of labour and consumption, while income and property are taxed rather lightly, although with less than 30% of GDP, the country's overall tax burden is below the OECD average of 34% (Table 5). The tax mix could be made more inclusive by moving away from labour taxes and by reducing the tax burden for low-income groups:

- The social security contribution rate funding pensions, health and unemployment benefits account for a high 40% of gross wages, mostly paid by employers. Such a high rate could reduce labour demand and induce informality, especially for low-income earners. In 2017 the government started to shift the funding of benefits from social security to the general budget, thereby broadening the tax base, but contribution rates were not lowered. The government should continue diminishing the contribution burden, while ensuring benefits and deficit targets are maintained.
- Personal income is taxed at a flat rate of 15%. When implementing the new social model the governmental more than doubled tax exemptions for low-income households from EUR 165 monthly in 2014 to EUR 310 in 2017 and EUR 380 in 2018, but they remain below the OECD average. In 2017 the government further strengthened progressivity of income taxation by tapering tax exemptions, *i.e.* providing lower tax allowances for higher incomes. A child tax allowance was replaced by a child benefit in 2018, thereby favouring low-income earners.
- Recurrent taxes on immovable property account for 0.4 % of GDP, less than the OECD average (Figure 16). Property values are assessed by market appraisal, but the threshold value when property taxes kick in is high at EUR 220 000. Since property tax is considered the least detrimental to growth, the government should aim at a higher property tax share, by broadening the tax base rather than setting

higher rates and providing exemptions for low-income households (Blöchliger, 2015).

• Taxation of capital gains is low. Exemptions favour high-income earners and reduce the progressivity of the tax system. In 2016, the tax exemption for capital gains on the sale of a non-principal residence was restricted to property held for at least 10 years. A longer period could depress market transactions and reduce geographical mobility (Caldera-Sanchez et al, 2011). Going forward, the authorities should consider phasing out such exemptions.

Tax compliance has increased but remains an issue. The value-added tax gap – the difference between actual collection and what could be theoretically collected – is one of the highest in the European Union (CASE, 2017). Several measures to improve VAT and personal income tax collection are supposed to bring in additional revenues equal to 0.4% of GDP, which is considered ambitious (EU Commission, 2017). In 2016, the State Tax Inspectorate continued to implement its Tax Compliance Strategy, by introducing an electronic invoicing system and an electronic waybill system, which should improve tax collection considerably in the coming years. Efforts to tackle tax avoidance should continue, strengthening the fairness of the tax system and improving the competitiveness of the economy. Particular attention should be paid to whether the measures already implemented were successful.

The recommendations of this Survey would have an overall positive impact on the budget balance over time (Box 4).

Switzerland
Mexico
Austria
Slovenia
Slovenia
Ireland
Hungary
Chile
Sweden
Finland
Korea
Portugal
Ireland
Mextralia
Japan
New Zealand
Israel
Greece
United States
France
Canada

Figure 16. Recurrent taxes on immovable property are low

Property tax revenues 2016 or latest year available

Note: For the OECD countries the aggregate "4100 Recurrent taxes on immovable property" is used. For Lithuania instead the revenues from taxes different than Taxes on income, profits and Taxes on goods and services were used. Therefore the figure for Lithuania overestimates the revenues from taxation on property. *Source*: OECD Revenue statistics database; and Ministry of finance of Lithuania.

StatLink https://doi.org/10.1787/888933788472

Greening the economy

Lithuania's economy is relatively energy intensive. Since closing its nuclear reactor at the end of 2009 Lithuania has been dependent on imports, mainly from Russia. Interconnectors with Sweden and Poland brought into service in late 2015 have reduced this dependence, but further interconnectors and the planned synchronisation with central

and western Europe are needed for Lithuania to benefit from the integrated European electricity market.

Box 4. The long-term fiscal effects of some key OECD recommendations

Table 6 presents an order of magnitude of the long-term fiscal effects of some OECD recommendations presented in this Survey. These estimates are based on illustrative scenarios for specific spending and tax items and existing estimates for the elasticity of taxes to GDP. The effects of the structural reforms quantified in Box 2 are decomposed into their impact on GDP, including estimated behavioural responses ("budget effects"), and their direct fiscal costs ("accounting effects"). The estimates assume budget effects to accrue immediately after implementation of reforms. All results should be interpreted with care, in particular as they do not take dynamic and country specific effects into account.

Table 6. Estimated fiscal impact of some OECD recommendations

Measure	Change in fiscal balance (% GDP)		
Accounting effects of the structural reforms proposed in Box 2			
Increase property tax, notably recurrent taxes on housing, from 0.4% of GDP to the OECD average (1.1%).	+0.7		
Reduce social security contributions from 40% to 35% of gross wages	- 1.5		
Increase spending on activation policies from 0.3% to 0.5% of GDP	-0.2		
Increase spending on childcare from 0.3% of GDP to 0.6% (OECD average)	-0.3		
Budget effects of the structural reforms proposed in Box 2			
The estimated impact of structural reforms on GDP per capita (Box 2) would lead to higher GDP by 2.8%, abstracting from population growth. The public-spending-to-GDP ratio of 36.8% of GDP in 2016 would be lowered to $36.8/1.028 \approx 35.8\%$ of GDP. Assuming a long-run tax revenue to GDP elasticity of one, the estimated effect on the fiscal balance would be 1.0% of GDP (36.8% minus 35.8%).	+1.0		

Source: OECD calculations.

The energy supply structure has changed, and the economy has reduced its impact on the environment over the past 10 years (Figure 17):

- The use of biomass partly explains why Lithuania's per capita CO₂ emissions are much lower than the OECD average (Panel A). Lithuania estimates absorption of CO₂ by new forest growth offsets as much as half of its greenhouse gas emissions (Ministry of Environment, 2015). Per capita emissions continue falling in line with the average OECD country.
- The use of renewables has climbed rapidly over the past 10 years as wind power and biomass burning for heat and electricity have expanded (Panel B). Most domestic heating is supplied by district heating plants (CHP). In over 30% of CHP fuel was from biomass, investment in waste- and biomass-fired CHP plants is planned to replace additional fossil-fuel capacity.
- Biomass burning is an important contribution to energy independence but also contributes to air pollution. Most emissions of fine particles (PM2.5) in Lithuania are due to combustion in the energy sector, while transport accounts for the rest (EPA, 2014). Air quality, which is affected by domestic emissions as well as those from neighbouring countries, is around the OECD average, though the share of population exposed to high annual levels is small (Panel C).

Waste disposal is still reliant on landfill (Panel D). A landfill tax was introduced in 2016 but set very low, and it should be increased. Waste disposal is subject to a volumetric charge, and a tax applies to a number of products whose disposal is likely to pollute (e.g. batteries). Treatment of household wastewater has improved radically since 2000, moving from only half wastewater receiving adequate treatment to almost 100% coverage. Nevertheless, 10% of surface water bodies are classified as "bad" (Environmental Protection Agency, 2016). Lithuania has recently moved to establish river basin management systems to better manage risks, including flooding.

Taxes on petrol and diesel fuels are at OECD average levels. However, Lithuania remains among the few European countries without car taxation or a road-use tax for private passenger vehicles. The government should introduce car taxation, possibly based on emissions or mileage.

B. Renewables A. CO2 intensity % of renewables in total CO₂ per GDP Total primary energy supply CO2 tonnes per capita per GDP (ktoe/USD 2010 PPP) kg/USD (2010 PPP prices primary energy supply 0.6 20% 0.5 Lithuania 0.25 0.4 15% Lithuania 0.20 0.3 10% 02 0.15 **OECD** 0.10 OECD 0.0 0 0.05 2014 2014 1990 1995 Lithuania (demand-based) Lithuania (production-based) 0.00 Lithuania (production-based) 2014 1990 2002 2002 2014 OECD (demand-based) OECD (production-based) OECD (production-based) C. Exposure of the population to fine particles D. Municipal waste

Figure 17. Green growth indicators



20

18

16 14

12

10

8

6

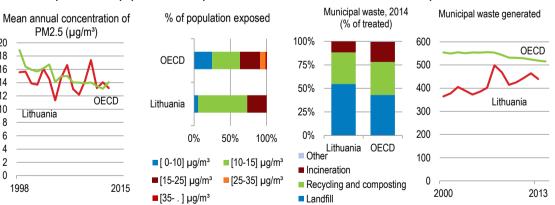
4

2

0

1998

Lithuania



Source: OECD (2017), Green Growth Indicators; OECD Environment Statistics database; OECD National Accounts database; IEA (2017), IEA World Energy Statistics and Balances database; OECD (2017), Exposure to air pollution.

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Promoting productivity and inclusive growth

Strengthening productivity growth would help to speed up the income convergence process, yielding gains in terms of inclusiveness (Figure 18). Coherence between policies is important to ensuring that they work together to address these interrelated challenges. Well-designed active labour market programmes, for example, could facilitate the reallocation of workers towards more productive sectors by helping displaced individuals to transition to new, good jobs (OECD, 2016d). Education reforms yield a double dividend in terms of boosting productivity and fostering inclusiveness.

GDP per capita gap, simulation Scenario 3: doubled LP growth 3.9% -10 Scenario 2: LP growth 2.9% Base line scenario: LP growth of 2007-2017 1.9% -20 -30 -40 -50 -60 -70 1995 2000 2005 2010 2015 2020 2025 Source: OECD calculation.

Figure 18. GDP per capita convergence according to different scenarios

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Boosting productivity by removing remaining barriers to investment

Lithuania's regulatory environment is overall business-friendly and open to foreign investment. This is echoed in the OECD's Product Market Regulation (PMR) indicator (Figure 19) and the *World Bank Doing Business* index, where Lithuania is placed among the top 20 countries (World Bank, 2018). Moreover, Lithuania ranks among the top 10 countries with the most open markets for services trade (OECD, 2018a). However, some barriers to investment, including relatively tight regulations for the employment of non-EU workers and for entering legal services (Figure 19 and Figure 20), can reduce the country's attractiveness for foreign investors with current efforts to address such barriers going in the right direction.

More specifically, a recent law has eased restrictions on the employment of workers from non-EU countries for selected professions. It also improved the employment possibilities for non-EU students (part-time) and graduates, while introducing a simplified start-up visa scheme for non-EU entrepreneurs planning to establish a high-tech business in Lithuania. Further steps towards relaxing employment regulations for non-EU workers are in the pipeline. Recent reforms, including a change to the constitution, also eased restrictions to non-residents in areas such as legal services and land acquisition, but some limited barriers in these areas remain. Greater competition is also key to higher productivity. Competition in some key sectors should be increased, such as railways, where there is only one main undertaking offering freight transportation services. The

government plans to reorganise the state-owned enterprise Lithuanian Railways ("Lietuvos geležinkeliai"), separating it into different companies for passengers, cargo and infrastructure management, which would be welcome. Devising packages of reforms can help reduce resistances to change from stakeholders.

A. PMR main indices B. Barriers to entrepreneurship 2.5 3.5 ■ OECD ■ Latvia Lithuania ■ Estonia ■ Lithuania OECD 3 2 2.5 1.5 2 1.5 1 1 0.5 0.5 0 0 Barriers to entrepreneurship Barriers to trade and investment Product market egulation Antitrust exemptions State or sole proprietor firms **Barriers in services** Legal barriers network sectors Licences and permits system Communication and simplification of rules. Administrative burdens Administrative burdens Barriers in for corporation C. State Control D. Barriers to trade and investment 7 ■ OECD OECD **■**Lithuania Lithuania 6 2.5 5 2 4 1.5 3 2 0.5 1 0 0 Price controls control regulation wned enterprises in network sectors Direct control over Governance of **Tariff barriers** treatment of foreign Barriers to FDI Barriers to trade Command and state-owned enterprises Scope of state-Government involvement enterprises acilitation Differential (SOEs) suppliers Source: OECD Product market regulation database.

Figure 19. Product market regulations, 2013

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The licencing reform underway would also stimulate investment by reducing further the administrative burden on businesses. The widespread informal economy in Lithuania, estimated by various studies (e.g. Schneider, 2016, Figure 21) at around 17% to 25% of GDP, can be another obstacle to investment by creating an uneven playing field for firms, while it also reduces labour market inclusiveness. Firms tend to operate in the shadow sector for a number of reasons including high social security contributions and uncertainty about regulatory policies, tax rates and tax administration (Putnis and Sauka, 2017). Difficulties faced by firms in finding adequately-skilled workers (discussed below) also weigh on investment decisions.

Telecom OECD Sound recording
Road freight transport
Rail freight transport
Motion pictures
Maritime transport ■ Lithuania More restrictive Maritime transport Logistics storage and warehouse
Logistics freight forwarding
Logistics customs brokerage
Logistics cargo-handling
Legal
Insurance Less restrictive Engineering Distribution Courier Computer Commercial banking Broadcasting Architecture Air transport Accounting 0.2 0.3 0.35 0.4 0.45 0.5

Figure 20. Service Trade Restrictiveness Index, 2017

Source: OECD Product market regulation database.

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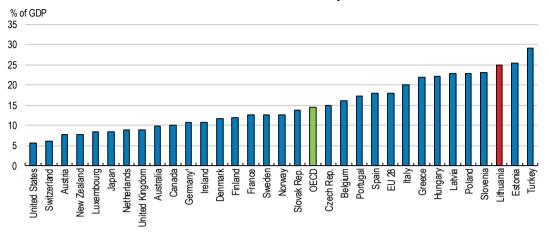
Enhancing the performance of state-owned enterprises

State-owned enterprises (SOEs) account for approximately 3.2% of total employment, above the 2.4% OECD average. Around two-thirds of Lithuanian SOEs engage in commercial activities, either exclusively or in combination with public policy objectives (Bank of Property, 2017). SOEs' average financial performance has improved in recent years, but many still do not achieve the annual return on equity target set by the government (Bank of Property, 2016; 2017). Some SOEs are unprofitable, creating a strain on the public budget and potentially crowding out more efficient private enterprises. Lithuania has made considerable progress in recent years to bring SOE governance practices closer to the standards set forth in the OECD *Guidelines on Corporate Governance of State-Owned Enterprises*. However, the 2015 OECD *Review of the Corporate Governance of State-Owned Enterprises: Lithuania* identified some crucial shortcomings in SOEs' governance. These include insufficient separation of the government's role as owner and regulator of SOEs, the absence of a centralised ownership entity, limited operational independence of SOE boards, weak corporatisation and concerns about the quality and credibility of SOEs' financial reports (OECD, 2015b).

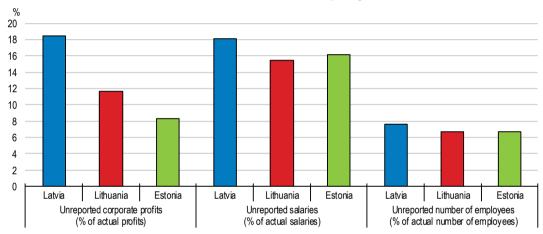
A number of recent reforms aim to address such shortcomings. These include notably the elaboration of a state ownership policy and SOE disclosure requirements, strengthening the ownership coordination function to monitor SOEs' compliance with these requirements, and efforts to remove politicians and place more independent directors on SOE boards. These reforms, along with the restructuring underway in the state-owned forestry and road maintenance sectors, are proceeding as planned and should go hand-in-hand with increased accountability for boards of directors and managers for achieving results. Plans are also underway to fully corporatise a number of commercially-oriented SOEs that are currently subject to statutory legislation rather than company law. Only a small number of SOEs is to remain as statutory enterprises under the planned changes. Ensuring that SOEs are subject to the same laws and regulations as private companies is essential for safeguarding competition and productivity (OECD, 2015b).

Figure 21. A large informal economy

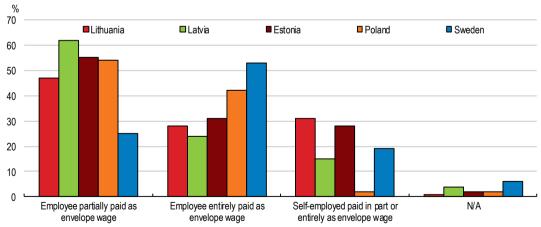
A. Size of the shadow economy, 2016



B. Extent of income underreporting, 2016



C. Type of own shadow economy, 2016



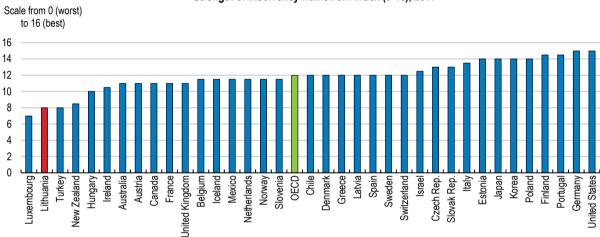
Source: Eurobarometer; and Lithuanian free market institute "Shadow economies in a Baltic Sea region 2015"; and Schneider, Friedrich (2016): Estimating the Size of the Shadow Economies of Highly-developed Countries: Selected New Results, CESifo DICE Report, ISSN 1613-6373, Vol. 14, Iss. 4, pp. 44-53; and Putnins, Talis & Sauka, Arnis. (2017). Shadow Economy Index for the Baltic Countries 2009-2016.

StatLink https://doi.org/10.1787/888933788567

Improving the efficiency of insolvency procedures

Lithuania needs to make the insolvency framework more efficient, facilitating the exit of less productive firms (Figure 22) (Adalet McGowan et al., 2017). Despite progress in recent years, bankruptcy processes remain costly and time-consuming (World Bank, 2017). Rules regarding manager's liability of insolvent companies should become clearer and stricter, so as to increase incentives for early filings for bankruptcy (NAO, 2014). The government is currently drafting a comprehensive law on corporate insolvency, which changes the criteria for starting bankruptcy procedures and establishes clearer deadlines for filings. Amendments also aim to establish more favourable conditions for enterprise restructuring, offering the opportunity to debtors in financial difficulties to restructure early (Adalet McGowan and Andrews, 2016). Strengthening the use of expertise is key for raising efficiency, given that winding down or rehabilitating a company can be complex. Specialised judges and administrators are important in this regard.

Figure 22. Insolvency framework needs to be improved



Strength of insolvency framework index (0-16), 2017

1. The strength of insolvency framework index is a composite indicator of the quality of the insolvency framework based on the time, cost and outcome of insolvency proceedings involving domestic legal entities. Source: World Bank Doing business 2018 database.

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Boosting innovation capacity

Lithuania has improved its international innovation position, but its performance remains below EU average (European Commission, 2017b) (Figure 23, Panel A). Despite progress, innovation inputs and outputs fall below the OECD median, with scope for greater efficiency. There are many institutions with advisory and implementation functions under various ministries and a plethora of support programmes and instruments which lead to policy fragmentation and overlap (OECD, 2016a; IMF, 2017b). A more coordinated governance of the innovative system is essential. The government should continue the implementation of the institutional reform of innovation policy by improving coordination, and consolidate agencies and support programmes where overlaps exist, based on a careful and well-evidenced assessment (OECD, 2016a).

Promoting business-firm collaboration - an increasingly recognised channel of knowledge transfer and commercialisation - remains another key challenge (OECD, 2016a). The collaborative activity by SMEs has picked up significantly in recent years, surpassing the EU average. However, collaboration of firms with universities and research institutions remains limited, especially in the case of larger firms, with little mobility between the business and research sectors (Figure 23, Panels B and C). The share of researchers working in the business sector in Lithuania stands at around 16%, well below the EU28 average close to 40%. Increasing government contribution for collaborative research conducted by public research institutions could be a policy option on the basis of international experience (OECD, 2017a).

Fostering digitalisation can boost productivity growth and improve wellbeing as information and knowledge become more widely available (OECD, 2017b). It is particularly important in a context of a shrinking working-age population. However, reaping the opportunities of digitalisation requires that individuals are equipped with the right skills to use the new technologies and re-integrate swiftly in the labour market, if displaced by the digital transformation. Lithuania performs well internationally in terms of broadband coverage (fixed and mobile). Effective use of digital networks however remains a challenge: only 63% of households had subscribed to a broadband connection in 2016, around 10 percentage points below the EU28 average. The use of ICT by firms is also low. The "human capital" component of the EU Digital Economy and Society Index is below the EU average, reflecting a relative low share of internet users in population and of ICT specialists in total employment (Figure 23 D). Addressing skills mismatch and ensuring solid basic skills are important for strengthening the digital skill base (OECD, 2017b).

Enhancing inclusiveness and productivity by addressing skills mismatch

The share of workers with skill mismatch in Lithuania is above the OECD average (Figure 24, Panel A). This is exacerbated by the insufficient quality of the domestic education system. Lithuania has a highly educated workforce in terms of tertiary graduates; yet finding workers with the right skills appears to be a significant constraint for over 40% of firms (Figure 25). High emigration and certain restrictions on non-EU workers, as well as limited participation in lifelong learning, also explain the lack of suitable labour in Lithuania. More work-based training is necessary to meet the skill needs. Comprehensive efforts are underway to improve the attractiveness of vocational education and training (VET), which records low enrolments rates, and increase its labour market relevance. As an additional positive step, the new Labour Code, in force since July 2017, clarifies the legal status of apprenticeships, which are very little developed in Lithuania. Consideration should be given for moving from time-based to competencebased apprenticeship as is the case, for example, in Australia and the United Kingdom (OECD, 2018b). Developing incentives for employer-based training is important. Ongoing reforms aimed at improving basic skills development in general education and better alignment between general, VET and tertiary education should continue.

Field-of-study mismatch is relatively high (Figure 24 B). Plans for a more direct link between tertiary education funding mechanisms and labour market demands, including through differentiated awards to institutions for courses that provide skills closely linked to the labour market needs, are welcome.

A. EU Summary Innovation Index EU28 = 100 100 Lithuania Estonia - Latvia - Poland 90 80 70 60 50 40 2009 2010 2011 2012 2013 2014 2015 2016 C. Firms collaborating on innovation with B. Innovative SMEs collaborating with others % of higher education or research institutions, 2014 innov ating % of SME firms 30 80 ■ 250 employees or more △ 10-49 employees 70 25 60 20 50 40 15 30 10 20 10 Netrerlands
Slovak Rep.
France
Prance
Germany
Greece
Slovenia
Denmark
Beigum
Austien
Finland 2015 2008 2010 2012 2009 2011 2013 2014 EU - Latvia Estonia Lithuania - Poland D. Digital Economy and Society Index 0.05 0.25 0.3 0.35 0 0.1 0.15 0.2 Human capital ■ Lithuania ■ EU28 Share of individual using internet (2016) Share os individuals with at least basic digital skills (2016)

Figure 23. Innovation and digitalisation indicators

Source: European Innovation Scoreboard 2017.

Share of ICT specialists on total employment (2015)

Share of STEM graduates on population aged 20-29 (2014)

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B. Field-of-study mismatch¹, 2015 A. Components of skill mismatch, 2015 % employed % employed aged 15-64 45 aged 15-64 50 Undergualification 45 Overgualification 40 40 35 35 30 30 25 25 20 20 15 10 France
Austria
Austria
Lithuania
Norway
Switzerland
Estonia
Sweden
Iceland
Iceland
Italy Jnited Kingdor

Figure 24. Skill mismatch is high

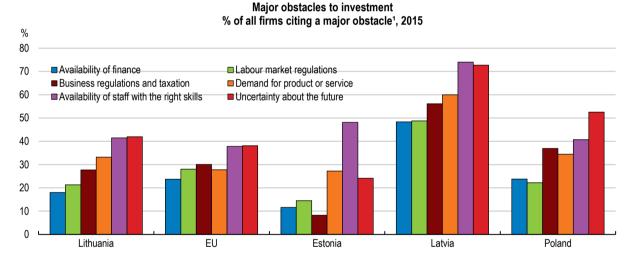
Note: The OECD average is calculated on the 25 available countries only.

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

Source: Adalet and Andrews, 2017 and OECD Skills for Jobs Database.

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Figure 25. Finding the right skills is an obstacle to firms



1. Firm responses to the question: "Thinking about your investment activities in your country, to what extent is each of the following an obstacle? Is it a major obstacle, a minor obstacle or not an obstacle at all?"" *Source*: European Investment Bank – EIBIS, EIB Investment Survey.

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Making the labour market more inclusive through more and better jobs

Lithuania's labour market performed strongly since the start of the recovery but some groups, notably the low-skilled, fare worse than others (Figure 26). At the same time, extensive undeclared work, high wage inequality and often poor working conditions impact job quality for many Lithuanians (Figure 27).

Group-specific unemployment rates, 2017

% 30

25

10

5

Figure 26. The labour market could become more inclusive

1. Calculated on the labour force aged 25-64.

15-24

25-54

Age

2. Data refer to 2016.

Gender

Women

Men

Source: OECD Gender employment database; and OECD Education attainment and outcomes database.

55-64

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Medium-skilled1

Educational attainment²

High-skilled1

Long-term UNR²

Low-skilled1

Figure 27. Wage inequality is high

Ratio of 9th to 1th deciles of earning distributions, 2016 or latest year available

ltaly Sweden Belgium Norway Denmark France Japan New Zealand Celand Netherlands Spain Luxembourg Greece Australia Slovenia Mexico Germany United Slovak Turkey Canada Hungary Lithuania Estonia Estonia Estonia Poland Chiled States United States

Source: OECD labour database.

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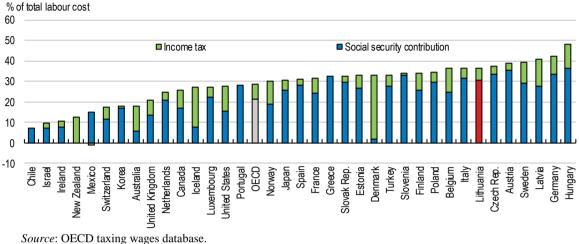
The high tax wedge makes low-skilled workers less attractive to employers (Figure 28). Recent increases in the personal income tax threshold are welcome in this regard, but a reduction in social security contribution rates should lower the labour tax burden further. Reliable information on wages is critical for targeting effectively the low-skilled and containing budgetary costs. As a welcome step, the State Social Insurance Fund Board has started since early 2017 to publish the data on average wages in enterprises and institutions.

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Figure 28. A high tax wedge

Decomposition of the tax wedge, 2016

Single without children 50% of the average wage



Effective income support for those out-of-work

In tandem with increased flexibility, reforms under the New Social Model provide for more income security through better access to unemployment benefits and a rise in the payment rates (flexicurity). The changes are expected to increase the coverage of the registered jobseekers to around 45% and bring the net replacement rate (i.e. the unemployment benefits to earnings ratio) above the OECD average (OECD, 2018b) (Figure 29). Indicatively, the share of unemployment insurance benefit recipients in total registered unemployed increased from 29% in January 2017 (before the reform) to more than 33% a year after, while the average amount of unemployment insurance benefit increased by almost 1.5 times. The reforms will also strengthen job-search assistance. The maximum duration period of unemployment benefit, currently at nine months, could be further extended, making savings elsewhere. Most OECD countries pay unemployment benefits for at least twelve months (OECD, 2018b). This would strengthen the support for long term-unemployed, accounting for close to 40% of all unemployed in 2016, while effective polices to help them re-integrate in the labour market remain crucial.

Net Replacement Rates for a single person in unemployment, 2015 100 ■ Unemployment benefits (in the 3rd month) 90 ■ Top-ups (in the 3d month) 80 Unemploymet benefits and top-ups (in the 9th month) 70 60 50 40 30 20 10 Estonia Hungary ¹ Canada Slovenia Belgium Sweden Turkey OECD Poland Norway Finland France Chile Austria Ireland Japan Slovak Republic Iceland Latvia Jnited Kingdom United States Lithuania (pre-reform) Republic Italy Netherlands Switzerland Luxembourg New Zealand Germany Spain Denmark ithuania (post

Figure 29. Unemployment benefits became more generous

Note: Net replacement rates (NRRs) give the case of a 40-years-old who has been continuously employed since the age of 18. For Lithuania, the results for January and July 2017 represent the situation before and after introduction of the New Social Model, respectively.

Source: OECD (2018), OECD Reviews of Labour Market and Social Policies: Lithuania, OECD Publishing, Paris

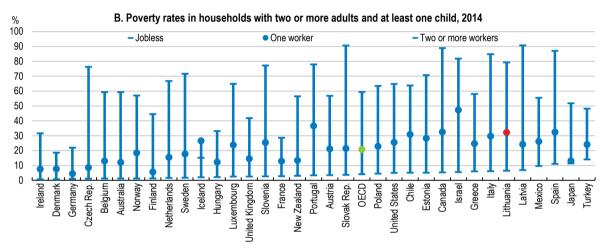
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Czech

Social benefits - currently below OECD levels - should better combat poverty. Child poverty remains an important issue, with a risk of a vicious cycle between socioeconomic background and economic opportunities (OECD, 2017c). Around 19% of children live in relative poverty with an income below 50% of the median, above the OECD the average and other Baltic countries and Poland (Figure 30). Children in Lithuania are more likely to live in income poverty than the general population, with the likelihood of being poor linked closely to the employment status of an adult in the household. To address child poverty better, the government introduced a universal child benefit replacing the former child tax allowance from 2018. Moreover, the child benefit will not be included in the income establishing a family's eligibility for social assistance. The government expects that at risk-of-poverty rate of children will decrease by about 2.7 percentage points as a result of these measures. These reforms are accompanied by efforts to improve the quality of services by social workers.

A. Poverty rate, 2015 or latest year available % of population aged 0-17 % of total population 30 0.3 ■ Child poverty rate (LHS) ♦ Total poverty rate (RHS) 25 0.25 20 0.2 15 0.15 0.1 10 0.05 Portugal Lithuania Switzerland Netherlands Szech Republic OECD New Zealand Slovak Republic Ita| Jnited States Jnited Kingdom

Figure 30. Child income poverty rates are high, especially in jobless households



Note: The child income poverty rate is defined as the proportion of children (0-17 year-olds) with an equivalised post-tax-and-transfer income of less than 50% of the national annual median equivalised post-tax-and-transfer income

Source: OECD Income Distribution and Poverty database.

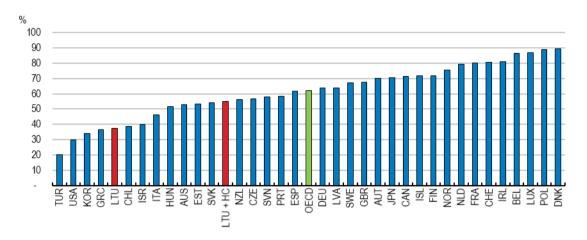
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Increases in the level of income support to better protect those in need should not discourage work. The gap between minimum wages and social benefits implies that the financial incentives to take up a job are relatively large, depending on family size (Figure 31). Yet, as with other countries, the withdrawal of benefits when the recipient takes up a job makes employment less attractive. As a positive step, Lithuania has recently strengthened financial incentives for benefit recipients by extending the coverage of "in-work benefits"; those registered as unemployed for at least six months (rather than 12 months under the previous regime) and find a job can temporarily keep half of their benefits. Moreover, an income disregard was introduced in 2018, in line with practice in other countries, increasing social assistance without taking into account a part of the recipient's work income. The impact of the new measure in boosting financial incentives to work and reducing poverty needs to be regularly evaluated.

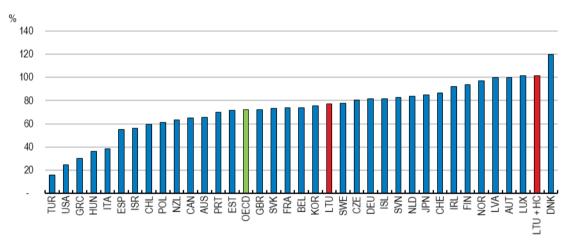
Figure 31. Financial incentives to take up a job are weaker for large households

Participation tax rates for a person taking up employment at the 20th percentile of the gross earnings distribution

A. Single without children



B. Couple with 2 children



Note: The participation tax rate is calculated as the income gain from taking up work net of taxes, contributions and losses in benefit payments as a share of the gross earnings from work. For Lithuania, the values refer to those for households receiving Social Benefits only (LTU) and social benefits plus heating compensation (LTU + HC). In the latter case, the calculations assume that the heating compensation is lost when a person takes up work. The data refer to 2015 except for Lithuania (July 2017). The 20th percentile of the gross earnings distribution corresponds to about EUR 440 per month.

Source: OECD (2018), OECD Reviews of Labour Market and Social Policies: Lithuania, OECD Publishing, Paris.

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Helping jobseekers to get back to work through well-designed active measures

Participation in active labour marker policies (ALMPs), and spending on them, is relatively low (Figure 32, Panels A and B). Moreover, Lithuania's public employment services (PES, Lithuanian Labour Exchange) are understaffed (Figure 32, Panel C). Recent reforms have changed the structure of public employment services by centralising the management processes of activities planning and of financial and human resources.

This is expected to release some resources, increasing in turn the provision of direct services to jobseekers. However, intensive personalised PES services hinge upon a sufficient number of suitably trained officers. In addition, a new Law on Employment in July 2017 expands the range of ALMPs and attempts to increase efficiency by reallocating spending among programmes. Public works have been abolished and employment subsidies are now the main ALMP measure (Figure 32, Panel D). While employment subsidies can be an efficient tool for improving the employability of low skilled quickly, the spending on ALMPs appears too skewed at the expense of programmes that boost long-term employability, such as training. Increasing investment in active labour market programmes should be subject to a close monitoring of the achieved outcomes.

A. Public expenditure in activation programmes¹, B. Stock of participants to activation 2015 or latest year available programmes¹, 2015 or latest year available % of labour % of GDP force 1.8 10 1.6 9 8 1.4 7 1.2 6 1 5 0.8 4 0.6 3 0.4 2 0.2 C. Spending devoted to Public Employment D. Spending composition, 2015 Services, 2015 or latest year available % of ALMP % of GDP and PES 0.45 50 45 0.4 40 0.35 35 0.3 30 0.25 25 0.2 20 0.15 15 0.1 10 0.05 5 0 Public Wage Supported Public work Training subsidies Employment employment services and rehabilitation

Figure 32. Expenditure on activation policies

1. Activation programmes refer to the active labour market programmes (categories 2-7): cover training, employment incentives, supported employment and rehabilitation, direct job creation and start-up incentives. *Source*: OECD Labour database.

StatLink https://doi.org/10.1787/888933788776

Ageing together

Growing life expectancy, continuing emigration and low fertility – albeit above the OECD average and raising again – are changing Lithuania's demographic structure. The old-age dependency ratio is projected to rise from 25% in 2013 to 42% by 2060 (Figure 32). Population ageing has economic implications for various policy areas.

Figure 33. Old-age dependency ratio, 2010 and 2060

Old age dependency ratio, projections, 2010 - 2060

% population 65+ on population 15-64 Lithuania FU OECD 50 30 10 2010 2015 2020 2025 2030 2035 2040 2045 2050 2055 2060

Source: United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects.

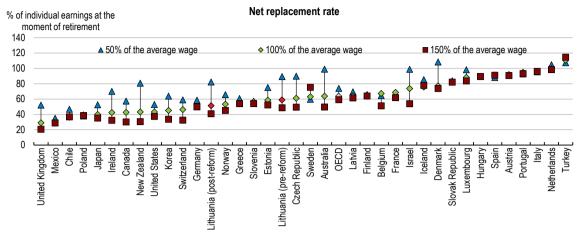
StatLink https://doi.org/10.1787/888933788795

Pensions have become more sustainable

Spending on pensions is relatively small at around 6.8% of GDP. The net replacement or wage to pension rate is close to the OECD average, and the large difference between low-and median earnings points at considerable redistribution as the wage-independent "basic pension" makes up more than half of pension spending (Figure 34). The New Social Model that entered into force in 2018 brought the pay-as-you-go first pillar on a more sustainable path, essentially by applying a new pension indexing formula and by gradually increasing the required length of pensionable service. According to national projections, based on demographic assumptions of the European Union, these reforms are thought to reduce the size of the pension system by more than 3 percentage points of GDP in the long run (Figure 35). The reform stopped short of introducing an automatic link from life expectancy to the retirement age, which would make the system even more sustainable.

Pensions are mostly financed through social security contributions, which at around 30% put a high wedge on labour. The government plans to shift the funding of the "basic pension" to the general government budget, thereby broadening the tax base (OECD, 2016b). The government also wants to strengthen the second pillar (funded pensions) and third pillar (individual savings) of the pension system, which tend to be more sustainable and provide a closer link between contributions and benefits. Second pillar pension savings, which are voluntary, should become compulsory to achieve the planned shift towards a funded pension system more rapidly. Third pillar private savings are tax-favoured, limited to a maximum 25% income-to-savings ratio and a ceiling of EUR 2 000 per year. Only 3% of the working-age population have private pension savings accounts.

Figure 34. Replacement rate is average

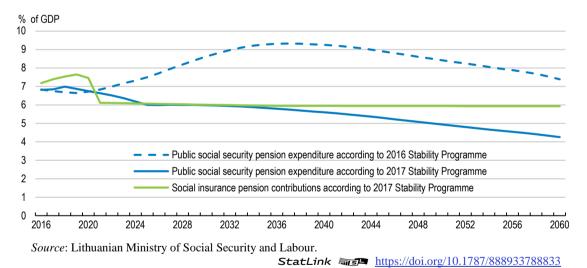


Note: The net replacement rate is defined as the individual net pension entitlement divided by net preretirement earnings, taking into account personal income taxes and social security contributions paid by workers and pensioners. For Lithuania a 2% contribution to the private funded pension was assumed. *Source*: OECD (2018), *OECD Reviews of Labour Market and Social Policies: Lithuania*, OECD Publishing, Paris.

StatLink https://doi.org/10.1787/888933788814

Figure 35. The recent reform is set to increase sustainability of the pension system

Pension revenue and spending in percent of GDP



Despite being redistributive, the system is not well-targeted at the poor. More than 25% of old Lithuanians are at risk of poverty (Figure 36). The social assistance pension, paid to those with insufficient or no acquired pension rights, is low at less than 30% of the minimum wage. Still, home ownership is widespread among older Lithuanians, raising their disposable income (Eurostat 2017). Moreover, pensions are not taxed. The government may consider raising minimum pensions and means-testing them, while streamlining the variety of other social benefits. Also, at 15 years the minimum service period to obtain a pension at all is high, potentially discouraging return emigrants to take up work.

Slovak Rep.

Slovak Rep.

Czech Rep.

Czech Rep.

Poland Poland Spain

Belgium Relgium Belgium Belgium Belgium Belgium Belgium Croatia

Croatia Portugal

Croatia Portugal

Slovenia Bulgaria

Bulgaria

Estonia

Estonia

Figure 36. Old-age poverty is high Old age population at risk of poverty, 2016

Source: Eurostat.

StatLink http://dx.doi.org/10.1787/888933788852

Health care is improving

Health ranks low in well-being indicators. Life expectancy in Lithuania is among the lowest across the OECD, and the gap between men and women one of the largest (Figure 37), partly owing to lifestyle such as high alcohol and tobacco consumption. Policies to improve the health status of the population should therefore include prevention and the promotion of healthier lifestyles. The Lithuanian health strategy 2014-2025 rightly builds on a whole-of-life approach which emphasises the importance of tackling the main health determinants. Access to health care is satisfactory for all income groups and in all parts of the country, although private outlays for medicines are comparatively high (OECD, 2018b). Informal payments are still a problem, yet the government makes it a priority to reduce them, by raising wages for doctors and nurses and by improving monitoring. Health care spending is low at 6.5% of GDP and the system is considered sustainable, although population ageing is assumed to contribute up to 4% points of GDP to the health care bill by 2030 in some scenarios (European Commission 2015).

The health spending mix is more of an issue. Lithuania still favours hospital-centred over outpatient and primary care, despite having rebalanced health services since long (Figure 38). Hospitals are often small and underused, driving costs and carrying risks for patients requiring special treatments (OECD, 2018b). Lithuania should continue to reorganise the hospital sector and move towards outpatient care. More resources should also be devoted to long-term care. In 2013 a programme for integrated nursing and social care at home for disabled and elderly persons was started. Stronger reliance on nurses has proven very efficient in providing health services in Finland and Sweden, and their role should be strengthened further (OECD, 2016c). Finally, a network of around 55 palliative centres has been established, often in former hospitals. Given its role for patient-centred care towards the end of life, palliative care should be extended.

Figure 37. Life expectancy of men is low

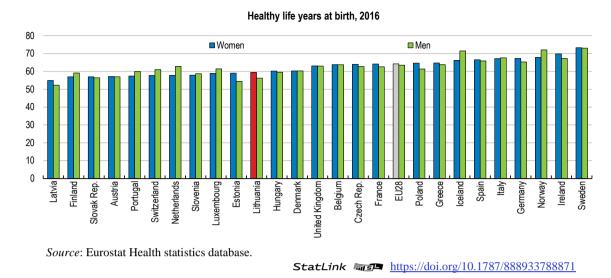
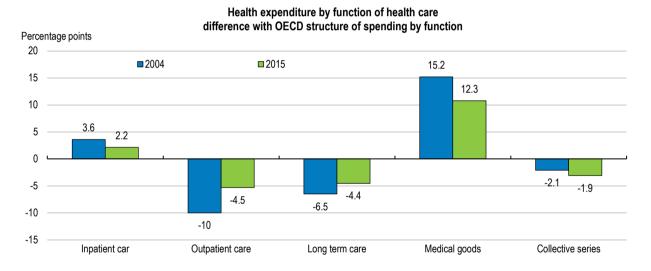


Figure 38. Lithuania's health care system has undergone deep reforms but is still hospital-centred



Source: OECD Health Statistics 2016.

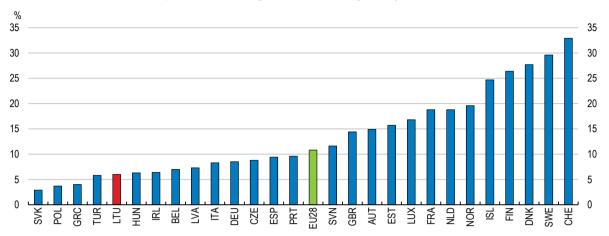
StatLink <u>http://dx.doi.org/10.1787/888933788890</u>

Life-long learning is limited

Life-long learning is key to maintain productivity and employment in an ageing society, yet it is low in Lithuania (Figure 39). Employers invest little in upskilling, and few collaborate with educational and research organisations. Participation of the unemployed in training programmes remains very weak, although about 40% of the Lithuanian unemployed have no professional qualification (OECD, 2018b). Financial incentives are modest: firms may deduct training expenses from social security contributions, and employees get a commuter allowance to attend training in distant places. The new Labour Code introduced a study leave of up to five days for non-formal training, partially covered by the employer if the employee was employed for more than five years.

Figure 39. Life-long-learning propensity in Lithuania is low

Participation rate in lifelong education or training, 25-64 year-olds, 2016



Note: Data refer to the share of 25 to 64 year-olds who participated in education or training in the 4 weeks prior to the survey.

Source: Eurostat (2017), Education and training statistics (database).

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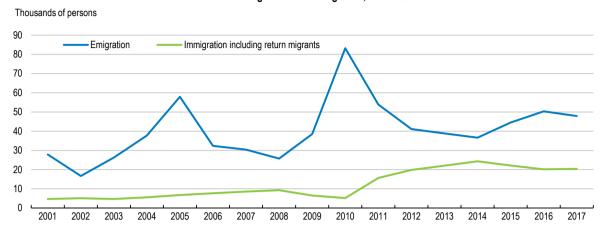
Lithuania should elaborate a broad and flexible system of lifelong learning. Lifelong learning could be modelled on Estonia's programme established in 2016, with targets for participation rates and regular monitoring (OECD, 2017d). Firms should be encouraged to offer training opportunities, maybe by a levy-based fund reimbursing firms based on the amount of training provided (OECD, 2018b). Tax allowances should be granted to employees for training expenses. Since upskilling needs rely partly on basic skills acquired through professional education, life-long learning programmes should be well linked to secondary and tertiary education, vocational training and the apprenticeship system.

Emigration remains high

Emigration is largely driven by wage differences with the destination countries and free movement within the European Union (Kumpikaitė Valiūnienė et al, 2017). The young are particularly inclined to leave, accelerating the ageing of the society and contributing to skills shortages (Figure 40). Remittances cushion the economic effect of emigration as they make up around 3% of GDP, but their role has declined recently, partly reflecting loosening ties between emigrants and their home country and weaker purchasing power in the destination countries. As part of broader strategy to reach out to emigrants, the government has set up the "Global Lithuania Programme", a policy programme that aims at strengthening links with the diaspora, but it is scattered across 14 public agencies, and the sums spent on each activity are usually small. The government is currently drafting a new demography, migration and integration strategy, which aims at reducing emigration, higher return migration and reforms to immigration.

Figure 40. Emigration is high and volatile

Emigration and immigration, absolute numbers



Source: Statistics Lithuania.

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Migration policy should rest on three pillars: 1) taking care of those living in the country, 2) reaching out to those living abroad; and 3) attracting skilled immigrants. As such, immigration and returning emigrants could partly offset population ageing and a shrinking labour force, especially of the high-skilled. However, Lithuania's immigration policy for non-EU workers is tight, with permit-free occupations having been scaled down gradually (OECD, 2017). Most immigrants are posted to freight companies, contributing little to economic activity in Lithuania. A reform to the immigration law lowered the administrative burden for high-skilled immigrants and those investing in the country in 2017, but the rules should be relaxed further. Finally, enrolment of foreign students is slowly increasing, although only around 5% remain in the country after graduation, fewer than in Estonia with around 20% (OECD, 2018b).

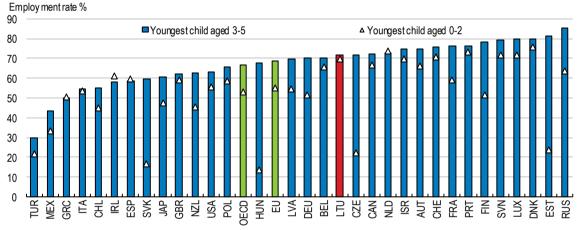
Family policy

Both fertility rates and female labour market participation are above OECD averages (Figure 41), pointing at good integration of working mothers. Yet tensions could arise between supporting families and providing incentives to work. Parental and home care leave is relatively generous as it is paid for up to two years. Child benefits for one or two children are means-tested, while those for three or four children are not. An additional universal child benefit of around EUR 30 per child was introduced beginning of 2018, probably lifting overall child support above the OECD average. Spending on support for childcare remains below the OECD and other Baltic countries, but enrolment has rapidly increased over the last ten years and is now close to the OECD average of around 30%.

A. Fertility rates1, 2015 or latest year available 3.5 3 2.5 2 1.5 Canada Republic Estonia Slovenia Belgium Finland Norway Lithuania France Austria Germany OECD Denmark Latvia Australia Ireland Sweden Zealand Slovak Republic Switzerland Vetherlands Iceland Jnited Kingdom United States _uxembourg New Czech I

Figure 41. Both birth rates and female employment are above OECD averages

B. Share of working mothers², 2015 or latest year available



- 1. The Total Fertility Rate (TFR) is defined as the average number of children born per woman over a lifetime given current age-specific fertility rates and assuming no female mortality during reproductive years.
- 2. Employment rates for women (15-64 years old with children by age of the youngest child. *Source*: OECD Family Database.

StatLink http://dx.doi.org/10.1787/888933788947

The government programme establishes that reconciling work and family life is crucial to meet demographic challenges, raise birth rates and foster well-being of families (Government of Lithuania, 2016). To reach these objectives and to minimise the trade-off between higher fertility rates and the labour market participation of women, Lithuania's family policy should focus on extending support for childcare and commit to the planned investment in childcare facilities.

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Annex. Progress in structural reforms

This table reviews recent actions taken on recommendations from the previous Surveys. Recommendations that are new to the present Survey are listed in the relevant chapters.

KEY RECOMMENDATIONS	ACTIONS TAKEN		
FISCAL AND FINANC	CIAL POLICIES TO SUPPORT THE ECONOMY		
Continue fighting tax evasion also beyond the VAT gap and improve spending efficiencies (especially in education and health care areas), to allow medium term fiscal consolidation and finance public spending needs.	"Smart tax administration" has been introduced, and the VAT tax gap reduced from 31% to 26%.		
Further shift the tax burden away from labour, especially from employer social security contributions, and raise recurrent taxes on personal immovable property.	Property is now assessed close at market value, and the threshold value for property tax exemption was reduced. Property tax rates were reduced.		
Increase taxes on activities that damage the environment	A landfill tax was introduced in 2016 but the rate is low		
В	OOSTING PRODUCTIVITY		
Further increase the role of workplace training and cooperation with employers in the education system, especially in the context of vocational education and training programmes.	The new Labour Code, in effect from July 2017, introduces apprenticeship contracts. These can either entail a training contract with a VET institution; or, include no such a contract. In the latter case the employer has to create the training programme for the whole period of apprenticeship contract. Sectoral professional committees are being renewed in order to ensure better cooperation with employers in the education system and life-long learning; this is facilitated by the revision of professional standards.		
Attract higher performing graduates to the teaching profession by paying higher wages and investing in teacher development. Promote participation in pre-primary education.	Attractiveness of the teaching profession is being addressed by reforming teachers' remuneration and workload calculation system, raising the salary level, and restructuring teachers' training institutions The number of childcare facilities has been increased, now reaching OECD averages.		
Promote new forms of business financing and ensure that innovation policies support young innovative firms. Reform bankruptcy procedures.	A law on crowd-funding was adopted in November 2016. The government established three new venture capital instruments in 2017, with six more funds to be established by 2019. Three new financial instruments for SMEs are to be launched in 2018: short-term export credit guarantees to SMEs exporting their goods to non-EU and non-OECD countries; portfolio guarantees for factoring transactions to provide short-term financing for SMEs; and, crowd-funding loans, which would allow to finance SMEs through crowd-funding platforms. A measure specifically targeted at promotion of commercialization R&D results has		
DDO	been worked out and the first call for proposals announced in June 2017.		
	MOTING INCLUSIVE GROWTH		
Improve inclusiveness by providing in-work benefits for low- paid jobs and increasing access to lifelong learning. Lower employer social security contribution on low-skilled workers while maintaining their entitlements.	Recent reforms allow those who find employment to temporarily keep half of their benefits after taking up work in the form of in-work benefits.		
Implement the plans in the "New Social Model" to reform labour regulations and temporary income support for the unemployed. Strengthen active labour market programmes and the capacities of public employment services to implement programmes to get people back to work.	Almost all laws of the New Social Model were already in force or went into force on 1 July 2017. The coverage and generosity of unemployment benefits have increased by easing eligibility conditions and rising payment rates. The management of Public Employment Services has been centralised. In addition, a new Law on Employment in July 2017 expands the range of ALMPs and reallocates spending among programmes.		
Increase the income support to social assistance recipients while strengthening work incentives	The new Law on Employment provides more opportunities to employ the recipients of cash social assistance through programmes for increasing employment. The work incentives for social benefit recipients were strengthened by permitting		

those who find employment to keep part of the work income that is not included in a family income establishing person's (family) right to assistance.

The government has initiated the evaluation of ALMP measures, social support and social service compatibility when integrating unemployed into labour market. Its aim is to evaluate ALMP measures, social assistance and social services impact of social assistance recipients and its impact on their motivation to work.

Further promote healthy lifestyles and primary care services especially in rural areas through general practitioners, greater role for nurses and the recently established network of public health bureaus.

Increase health sector efficiency and effectiveness of health policy by continuing to merge hospitals and widening the scope for the newly established e-health infrastructure while fully respecting privacy concerns.

The number of staff who provides social services and nursing, including long term care, has doubled within a few years. The number of nursing homes also increased. Merging and restructuring of hospitals is continuing.

Thematic chapters

Chapter 1. Boosting productivity and inclusiveness

Productivity growth has slowed in the aftermath of the global financial crisis, holding back income convergence and making it harder to reduce further the relatively high inequality and poverty. A comprehensive approach is required to address productivity and inclusiveness challenges, building on their synergies. The government has taken measures to this end, with the New Social Model at the core, but efforts need to continue. Reforms should focus on additional improvements in the business environment by easing further regulations on the employment of non-EU workers and reducing informality. Initiatives to improve the governance of state-owned enterprises are welcome and need to continue. Improving access to finance and ensuring effective bankruptcy procedures are key to boosting firm dynamism, as are measures to encourage business-research sector collaboration on innovation. Addressing large skills mismatch is also a priority. Increasing the market-relevance of the education system is important. More and betterquality jobs in the formal sector, especially for the low-skilled, are key to inclusiveness and well-being, while more effective support and active labour market programmes would help combating poverty.

The productivity catch-up with the OECD average has been impressive over the past two decades (Figure 1.1). Nonetheless, the gap remains large. Productivity growth decelerated after the financial crisis, and this deceleration is broad-based, affecting most sectors of the economy. This has implications for inclusiveness: the convergence process has slowed down and income remains at around one-third below the OECD average. Income inequality and poverty remain high and income disparities have increased in recent years (Figure 1.1). Low productivity reflects some remaining barriers to investment, relative weak firm dynamics, skills mismatch and large informality.

The government has undertaken many reforms in recent years to boost productivity and inclusive growth. These include measures to improve the business environment, encourage innovation, enhance skills, modernise labour relations, and strengthen income support. In addition, the National Productivity Board was established at end-2017 to monitor productivity developments and potential risks and evaluate proposals for reforms. However, more needs to be done to ensure higher living standards for Lithuanians and prepare for the future in an aging society.

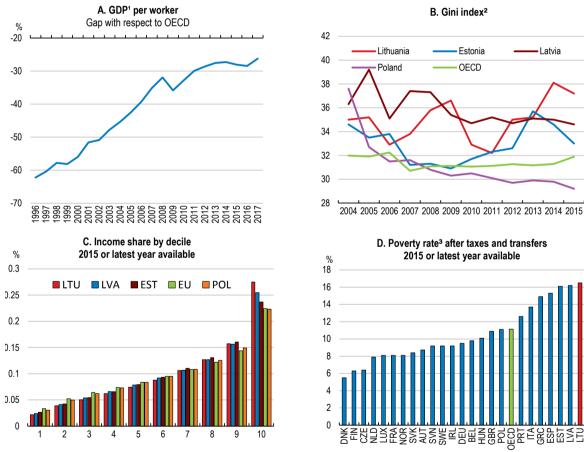


Figure 1.1. The convergence process needs to be strengthened

- 1. GDP in 2010 USD PPP. The rate of convergence is the annual difference in labour productivity gap.
- 2. Calculated on the basis of disposable income after taxes and transfers.
- 3. The poverty rate is the ratio of the number of people (in a given age group) whose income falls below the poverty line, set as half the median household income of the total population.

Source: OECD Productivity database; and OECD Income Distribution and Poverty database.

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This chapter examines policies that can help reinvigorate productivity growth and foster inclusiveness, building on the synergies between these two challenges. The next section explains the productivity slowdown and the reasons behind the relatively high inequality and poverty rates, with a special focus on labour market inclusiveness. Section three discusses the productivity-inclusiveness nexus, in particular the link between productivity dispersion and wage inequality. Section four considers the policies that can help firms to become more productive and support inclusive growth, in particular the challenge to make them more dynamic and innovative. Section five addresses measures that aim to ensure that individuals, especially the most vulnerable ones, have the opportunities and the skills for more and better jobs, while providing efficient support to the jobless and poor.

Convergence can be more sustainable and inclusive

Productivity growth has slowed from its pre-crisis highs

Differences in labour productivity explain most of the gap in living standards between Lithuania and OECD average (Figure 1.2, Panel A). After having increased annually by around 7% between 1996 and 2007 – approximately three and a half times faster than the OECD average – labour productivity growth more than halved over the following years, even if some recent pick up is taken into account (Figure 1.2, Panel B). Total factor productivity (TFP) growth – accounting for most of the labour productivity growth over the period 1996-2007 on average - has decelerated considerably since the crisis, indicating a less efficient use of inputs (Figure 1.3, Panel A). Strong investment and capital deepening in the run-up to the crisis created positive spillovers to the economy as a whole that lifted TFP growth. Since then, TFP growth has lost momentum, together with capital deepening, weakening the economy's growth potential. Investment plunged during the financial crisis, reflecting weak domestic demand and lower capital inflows. While growth resumed, the total investment rate, and importantly in the business sector, remains well below the pre-crisis peaks (Figure 1.3, Panels B and C). Low business confidence may be part of the explanation, but other factors (discussed below) including some remaining barriers to investment, skills mismatch and large informality, can also deter investment. The gap vis-à-vis the OECD average with regard to both TFP and capital deepening stood at over 16% in 2017.

More in depth analysis based on sectoral data for the period 1997-2016 ("shift-share" analysis, Annex A.1) suggests that the deceleration of labour productivity growth in recent years was driven mainly by efficiency losses within each sector ("within effect"), reinforced by a considerable slowdown in the shift of workers from less to more productive sectors ("shift-effect"). Overall, sectors with above-average labour productivity level hardly increased their employment between 2007 and 2016, against total employment gains of around 7% before the 2008 crisis (Figure 1.4). Most of the increase in the labour share, after the crisis, came from the least productive industries such as professional and administrative services, and entertainment and recreation. The movements of workers between sectors reflects both cyclical factors such as a weakening of domestic demand and a slow recovery in global trade after the crisis, and more structural ones related to the sectoral transformation of the Lithuanian economy towards more skill-intensive sectors, in particular services.

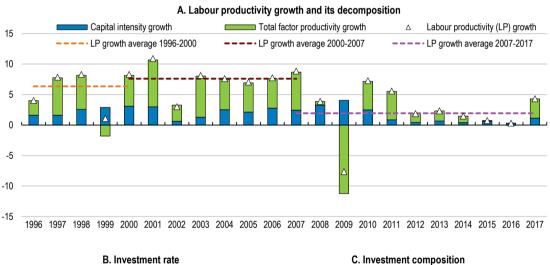
A. Gap with the OECD, 2017 B. Labour Productivity growth Y-o-y % change ■ GDP per capita ■ Labour productivity 15 5 0 10 -5 -10 -15 -20 -25 -5 -30 -10 OFCD FH -35 -40 CZE EST HUN LTU LVA POL SVK SVN

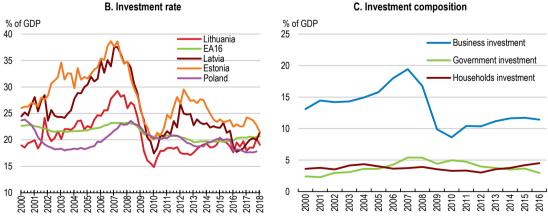
Figure 1.2. Low labour productivity explains most of the gap in incomes

1. Data refer to the European countries that are OECD members. *Source*: OECD Economic Outlook database.

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Figure 1.3. Total factor productivity and capital deepening weakened





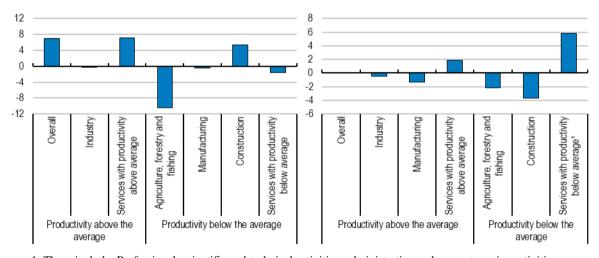
Source: OECD Economic Outlook database; Eurostat and OECD calculations.

A major factor to boost productivity is a more successful participation in global value chains (GVCs), which is currently low (Figure 1.5, Panel A). Deepening integration in GVCs can benefit productivity as it enables knowledge transfer and provides access to more differentiated and better quality inputs (OECD, 2013). Foreign direct investment (FDI) is another important source of productivity gains as it tends to bring latest technologies and know-how to the country (OECD, 2016a). Recent trends in FDI are encouraging, but the inward FDI stock remains lower than in other Baltic countries in relation to GDP (Figure 1.5, Panels B and C). This may be explained in part by the fact that over the period 1990-1995 (first phase of privatisation after independence) the ownership of the majority of state-owned-enterprises in Lithuania were transferred to domestic residents, rather than strategic investors, as was the case for example in Estonia. Moreover, many projects in recent years concerned shared services centres, which do not require heavy capital expenditure and hence do not contribute much to FDI stock. However, other factors mentioned earlier, such as some remaining barriers to investment and the difficulties faced by firms in finding adequately-skilled workers, as well as the weak dynamism of the innovation system can also impact FDI decisions.

Figure 1.4. Productivity and labour shares trends by sector



B. Changes in employment share 2007-2016



1. These include: Professional, scientific and technical activities, administrative and support service activities; Public administration, defence, education, human health and social work activities; and Arts, entertainment and recreation, repair of household goods and other services.

Source: Eurostat; and OECD calculations.

A. Participation in global value chains is weak as a share of gross exports, 2011 80 ■ Forward¹ ■ Backward² △ Participation index 2008 70 60 50 40 30 20 10 3BR Ä ΠĀ 품 ₽ Ι EST 절 핆 핅 PR B. Flow of inward FDI C. Stock of inward FDI, 2017 Millions of euros % of GDP 1600 180 1400 160 1200 140 1000 120 100 800 80 600 60 400 40 200 20 -200 N 2010 2011 2012 2013 2014 2015 2016 2017

Figure 1.5. Participation in global value chains can be deepened

- 1. The indicator provides the share of exported goods and services used as imported inputs to produce other countries' exports. This indicator gives an indication of the contribution of domestically produced intermediates to exports in third countries.
- 2. The indicator measures the value of imported inputs in the overall exports of a country (the remainder being the domestic content of exports). This indicator provides an indication of the contribution of foreign industries to the exports of a country by looking at the foreign value added embodied in the gross exports. *Source*: OECD International Trade database; World Bank World Development Indicators database; Bank of Lithuania; and IMF Balance of Payment database.

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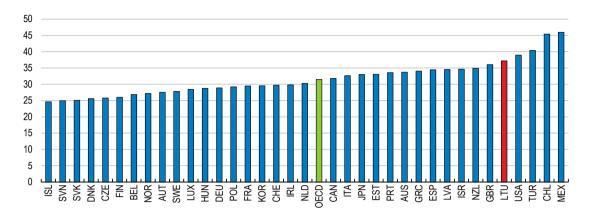
Inequality and poverty remain high

Income disparities measured by the Gini index are among the largest in OECD and have increased in recent years, despite some improvement (Figure 1.1, Panel B and Figure 1.6, Panel A). Inequality is driven by the top and bottom ends of the income distribution, with earnings in the top decile at around 13 times higher than the bottom decile (Figure 1.6, Panel B). Moreover, the bottom 50% of Lithuania's population has lost income share between 2004 and 2014, while the richest top 10% gained an additional 2.5%. Recent

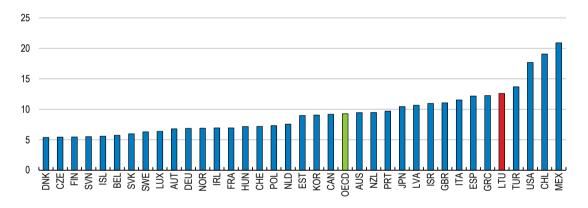
analysis concludes that Lithuania's income inequality is high even after controlling for its level of economic development (IMF, 2016).

Figure 1.6. Income inequality is high

A. Gini index after taxes and tranfers, 2015 or latest year vailable



B. Ratio between income share of top decile and bottom decile, 2015 or latest year vailable



Source: OECD Income Distribution and Poverty database.

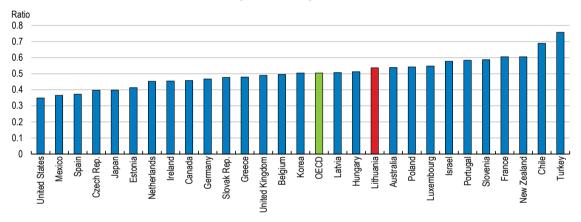
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Large earnings dispersion is one of the key drivers of persisting income inequality in Lithuania (Figure 1.7, Panel A). At the same time, the tax-transfer system is not very effective as social benefits are low and the tax system is not very redistributive, as shown in the 2018 OECD Reviews of Labour Market and Social Policies: Lithuania (OECD, 2018a) (Figure 1.8). Regional disparities in disposable income are also considerable. To tackle wage inequalities, minimum wages were increased by 64% between 2009 and 2016, bringing the ratio of minimum to the median wages even above the OECD average (Figure 1.7, Panel B). Further increases may risk reducing job market opportunities for the less qualified.

Figure 1.7. Wage inequality is high

A. Ratio of 9th to 1th deciles of earning distributions, 2016 or latest year available △ 2010 ■2016 or latest year available Iceland Estonia France Greece Austria United States Netherlands Luxembourg Australia Slovak Republic Switzerland **New Zealand** Czech Republic United Kingdom

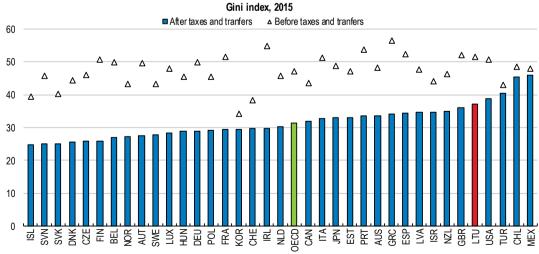
B. Minimum wage to median wage of full time workers, 2016



Source: OECD Labour database.

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Figure 1.8. The tax and transfers system could be more effective in reducing inequality



Source: OECD Income Distribution and Poverty database.

As a result, around 16.5% of Lithuania's population lives in relative poverty with an income below 50% of the median income, well above the OECD average of 11.1% although not very different from Estonia and Latvia (Figure 1.1, Panel D). Approximately 20% of the population is estimated to have income that falls below the risk-of-poverty threshold (Figure 1.9). Women, the youngest and the elderly are particularly affected. As with other countries, the risk of poverty in Lithuania tends to fall with the level of education, with those who have not completed upper secondary education facing a very high risk.

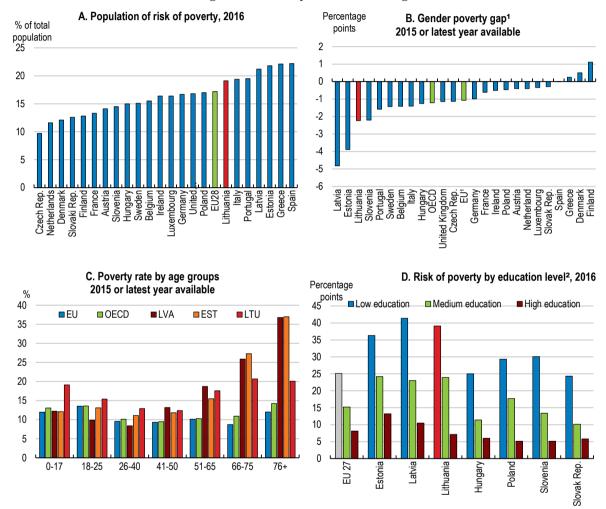


Figure 1.9. Poverty rates remain large

- 1. The poverty rate is the ratio of the number of people (in a given age group) whose income falls below the poverty line, set at half the median household income of the total population. The at-risk-of-poverty rate is the share of people with an equivalised disposable income (after social transfers) below the at-risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income after social transfers.

 2. The gender poverty gap is defined as the poverty rate of men minus that of women.
- 3. The Low education category corresponds to individuals with less than primary, primary and lower secondary education; the Medium education category corresponds to individuals with upper secondary and post-secondary non-tertiary education; and the High education category corresponds to individuals with tertiary education.

Source: Eurostat; and OECD Income Distribution and Poverty database.

The labour market is not very inclusive

Poverty is closely related with labour market outcomes. Lithuania's labour market performed strongly since the start of the recovery, but unemployment still exceeds the OECD average, notably of the low-skilled (Figure 1.10). Regional differences in unemployment rates also remain large. Those who find themselves out of work face a particular high poverty risk in view of the low social benefits.

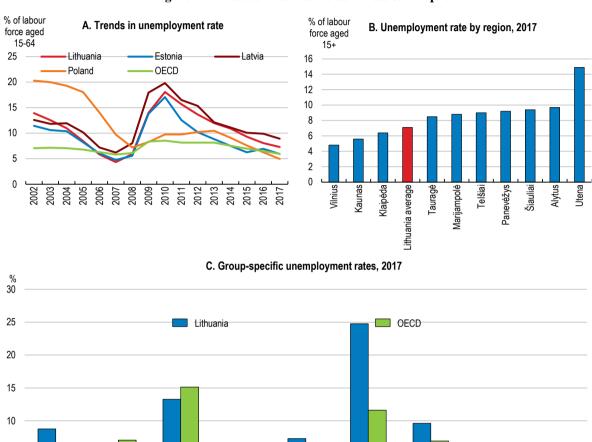


Figure 1.10. Labour market inclusiveness can improve

1. Calculated on the labour force aged 25-64.

15-24

2. Data refer to 2016.

Gender

Women

0

Men

Source: Statistics Lithuania; OECD Gender employment database; Eurostat; and OECD Education attainment and outcomes database.

55-64

Low-skilled1

25-54

Age

StatLink https://doi.org/10.1787/888933789137

Educational attainment²

Medium-skilled¹ High-skilled¹

Long-term UNR²

Another core factor affecting poverty and income distribution is the large size of the informal economy, estimated by various studies (e.g. Schneider, 2016, Figure 1.11, Panel A) at around 17% to 25% of GDP. The share of workers undertaking undeclared work is lower than in Latvia and Estonia, according to the 2013 *Eurobarometer*, but still well

above the EU average (European Commission, 2014) (Figure 1.11). Many workers receive part of their wages as "envelope wages" (cash-in-hand, non-declared wages), avoiding taxation and social contributions. Undeclared self-employment is also a widespread form of informal employment and more common than in other Baltic countries (Žukauskas, 2015). High social security contributions and a perceived lack of regular jobs are among the explanations for informality (European Commission, 2014).

A. Size of the informal economy, 2016 25 20 15 10 Norway Greece Turkey Latvia Jnited States Slovak Rep. **Denmark Szech Rep** B. People carrying out undeclared paid activities C. Employees receiving all or part of their salary on % of an undeclared basis population employees aged 15+ aged 15+ 12 10 10

Figure 1.11. Undeclared activities remain widespread

Source: Special Eurobarometer 402 (Fieldwork April May 2013); and Schneider, Friedrich (2016): Estimating the Size of the Shadow Economies of Highly-developed Countries: Selected New Results, CESifo DICE Report, ISSN 1613-6373, Vol. 14, Iss. 4, pp. 44-53.

Latvia

European

StatLink https://doi.org/10.1787/888933789156

Lithuania

Informal work can have an adverse impact on job security and pay, especially for fully undeclared workers. They lack social security coverage and the protection provided by formal labour contracts, for instance with respect to the minimum wage, employment protection and occupational health and safety standards (OECD, 2018a). Informality also reduces incentives to invest in skill upgrading, as workers in the informal labour market have limited (if any) training and career advancement opportunities which are vital for earnings progression and a good quality job. Despite a decrease (by 0.7 percentage

European

Union

Lithuania

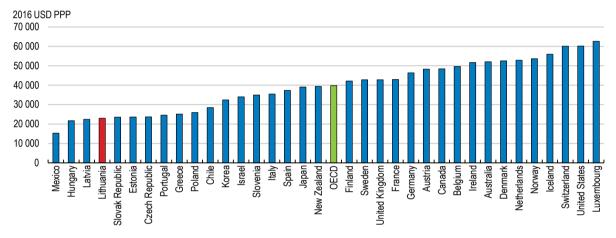
Estonia

points) between 2010 and 2014, vulnerable employment accounted for around 10% of total employment (OECD, 2017a).

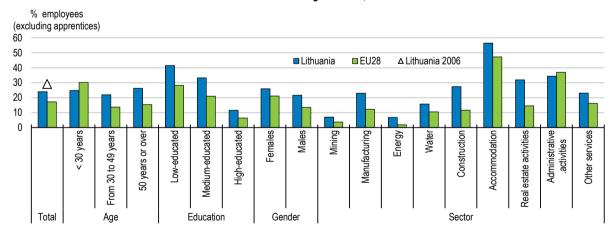
Low earnings remain a concern, as they also provide a strong incentive for emigration (Chapter 2). Despite moving closer to the OECD average, real wages are still low in international comparison at around 60% of the average in 2016 (Figure 1.12, Panel A). Almost a quarter of Lithuanian workers were low-paid in 2014 earning two-thirds or less of median earnings in 2014 (Figure 1.12, Panel B). While this share is much lower than the corresponding one in 2006, reflecting the hikes in minimum wages, it still compares unfavourably with an EU28 average of around 17%. The incidence of low pay is particularly high among the less skilled, workers over 50 years, and in the construction and service industries such as real estate activities and accommodation.

Figure 1.12. Earnings are low and low-pay widespread

A. Average earnings, 2016



B. Low-wage earners¹, 2014



Note: Low-wage earners are defined as those employees earning two thirds or less of the national median gross hourly earnings.

Source: OECD labour database; and Eurostat

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Good working conditions are another acknowledged feature of a good quality job. Around 17% of Lithuanians are not satisfied with their working environment, according to a recent survey, somewhat above the EU28 average (Figure 1.13). However, the prospects for career progression are more of a concern among Lithuanian workers than on average in the EU and in other Baltic countries and Poland. In addition, 23% of Lithuanians would need more skills to cope well with their duties, compared to an EU average of 14% (Eurofound, 2017).

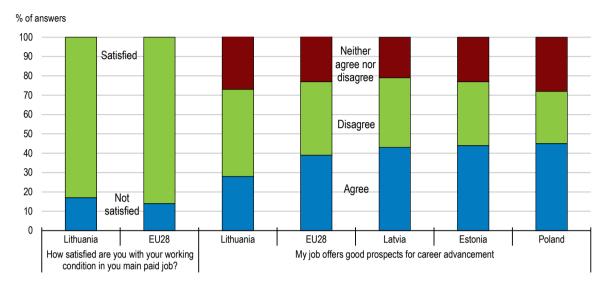


Figure 1.13. Lithuanian employees perceive their career prospects to be weak, 2015

Source: Eurofound (2017), Sixth European Working Conditions Survey – Overview report (2017 update), Publications Office of the European Union, Luxembourg; and OECD calculations.

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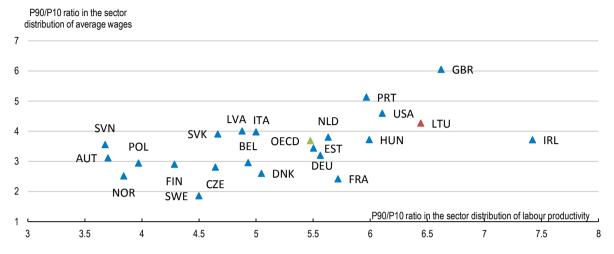
A coordinated policy response is needed to increase productivity and foster inclusiveness

Promoting productivity and inclusiveness is a "twin challenge" (OECD, 2016b). Recent cross-country evidence suggests that much of the widening of the wage distribution over the past two or three decades can be attributed to increases in the variance of wages between firms, linked in turn to productivity dispersion across firms (Andrews et al., 2016). Firm-level data were not available for Lithuania at the time of the preparation of the *Survey*. However, analysis based on sectoral data on the relationship between labour income inequality and productivity disparities suggests that Lithuania has a wider income and productivity gap than the OECD average (Figure 1.14). At the same time, high income inequality and poverty can undermine productivity and growth potential by reducing investment in human capital, in addition to being socially undesirable (OECD, 2016c).

Addressing the "twin challenge" of boosting productivity and fostering inclusiveness requires a broad-based and integrated approach to policy. Well-designed active labour market programmes, for example, could facilitate the reallocation of workers towards more productive sectors by helping displaced individuals to transition to new, good jobs

(OECD, 2016b). Initiatives in education yield clearly a double dividend in terms of promoting productivity and inclusiveness.

Figure 1.14. Income inequality is positively correlated with productivity disparities across sectors



Source: OECD National Account database; and Lithuania Statistics.

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The rest of the chapter examines potential reforms that help both firms and individuals to meet their productive capacity, while ensuring a broader sharing of the productivity gains across society. Measures that reduce remaining barriers to investment and competition, encourage firm entry and exit, and foster innovation have an important role to play in this regard. Similarly, policy initiatives that address skill mismatches and provide opportunities for more and good quality jobs are key to greater productivity and inclusiveness, as are measures helping to combat poverty effectively. Reducing informality is also a win-win policy for inclusiveness, as formal firms tend to be more productive and to offer higher quality jobs.

Helping firms to become more productive and support inclusive growth

Removing remaining barriers to investment

Lithuania's regulatory environment is overall business friendly and open to foreign investment. Barriers to entrepreneurship are relatively low on the basis of the OECD Product Market Regulation (PMR) indicator (Figure 1.15). This is also echoed in the World Bank's *Doing Business* index, where Lithuania is placed among the top 20 countries (World Bank, 2018). Moreover, Lithuania ranks among the top 10 countries with the most open markets for services trade (OECD, 2018b). However, some barriers to investment, including relatively tight regulations for the employment of non-EU workers and for entering legal services, as well as restrictions for the acquisition of land by foreigners from some countries (Figure 1.15 and Figure 1.16), can reduce the country's attractiveness to foreign investors with current efforts to address such barriers going in the right direction.

A. PMR main indices B. Barriers to entrepreneurship 2.5 3.5 ■ Latvia Lithuania ■ OECD ■ Estonia ■ Lithuania **□** OECD 3 2 2.5 1.5 2 1.5 1 1 0.5 0.5 Barriers to entrepreneurship Barriers to trade and investment Product market regulation State control Communication and simplification of rules. Administrative burdens for sole proprietor firms Barriers in services Legal barriers Antitrust exemptions network sectors Licences and permits system Administrative burdens Barriers in for corporation sectors C. State Control D. Barriers to trade and investment 7 3 ■ Lithuania ■ OECD ■ Lithuania OECD 6 2.5 5 2 4 1.5 3 2 1 0 0 Barriers to trade acilitation Scope of state-owned enterprises treatment of foreign suppliers in network sectors Price controls Tariff barriers Direct control over Sovernance of control regulation Barriers to FDI Command and state-owned enterprises Government involvement enterprises Differential (SOEs)

Figure 1.15. Product market regulations, 2013

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Source: OECD Product market regulation database.

■ OECD Lithuania Sound recording oad freight transport Rail freight transport Motion pictures More restrictive Maritime transport Logistics storage and warehouse Logistics freight forwarding Logistics customs brokerage Less restrictive Logistics cargo-handling Legal Insurance Engineering Distribution Courier Construction Computer Commercial banking Broadcasting Architecture Air transport Accounting 0.05 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5

Figure 1.16. Service Trade Restrictiveness Index, 2017

Source: OECD Product market regulation database.

StatLink http://dx.doi.org/10.1787/888933788548

More specifically, a law adopted in early 2017 eased restrictions, and the concomitant administrative burden, on the employment of workers from non-EU countries for selected professions. It exempts professions in approved shortage occupation lists from a work permit or the labour market test (Box 1.1). The law also improved the employment possibilities for non-EU students (part-time) and graduates in Lithuania, providing more flexibility for entrepreneurs, while introducing a simplified start-up visa scheme for non-EU entrepreneurs planning to establish a business in Lithuania in a number of high-technology sectors. As an additional step, more simplified visa rules came into force in early 2018 for foreign semi-qualified workers through the establishment of the verified companies list. The new procedure is scheduled to be assessed in the course of 2018.

Recent reforms also eased investment and services restrictions to non-residents including in the areas of legal services and land acquisition. Amendments at end-2017 provide for the possibility for non EU-nationals to exercise as practicing advocates in Lithuania when their country enters in bilateral mutual recognition agreements on professional qualifications. Moreover, foreigners will be allowed to register as patent agents from 2018. With regard to land acquisition, recent changes removed reciprocity requirements (stipulating equal treatment of Lithuanian investors in the counterpart country) and relaxed regulation on the acquisition of agricultural land by abolishing professional experience requirements.

These initiatives complement other recent reforms to boost Lithuania's attractiveness for foreign investors such as improvements in the regulation for free economic zones and the modernisation of labour relations (see below). The easing of employment restrictions for non-EU workers with qualifications in high demand can also help Lithuania to meet skill needs in growing sectors, for instance, information technology.

Barriers to investment could still be lowered further:

The government plans to introduce further amendments with regards to the
employment regulations of highly qualified non-EU workers, introducing the
possibility for such employees to work on the basis of a national visa rather than a
residence permit (Blue Card). Immigration procedures are expected to speed up

further by the establishment in 2020 of the *Electronic Migration Cases System* (MIGRIS), enabling applications for residence permits or national visas in Lithuania, and their process, to be done electronically. Ensuring the timely implementation of the new system is important. A careful examination of the economic impact of remaining labour market tests for non-EU workers would be advisable.

- Some barriers for foreigners to do business in Lithuania also remain in some other areas. For instance, nationals from non-EU countries are now allowed to exercise as practicing advocates in Lithuania but only if their countries entered into bilateral mutual recognition agreements on professional qualifications (see above). In addition, there are limitations on the acquisition of real estate by foreigners, although nationals from European Economic Area and OECD are exempted (OECD, 2017b). Greater competition is also key to higher productivity. There is scope to increase competition in some key sectors, such as railways, where there is only one main undertaking providing freight transportation services. The government plans to reorganise the state-owned enterprise Lithuanian Railways ("Lietuvos geležinkeliai"), separating it into different companies for passengers, cargo and infrastructure management, which would be welcome. Devising packages of reforms can help reduce resistances to change from stakeholders.
- Investment conditions would also benefit from a further reduction in administrative burden for businesses. While starting a business has become significantly easier in recent years, firms operating in Lithuania still face administrative burdens arising, for instance, from complex licensing or administration procedures or lengthy insolvency procedures (see below). Current efforts to develop a methodology for the calculation of compliance costs, and evaluate such costs for certain sectors (chemicals and transportation sectors) are welcome. The new methodology should be progressively applied to all key sectors of the economy identifying the areas with scope for reducing these costs.
- A licencing reform is also underway, aiming to simplify the system, with most of the legislative changes approved by Parliament. The screening process that commenced in 2012 indicated large scope for improvement in this regard including, for instance, 9 activities which should no longer be licensed and 45 activities that should be started by simple submission of a declaration. Simplified procedures are expected to reduce administrative burden on businesses, stimulating investment. These efforts need to be supported by a coherent framework to monitor the implementation of regulatory reforms and evaluate their effectiveness (OECD, 2015a).

Box 1.1. Reforms in employment procedures for foreign workers: main provisions

A new Law on the Legal Status of Aliens, which took effect on 1 January 2017, introduces a number of amendments that simplify employment procedures for workers from non-EU countries with skills in short supply in the Lithuanian labour market. In particular:

- The law provides for two lists of occupations in short supply: one for high-skilled ("High-Skilled Occupations in Short Supply"), covering 27 occupations; and another ("List of Occupations in Short Supply") for occupations requiring lower professional qualifications such as machine operators and international transport vehicle drivers. The latter list is approved semi-annually by the Lithuanian Labour Exchange.
- For the highly qualified professionals, the 2017 law eases travel and employment conditions. The issuance period of temporary residence permits is reduced for professionals from non-EU countries whose occupation is in the list of "High-Skilled Occupations in Short Supply". Moreover, a greater number of foreign workers qualify under the new arrangements for a temporary residence permit (Blue Card). The minimum salary level that an employer has to pay to such workers was reduced from twice the average gross monthly salary to 1.5 times. In addition, highly qualified professionals are exempt from the labour market tests (requiring that a work permit is issued to a non-EU worker if there is no specialist in Lithuania meeting the employer's qualification requirements); under the previous arrangements only the highest-paid workers were excluded. Moreover, the professional experience (at least five years) of a foreign worker is now recognised as an equivalent to higher education qualification.
- Administrative procedures for incoming workers were made simpler, including through a shortening of the period of the issuance of a temporary residence permit (Single Permit) for non-EU workers with occupations included in the List of "Occupations in Short Supply".
- The law eases access to employment for graduates in Lithuania who intend to work according to the qualification acquired by abolishing requirements for a work permit or labour market test for such workers. Also, a work permit is no longer required for foreign students in Lithuania who work-part time.
- A simplified start-up visa scheme for non-EU entrepreneurs with plans to operate
 in certain fields of high technology (e.g. information and technology,
 biotechnologies, electronics) was introduced. An evaluation committee assesses
 the application on the basis of the scale and innovation potential of the new
 business.

Source: Government of Lithuania.

Enhancing the performance of state-owned enterprises

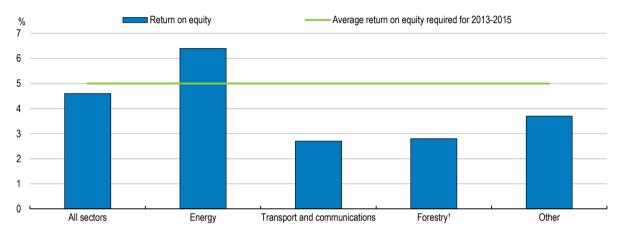
State-owned enterprises (SOEs) account for 3.2% of total employment, above the 2.4% OECD average (OECD, 2016d). As of end-2016, there were 118 SOEs in Lithuania, mainly in the energy, transportation and forestry sectors. Around two-thirds of SOEs engage in commercial activities, either exclusively or in combination with public policy

objectives (Bank of Property, 2017). At the beginning of 2018 due mostly to the consolidation of 42 forestry and 11 road maintenance enterprises, 66 SOEs remained.

The average financial performance of SOEs has improved in recent years, but many still do not achieve the annual return on equity target set by the government, meaning that they absorb resources that could be reallocated to more productive firms. Only 16 out of 42 commercial SOEs (excluding the 42 forest enterprises that were subject to different requirements) achieved the 5% average return-on-equity target over 2013-15 (Bank of Property, 2016), and this share hardly improved in 2016 (Figure 1.17) (Bank of Property, 2017).

Figure 1.17. SOEs performance varies across sectors

Returns on equity of state owned enterprises, 2013-15



1. As forest enterprises were not subject to the return on equity requirement, their results were not included in the average 2013-2015 return.

Source: State-owned enterprises in Lithuania, Annual report 2015.

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The under-performance of state-owned enterprises is likely to reflect weaknesses in corporate governance. Lithuania has made considerable progress in recent years in aligning the governance framework for SOEs to the OECD SOE Guidelines. However, the 2015 OECD Review of the Corporate Governance of State-Owned Enterprises: Lithuania identified some crucial shortcomings in SOEs' ownership and corporate governance arrangements (OECD, 2015b). These include insufficient separation of the government's role as owner and regulator of SOEs, the absence of a centralised ownership entity to induce a greater separation of these functions, limited operational independence of SOE boards, weak corporatisation and concerns about the quality and credibility of SOEs' financial reports.

A number of recent reforms aim to address such shortcomings. These include, notably, the transfer of the ownership coordination function from the Bank of Property to an independent public institution to better separate operation and monitoring. Moreover, the budget of the Governance Coordination Centre (GCC) – established in 2012 to monitor and report on SOEs' compliance with the state's disclosure standards for such enterprises – was increased substantially to strengthen its monitoring capacity. Progress in this area is important. In addition, disclosure standards became mandatory for large SOEs. The compliance with the new provisions needs to be monitored closely, including through high quality auditing. The government has also adopted new rules which require a higher

proportion of independent members on SOE boards from early 2018. Political appointees are barred from serving on boards. Moreover, a new nomination process for SOE board members was introduced which includes the use of personnel selection agencies, with the potential to make recruitment decisions more transparent.

These reforms, along with the restructuring underway in the state-owned forestry and road maintenance sectors, are proceeding as planned and should go hand-in-hand with increased accountability for boards of directors and managers for achieving results. Plans are also underway to fully corporatise a number of commercially-oriented SOEs that are currently subject to statutory legislation rather than company law. Only a small number of enterprises is to remain as statutory enterprises, with some undergoing mergers and others being liquidated or converted into public institutions or private/public limited liability companies. The government plans that by the end of 2020, entities with legal status of a state enterprise will cease to exist. This is in line with international practices (OECD, 2017c). Ensuring that SOEs are subject to the same laws and regulations as private companies is essential for safeguarding competition and productivity (OECD, 2015b).

Boosting business dynamics through wider financing options

New, dynamic firms spur productivity growth by increasing competitive pressures on incumbents and enabling knowledge diffusion. Innovative start-ups can also promote inclusive growth by reducing inter-firm wage dispersion (OECD, 2016c; OECD, 2017d). The share of "high-growth" enterprises in total is low in Lithuania compared to the OECD average, indicating scope for policies that promote firm turnover (Figure 1.18).

16 14 12 10 8 Lithuania Hungary OECD France Latvia Portugal Spain Canada Netherlands Ħ Denmark Jnited Kingdom **New Zealand** Slovak Rep Szech Rep

Figure 1.18. Firm dynamics can be improved

High-growth enterprises as a share of all enterprises¹, 2015 or latest

1. The rate of high growth enterprises is calculated as the percentage of high growth enterprises (20% or higher growth based on employment) on the population of active enterprises with at least 10 employees. *Source*: OECD SDBS Business Demography Indicators database.

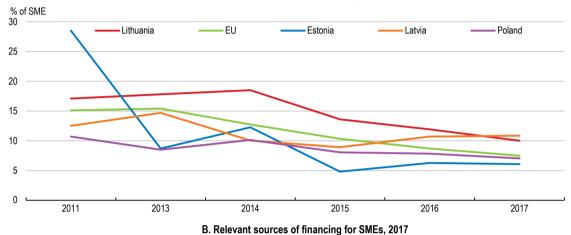
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Reducing the financial constraints for high-potential firms is important (OECD, 2015c). Access to financing sources for business development has improved in recent years, but some Lithuanian firms still face constraints. Around 10% of small and medium-sized enterprises (SMEs) in 2017 cited access to finance as the most important concern, above the EU average (Figure 1.19, Panel A). Firms facing financial constraints in Lithuania are often smaller and more productive with a key role in boosting innovation and creating

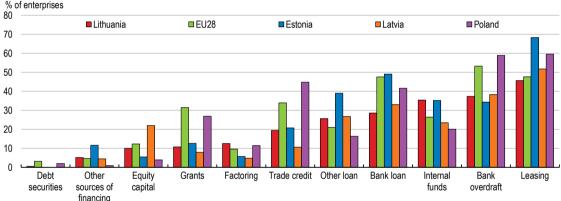
jobs (OECD, 2016e). Equity financing – an important source in many countries to bridge the financing gap for young firms – was used by only 10% of SMEs in 2017 (Figure 1.19, Panel B). Despite advances in the venture capital market in recent years, Lithuanian firms continue to rely highly on debt financing.

Figure 1.19. Access to finance for businesses

A. Evolution of access to finance as the main problem for SMEs



B. Relevant Sources of finalicing for SMES, 2017



Source: European Commission, Survey on the Access to Finance of Enterprises.

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Several initiatives were recently introduced to help startups. A law in 2016 on crowd-funding is expected to promote alternative forms of business financing, comparable to new regulations in Austria and Germany, to promote equity-based funding. Crowd-funding involves many investors making small investments for specific projects through an online platform (OECD, 2016a). The government in 2017 has also established three new venture capital funds, financed by EU structural funds and national resources, with six more funds to be established by 2019. These include, notably, a *co-investment fund* which enables business angels and capital venture teams to invest in young innovative start-ups together with the state. In addition to supply financing, business angels can provide business know-how in a newly established company.

As a further step forward, three new financial instruments for SMEs are to be launched in 2018. The first instrument, export credit guarantees, provides short-term export credit guarantees (up to two years) to SMEs exporting their goods (of Lithuanian origin) to non

EU and non OECD countries. The second instrument, portfolio guarantees for factoring transactions, will provide short-term financing for SMEs with the aim to increase turnover and the development of SMEs' international activities. The government also plans to introduce crowd-funding loans, which allow financing SMEs through crowd-funding platforms. Such loans can be used to finance investments for new business, or to strengthen existing activities and promote development. The selection of financial intermediaries is underway.

The outcomes of the new initiatives in closing the financing gap for young innovative firms need to be monitored and assessed regularly, with changes in the design if required, given the importance of such firms in boosting productivity growth. More also can be done to increase awareness of funding opportunities among businesses. Measures that enhance the quality of projects and their presentation can also improve access to finance ("investment readiness") (OECD, 2016a).

Streamlining insolvency procedures

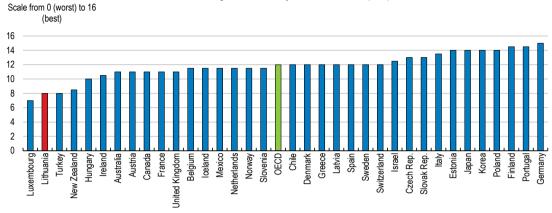
Lithuania's insolvency framework is weak, and the exit rate of firms is low (Figure 1.20). The survival of non-viable firms ("zombie" firms) drags down productivity and congests markets (Adalet McGowan et al., 2017). To facilitate the exit of less productive firms and to reallocate resources to more productive activities, the insolvency regime needs to be reformed. Effective insolvency regimes can also promote inclusiveness over the medium term by reducing across-firm differences in productivity and wages (OECD, 2017c).

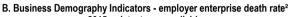
Progress was made towards streamlining bankruptcy procedures in recent years, including through simplifying insolvency laws and reducing the period for decisions on appeals (World Bank, 2017). Moreover, since 2015, bankruptcy administrators in enterprise bankruptcy proceedings are appointed by courts on a computerised basis, increasing the transparency of the process. However, bankruptcy processes remain costly and time-consuming in an international comparison (Figure 1.20, Panel C). Also, the recovery rate for investors is relatively low, which can discourage entrepreneurship (OECD, 2016e). An audit report highlights the need to introduce clearer and stricter rules regarding directors' liability of insolvent companies, so as to increase incentives for early filings for bankruptcy (NAO, 2014).

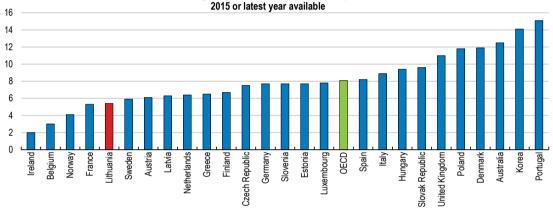
The government is currently drafting a comprehensive law on corporate insolvency, which changes the criteria for starting bankruptcy procedures and establishes clearer deadlines for filings. Amendments also aim to establish more favourable conditions for enterprise restructuring. It is envisaged, for example, that the petitions for initiation of bankruptcy and restructuring should be examined together, and that an enterprise in bankruptcy course should be provided with the possibility to terminate bankruptcy proceedings and convert them to restructuring proceedings. These reforms should go ahead. Recent OECD work highlights the need for insolvency regimes to offer the opportunity to debtors in financial difficulties to restructure early and, where necessary, facilitate exit predictably and expediently (Adalet McGowan and Andrews, 2016). Strengthening the use of expertise is key for raising efficiency, given that winding down or rehabilitating a company can be complex. Specialised judges and bankruptcy administrators are important in this regard.

Figure 1.20. The insolvency framework can become more efficient

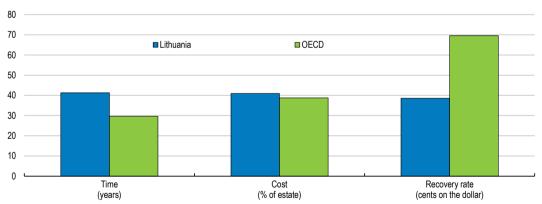
A. Strength of insolvency framework index1 (0-16), 2017







C. Resolving insolvency, 2017³



- 1. The strength of insolvency framework index is a composite indicator of the quality of the insolvency framework based on the time, cost and outcome of insolvency proceedings involving domestic legal entities.
- 2. Death rate: number of enterprise deaths in the reference period (t) divided by the number of enterprises active in the same period.
- 3. The indicators are normalised with respect to minimum and maximum values assumed among the OECD countries.

Source: World Bank Doing business 2018 database; and OECD SDBS Business Demography Indicators (ISIC Rev. 4) database.

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Strengthening innovation capacity and diffusion of knowledge

Securing faster income convergence will depend increasingly on strengthening innovation. Lithuania has improved its international innovation position, according to the 2017 European Innovation Scoreboard (EIS) (Figure 1.21, Panel A). It remains however a "moderate" innovator, on the basis of the summary index, with a performance of around 80% of the EU average (European Commission, 2017a). Despite progress, innovation inputs and outputs fall below the OECD median, with scope for greater efficiency (Figure 1.21, Panel B).

A. EU Summary Innovation Index EU28 = 100 100 Lithuania Estonia Latvia Poland 90 80 70 50 40 2009 2010 2011 2012 2013 2014 2015 2016 B. Global Innovation Index: input-output matrix, 20171 Innovation output index 70 CHE NLD 65 60 SWE LUX 55 ISL **AGBR** 50 DNK Innovation output OECD average 45 40 ESP BEL HUN **AUS** nnovation input 35

Figure 1.21. There is scope to catch up with more innovative countries

1. Innovation input measures include: institutions, human capital and research, infrastructure, market and business sophistication. Output measures include: knowledge and technology outputs and creative outputs. The indicators were normalised into the [0,100] range, with higher scores representing better outcomes. Source: European Innovation Scoreboard 2017; and Cornell University, INSEAD, and WIPO (2016): The Global Innovation Index 2016: Winning with Global Innovation.

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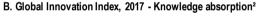
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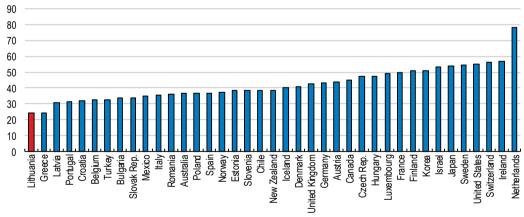
Innovation input index

The proportion of innovative firms in Lithuania continues to lag behind the EU28 average, despite an increase in recent years (Figure 1.22, Panel A). Compared with the average EU business, Lithuanian firms reported a stronger process innovation activity over the period 2012-14 but the introduction of product and organisational or marketing innovations lagged behind. This may partly reflect the relatively poor capacity of businesses in Lithuania to absorb and adapt external knowledge and technologies (Figure 1.22 Panel B). This is of concern in view of the dependence of Lithuanian firms on external technology in catching up with the technological frontier and the need to participate more in global value chains (GVCs) (Figure 1.5). Increased investment in knowledge-based capital, including through improving digital skills, and greater collaboration between industry and research sectors that increases exposure to knowledge (discussed below) could boost firms' absorptive capacity (Vie et al., 2014; Maggs and Hathway, 2016). MOSTA (2017) further recommends a greater focus of research and innovation policy on firms that have potential to innovate or grow. Adjusting the research institutions' services towards business needs is important.

A. Type of innovation, 2014 % of enterprises with innov ation activity 60 Lithuania ■ EU28 △ 2012 50 40 30 20 10 Innovative enterprises Marketing Organisation Process innovative Product innovative Non-innovative innovative innovative enterprises enterprises enterprises enterprises enterprises

Figure 1.22. Firm level innovation and absorptive capacity are low





1. Including enterprises with abandoned/suspended or on-going innovation activities.

^{2.} The knowledge absorption index is a composite indicator that measures how good economies are at absorbing and diffusing knowledge. It is based on the following indicators: intellectual property payments as a percentage of total trade; high-tech net imports as a percentage of total imports; imports of communication, computer and information services as a percentage of total trade; net inflows of foreign direct investment as a percentage of GDP and the percentage of research talent in business.

Business R&D intensity remains low, despite generous company-level support schemes, even taking into account that the high tech sector is relatively small (European Commission, 2016a) (Figure 1.23). The generous R&D tax incentives are hardly taken up. Along with an accelerated depreciation allowance for some R&D capital, the current scheme allows companies to deduct 300% of eligible R&D expenditures. Furthermore, the tax incentive for companies investing into technological modernisation has been extended allowing from 2018 to reduce the taxable profits from the respective investment expenses up to 100%, instead of 50% under the previous arrangements. Yet, in 2015, only 149 firms out of 79 840 operating in Lithuania were enrolled to receive tax incentives for R&D, according to the official data. This is due in part to uncertainty regarding the definition of eligible R&D and complex and lengthy application procedures, indicating scope for revisions (European Commission, 2016a). The fact that young innovative firms often do not make profits and limited awareness of the scheme may be other possible reasons for the low take up (OECD, 2016e; IMF, 2017a). Recent measures to better communicate the R&D tax incentives to firms, through expert consultations and electronic information about the application procedure, are therefore welcome.

A: Trends in business expenditure in research and B. R&D tax subsidy rate, 2015 development % of GDP 1-B 0.36 18 16 0.31 1 4 0.26 1.2 Lithuania 0.21 1 0.16 0.8 0.11 0.6 0.06 0.4 0.01 0.2 -0.04

Figure 1.23. Business innovation is low despite generous tax incentives

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A further corporate income tax incentive supporting commercialisation of patented assets and copyrighted software created from R&D activities performed in Lithuania was recently approved by Parliament. The new arrangement provides for a reduced corporate income tax rate of 5% (instead of 15%) to the taxable profits earned from use, sale or other transactions related to these assets. A number of countries have complemented their R&D tax incentives with tax incentives on Intellectual Property ("patent boxes"). However, based on international experience, patent boxes favour holders of existing patents rather than entrepreneurs who do risky experimentation, which is an important driver to innovation (OECD, 2015d). The effectiveness of the new measure needs to be monitored.

Fostering digitalisation is a key challenge going forward. New technologies can boost innovation and productivity and improve wellbeing, as information and knowledge become more widely available (OECD, 2017e). Lithuania ranks well in international comparison in terms of broadband coverage (fixed and mobile) (Figure 1.24, Panels A and B). However, the take up rate remains low. For instance, only 63% of the households had subscribed to a broadband connection in 2016, around 10 percentage points below the EU28 average (Figure 1.24, Panel C). The use of ICT by firms also remains limited (Figure 1.24, Panel D). Ensuring the right skills is key for adapting to technological changes and for safeguarding inclusion. Lithuania lags behind in the "human capital" component of the EU Digital Economy and Society Index, reflecting a relative low share of internet users in population and of ICT specialists in total employment (Figure 1.24, Panel E). Addressing skills mismatch and ensuring solid basic skills (discussed below) are important for strengthening the digital skill base (OECD, 2017e). Greater investment in knowledge-based capita (Figure 1.24, Panel F) and measures that improve firm dynamism are also important for the digital transformation.

Enhancing research-business collaboration on innovation is an additional key challenge. This is an increasingly recognised channel of knowledge transfer (OECD, 2015d). The collaborative activity by SMEs has picked up significantly in recent years, surpassing the EU average (Figure 1.25, Panel A). However, collaboration of firms with universities and research institutions remains limited, especially in the case of larger firms (Figure 1.25, Panel B). Lithuania also has a low incidence of co-authored publications between industry and the research sector and a comparatively low concentration of researchers in the business sector, suggesting low mobility between the two sectors (Figure 1.25, Panels C and D). The share of researchers working in the business sector in Lithuania stands at around 16%, well below the EU28 average close to 40%.

Collaborative research can be improved by encouraging universities and business to engage more with each other. Policy measures, such as the innovation vouchers for SMEs to buy industrial or applied R&D from selected public research institutions, and technology scouting, aiming to foster technology transfer from science to business (and vice versa) by searching and identifying new technological solutions, are welcome. Moreover, the *Intellect* programme, which provides grants to businesses, finances only projects jointly carried out by businesses and research institutions (IMF, 2017a). A regular assessment of the impact of these measures is advisable.

Increasing the government contribution for collaborative research conducted by public research institutions could be another policy option on the basis of international experience (OECD, 2017f). As a step in this direction, a new scheme for basic funding of universities and research institutes encompasses a number of criteria related to collaboration with business, such as the number of patents and joint academia-business publications. This reform is expected to increase incentives for researchers to acquire industrial experience. New measures aiming at improving the absorption capacity of private companies, including industrial doctorates and support for mobility of researchers between public and private sectors, are also in the right direction towards improving collaborative research.

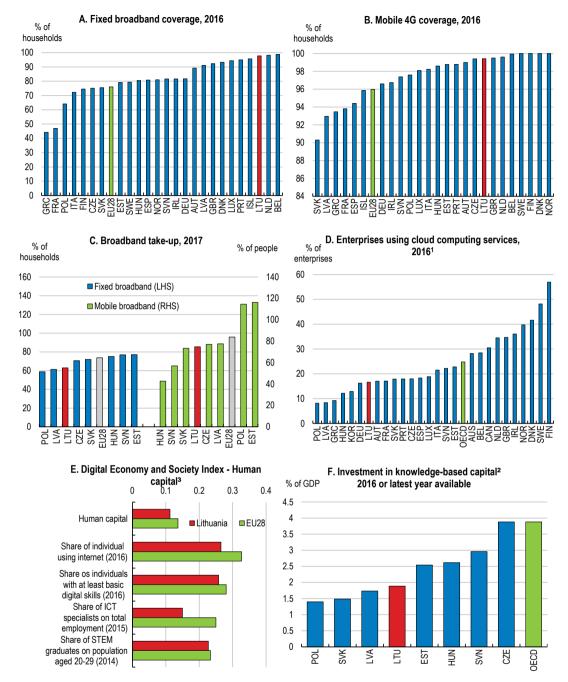


Figure 1.24. Indicators of digitalisation

- 1. Cloud computing refers to ICT services used over the Internet as a set of computing resources to access software, computing power, storage capacity and so on. Data refer to manufacturing and non-financial market services enterprises with ten or more persons employed, unless otherwise stated. Size classes are defined as: small (10-49 persons employed), medium (50-249) and large (250 and more). OECD data are based on a simple average of the available countries.
- 2. Includes R&D, mineral exploration and evaluation, computer software and databases, entertainment, literary and artistic originals, and other IPPs.
- 3. The indicators are standardised using a fixed min-max methodology (see http://ec.europa.eu/newsroom/document.cfm?doc_id=43048).

Source: European Commission, Digital Scoreboard; and OECD Digital Economy Outlook 2017.

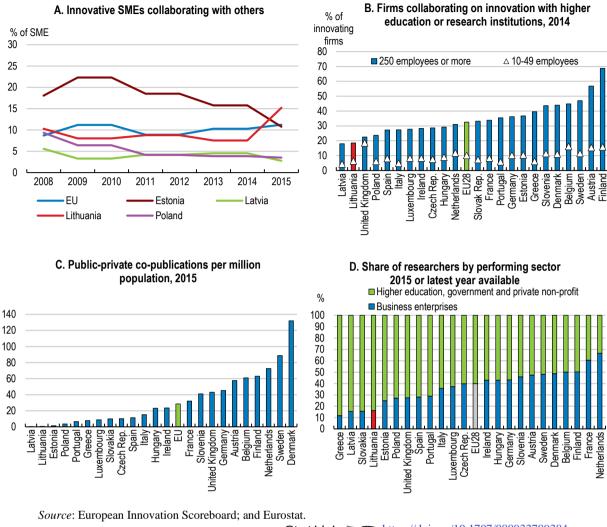


Figure 1.25. There is scope to increase collaborative research

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Finally, intellectual Property (IP) policies that favour collaboration are important. Knowledge and technology transfer activities are quite new in Lithuanian universities. Some successful examples of IP management models, however, provide indications that changes are underway. The management of IP created by the universities could be improved by providing financial incentives for the commercialisation of innovation outputs and knowledge transfer. For instance, following recent reforms, funding arrangements for competitive grants in Australia require universities to list their patents generated by publicly funded research (Australian Government, 2016; OECD, 2017f). It is essential that IP owners have the skills for negotiating with businesses.

Strengthening collaboration does not imply a need for reduced attention to basic research. The *OECD Innovation Imperative* (OECD, 2015d) stresses the significantly larger knowledge spillovers generated by basic research compared to applied research, while also making applied research more productive. Moreover, basic research facilitates access to international knowledge (OECD, 2015d).

Greater coordination is needed to strengthen the innovation system. There are many institutions with advisory and implementation functions under the various ministries with weak coordination among them, which leads to fragmentation of policies and their delivery and functional overlap (OECD, 2016a; IMF, 2017a). Moreover, a plethora of support programmes and instruments increases institutional complexity administrative costs and makes it difficult for firms to achieve the most of available support. The low take up rates of the R&D tax incentives scheme can be an indication of such complexity. The establishment of the Strategic Council for Research Development and Innovation is a step toward a greater horizontal coordination. The council's role currently includes reviewing institutions involved in research development and innovation. Its functions could be strengthened, including reviewing the science, technology and innovation (STI) policy mix (OECD, 2016a). The government should continue the implementation of the institutional reform of innovation policy by improving coordination and consolidate agencies and support programmes where overlaps exist, based on a careful and well-evidenced assessment, as recommended by the OECD Innovation Policy Review for Lithuania (OECD, 2016a).

Improving infrastructure

Good infrastructure supports private investment and innovation and facilitates trade and knowledge diffusion. It could also make growth more inclusive, through enhanced labour mobility (OECD, 2017d). The perceived quality of overall infrastructure in Lithuania has edged up in recent years, but remains below the OECD average (Figure 1.26). Transport infrastructure, in particular, could be improved. There is a need to develop safer road infrastructure - the number of road fatalities remains among the highest in the EU - and upgrade port and air transport infrastructures. In the rail sector, there is a shortage of lines with double tracks, which causes bottlenecks, and a low degree of electrification; only 7% of rail tracks in Lithuania are electrified (European Commission, 2017b). Moreover, Lithuania's transport and energy (electricity, gas) networks need be integrated further with the rest of Europe.

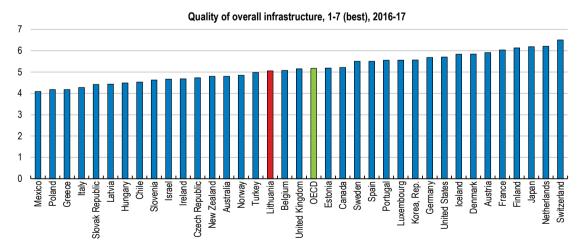


Figure 1.26. Infrastructure quality in international comparison

Note: The score is based on the assessment of business leaders operating in the country to the question: how would you assess general infrastructure (e.g. transport, telephony and energy) in your country? [1 = extremely underdeveloped – among the worst in the world; 7 = extensive and efficient – among the best in the world]. *Source*: World Economic Forum Global Competitiveness Index dataset.

A number of noteworthy projects, co-financed by the EU, are underway. The *Rail Baltica* project will connect the Baltic states to the standard-gauge European network. Other projects attempt to modernise water and air transport infrastructure. In addition to economic gains, reforms in the transport sector would have environmental benefits by reducing bottlenecks. Moreover, energy supply has been diversified by connecting the electricity grid with that of Sweden (*NordBalt*) and Poland (*Litpol*); this allows Lithuania to import significantly more electricity from Europe improving supply certainty. In the gas sector, the construction of a new gas interconnector linking Lithuania with Poland (GIPL) is scheduled to be completed by the end of the decade. GIPL is of key importance as upon completion it will connect the gas networks of all the Baltic countries with that of continental Europe (European Commission, 2017b).

These initiatives go in the right direction as better infrastructure can increase competition and reduce cost for Lithuanian firms. However, enhancing efficiency of public infrastructure spending is crucial to achieve the highest possible benefits from public investments. A recent report by the *National Audit Office of Lithuania*, assessing the management of the state investment programme in 2015, highlighted that the programme planning suffered from a poor coordination and that project selection procedures were often lacking rigorous analysis, with limited requirements for performance reporting (NAO, 2016). As a positive step, from 2018, a cost-benefit analysis will be required for all investment projects financed by the Lithuanian budget. This could increase the efficiency, as well as transparency, of the selection process.

Helping individuals to meet their productive potential

Ensuring relevant skills

The economy is booming and wages are growing fast. However, Lithuania still faces important long-term labour market challenges having an impact on productivity and inclusiveness over time. The high structural unemployment rate reflects inefficiencies in the allocation of labour resources. Moreover, skill shortages contribute to supply constraints putting pressure, along with the shrinking workforce, on inflation and labour costs. ICT professionals and engineers, with a key role for the digital economy, are among the occupations that are in short supply of workers, as are health professionals (European Commission, 2016b).

The share of workers with skills mismatch in Lithuania is above the OECD average (Figure 1.27 Panel A). Over-skilling is generally more common than under-skilling. Recent OECD research concludes that, lowering skills mismatch in Lithuania to best practice is associated with productivity gains of around 10% compared to the OECD average of 6% (Adalet McGowan and Andrews, 2017).

The field-of-study mismatch (when workers are employed in a different field from what they have specialised in) is also high in international comparison (Figure 1.27, Panel B). Despite a highly educated workforce, finding workers with the right skills appears to be a significant constraint for over 40% of firms on the basis of recent survey data (Figure 1.28). High emigration and certain restrictions on non-EU workers, as well as limited participation in lifelong learning, partly explain the lack of suitable labour. This is exacerbated by the insufficient quality of the domestic education system.

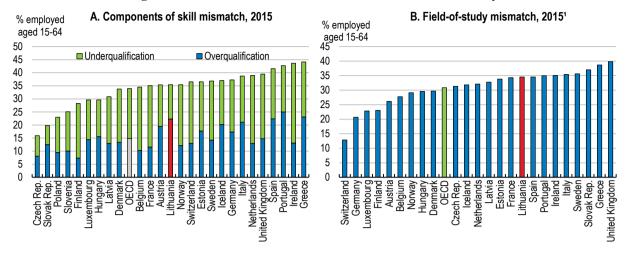


Figure 1.27. Labour resources could be allocated more efficiently

Note: The OECD average is calculated on the 25 available countries only.

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

Source: Adalet and Andrews, 2017; and OECD Skills for Jobs Database.

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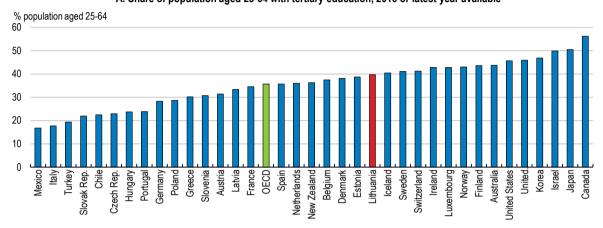
Addressing skill mismatches requires a tertiary education system that is more responsive to changing labour market needs. It is not uncommon for university graduates to subsequently enrol in vocational training (IMF, 2017b). Recent initiatives towards improving the labour market relevance of tertiary education are welcome. These include a new law in 2016 that provides for increased cooperation between higher education institutions and social partners on curriculum development and the expansion of workbased learning opportunities in tertiary education (European Commission, 2016a). In addition, the 2016 law opens pathways from professionally-oriented courses to traditional master's programmes. In response to reported shortages, the government has also recently increased the number of vouchers (public funds to cover the full cost of studies) for tertiary studies in areas such as ICT, mathematics and engineers. Moreover, the mandate of sectoral professional committees (advisory bodies coordinating qualification-related issues in a specific sector of the economy) was enhanced to include higher education qualifications, and the system of professional standards now applies to all levels of qualification. However, explicit incentives under the current tertiary funding system to align the provision of tertiary education to labour market needs are generally missing (Gruzevskis and Blaziene, 2015).

Plans for a more direct link between tertiary education funding mechanisms and labour market demands, including through differentiated awards to institutions for courses that provide skills closely linked to labour market needs, are welcome. In particular, a new funding model for tertiary education is underway which will relate part of the public funding (up to 20%) to the achievement of the performance outcomes agreed with the tertiary institutions. This will be complemented by the development of a more rigorous methodology for assessing labour market needs and keeping track of graduates' employability. These reforms should go ahead. Incorporating graduate labour market outcomes to providers' funding formulae could be considered. It is further important to assess carefully whether the current funding arrangements have any unintended effects in terms of skill mismatches in view of differences in course fees and the alleged shortages

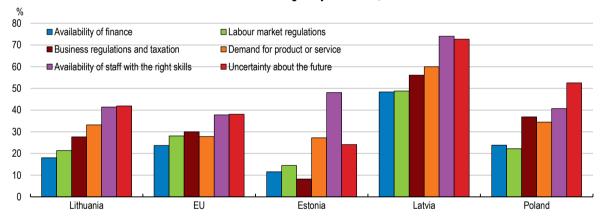
in high-skilled occupations, such as ICT specialists and engineers. Better information to students about the labour market outcomes of graduates by field of study is important in this regard. The new human resources monitoring system, linking administrative data from education, training, employment, and tax systems, should improve such information but this needs to be made readily available to students (OECD, 2018a).

Figure 1.28. Lithuania has a highly educated workforce but the skill mix needs to improve

A. Share of population aged 25-64 with tertiary education, 2016 or latest year available



B. Major obstacles to investment % of all firms citing a major obstacle¹, 2015



1. Firm responses to the question: "Thinking about your investment activities in your country, to what extent is each of the following an obstacle? Is it a major obstacle, a minor obstacle or not an obstacle at all?"" *Source*: OECD Education at a glance 2017; and European Investment Bank – EIBIS, EIB Investment Survey.

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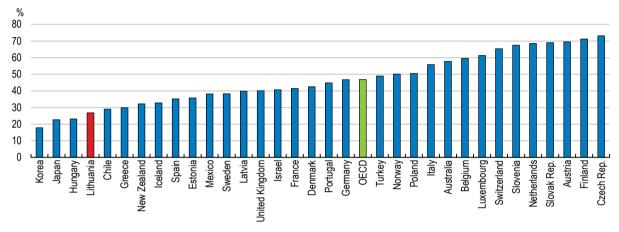
More work-based training is also necessary to meet the skills needs. Vocational education and training (VET) has relatively low enrolment rates and is largely school-based (Figure 1.29). Comprehensive efforts are underway to improve the attractiveness of VET and increase its labour market relevance. These include changes in the governance of VET that strengthen business involvement in the development and implementation of programmes and improvements in the technical competencies of VET teachers through training programmes in business enterprises (OECD, 2017g). Moreover, the VET curricula are being reformed, in close collaboration with the social partners, and

transformed to the modular structure (European Commission, 2017c). In addition, 42 sectoral practical centres provide modern training facilities for VET students.

These are positive initiatives, but efforts need to continue if the national policy target for increased enrolment in upper-secondary VET from almost 27% in 2016 to 35% by 2022 is to be met. Better communicating skills information to students is very important in this regard (OECD, 2018a). More effective career counselling is also instrumental. A new law for VET stipulates that vocational guidance will become part of the general education system and will be provided to children from the first grade. This is welcome.

Figure 1.29. The enrolment rates in VET are low

Share of vocational students on upper secondary students, 2015



Source: OECD education at a Glance 2017.

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Strengthening VET quality further hinges upon reforms that increase the capacity and incentives of schools to provide more work-based training. Consideration should be given, in this context, making work experience a prerequisite for entry into vocational teaching, as recommended by the 2017 OECD Review of Education for Lithuania (OECD, 2017g). Moreover, the current funding system for VET, which links public funds to the student enrolments, could be reformed to recognise and reward work-based instruction of vocational students. To ensure good quality of teaching in VET, a new law requires external school audit every 5 years and the supervision of non-formal vocational training. Increasing the quality of general education teaching offered to secondary vocational students, would also raise the attractiveness of VET (OECD, 2017g). Ongoing reforms aimed at improving basic skills development in general education and enhancing alignment between general, VET and tertiary education should continue.

Apprenticeships are not widespread in Lithuania. The new Labour Code (see below), in force since July 2017, clarifies the legal status of apprenticeships and provides for two types of apprenticeship employment contracts: one with a contract for formal or nonformal training; and one without such a contract. The maximum duration for an apprenticeship is 6 months, apart from the case that this entails a training contract of a longer period. A part of the training expenses incurred by the employer can be reimbursed through the wage of the apprentice if the two parties involved in the apprenticeship contact agree on it. No more than 20% of the apprentice's monthly remuneration can be

allocated to reimburse such expenses. The new Law on Employment also includes measures to support apprenticeship, providing in particular for wage subsidies as a compensation for the training costs incurred by employers in the case that they employ job-seekers registered at the local labour exchange (public employment service). The apprenticeship system could be strengthened, including by moving from time-based to competence-based apprenticeships, which links success to the acquisition of knowledge and skills (OECD, 2018a). This is the case for instance in Australia and the United Kingdom. Complementary measures that further encourage participation by businesses may also be necessary. Widening the options of financial support for companies through, for example, cost-sharing mechanisms or joint apprenticeship programmes, available in some countries, would be beneficial (OECD, 2018a). Plans by the government to introduce a "dual system" of VET education, along with a flexible system of recognition of qualifications, go in the right direction and could be guided by international experience. Increased capacity of firms to provide structured training in the workplace is vital in this regard.

Dealing with the inadequacy of skills further requires addressing deficiencies in the education at early stage and ensuring strong soft skills, such as critical thinking, problem solving and teamwork. Education performance, as measured by PISA (OECD *Programme for International Student Assessment*) is below OECD average (OECD, 2017g). Ongoing reforms in all sectors of the education system are therefore welcome. Basic skills are also important for participating in the digital economy (OECD, 2017e). A large share of population in Lithuania lacks basic problem-solving skills in technology-rich environment, which may weaken job prospects, though younger people are better prepared than their older counterparts (Figure 1.30).

Share of 25-34 and 55-64 year-olds performing at Level 2 or 3 % in Problem Solving in Technology-Rich Environments¹, 2012 80 ▲ Aged 25 to 34 ■ Aged 55-65 All age groups 70 60 50 40 30 20 Northern Ireland (UK) OECD United States Austria Czech Republic Slovak Republic Flanders (Belgium) Canada Sweden **Jew Zealand** England (UK) Denmark

Figure 1.30. There is need to strengthen basic skills for the digital working environment

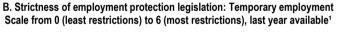
1. Level 3 corresponds to a score between 291 and 340 and Level 2 to a score between 341 and 500. At levels 2 and 3, tasks typically require the use of both generic and more specific technology applications. *Source*: OECD (2015e), Survey of Adult Skills (PIAAC) (2015).

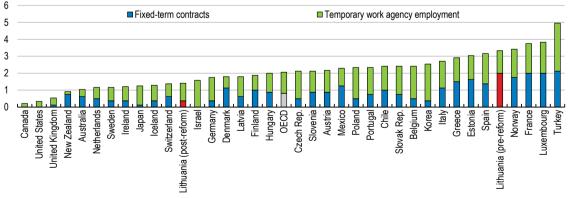
Making the labour market more inclusive through more and better jobs

A new Labour Code came into force in July 2017 as part of a broader reform package referred to as the "New Social Model" (Box 1, Assessment and Recommendations). The new labour law relaxed the rules on individual dismissal for employees with a permanent contract and shortened the notice and severance pay periods for those employees (Figure 1.31, Panel A). A central fund, financed from 0.5% contribution by employers on their wage bill, will provide supplementary severance pay for workers with long tenure (5 years or more), with the amount increasing with the length of service. The 2017 law also lifted restrictions on the use of temporary employment contracts (Figure 1.31, Panel B), which accounted for only 2% of employees in 2016, especially youth (OECD, 2017h). As a safeguard, the new Labour Code requires that such contracts should not account for more than 20% of the total for a given employer; in addition, while they can be successive, fixed-contracts can be used only for a specific period for a given employee. A new set of employment contracts was further introduced, including for apprentices (see above) and project-based employment contracts, and working-time arrangements were relaxed (OECD, 2018a).

A. Strictness of employment protection legislation: Regular workers Scale from 0 (least restrictions) to 6 (most restrictions), lastest year available¹ 3.5 3 25 2 1.5 Finland OECD Greece Slovenia Austria Hungary Korea Slovak Rep. Turkey Sweden Mexico Switzerland Israel -uxembourg Jnited States United Kingdom (post-reform) Lithuania (pre-reform) Czech Rep.

Figure 1.31. Employment protection legislation was eased





 2013 except 2014 for Slovenia and the United Kingdom and 2015 for Latvia.
 Source: OECD (2018), OECD Reviews of Labour Market and Social Policies: Lithuania, OECD Publishing, Paris.

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Overall, labour relations became more flexible under these new provisions. Lithuania's restrictiveness of both permanent and temporary employment protection regulation (EPL) now stands below the OECD average (Figure 1.31). The reform is expected to lead to higher productivity growth by promoting a more efficient allocation of resources (OECD, 2016f; Andrews and Cingano, 2014). In the shorter term, there may be some employment losses but also a reduction in informality and increase in inclusiveness as less strict labour regulations lower the cost of formal employment (OECD, 2008; 2018a). Other provisions of the new Labour Code could also help to reduce labour market informality, such as the requirement for employers with 20 or more employees to establish work remuneration systems, which increases wage transparency.

Protecting workers from circumventions of formal regulations is essential for inclusiveness and well-being. For example, between 2010 and 2013, less than 10% of total dismissed workers received severance pay according to available data (European Commission, 2015). Enforcement of the new law would also boost labour market efficiency and investment by increasing certainty for firms about work practices (European Commission, 2017b). As a positive move, the State Labour Inspectorate (SLI) will now also be responsible for monitoring the practical enforcement of the new law and evaluate its impact. To this end, the SLI will be in charge of collecting a range of data, including on the number of breaches and labour contract terminations, and the grounds for the latter, as well as the number of actions filed in court regarding labour disputes. Ensuring adequate resources for SLI to meet its expanded functions is important. A comprehensive dataset is essential to monitor the implementation of the new labour code and identify possible areas for further improvement. Consideration could be given in strengthening the sanctions in case of law infringement, as they could be too low (OECD, 2018a).

Size-dependent exemptions from the requirements of the new labour law require attention. For instance, firms with less than 10 employees, accounting for more than 90% of total enterprises in Lithuania (Figure 1.32), are exempted from the obligation to approve the selection criteria for redundancy or to provide information to their employees regarding the company's situation in terms of fixed-term contracts and temporary work. In addition, these firms are not obliged to provide a payment of study leave for employees participating in non-formal training. Size-dependent policies come with the risk of increasing the incentives for firms to remain small or to underreport workers (OECD, 2016e). Moreover, too generous exemptions may impact job quality. Assessing regularly as to whether the safeguards of the new Labour Code are sufficient to minimise the risks for an increase in labour market duality is essential.

50+ ■ 20-49 **10-19 1**-9 % of enterprises 100 90 80 70 60 50 40 30 20 10 Hungary Germany Austria Denmark Estonia Latvia Finland srae Ireland Sweden Belgium Slovenia France Portugal Luxembourg Jnited Kingdom Italy **Vetherlands** Vew Zealand **Jnited States**

Figure 1.32. Distribution of enterprises by size

Distribution of entreprises by size, 2015 or latest year available

Source: OECD Structural and Demographic Business Statistics.

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Improving the employability for those with lower skills

Providing more job opportunities for the less-skilled workers is instrumental for an inclusive labour market (Figure 1.10). The high tax wedge (measuring the difference between labour costs to the employer and the corresponding net take-home pay of the employee) makes such workers less attractive to employers (Figure 1.33). Recent empirical evidence suggests that, in the Baltic countries a 10 percentage point reduction in the tax wedge would reduce the level of structural unemployment by 2 to 4 percentage points on average (Ebeke and Everaet, 2014). In addition to its adverse impact on employment, high labour taxation might also curb work incentives for the low-skilled and increase incentives for informal activities. Recent increases in the personal income tax threshold are a welcome step towards reducing the tax burden at the bottom of the wage distribution, but a reduction in high social insurance contributions would have been even more important, while ensuring that benefits are maintained (Figure 1.33). Reliable information on wages is critical for targeting effectively the low-skilled and containing budgetary costs. As a welcome step, the State Social Insurance Fund Board has started since early 2017 to make public the data on average wages in enterprises and institutions.

In the medium-to-longer term, the best way to ensure more and better quality jobs for the low skilled is through measures that improve their productivity, and hence their career advancement, including through an educational and training system that matches skills to labour needs and effective life-long learning programmes for workers' upskilling. Only 6% of workers participated in lifelong leaning in 2017, almost half the level in EU (Chapter 2). Measures under the new Labour Code, including the right to leave for training and the recent introduction of commuting support (for a three-month period) for jobseekers participating in subsidised employment programmes in distant places, are in the right direction. The latter is also expected to reduce training barriers for jobseekers in rural and remote areas, where unemployment rates tend to be higher (Figure 1.10).

Decomposition of the tax wedge¹, 2016 Single worker without children at 50% of the average wage % of total labour cost 50 □ Income tax ■ Social security contribution 40 30 20 -10 Estoria Denmark Turkey Slovenia Finland Poland Belgium France Greece Vorway -uxembourg Jnited States 1. Average tax wedge on labour income. Source: OECD taxing wages database.

Figure 1.33. The tax wedge is high

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Income support for the unemployed has increased

In tandem with increased flexibility, reforms under the New Social Model (Box 1, Assessment and Recommendations) provide for increased income security (flexicurity). Only 30% of the unemployed were covered by the insurance system before the reform, reflecting the long minimum contribution periods required (OECD, 2018a). This imposed constraints especially on youth or people with interrupted work paths. The new provisions reduce the required contribution period for benefit entitlement from 18 months in the last 36 months to 12 months in the last 30 months. They also increase the generosity of the benefits by extending their duration to 9 months, regardless of contribution history; and, by raising payment rates. The link between benefits and previously received earnings has been reinforced. These changes are expected to increase the coverage of the registered jobseekers by 15% and bring the net replacement rate (i.e. the share of previous net earnings replaced through unemployment benefits) above the OECD average (OECD, 2018a) (Figure 1.34). Indicatively, the share of unemployment insurance benefit recipients in total registered unemployed increased from 29% in January 2017 (before the reform) to more than 33% a year after, while the average amount of unemployment insurance benefit increased by almost 1.5 times. This should contribute to poverty reduction and willingness of workers to change jobs, boosting inclusiveness. It may also make formal employment more attractive.

Around 40% of households in Lithuania fall below the poverty risk threshold in case of job loss (OECD, 2016e). The maximum duration period of unemployment benefit could be further extended. Most of OECD countries pay unemployment benefits for at least twelve months (OECD, 2018a). Such reform could be funded, for example, through a reduction in replacement rates in the initial months of an unemployment spell, when they are generous in international comparison (Figure 1.34), as recommended by the 2018 OECD Reviews of Labour Market and Social Policies: Lithuania (OECD, 2018a). This would strengthen the support for long term-unemployed, who accounted for close to 40% of unemployed in 2016, while ensuring that they effectively re-integrate in the labour market.

Net Replacement Rates for a single person in unemployment % 100 90 Unemployment benefits (in the 3rd month) 80 ■ Top-ups (in the 3d month) 70 Unemployment benefits and top-ups (in the 9th 60 50 40 30 20 10 Slovenia Belgium Portugal Korea Estonia Hungary ^r OECD Republic Poland Iceland Canada Republic Norway Finland United Kingdom Chile Austria Ireland Japan Spain France Latvia United States ₋ithuania (pre-reform) Italy **Netherlands** Switzerland Germany Denmark (post-reform) Slovak I Czech F -ithuania

Figure 1.34. Unemployment benefits became more generous

Note: Net replacement rates (NRRs) give the case of a 40-years-old who has been continuously employed since the age of 18. For Lithuania, the results for January and July 2017 represent the situation before and after introduction of the New Social Model, respectively; for all the other countries the data refer to 2015. *Source*: OECD (2018), OECD Reviews of Labour Market and Social Policies: Lithuania, OECD Publishing, Paris.

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Combating poverty more effectively

As a complementary reform, the minimum-income benefits scheme needs to be strengthened to combat high inequality and poverty more effectively. While the receipt rate of social benefits is higher than before the global financial crisis, the payment levels are not sufficient to significantly alleviate or prevent poverty, even larger households which are eligible for higher social payments (Figure 1.35, Panels A and C). In 2014, Lithuania spent around 0.3% of GDP on minimum-income benefits, above Estonia and Latvia, but with some room for catching up with the OECD average (OECD, 2018a).

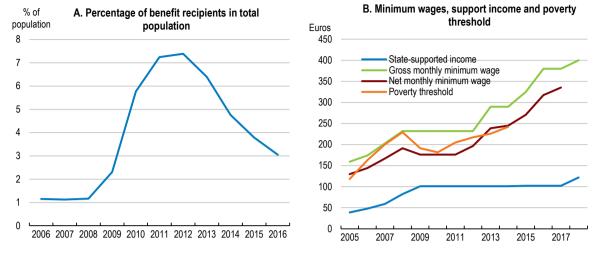
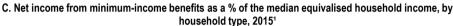
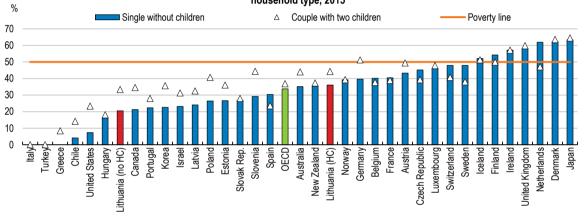


Figure 1.35. Receipt of social benefits increased but support remains weak





1. 2017 for Lithuania, with Heating Compensation ("Lithuania (HC)") and without ("Lithuania (no HC)"). *Source*: OECD (2018), OECD Reviews of Labour Market and Social Policies: Lithuania, OECD Publishing, Paris.

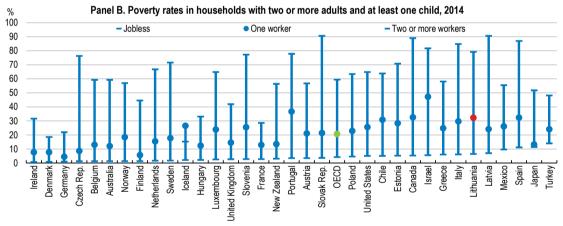
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Recent reforms attempt to raise income support adequacy. In particular, the amount of state-supported income, which determines the eligibility for social assistance, was increased by approximately 20% in early 2018 (Box 1.2). Moreover, a recent law links social benefits to the amount of minimum consumption needs. These measures are welcome, especially in view of the decline in the purchasing power of social benefit recipients in recent years, estimated by OECD (2018a) at around 8% between 2009 and 2016. The impact of the new measures in terms of poverty reduction needs to be closely monitored. Regular updates of the level of the amount of minimum consumption needs are important. Consideration might be given to the regional differentiation of the benefits (OECD, 2018a).

Child poverty remains an important issue, with a risk of a vicious cycle between socioeconomic background and economic opportunities (OECD, 2017a). Around 19% of the children live in relative poverty with an income below 50% of the median, above the OECD the average and other Baltic countries and Poland (Figure 1.36). Children in Lithuania are more likely to live in poverty than the general population, with the likelihood of being poor linked closely to the employment status of an adult in the household. To address child poverty better, the government introduced a universal child benefit replacing the former child tax allowance from 2018. Moreover, the child benefit will not be included in the income establishing family's eligibility for social assistance (Box 1.2). The government expects that at risk-of-poverty rate of children will decrease by about 2.7 percentage points as a result of these measures. These reforms are accompanied by efforts to improve the quality of services by social workers.

A. Poverty rate, 2015 or latest year available % of population aged 0-17 % of total population 30 0.3 Child poverty rate (LHS) ♦ Total poverty rate (RHS) 0.25 25 0.2 20 0.15 15 10 0.1 0.05 Lithuania Belgium OECD Czech Republic New Zealand Slovak Republic Italy Jnited Kingdom

Figure 1.36. Child income poverty rates are high, especially in jobless households



Note: The child income poverty rate is defined as the proportion of children (0-17 year-olds) with an equivalised post-tax-and-transfer income of less than 50% of the national annual median equivalised post-tax-and-transfer income

Source: OECD Income Distribution and Poverty database.

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Box 1.2. Social assistance and in-work benefits schemes: main features

Social assistance

Lithuania provides last-resort income support to low-income households through its Cash Social Assistance scheme, including for those jobseekers without unemployment entitlements. The scheme includes two components: Social Benefits and the Heating Compensation (covering compensation of heating, drinking and hot water costs). Social benefits are means-tested and granted if the monthly income is below the level of statesupported income (SSI). The Heating Compensation, is paid if heating costs exceed more than 10% of the differences between household income and the SSI (OECD, 2018a).

The social benefit for a single person, or the first member in the household, is equal to 100% of the difference between the SSI and the actual income of the household; 80% of the difference for the second member; and, 70% for the third and any additional household member. Before 2012, 90% of the SSI income was applied for all members of the household. Employable recipients who do not study or work have to register as jobseekers at the local public employment service.

Payments are reduced over time. In particular, employable long-term recipients face a reduction after every 12 months on benefits, up to a maximum of 50% after 48 months. Since 2016, benefit recipients who have not been offered a job or participation in an active labour market programme, as well as those involved in community work, are exempt from these reductions. Benefits are paid in-kind after 60 months (OECD, 2018a).

The cash social assistance system is administrated and funded by municipalities since 2015, following a comprehensive reform over the period 2012-2015. Every municipality currently receives an annual lump-sum to cover benefit payments, the amount of which is determined by the average benefit expenditures in the specific municipality in the three years before the reform.

In-work benefits

Lithuania has introduced in 2012 in-work benefits for long term unemployed (registered as unemployed for at least 12 months) recipients of social benefits. Recent reforms extended the coverage of in-work benefits. As from September 2016, those registered as unemployed for at least six months and start working are allowed to keep half of their previous assistance benefits for six months if the new job pays between one and two times the monthly minimum wage.

An income disregard was introduced in early 2018 as part of amendments to the Law on Cash Social Assistance for poor residents at end-2017. This permits recipients who work to keep some of their earnings. The part of income to be excluded varies with the composition of family and the number of children, ranging from 15% in the case of single persons to 35 % for individuals with three or more children. In addition, the child benefit will not be included in the income establishing family's eligibility for social assistance. The government expects that about 50 thousand persons will benefit from these measures in 2018, either by becoming eligible for social benefit or by being granted an increase in the benefit level.

A major challenge when increasing the level of income support to better protect those in need is to ensure that financial incentives to work are not reduced. The low level of social benefits in Lithuania and the increasing gap vis-a-vis minimum wages imply that the financial incentives to take up a job are relatively large (Figure 1.35 Panel B). Yet, as with other countries, the withdrawal of benefits when the recipient takes up a job makes employment less attractive and may also increase incentives for informal work. This is also supported by evidence showing that the disincentives to work are stronger at the bottom of the income distribution (Navicke and Lazutka, 2016). The financial incentives to work are weaker for larger households as the benefit level rises with every additional household member (Figure 1.37). Hence, the family benefits only little if one partner takes up a job. Moreover, the standard calculations of participation tax rates do not take into account in-kind support, such as free childcare and school lunches, provided to low-paid families by the municipalities, and hence probably underestimate the risk for recipients with children of entering an inactivity trap (OECD, 2018a).

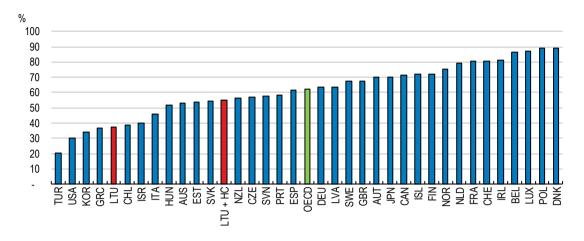
In-work benefits are an effective tool for increasing the financial incentives to work for low-income individuals, according to international experience (Immervoll and Pearson, 2009). When properly designed, such schemes can reduce inequality at the same time as increasing employment. Lithuania has introduced in 2012 in work-benefits for long-term unemployed recipients of social benefits, extending their coverage more recently (Box 1.2). Around 11% of social benefit recipients registered with the Public Employment Service received this support in 2015 compared to 5.3% in 2014 (OECD, 2018a). The impact of in-work benefit scheme on incentives to work needs to be evaluated. Consideration could be given, if legally feasible, to give municipalities, who fund the scheme, more leeway to change its parameters according to the local circumstances, as is recommended by the 2018 OECD Review of Labour Market and Social Policies: Lithuania (OECD, 2018a). Allowing local differentiation, for instance in the coverage or duration of in-work benefits, could increase the responsiveness, and hence effectiveness, of the measure.

An income disregard was introduced in 2018 as a further step to increase financial incentives to work (Box 1.2). This increases the level of earnings at which singles and couples are eligible for social assistance by not taking into account a part of the recipient household's work income when establishing eligibility for the assistance. A number of countries are implementing income disregards in their social assistance programs, including Finland, Portugal and the Slovak Republic (Navicke et al., 2016). By permitting recipients who work to keep some of their earnings, such measure increases an individual's incentives to take up a job, even part-time. Its impact in reducing poverty needs to be regularly evaluated. The recent reforms of the work-benefit scheme, as well as of social benefits, should be accompanied by strengthened job search support and active labour market programmes.

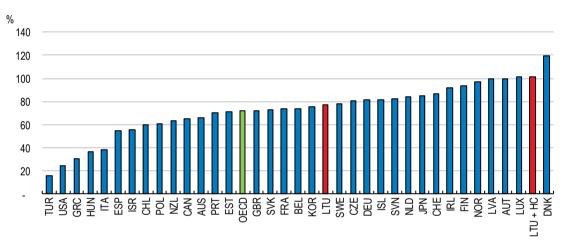
Figure 1.37. Financial incentives to take up a job are weaker for large households

Participation tax rates for a person taking up employment at the 20th percentile of the gross earnings distribution

A. Single without children



B. Couple with 2 children



Note: The participation tax rate is calculated as the income gain from taking up work net of taxes, contributions and losses in benefit payments as a share of the gross earnings from work. For Lithuania, the values refer to those for households receiving Social Benefits only (LTU) and social benefits plus heating compensation (LTU + HC). In the latter case, the calculations assume that the heating compensation is lost when a person takes up work. The data refer to 2015 except for Lithuania (July 2017). The 20th percentile of the gross earnings distribution corresponds to about EUR 440 per month.

Source: OECD (2018), OECD Reviews of Labour Market and Social Policies: Lithuania, OECD Publishing, Paris.

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Helping jobseekers to get back to work through effective training and retraining

Well-designed activation policies can foster inclusive growth by helping the most vulnerable to find a job. The high structural unemployment rate in Lithuania and more flexible EPL rules under the new code reinforce the need. Spending on active labour marker policies (ALMPs), and participation in such programmes, is relatively low in international comparisons (Figure 1.38, Panels A and B).

Moreover, Lithuania's public employment services (PES), delivered by the Labour Exchange Office, is understaffed with a heavy workload per employee (Figure 1.38, Panel C); depending on the region, the caseload per frontline PES staff varies between 130 and 180 jobseekers (OECD, 2018a). This makes it difficult to provide intensive personalised services, such as frequent individual interviews and updated action plans over the unemployment spell, which have been proved critical for a successful reintegration in the labour market and better skill matches (OECD, 2015e). A small share of jobseekers in Lithuania find a job through the PES (Pacifico, 2017), despite its wide use as a source of information on job vacancies, indicating scope for more efficiency.

Recent reforms have changed the structure of public employment services by centralising the management processes of activities planning and of financial and human resources. The new PES structure (from October 2018), along with change brought from the new Employment Law, is expected to reduce the administrative functions at local level and release some resources, increasing in turn the provision of direct services to jobseekers. The foreseen equalisation of workloads of PES staff across counties is welcome. However, intensive personalised PES services require that the number of suitably trained officers is increased; this is also vital for the reform of employment service delivery underway (OECD, 2018a).

The structure of ALMP programmes has also changed recently. The new Employment Law that came into force in July 2017 expands the range of ALMPs and attempts to increase efficiency by reallocating spending among programmes. Public works, which have proven ineffective in boosting employment, have been abolished. Spending on ALMPs in Lithuania appears too tilted towards wage subsidies at the expense of programmes that boost long-term employability, notably training (Figure 1.38, Panel D). Wage subsidies can be efficient at improving the employability of low skilled rather quickly but they may have only short-lived effects and may involve large deadweight losses (when hiring would have occurred in the absence of the subsidy), even though cost-efficiency could be improved by targeting the subsidies to the most vulnerable groups (OECD, 2016e). Participation in training, on the other hand, has proven to boost employability and the quality of jobs in the medium- to long-term (Card et al., 2015).

More systematic evaluation of the active labour market programmes is essential for a close monitoring of the achieved outcomes. As a positive step, since 2014, the Lithuanian PES assesses the performance of ALMPs on the basis of sustainability and return on investment, taking also into account the wage an ALMP participant receives when finding a job. However, the evaluation analysis has been undertaken only for some programmes, particularly those co-financed by the EU. Systematic data collection on the outcomes of the various ALMP programmes is key for a high-quality assessment of their effectiveness, although the difficulties in developing key performance indicators should not be underestimated. A close co-operation between PES, which are responsible for ALMPs, and municipalities that have responsibility for social assistance benefits, is also important to help to better tailor programmes to the participants' profiles, improving effectiveness and yielding inclusiveness gains.

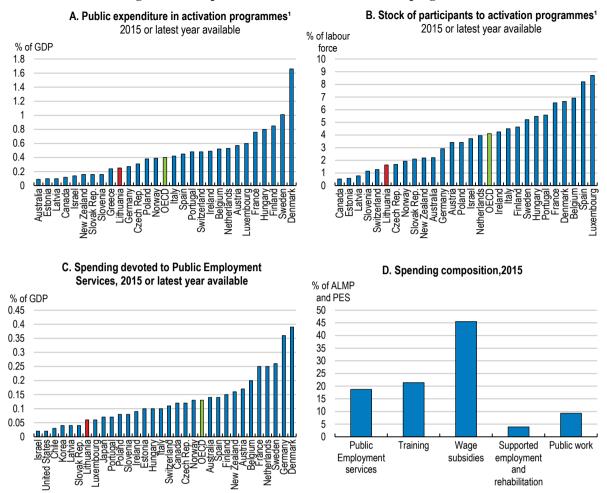


Figure 1.38. Expenditure on active labour market programmes

1. Active labour market programmes (categories 2-7) include: cover training, employment incentives, supported employment and rehabilitation, direct job creation and start-up incentives.

Source: OECD Labour database.

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Box 1.3. Recommendations on raising productivity for inclusive growth

Key recommendations:

- Strengthen the monitoring capacity of the Governance Coordination Centre, building on the recent increase in its budget.
- Simplify bankruptcy procedures and establish more favourable conditions for restructuring.
- Continue the implementation of the institutional reform of innovation policy by improving coordination, and consolidate agencies and support programmes where overlaps exist.
- Give more weight on collaborative research when allocating funds to public research institutions.
- Provide differentiated awards for tertiary courses with skills closely linked to labour market needs.
- Strengthen work-based learning, including by linking the length of apprenticeships to the level of acquired competencies.
- Continue with overall reform of the education system at all levels, addressing skills mismatch.
- Further increase the level of social assistance, while ensuring strong work incentives.
- Increase investment in active labour market programmes upon a close monitoring of their outcomes.

Other recommendations:

- Apply progressively to all key sectors of the economy the new methodology for the calculation of the compliance costs for business.
- Continue implementing reforms to strengthen the ownership function, increase the independence of SOE boards, streamline SOEs' corporate forms and improve disclosure practices.
- Strengthen the use of expertise, including through specialised judges and bankruptcy administrators.
- Make work experience a prerequisite for entry into vocational teaching and reform the funding system for vocational education and training to recognise and reward work-based instruction of students.
- Ensure adequate resources for the State Labour Inspectorate to meet its strengthened monitoring functions.
- Reduce the tax burden at the bottom of the wage distribution through a reduction in social security contributions, while ensuring that benefits are maintained.
- Update regularly the level of the amount of minimum consumption needs to ensure adequate income support to benefit recipients, and consider the introduction of regional differentiation in social benefits.
- Ensure a sufficient number of suitably trained officers in Public Employment Services to provide intensive personalised assistance for jobseekers.

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Annex 1.A. Labour productivity growth: shift share analysis

Shift-share analysis allows decomposing labour productivity growth into changes within and between sectors. Following de Avillez (2012), the labour productivity, defined as gross value added over employment, can be calculated as the sum of each sector labour productivity, weighted by its labour share:

$$\frac{\Delta L P_t}{L P_{t-1}} = \sum_i \frac{\Delta L P_{it}}{L P_{it-1}} \frac{Y_{it-1}}{Y_{t-1}} + \sum_i \frac{L P_{it-1}}{L P_{t-1}} \left(\frac{L_{it}}{L_t} - \frac{L_{it-1}}{L_{t-1}} \right) + \sum_i \frac{L P_{it-1}}{L P_{t-1}} \ \Delta \frac{L_{it}}{L_t} \frac{L P_{it} - L P_{it-1}}{L P_{it-1}}$$

In this equation, LPit is labour productivity in sector i at time t; Lit is the number of workers in sector i at time t; and Y is the output, defined as the gross value added.

Therefore, the methodology enables disaggregating labour productivity into three components:

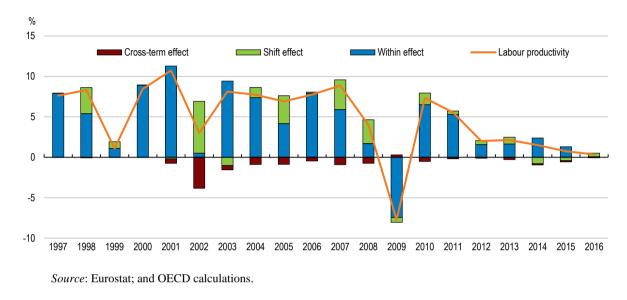
- Within-sector effect (W): this component measures the contribution to total productivity growth from productivity growth within sectors, capturing the reallocation between firms in the same sector as well as changes in efficiency at the sectoral level.
- *Shift effect (SE)*: this component measures the contribution to total productivity growth from the movement of labour resources between sectors, assuming productivity levels in each sector are unchanged. This effect is positive when the sector's labour share increases.
- Cross-term effect (CT): this component also shows how labour productivity changes when workers move from the one sector to another, but it also takes into account the trends in labour productivity for each sector. In the case of Lithuania, this term is usually negative meaning that an increase in productivity growth is exhibited in shrinking sectors, which may reflect a structural adjustment.

The results of shift share analysis for the period 1997-2016 reveal that the *within*-sector effect is the main source of growth in Lithuania, accounting on average around 6.5 percentage points of annual productivity growth between 1997 and 2007. This means that most of the improvements in labour productivity in Lithuania take place within the sectors and that the productivity slowdown of recent years has been driven mainly by a deceleration in the efficiency growth within each sector, that is, it has its origins in the deceleration of productivity growth within each sector (Figure A1.1).

The *shift effect*, however, has also contributed to productivity growth by around 2% between 1997 and 2007, helping to mitigate the occasional slowdown of the within-sector effect. The contribution has declined after the global financial crisis dampening the overall labour productivity growth. This reflects a weaker flow of workers toward sectors with labour productivity above the national average. If the labour shifted from the less to more productive sectors after the 2008 crisis to the same extent as before the crisis, total

labour productivity growth would be at around 2.5% in 2016 (keeping the within-sector effect constant), compared to growth of less than half percent that year.

Figure 1.A.1. Shift-share analysis of labour productivity



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Chapter 2. Ageing together

Lithuania's population is ageing fast, affecting growth and well-being of the country. High emigration, particularly of the young, is adding to the demographic pressure. Health outcomes, especially for men, are among the poorest in the OECD, and poverty among the elderly is widespread. Fertility is relatively high and rising but remains below the population replacement rate. Good policies covering several areas can help master the economic and social consequences of an ageing society. Pension reforms in the wake of the "new social model" made the system more sustainable but it should be better targeted at poor pensioners. Health care and long-term care are improving but further steps should be taken to make it more patient-friendly and less hospital-centric. Life-long learning is weak especially among older workers, and policy should provide more incentives to firms to offer and workers to take up life-long learning activities. Also, the government should strengthen programmes that help keep contact with the diaspora even if emigrants do not intend to return to their home country soon, and it should relax the rules for high-skilled non-EU immigrants. Finally, to raise both birth rates and labour market participation of women, support for childcare should be strengthened further.

Growing life expectancy and low fertility in the early years after renewed independence are rapidly changing Lithuania's demography. The old-age dependency ratio – the share of population of more than 65 or 80 years old – is projected to almost double between 2013 and 2050 (Figure 2.1). Large emigration, particularly of the young, is adding to the ageing pressure, while immigration is unlikely to rebalance Lithuania's demographic structure in the near future given political constraints. Older workers are well-integrated into the labour market, but their productivity tends to be low and life-long learning activities to upgrade skills are quite modest. The old-age gender gap is one of the largest in the OECD: while women's life expectancy is around average, men's is among the lowest of all OECD countries, pointing at challenges for both lifestyle and health care.

Getting old is inevitable, but good policies can help master the economic and social consequences of an ageing society. Ageing concerns the entire population, so policies to foster inclusive growth and well-being for the elderly should cover all age groups. As such, this chapter discusses age-related policies under a wide angle ranging from pensions to family policies. The next section assesses the sustainability and adequacy of the pension system after the reforms undertaken in the wake of the "new social model" adopted in 2017. Section three turns to age-related issues in health and long-term care, in particular the challenge to increase healthy life years. Section four addresses life-long learning and the integration of older workers in the labour market. Section five deals with international migration and its potential to raise productivity and income at home. Section five surveys family policy and its role for raising both fertility and labour force participation of women.

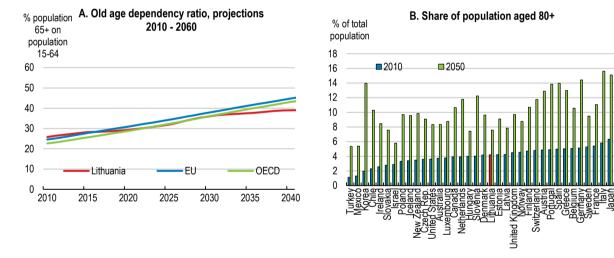


Figure 2.1. Lithuania is ageing rapidly

Note: The declining old-age dependency ratio in Lithuania around 2040 might be the result of less emigration of the young.

Source: United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects. The declining old-age dependency ratio in Lithuania around 2040 might reflect the impact of emigration of the young in the years before.

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Pensions

After a thorough reform, the pension system has become sustainable

Pension sustainability has been an ongoing issue in Lithuania despite relatively small pension spending of around 6.8% of GDP (Figure 2.2). After renewed independence in 1991 Lithuania inherited the former Soviet Union's pension system, which was characterized by a low retirement age - 55 for women, 60 for men - and high income replacement rates ranging between 50% and 100% (OECD, 2018). The pay-as-you gosystem soon ran into deficit, which in 1996 prompted the government to raise the retirement age to 65 years for both sexes by 2026. To ease pressure further, the government introduced funded pensions in 2004, although their sustainability effect will only be felt once the system begins to mature in two or three decades. Rapid growth of pension entitlements after 2000 and plummeting GDP in the wake of the 2008 crisis temporarily pushed pension expenditures above 8% of GDP in 2009. Since there was no indexation formula, rent freezes and discretionary indexation of pensions became the main instrument to react to fiscal deficits (Medaiskis and Jankauskienė, 2014). Despite these measures, the social pension fund accumulated a debt of around 7 % of GDP, and the 2015 stability plan predicted pension spending to reach 9% of GDP by 2030 (European Commission, 2015).

In 2017 the government thoroughly revamped the old-age social security system, essentially tackling the spending side by introducing a pension indexation formula and by increasing the required length of pensionable service. The reform is expected to bring pensions on a long-term sustainable path. The widening difference between revenues and spending will eventually help reduce social security contributions for the first pillar payas-you-go system and move them to second pillar funded pensions (Figure 2.3). The reform, which is a central part of the "new social model", consists of four cornerstones:

- Establishing a "sustainability factor" by indexing pensions to the economy-wide wage sum, thereby taking into account a shrinking workforce.
- Gradually shifting the funding of basic pensions from the social security to the general government budget. In 2017 contributions were reduced by 1% point and funding moved to general government, yet the timeframe for further shifts is not set vet.
- Introducing a transparent and simple formula (point system) by which contributions translate into pension entitlements.
- A gradual increase of service years from 30 to 35 required to get a full pension.

Box 2.1. Main features of the Lithuanian old age security system

Lithuanian old-age social security consists of three pillars: a pay-as-you go defined benefit pension system (first pillar), a statutory private funded pension scheme (second pillar) and tax-favoured private savings (third pillar). Contribution rates amount to 25.3 % of gross wages, of which 22.3% are paid by employers and 3% by employees. Since the second and third pillars were only introduced in 2003, the pay-as-you-go system still makes up the overwhelming part of pension payments. The Lithuanian pension system is relatively small with around 6.8 % of GDP (OECD average around 8%), although social security contributions are high (Figure 2.2).

- First pillar: The first pillar pay-as-you go pension is composed of two parts: 1) a basic part which depends on the number of years worked, and 2) an earningsrelated part which is capped at five times the former wage. Both parts are about equally-sized, making the system quite redistributive. An additional social assistance pension, not means-tested, is paid to those with small or no pension entitlements. A specific "state pension" exists for specific groups such as veterans. Pensions are indexed to the growth of the economy-wide wage sum over 7 years (sustainability factor). 35 service years will be required to obtain a full pension in 2027; and 15 service years are required to get a pension at all.
- Second pillar: The second pillar is a defined contribution scheme based on pension funds, created in 2004. Participation in the funded pension scheme is voluntary, yet joining is irrevocable, and around of 85% of the insured decided to opt in so far. The second pillar is funded by a social security contribution of 2%, an additional voluntary 2% on a person's salary and a state subsidy of another 2%, known as the "2/2/2" arrangement. Funding is planned to rise to "3.5/2/2" in 2020. Households are free to move between various pension funds. Occupational pensions, although legislated in 2006, never came to existence.
- Third pillar: The third pillar consists of individual, tax-favoured savings. A voluntary personal pension contract can be terminated and pension savings can be withdrawn at any time. Contributions for private pension savings are tax deductible up to a ceiling of 25% of an individuals' salary and up to EUR 2 000 per year. Less than 3% of the working age population has a voluntary personal pension.

The statutory retirement age was 63.5 for men and 62 for women in 2017 and increases by 4 months for women and 2 months for men every year until it reaches 65 for both sexes in 2026. The effective and statutory retirement ages are very close as early retirement is financially unattractive and postponement of retirement is possible and rewarded by a higher pension. Pensions are not taxed, except for third-pillar savings withdrawn before retirement.

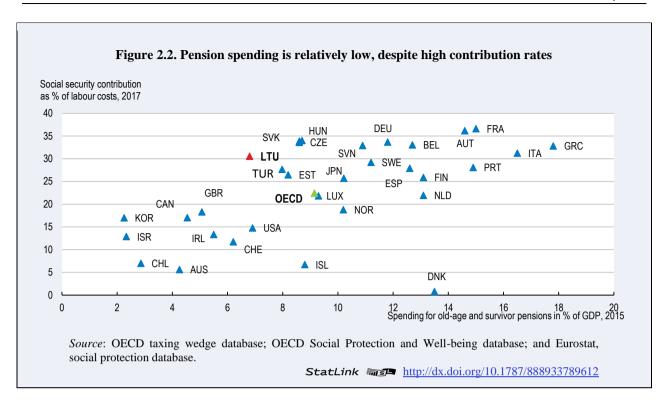


Figure 2.3. The recent reform is expected to increase sustainability of the pension system

% of GDP 10 9 8 Public social security pension expenditure according to 2016 Stability Programme Public social security pension expenditure according to 2017 Stability Programme Social insurance pension contributions according to 2017 Stability Programme 2016 2024 2020 2028 2032 2036 2040 2044 2048 2052 2056 2060

Pension revenue and spending in percent of GDP

Note: Spending includes first-pillar social insurance pensions but excludes social assistance and state pensions.

Source: Ministry of Finance of Lithuania.

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The reform stopped short of introducing an automatic link from life expectancy to the age of retirement, which is seen as the most effective way of maintaining sustainability of the pension system (OECD, 2011). In 14 OECD countries, the current legislation foresees a rise of the age of retirement beyond 65, and several countries Denmark, Finland, Italy, the Netherlands, Portugal and the Slovak Republic) have elements in their pension systems that provide a link from life expectancy to the retirement age (OECD, 2017a). To address

the demographic transition, Lithuania should consider an automatic adjustment from life expectancy to the statutory retirement age, as initially planned. However such a reform must be planned carefully as it raises equity concerns since life expectancy — and hence how long a retiree can benefit from the pension — tends to be lower for low-income groups (Cingano, 2014).

The pension reform retained the minimum service years needed to obtain a pension at all to 15, which is relatively high compared to other OECD countries (OECD, 2017a). Pension systems that predicate such a long waiting period may make it difficult for people with shorter working lives or longer career breaks to qualify for a pension. It might also discourage older workers to take up work, especially given high contribution rates, and foster informality. In Lithuania specifically, the waiting period could discourage emigrants from returning to their home country for work. The negative impact of the long waiting period is mitigated since workers delaying their retirement age are entitled to higher pensions. Still the government might wish to assess to what extent the long minimum qualification period has negative consequences for work and employment, especially of return emigrants.

The pension system is redistributive but not targeted at old-age poverty

The average pension-to-wage ratio is around 60%, which is a bit above the OECD average. Yet the pension system is more redistributive than in most other countries, reflected in one of the highest net replacement ratios for low-income earners in the OECD. For example, a person working at the minimum wage will get a pension of around 77% of the former salary, while a person who earned five times the average wage receives only 21% (Medaiskis, 2016). One of the reform objectives of the government was to increase "fairness", *i.e.* to strengthen the link between wages and pension entitlements (Rajevska, 2016). The reform lowered the average net replacement ratio, yet the absolute difference in the net replacement ratios between high and low earners remained the same, because of a substantial ad-hoc increase of the basic pension in 2017 (Figure 2.4). The rising significance of pension funds, with no cap on pension entitlements, will likely reduce this difference.

Despite being redistributive, the system is not very targeted at the poor, and the 2017 reform did little to increase pensions for very low incomes. The at-risk of poverty rate of the elderly, defined as the share of people living below 60% of the median income, is more than 25% and thus substantially higher than in most other OECD countries or for other age groups (Figure 2.5). Old-age poverty in Lithuania affects in particular women over 65 who often had lower salaries, shorter contribution periods, and often tend to live in single households because their life expectancy is much higher than men's. Although the net replacement ratio for low-income earners is high, many pensioners do not receive a full pension because of incomplete or informal work careers. The social assistance pension, to which are entitled those with pensions below a minimum threshold, makes up around 30% of the minimum wage only.

However, additional social benefits targeted at the elderly, such as a heating supplement, add to pension income. Moreover, widespread homeownership, the highest in the OECD, provides further benefits to retirees. Older homeowners have generally paid-off their mortgages and thus fully benefit from not having to pay a rent. If this benefit is taken into account, the economic situation of pensioners in Lithuania is likely to look better. For this reason, the government should consider a rise of social assistance pensions, while ensuring that these pensions are means-tested. Raising minimum pensions is all the more

important as the new indexation formula will slow down the growth of pension entitlements going forward. Also, merging the social assistance pension with other social benefits would make old-age social assistance more transparent and simplify administrative procedures for beneficiaries.

Net replacement rate % of individual earnings at the moment of retirement 140 ▲ 50% of the average wage ◆ 100% of the average wage ■ 150% of the average wage 120 100 80 60 40 20

Estonia

Switzerland

German

⊔ithuania (post-reform)

Jnited States

New Zealand

Figure 2.4. The Lithuanian pension system is very distributive

Note: The net replacement rate is defined as the individual net pension entitlement divided by net preretirement earnings, taking into account personal income taxes and social security contributions paid by workers and pensioners. For Lithuania a 2% contribution to the private funded pension was assumed. Source: OECD (2018), OECD Reviews of Labour Market and Social Policies: Lithuania, OECD Publishing, Paris.

Czech Republic

Lithuania (pre-reform)

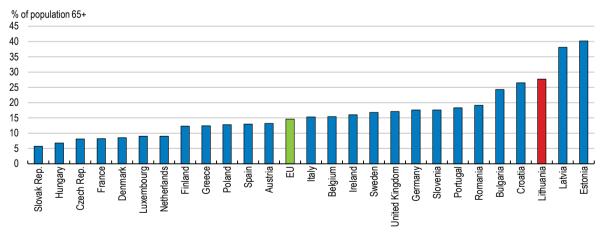
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Denmark

Slovak Republic

Figure 2.5. Old-age poverty is high

Old age population at risk of poverty, 2016



Source: Eurostat.

Jnited Kingdom

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Strengthening the second and third pillars

Second-pillar defined contribution pensions are funded by the so-called "2/2/2" arrangement discussed in Box 2.1. The government in 2012 decided to strengthen the second pillar and move to a "3.5/2/2" arrangement by the year 2020, thereby reducing the social contribution rate for the first pillar. Total contributions to the second pillar are projected to reach around 1.3% and pension funds' assets 56% of GDP in 2060. Contributions to the second pillar are not compulsory - although the decision to do so is irrevocable - and non-contributing households may face income gaps in old age. Having a stronger second pillar is important as first pillar pensions are projected to gradually decline from around 35% to 17% of the former salary, mainly as a result of the new indexation rule. The government should make second pillar contributions compulsory, as is the case in most countries, to ensure that households achieve a sufficient pension level in old age. Funded pensions systems tend to be more sustainable because pension payments rely strongly on available funds, while volatility tends to be higher since pension funds follow the ups and downs of capital markets.

% of individual earnings at the moment of retirement

- Old-age earnings-related public pensions
- Private individual pensions
Total gross replacement rate

25
20
15
2014 2016 2018 2020 2022 2024 2026 2028 2030 2032 2034 2036 2038 2040 2042 2044 2046 2048 2050 2052 2054 2056 2058 2060

Figure 2.6. Funded pensions are gradually replacing the pay-as-you-go system

Note: Differences in the replacement rate between figures 2.4 and 2.6 are due to different method for calculating pension entitlements after tax.

Source: Ministry of Social Security and Labour, based on EU demographic projections, 2017.

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With the growing importance of the second pillar for old-age income support, the government might consider strengthening the effectiveness of pension funds and to ensure that pensions are secured to the extent possible. Pension funds are mostly owned by banks, and households are free to choose among them. As such, the government has to ensure that pension funds are managed sustainably, efficiently and equitably. This would imply: 1) analysing appropriateness of the current restrictions on investment strategies and their sustainability, 2) strengthening the comparability of pension fund offers, 3) making the offering process more efficient, more transparent and more accessible to households, 4) monitoring and analysing direct and indirect costs and fees of pension funds, and 5) continuously surveying competition in the private pension market and identifying and removing barriers to entry (OECD, forthcoming a).

Finally, private third pillar savings are not very important in Lithuania, mainly as a result of low incomes. Less than 3% of the working age population have a voluntary pension savings account and savings are generally small. The government provides incentives for private savings by a relatively generous tax deduction, as 25% of an individual's salary and up to EUR 2 000 per year is tax-deductible. Tax exemptions have a fiscal cost and may distort financial decisions of households. Moreover, since high-income households tend to save proportionally more than low-income households, tax-favoured saving tends to make the tax system regressive, which is exacerbated by Lithuania's flat personal income tax. Yet tax exemptions can be justified on the grounds that Lithuanian pensions are relatively low and policies to increase saving for old age are welcome.

Health care

As in most countries, an ageing population has substantial implications for the health care system. Health costs tend to increase with life expectancy and a higher share of older people in total population, together with growing incomes and technological progress (Oliveira-Martins and de la Maisonneuve, 2014). Some costs depend crucially on age, such as dementia, whose prevalence rises sharply with age (WHO, 2011). Ageing should however not be seen as the main culprit for growing health costs. In particular, health status and prevalence for diseases are sometimes considered a more important driver for health-related cost than age (Breyer et al, 2015 or Karlsson and Klohn, 2014). Since people are not only getting older but also healthier, a healthier life can partially offset the rising cost of a longer life. And healthy life is amenable to policy.

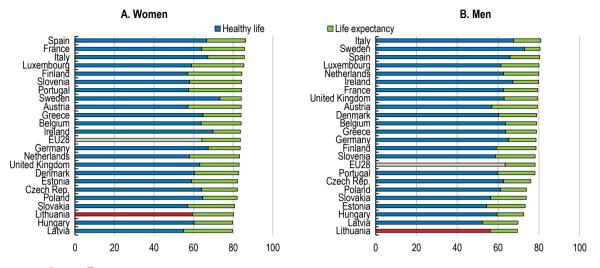
Indeed, there is growing evidence that with suitable policies and programs people can stay healthy and independent well into old age, while health cost can be kept under control. The longer people can live independently, care for themselves and remain mobile, the lower are the costs of long-term care. Keeping the ability to live without hospitalisation despite of physical malfunctioning also tends to reduce cost. Many elderly require some form of permanent assistance for the most basic activities of daily living, creating a heavy economic and social burden on families and the wider community. Reducing severe disability from disease and health conditions is thus one central element for containing health care costs in an ageing society (WHO, 2011). This chapter gives an overview on challenges of the Lithuanian health care system, its current outcomes, and how to improve them in favour of the elderly.

Health outcomes are still poor but improving

The health care system has undergone important improvements yet health still appears to be a source of dissatisfaction for Lithuanians when assessing their well-being (Figure 2). Life expectancy in Lithuania is among the lowest in the OECD, and the gender gap is larger than in any OECD country (Figure 2.7). Moreover, fewer Lithuanians report that they are in good or excellent health than in the OECD on average. Differences in health status and mortality between rural and urban areas are relatively large, albeit decreasing (Statistics Lithuania, 2016). Lithuania's gain in average life expectancy since 1970 has been four years only, which is lower than in the OECD with more than ten years. In Lithuania life expectancy dropped by 4 years in the late 1980s and early 1990s and only started rising again in the mid-1990s when the economic situation of the country started improving. Life expectancy and healthy years of life are increasing fast by now.

Figure 2.7. Life expectancy is low and the gender gap large

Life expectancy and healthy life at birth, men and women, 2016



Source: Eurostat.

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Poor health outcomes are partly the result of life-style factors. Cardiovascular diseases, alcohol and tobacco consumption and accidents are affecting the health status of the population and driving the large gap in life expectancy between men and women. Policies to improve the health status of the population must therefore be broad, including prevention and the promotion of healthier lifestyles for all age groups and both sexes. In 2017 the government increased excise taxes on alcohol and tobacco with the explicit aim to reduce consumption, and restricted the number of sales points. The Lithuanian health strategy 2014-2025 is rightly articulated around a patient-centred and whole-of-life approach which emphasises the importance of tackling the various health determinants, including the role of public health and of prevention (Seimas, 2014). Concomitant action plans detail the activities to be undertaken, although these plans focus too often on whether an action has been taken or not. The government should further strengthen prevention and should put more emphasis on monitoring implemented policies, to understand whether they brought the expected results, and whether they did so efficiently.

Spending on health is low but pressure is looming

Lithuania's spending on health care is among the lowest in the OECD; even if one takes the country's low GDP per capita into account (Figure 2.8). Likewise, with around 12% of public spending, Lithuania gives relatively little priority to public health, akin to the other Baltic countries. Still, countries with similar health spending levels achieve higher life expectancy or years of healthy life. This suggests that the effectiveness and efficiency of the Lithuanian health care system and health outcomes could be improved without necessarily having to increase spending, both private and public.

GDP per capita, 2017

Share of public and private health care spending in GDP set against GDP per capita Health expenditure, 2016 USA 16 CHF 12 ▲ POL A IRL NLD 10 000 20 000 30 000 40 000 50 000 60 000 70 000 90 000 100 000 80 000

Figure 2.8. Lithuania spends little on health

Source: OECD taxing wedge database; OECD Social Protection and Well-being database; and Eurostat.

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The health care system is financially sustainable but some pressure is looming (Box 2.2). In the years leading to the economic and fiscal crisis, health expenditure in Lithuania grew faster than in the OECD, reaching 7.5% of GDP in 2009. The share then declined but as of 2014 total spending accelerated again to outdo average growth in OECD countries (Kacevičius and Karanikolos, 2015). The health care fund turned into deficit, and the share of spending covered by general government rose from less than 20% in 2010 to around 35% in 2013. Health and long term care spending are expected to increase further by 2 to 4.5 percentage points of GDP by 2060 (European Commission, 2015b), driven mainly by long-term care needs, though Lithuania is one of the two countries with the lowest anticipated growth in public health expenditure. Again, more efficient and targeted health care spending could help keep spending pressures under control, while ambitious targets for health status should be maintained, and short term savings that could entail high costs in the medium- to long term should be avoided.

Access to health care is widely universal, and disparities across income groups or between different parts of the country are quite small (Figure 2.9). The number of lowincome households foregoing medical treatment for financial reasons is lower in Lithuania than in other Baltic countries and in the European Union as a whole. Households living in rural areas visit primary care providers almost as often as those living in urban areas (Statistics Lithuania, 2015). Rather, hospitalisation is more likely in rural areas, suggesting a lack of outpatient care there (Jurevičiūtė and Kalėdienė, 2016). However, access to medical technologies, measured by number of tests per 1000 population is lower in Lithuania than in OECD countries, including Estonia and Latvia (OECD forthcoming b). Moreover, high emigration rates and a lack of medical personnel in rural areas are thinning out health services. Currently physicians working in rural and remote areas are paid a mark-up and, more generally, will receive a considerable pay rise in 2018, but retain doctors and nurses in Lithuania will remain a challenge for the coming years.

Box 2.2. Main characteristics of the health care financial system

In the late 1990s, Lithuania moved away from a health system mainly funded through state and local budgets to one funded by the National Health Insurance Fund (NHIF). In 2015, the funding of the healthcare system was mainly based on social security contribution (57%), followed by out-of-pocket payments (32%), general government spending (10%) and private insurance (1%). Compulsory health insurance provides a standard benefits package for all beneficiaries. All residents and employed non-permanent residents must pay a health contribution (6% of gross earnings for employees and 9% for the self-employed), plus there is a 9% payroll tax paid by employers. The state covers vulnerable groups (children, elderly, disabled, unemployed, maternity leave), which account for about 60% of the population, resulting in a universal coverage system. Since 1997, the NHIF has been the main financing agent for the health system, accounting for 57% of the total expenditure on health in 2015.

The Ministry of Health is a major player in health system regulation through setting standards and requirements, licensing health-care providers and professionals and approving capital investments. In the 1990s many health administration functions were decentralized from the Ministry of Health to the regional authorities. The 60 municipalities varying in size from less than 5 000 people to over 500 000, became responsible for organizing the provision of primary and social care, and for public health activities at the local level. They also own the majority of polyclinics and small-to-medium sized hospitals, yet concerns exist over whether they have the capacity to effectively govern these facilities. Out-of pocket payments consist mostly of direct payments because the role of private insurance is very small, albeit increasing. Spending on medicines and medical goods represents two thirds of out-of-pocket payments, which is one of the highest shares in OECD countries.

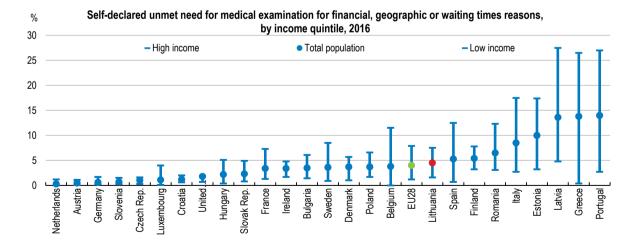


Figure 2.9. Access to health care for all income groups is good

Note: Countries are ranked according to values for total population. The vertical bars show the difference between unmet needs for high- and for low-income households.

Source: Eurostat.

StatLink http://dx.doi.org/10.1787/888933789726

Private out-of-pocket costs represent around 30% of health care spending, more than in most OECD countries. Spending on medicines and medical goods represents two thirds of these costs. Private health insurance is not developed in Lithuania; therefore the bulk of private spending is borne by the individual household. While some out-of-pocket payments for prescribed medicines partly depend on patients choices, such as buying originator drugs instead of a generic version, others are beyond the influence of patients. Even if there is 100% reimbursement, the NHIF pays the pharmacy a reference price while the pharmacy retail price is often higher. As a result, patients may end up paying more than is being reimbursed, which may put a burden especially on older and poor people. The Ministry of Health is now reforming the reimbursement and reference price system, thereby narrowing the difference between reference price and retail price and incentivising the use of generic drugs. New provisions implemented in 2017 helped reduce co-payments by around 20%. However, the government might do more to reduce out-of-pocket costs for patient, e.g. by providing financial incentives for pharmacies that sell generic drugs at cheaper prices (IMF, 2015).

Tackling corruption remains a crucial area for promoting inclusive health in Lithuania. According to a number of studies 35% to 50% of Lithuanians have paid a bribe in exchange for health care services, mainly to "jump the line" for obtaining hospital care (Murauskiene, 2013). The median value of an illicit payment seems to be substantial, estimated to average the annual minimum wage per year, thereby limiting access for people with low incomes, especially the elderly (Stepurko et al., 2015). Measures already taken include an information campaign to change behaviour of medical personnel; making the declaration of additional income mandatory for medical specialists; and the establishment of a hot line to report informal payments (OECD, forthcoming b). According to the Ministry of Finance, all transactions over EUR 3 000 will no longer be allowed to be carried out in cash as of 2018, which is likely to reduce informal payments and the corrosive impact of bribing. Finally, higher wages for doctors and nurses should also reduce bribing.

Health care is still hospital centred

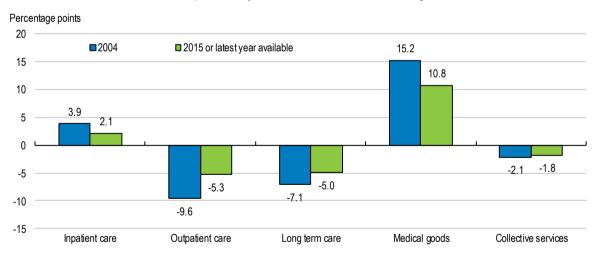
The mix of spending for the different health functions remains an issue. After renewed independence in the early 1990s, Lithuania inherited a health system that was typical of the Soviet Union: it was exclusively public, centrally-planned, financially integrated, hospital-centred and provided services to the entire population (Semashko system). Reforms were first driven by the need to modernise the system and to make it more centred on patients. During the 1990s, the government granted more autonomy to the state hospitals and handed over responsibility for out-patient services and local hospitals to the municipalities. The compulsory health insurance legislation of 1996 introduced a contractual model with a third-party payer (the National Health Fund) and relatively autonomous public and private providers. Over the last 15 years Lithuania has gone some way towards reorganising the hospital sector and reducing its size, and rebalancing service delivery in favour of outpatient care (Figure 2.10).

However the health system remains hospital-centred, to the detriment of outpatient and preventive care. Surveys carried out in different countries suggest that patients, especially the elderly, prefer other forms of care over hospitalisation by a wide margin (Kaiser Foundation, 2017). Yet Lithuania remains with Germany and Austria among the European countries with the most hospital beds, and although their number has continuously declined, most of that decline took place in the 1990s and is now slower than in other countries of the region. Hospitals are often small and occupancy rates are

low, driving costs and carrying risks for patients requiring special treatments. In 2016 the government decided that in order to concentrate services in fewer places and to reach a minimum scale, a hospital will no longer be contracted by the National Health Fund if it carries out fewer than 300 births per year or less than 400 major surgeries, which is welcome, but several exceptions to the rule could make it difficult to obtain the desired consolidation. As in most countries, political economy constraints may further slow-down reform vigour: municipalities tend to resist the merger or closure of a local hospital, perceived as reducing both access for older patients and local quality employment (OECD, 2013).

Lithuania will need to consolidate the hospital sector further, both in the interest of patients and cost efficiency. To do so it will probably have to reassign responsibility for health services to a government level above the municipalities. Several countries reorganised their hospitals over the last decade on a territorial scale. In the wake of a comprehensive municipal reform in 2007, Denmark created a regional level responsible for hospital services. Sweden is testing a similar approach, consolidating municipal hospitals in six health regions. Norway reassigned responsibilities for hospitals at the national level around ten years ago, although this looks rather radical an approach for a service that has a strong community appeal. In Finland, hospital boards manage joint municipal hospitals (OECD 2013). Regionalisation would also allow for a better coordination of different health services including hospitals, primary and specialised care and public health centres, while keeping decision-making power close to the local communities.

Figure 2.10. The health care system has undergone deep reforms but is still hospital-centred



Health expenditure by function, difference to OECD average

Source: OECD Health Statistics database.

StatLink http://dx.doi.org/10.1787/888933788890

Long term care should be developed further

Long term care underwent significant reforms over the past few years. The government's long term care strategy is to better integrate elderly in their communities, to turn active treatment beds into beds for geriatric and palliative care and to provide hospital care in exceptional cases only. Since 2010, an integrated system of diagnostic, health care, and

social services has been created, and in 2013 a programme for integrated nursing and social care at home for disabled and elderly persons started. Targeted grants for social care for severely disabled persons increased by more than 5 times over the past seven years, and the number of recipients who get day care increased by about 40%. Fewer hospital stays would not only favour patient's well-being, they could also generate substantial savings given the considerable cost of hospital care (OECD, forthcoming b). Long-term care services are more in demand in urban than in rural areas, where the family often takes care of its elderly members.

Nursing is a patient-centred form of long-term care which should be strengthened further. In Finland, Sweden and the United Kingdom stronger reliance on nurses has proven very efficient in providing community services, preventive care and minor illnesses (Stamati and Baeten, 2014). In Lithuania, since 2015, nurses can prescribe medical aids under a physician's supervision and have been given a greater role in providing services to chronic patients with non-communicable diseases such as lifestyle counselling, self-care and monitoring of health status. More and more primary health care facilities also employ specialised nurses who provide diabetic food care. The number of staff who provides social services and nursing, including long term care, has strongly increased within a few years. The number of institutional care facilities (nursing homes) also increased over the past few years. Finally, a network of around 55 palliative centres takes care for the terminally ill or those that do not wish further medical treatment. These centres were often established in former hospitals. The number of palliative centres is growing, but waiting lists still exist.

Better long term care will probably require a reorganisation of funding. Long-term care is a blend of social and health care policies (Murauskiene et al, 2013). Funding is currently shared between the health insurance fund, pensions, central and local government, charities and private out-of-pocket payments. Such a system is prone to overlap, fragmentation and cost-shifting. In Lithuania, as in many countries, tensions sometimes arise as to whether the national social security system or municipal social services should assume long-term care for low-income earners. Also hospital care continues to benefit from higher public cost coverage than outpatient care, discouraging the intended move from institutionalised towards outpatient care. For instance, the health care fund pays nurses up to 120 days per year, while cost coverage in a hospital is unlimited. Such disincentives should be eliminated. Finally, long term care patients often have access to only one service provider within their municipality, thereby limiting choice and competition (OECD, 2016a). In several Northern European countries, patients receive vouchers that they can use to contract those providers that offer a service package that bests suits their needs. The Lithuanian authorities might want to explore this option as a cost-reducing and patient-centred measure.

Life-long learning and labour market

Life-long learning is a means to raise productivity and competitiveness of firms and employees and can help address the effect of an ageing population (Box 2.3). It helps align workers' competences with the skills needed on the labour market, especially for the less qualified, and fosters individual employability in older age. Life-long learning is particularly important in a rapidly changing labour environment. For instance, in the very open, export-oriented and fast-moving Lithuanian economy many firms seek employees with specific foreign language skills to follow export markets, and good quality languagetraining opportunities for adults could help address these shortages (while computer skills

seem to be less of a problem). Addressing an ageing labour force through upskilling and lifelong learning is hence a central policy task to maintain productivity and employment.

Box 2.3. Lithuania's population is declining while employment is increasing

The ageing of the population has marked effects on Lithuania's labour force. The working-age population – aged 15 to 64 – in the total population is falling by around 1% each year, as a result of lower fertility, growing life expectancy and high emigration. The population decline is partly offset by a rise of participation rates and employment. In particular, labour force participation of the 55-64 years old rose strongly from 45% to 70% over the last 15 years, mainly as a result of the gradually rising retirement age. Labour force participation of older workers in Lithuania today is much above the OECD average.

High employment rates however imply that it will be more difficult to raise them still further in the future. For that reason policy should focus more strongly on the productivity of those who work, by fostering the skills and competences of older workers among others.

Source: OECD Labour force statistics.

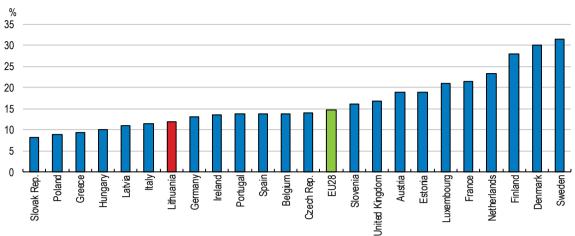
Yet life-long learning – or adult training – are underdeveloped in Lithuania, especially among older workers, and the share of older workers with low qualifications is particularly high. The propensity to engage in life-long learning is lower than in the Baltic peers and other Central and Eastern European countries (Figure 2.11). Participation of the unemployed in training programmes remains limited, although about 40% of the Lithuanian unemployed have no professional qualification (OECD, 2017b). Learning and upskilling activities are largely driven by individual employers, but the majority of them does not invest in workers' training. This might be due to a lack of resources or time and credit constraints facing small and medium enterprises. It may also result from firms' reluctance to invest in human capital as they might be afraid of losing better-qualified workers to competitors and hence tend to under-invest in training programmes. Indeed the propensity to invest in learning seems to depend on the benefits individual firms can expect from educating and training their workforce, and these benefits depend partly on government policy (Moretti et al, 2017).

Policies to support life-long learning are developing slowly in Lithuania. The only public financial incentive currently available to firms is that training expenses can be deducted from gross wages when paying social security contributions. Employees receive a commuter allowance covering the cost when they attend training away from residence or workplace, a measure that helps workers in rural areas to reach more distant training places. Since 2012, the funding of training through a voucher system has allowed training to better match employers' requirements, but these training vouchers are only available to the unemployed (OECD, 2017b). Specific training programmes, notably a large part of applied on-the-job training, is limited to jobseekers that have completed vocational training. Yet participation of the unemployed in training programmes remains limited, hardly commensurate with upskilling needs. The new labour code introduced several provisions targeted at lifelong learning, e.g. a study leave of up to five days per year for employees participating in non-formal training, partially covered by the employer.

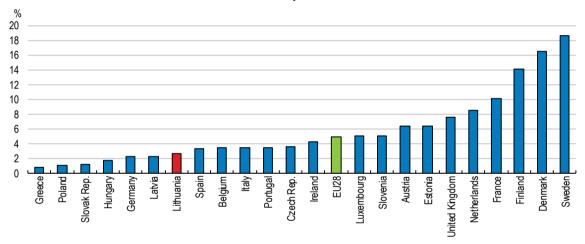
Figure 2.11. Life-long learning in Lithuania is not well developed

Share of workers in adult training, 2017

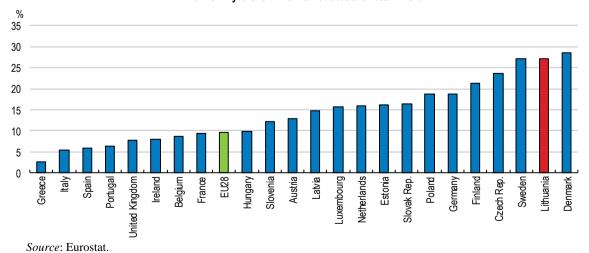




B. 55-74 years old



C. 18-74 years old with low educational attainment



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Lithuania should elaborate a broad and flexible programme of lifelong learning and on-the-job training, in particular for older workers. Lifelong learning could be modelled on Estonia's programme established in 2016, with ambitious but credible targets for participation rates and offering a large variety of training programmes for adult education (OECD, 2017c). Any life-long programme should reflect labour market needs and closely linked to the overall educational system, to ensure consistency. Moreover, training opportunities should be flexible and cover both formal and less formal upskilling activities. To ensure the quality of training courses and their effectiveness in upskilling participants, monitoring of lifelong learning programmes should be strengthened by using certification and *ex post* evaluation, including of labour market outcomes of participants, to maintain their relevance (Santiago, 2016). To induce older workers to engage in skills upgrading, incentives might be partially linked to age or length of job tenure. Finally, since upskilling needs depend partially on the skills acquired earlier through professional education, upskilling and adult learning programmes should be closely linked to secondary and tertiary education, vocational training and the apprenticeship system.

Broader public financial support is probably needed to help match the demand and supply of skills of older workers, as a skilled workforce has partially characteristics of a public good. Many countries use a combination of tax exemptions, subsidies and direct support of educational institutions to foster life-long learning (OECD, 2017b). Financial incentives are often targeted at specific sectors such as manufacturing, construction, health care or ICT. In Lithuania, a first but important step could be to extend the voucher system - which currently supports only the unemployed - to all workers. The current tax deductions available for employees taking up an upskilling activity could be broadened, maybe graded by age. Another option could be direct financial support to firms that train their workforce, similar to the support given to apprenticeships (OECD, 2018). Spending could be covered by a levy-based fund whereby firms receive support depending on the amount of training they offer. Finally government funding of universities and vocational schools could at least partially be made subject to the amount of joint research and development they undertake jointly with the business sector. The government should regularly assess the need and effectiveness of financial support programmes.

Emigration and immigration

Emigration remains high

Emigration is persistently high. Between 2001 and 2016, more than 15% of the population left the country, and the labour force is decreasing by around 1% per year, contributing to skills shortages. The young are particularly inclined to emigrate, which partly explains why Lithuania is ageing so rapidly. Only a minority of emigrants is returning to their home country, and return emigrants are even more likely to re-emigrate than first-time emigrants, although return emigrants appear to do very well on the Lithuanian labour market (Barcevicius, 2015). Opinion polls indicate that nearly half of the Lithuanian adult population is considering emigration and would like to move abroad for employment, and this share has increased over the past few years (Statistics Lithuania, 2016). Immigration, which could make up for emigration, is picking up only slowly, held back by relatively stringent regulation on immigrant workers, and it is unlikely that in the coming years immigrants may replace those that left the country.

The reasons for Lithuanians leaving the country are mostly economic. Emigration is driven by wage differences with the destination countries and free movement within the European Union, and wage gaps with the main destination countries are closing slowly,

so emigration is not expected to decline soon (Westmore, 2014). Short-term economic developments in the home country also affect emigration, as shown by the peak during and shortly after the 2009 crisis (Figure 13). Since more than half of emigrants declare being unemployed, emigration might have contributed to lower unemployment back home and relieved the unemployment benefit system (Statistics Lithuania, 2016). Although the main causes for high emigration remain economic, non-economic reasons also play a role. Some are Lithuania-specific, such as a long tradition of emigration and well-established foreign diaspora networks; a more rural population than in the other Baltics, which is more likely to emigrate; and apparent dissatisfaction with the social and psychological climate in the country (Kumpikaite-Valuniene et al, 2017).

Emigration and immigration and domestic economic growth Thousands of persons Y-o-y % changes 40 20 -20 -10 -40 -20 -60 -30 Emigration (LHS) Immigration including return migrants (LHS) -80 -40 Growth (RHS) -100 -50 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2017 2016

Figure 2.12. Economic factors are driving migration

 ${\it Source} : {\it Statistics Lithuania}; and OECD \ {\it Economic Outlook database}.$

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While the impact of emigration on the labour force is straightforward, the impact on skills and productivity is less clear since official statistics do not register the level of education or professional qualifications of emigrants. A widely-held belief is that the highly qualified are more likely to emigrate. In some sectors such as health care, emigration has indeed led to serious shortages of qualified doctors and nurses, threatening the quality of health care especially for the old. Also, the share of emigrants that leave the country for study purposes may reach up to 25%, pointing at potentially high skill levels (but also at weaknesses in Lithuania's tertiary education system)(Kumpikaite-Valuniene et al, 2017). A few studies however suggest that the low-skilled are more likely to emigrate, and their emigration could have partially contributed to the observed shortage of low-skilled workers (Sipaviciene and Stankuniene, 2013). By this token emigration could also explain that wages for the low-skilled are rising more rapidly than those for the high-skilled.

Remittances partly absorb the economic effect of emigration. Remittances account for around 3% of GDP, more than in any other country of the region, mainly supporting family members of emigrants in Lithuania's more rural parts. Their role has been declining over the past few years, reflecting loosening ties between emigrants and their home country and weakening purchasing power in the most important destination

countries such as the United Kingdom (Figure 2.13). According to the Bank of Lithuania, remittances become more often used for residential investment but most are still used for consumption especially by low-income households. Business investment based on remittances remains low and could be strengthened, especially to foster small and medium enterprises and business start-ups. The recently passed law on crowd-funding, which promotes alternative forms of financing to banks, could be actively used to tap remittances as a source for business investment in Lithuania (see Chapter 1).

Migration policy should rest on three pillars: 1) taking care of those that stay; 2) reaching out to those that left, and 3) attracting the high-skilled who would like to come. Since Lithuanians emigrate mainly for economic reasons, the main policy to turn the emigration tide is improving the economic situation – policies aimed at stronger and more inclusive growth, higher wages, and higher wellbeing. More than 70% of Lithuanian emigrants would return to their home country if the economic situation improved considerably (Statistics Lithuania, annual emigration survey). Policies that foster inclusive growth would hence benefit both resident citizens and would-be return emigrants.

Figure 2.13. Remittances are declining

Share of remittances in national GDP

% of GDP - Estonia -Latvia Poland 4.5 4 35 3 2.5 2 1.5 0.5 0 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Source: IMF Balance of Payments database.

StatLink https://doi.org/10.1787/888933789783

Specific policies could also help address the economic and social consequences of emigration. Lithuanian emigrants are becoming more mobile, moving several times between their home and host country (OECD, 2014). Migration has become a multi-stage process, with emigrants keeping contact with their home country even if they stay abroad for long. Government policies should hence focus on the long term, by strengthening the ties that exist between emigrants, their businesses and their home country. Lithuania has developed the "Global Lithuania Programme" to strengthen links with the diaspora and to facilitate reintegration of return migrants. The programme is however scattered across 14 public agencies and involves more than 20 different activities, and the sums spent on a single activity are relatively small. Lithuania might have a look at Latvia whose programme is more targeted involving fewer activities (OECD, 2016b). The "Global Lithuania Programme" was amended in 2017, to strengthen ties with Lithuanians not intent on returning soon, which is a step in the right direction. Given the central role

language plays for both a vibrant diaspora and successful integration after a potential return, education abroad of emigrant children should be strengthened. This could be done along the lines of the partly government-funded Polish "Saturday schools" in the United Kingdom (The Economist, 2017). The government is currently developing a demography, migration and integration strategy, aiming at less emigration and higher return migration.

Immigration rules for the high-skilled are tight

Immigration could partly offset population ageing and a shrinking labour force, especially if immigrants work in high productivity sectors. Immigration has slowly increased over the last decade but remains well below emigration. Raising immigration to levels that would fully compensate for emigration looks unrealistic. However, there is some scope to make immigration more beneficial for the economy. The rules for labour immigration for non-EU labour are tight, although the number of occupations requiring no work permit was extended to 14 in early 2018. Moreover, almost 80% of workers are posted to international freight transport companies, which contribute little to growth and income in Lithuania proper.

Policies to attract high-skilled immigrants were strengthened recently and compare well with other countries of the region (Box 2.4.). The restrictions on high-skilled immigrants entering the labour market through the European visa system ("blue card") were relaxed, with a number of highly qualified professions now exempt from the labour market test and minimum salaries being lowered. Lithuania also offers a permit category targeting investors, extended in 2017 towards foreign entrepreneurs starting up firms involving development of new technologies or other innovations. The government should continue to ease the immigration rules for high-skilled non-European workers. Finally, enrolment of foreign students is slowly increasing, although the number of students who remain in the country after completion of their studies remains low at around 5%, lower than in Estonia where this rate is at around 20% (OECD, 2018).

Family policy

Family policy is a set of measures to support families, to reduce child poverty, to help parents balance work and family and to increase fertility, with the latter becoming more prominent as a means to counter demographic pressure. Such policy includes measures such as paid parental leave, child benefits, the provision of childcare facilities, as well as family-based tax provisions. Family policy sometimes faces a trade-off between supporting childbearing and supporting female employment, as certain benefits may discourage parents, especially women, to work. The trade-off depends on policy design, and each benefit package has its cost and benefits (OECD, 2011). Overall, more support for childcare seems to have a positive effect on employment since caretaking tends to encourage parents to remain active, and it also tends to raise fertility (Box 2.5).

Lithuania fares quite well with regard to the twin objectives of high fertility and female employment. Fertility is above the OECD average and is again rising slightly, although it remains below the population replacement rate of 2.1 as in almost all OECD countries (Figure 2.14). The labour market participation of women is one of the highest in the OECD, while that of mothers is average, suggesting that many women do not return to paid work after giving birth. Lithuania is the country with the largest share of households where women earn more than their male partner (Thomas and O'Reilly, 2016).

Box 2.4. Policies to attract high skilled workers in neighbouring countries

The countries in Lithuania's neighbourhood such as Estonia, Latvia and Poland, have developed different approaches to attract immigrants and in particular high-skilled non-EU workers. Conditions for immigrant workers to get a work permit vary greatly.

- Estonia's selective immigration policy is oriented towards attracting the high-skilled. The system is relatively complex and seems have attracted few skilled workers needed on the labour market so far. Conditions to obtain a work permit are strict and vary between permit types. An annual quota on migration of 0.1% of the resident population is in place, which was reached in 2007 and 2016 only. Since 2016 the authorities have relaxed entry conditions for sectors affected by labour shortages, such as ICT. Also, the wage threshold for work permits has been reduced.
- Latvia at the beginning of 2018 adopted a list of professions where a substantial shortage of labour is forecast and where skilled foreigners, including immigrants from non-EU countries, are invited to work in the country. The new rules simplify job application procedures. The list includes 237 professions in different sectors (science, manufacturing, electrical technologies, construction, ICT, financial sector, fisheries, air transport, etc.). The share of foreign-born working-age individuals in Latvia with a degree from tertiary education is lower than in other Baltic countries.
- Poland's immigration policy is relatively open and not particularly targeted at high-skilled immigrants. There is a simplified procedure to obtain work permits for citizens of Armenia, Belarus, Georgia, Moldova, Ukraine and Russia. Work permits are mainly used for short-term assignments. Ukrainians accounted for more than half of the work permits and more than 90% of labour inflows based on the simplified procedure.

Over the past few years, all countries have passed reforms that facilitate the immigration of high-skilled workers, relaxing the conditions by which they are allowed to enter the country for work purposes

Source: OECD (2016c); OECD (2017c); OECD (2017d).

Policies to support families were considerably strengthened over the last two years, sometimes to the detriment of women's participation in the labour market. The 2017 amendments to the Labour Code offer more part-time working possibilities and remote working as well as flexible working schedules. At the beginning of 2018 a new universal child benefit was introduced, complementing the existing means-tested child-benefit system and lifting support above OECD levels. With up to two years, paid parental leave upon birth is rather generous, and even though the government in 2012 added an option to take only one year of leave against a higher payment, the comparatively long leave could dent women's prospects on the labour market. Incentives to take shorter parental leave should be strengthened, and leave should be split more evenly between mothers and fathers, as in some Nordic countries (OECD, 2017c). Public spending on childcare support remains below the OECD, yet enrolment has increased from below 10% in 2006 to around 30%, which is close to the OECD average.

The government programme rightly states that reconciling work and family life and reducing social exclusion is crucial to meet demographic challenges, raise birth rates and foster well-being

of families (Government of Lithuania, 2016). To reach this objective, Lithuania's family policy should focus on a balanced package of family benefits. All government levels should commit to increase childcare support and the planned investment in childcare facilities, especially in rural areas where access remains difficult. The government might also consider reducing paid parental leave for women somewhat, and to split it more evenly between mothers and fathers.

Box 2.5. Family policy and its effect on fertility and female labour participation

OECD countries use a large set of policies to help families and to increase fertility. Most countries offer paid parental leave, financial support for families with children and support for childcare. Different weights are given to these policies, which result in mixed incentives for continuing paid work while raising children, especially to women. Analysis so far carried out suggests that the various family policy measures can indeed have quite different effects. Reforms of the child benefit system in Germany, Spain and Poland provide some insights. Tentatively, the various family policy measures tend to have the following effects:

- Childcare services have a positive impact on female employment and in many studies they have also been found to have a positive impact on fertility (Luci-Greulich and Thévenon, 2013).
- Paid parental leave has a positive impact on fertility and can have a positive impact on female employment, provided it does not last too long. Otherwise it can delay the return to work with a negative impact on wages and career prospects for women. In Spain, an extension of job-protected leave and financial incentives to increase employment of mothers seems to have had a sizeable positive effect on fertility (Faré and Gonzalez, 2017).
- Regular child benefits tend to have a weakly positive or no effect on fertility (Gauthier, 2007). But they can discourage female labour force participation and employment and they re-inforce traditional family roles (Jaumotte, 2006 or Low and Sanchez-Marcos, 2015). The 1996 reform of the German child benefit programme, which increased cash benefits and tax exemptions, had little effect on fertility except for higher-income families with more than one child (Riphahn and Wyink, 2017). The Polish 500+ child benefit programme of 2016, which doubled child benefit payments to around 3% of GDP, reduced female labour supply considerably (Iga, 2017). The response to child benefits increases with family size, as benefits for the first child are often means-tested while those for higherorder children are not (Milligan, 2005).
- One-off financial transfers upon childbirth (birth grant) do not seem to have a significant impact on either fertility or labour force participation.

The tax-benefit-system plays an important role in fertility and labour market outcomes, especially as second earners are often taxed at higher marginal rates than primary earners as a result of means-testing of family benefits. Overall conclusions remain tentative though, and country-specific studies show heterogeneous results suggesting that the effectiveness of policies vary depending on the labour market, institutional environment and cultural context.

A. Fertility rates, 2015 or latest year available 3.5 3 25 2 1.5 Canada Republic Estonia Finland Norway France Zealand Chile Switzerland Czech F Vev B. Employment rate of women, 2017 C. Employment rate of mothers, 2014 Employment **Employment** rate % rate % 90 90 Youngest child aged 3-5 △ Youngest child aged 0-2 80 80 70 70 60 60 50 50 40 40 30 30 20 20 10 Slovak \e\

Figure 2.14. Both birth rates and female employment are above OECD averages

Note: The Total Fertility Rate (TFR) is defined as the average number of children born per woman over a lifetime given current age-specific fertility rates and assuming no female mortality during reproductive years. The employment rate of mothers is defined as the share of working women between 15 and 64 years with at least one child and the youngest child being either between 3 and 5 years old or up to 2 years old. *Source*: OECD Family database; and OECD Labour database.

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An ageing society also offers opportunities

The changing demographics also offer benefits and opportunities for sectors and firms that develop products and services for the elderly. The expanding health and long-term care sector will provide additional employment prospects and create business for supplementary services and products. Catering to an ageing population can help local enterprises to discover products and services that can subsequently be exported and attract foreigners to the country. Health care facilities such as specialised hospitals and spas could cater to a growing number of health-oriented elderly tourists. In neighbouring countries providing health care for residents and foreigners has become a core strategy for creating value added at the regional level (Committee for Economic Policy and Strategic Planning of St. Petersburg, 2017). With its beautiful coastline and well-preserved rural areas, Lithuania is well-placed to attract a segment of international health tourists to whom natural beauty combined with high-end services and a secure environment is key for a successful stay.

Box 2.6. Recommendations to address an ageing society

Key recommendations:

- Move pension contributions from the pay-as-you-go system ("first pillar") towards pension funds ("second pillar"), and make payments to pension funds compulsory for all households.
- Move the funding of the earnings-independent "basic pension" from the social pension fund to the general government budget (and reduce social security contribution rates accordingly).
- Continue rebalancing the health care system by reducing hospital care and fostering outpatient care and preventive care.
- Develop a broad and flexible programme of lifelong learning and on-the-job training, in particular for older workers.
- Implement effective migration policy, including a focused outreach to emigrants and a less restrictive approach to immigration.
- Extend and improve childcare support and foster early education.

Other recommendations:

- Introduce an automatic link from life expectancy to the official age of retirement.
- Increase social assistance pensions, and strengthen means-testing.
- Assess the extent to which the 15-year minimum service period to obtain a pension has negative consequences for incentives to formal work, especially for older workers and return emigrants.
- Continue implementing the 2014 plan for long term care by fostering nursing and home care. Expand the number of palliative care centres.
- Foster healthy lifestyles by strengthening prevention policies and put more emphasis on monitoring and evaluation of outcomes.
- Consider the creation of "health regions" to become responsible for organising and coordinating the various health functions - hospitals, outpatient care, prevention etc. - on their territory.
- Provide more financial incentives to firms and employees to take up life-long learning activities if market forces are considered insufficient to ensure upskilling
- Strengthen the link between life-long learning and tertiary education, vocational training and the apprenticeship system.
- Reduce barriers to immigration, by extending the list of professions that do not require a work permit and by facilitating the procedures for high-skilled workers.
- Strengthen incentives to take shorter parental leave, and split it more evenly between mothers and fathers.

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