



OECD Economic Surveys POLAND

MARCH 2016

OVERVIEW



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20th anniversary of Poland's accession to the OECD

This year we celebrate 20th anniversary of Poland's accession to the OECD.

For Poland, the membership in the OECD is a sign of quality; it also confirms the affiliation to a group of like-minded countries.

Recommendations and guidelines formulated by the OECD often contain tailored-made advice on how the country might want to tackle problems in economic and social spheres.

The OECD is not just a group of economically significant nations. It is also a policy forum covering a broad spectrum of areas. Poland can share its experience and learn from the practices of the other members, how to address current challenges.

The OECD sustains working relationships with over 100 non-member economies. Poland thus benefits from the dialogue and consultations with almost all major international players. It is particularly important to bear in mind that an increased interdependence and globalisation demand global rules of the game.

The twenty years of Poland's membership in the OECD is a history of rich and unique, multidimensional cooperation with the Secretariat and member states. It has engaged different people, involved setting foot in various places, covered multiple topics, comprised numerous events and produced a variety of products. All these activities, however, have had one single objective: working together to promote policies that will improve the economic and social well-being of people around the world.

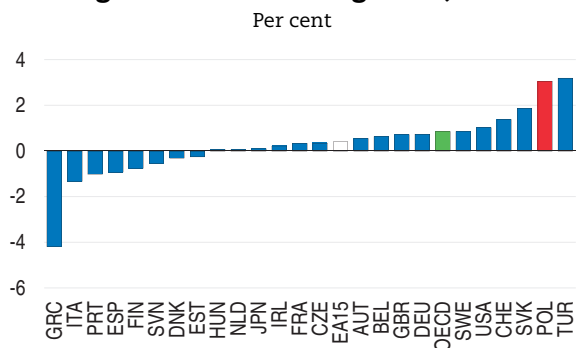
We are looking forward to further strengthening the collaboration with the OECD and its member states to promote the OECD's goal worldwide: "better policies for better lives".

Executive summary

- *Growth is robust, and unemployment has declined*
- *Education reforms would strengthen skills*
- *Greening infrastructure would improve public health*

Growth is robust, and unemployment has declined

Average annual real GDP growth, 2007-14



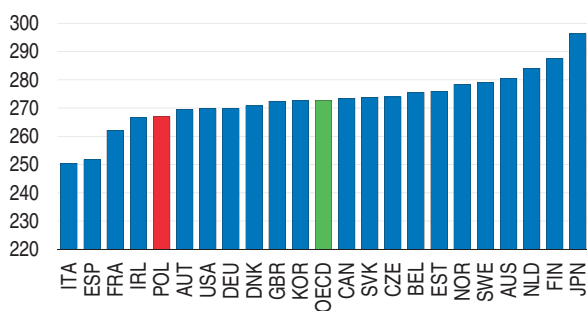
Source: OECD Economic Outlook 98 Database.

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Growth has been very robust, unemployment has come down fast, and deflation has been largely a supply-side phenomenon, strengthening real incomes and consumption. To continue its convergence with the most affluent OECD countries Poland needs to move towards higher-technology production, better skills among the population and higher employment rates for women and older workers. The widespread use of excessively flexible temporary contracts is impeding productivity, wages and access to training.

Education reforms would strengthen skills

Literacy proficiency scores for 16-65, 2012



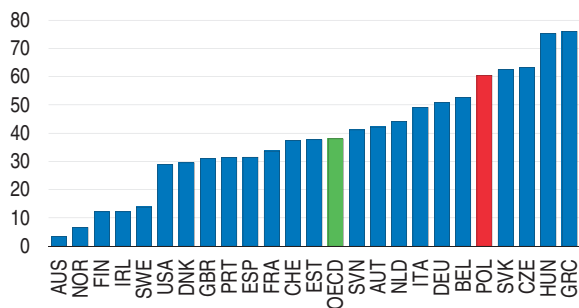
Source: OECD Skills Outlook 2013 Database.

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Despite important improvements in schooling outcomes and tertiary attainment rates, average skills of adults are well below typical OECD levels. Basic vocational education has failed to provide many students with solid basic skills and is not always aligned with labour market needs. The earlier tertiary education boom led to low quality in some areas. Reforms to strengthen quality are underway. Plans to better recognise foreign credentials and new possibilities to validate experience and skills would improve job matches of immigrants.

Greening infrastructure would improve public health

Deaths from air pollution per 100 000 inhabitants, 2013



Source: Institute for Health Metrics and Evaluation.

StatLink <http://dx.doi.org/10.1787/888933339995>

Despite important improvements in the transport, energy and ICT infrastructure, bottlenecks are holding back the economy. A lack of integrated planning and weak project management capacity at the local level has hampered infrastructure investment. Ageing electricity generation capacity and household heat production rely mainly on solid fuels. This and the use of poor quality coal by households, together with low energy efficiency in the residential sector produces substantial urban air pollution, posing health hazards, and heavy carbon emissions, which contribute to climate change.

MAIN FINDINGS	KEY RECOMMENDATIONS
TOP PRIORITIES	
The new government's reform plans require greater tax revenues, as do age-related spending and investment needs.	Raise revenues by broadening the VAT base, eliminating reduced rates and exemptions, and by increasing property and environmental taxes. To improve tax compliance set up strong central management for the tax authority, improve coordination, invest in ICTs and focus more resources on auditing large taxpayers.
Poor basic skills are widespread, particularly among students of basic vocational schools.	Continue to expand access to early childhood education and care, particularly for poorer families. Continue to strengthen individual support for weak students in elementary and lower secondary education, and attract the best teachers to basic vocational schools, e.g. by improving their pay and career opportunities.
Greenhouse gas emissions from power plants and air pollution are high, while electricity generation capacity is in need of renewal.	Ensure that climate change policies are clear and aligned with European and international objectives. Invest in interconnections with neighbouring countries in the electricity and the gas sectors.
OTHER PRIORITIES	
Boosting employment	
Irregular work relationships are undermining productivity and well-being. Employment rates among women are low.	Strengthen labour law enforcement, and further align contributions on civil and labour law contracts. In addition to childcare facilities develop long-term care facilities and move towards individual taxation only.
Employment among seniors, in particular women, is low, and so are pension replacement rates.	Increase the statutory pension age, as previously planned. If early retirement is to be allowed, it should be at the same age for men and women and at actuarially neutral discounts.
Improving the investment framework	
Local governments are responsible for most of the infrastructure but lack capacity to manage projects.	Bolster local capacity by providing central-government technical assistance and integrated e-procurement processes.
The regulatory burden is holding back growth and investment.	Streamline business registration procedures, and monitor the impact of the recent reform of insolvency law.
Enhancing skills	
Immigrants often work in professions that do not match their qualifications, and they find it difficult to transfer skills acquired abroad.	Implement easier foreign credentials recognition and validation of experience and skills acquired abroad.
The earlier tertiary education boom has led to quality problems in some areas.	Link university teachers' pay and career prospects to their performance, and continue strengthening links with business and foreign universities.

Assessment and recommendations

- *Moving towards higher-technology production would raise living standards*
- *Growth is solid, and the labour market situation has improved significantly*
- *Macroeconomic policies*
- *Enhancing employment and access to high-quality jobs*
- *Ensuring efficient public infrastructure and better conditions for private investment*
- *Further improving education to boost productivity and the ability to adopt innovations*
- *Making better use of migrants' skills*

Moving towards higher-technology production would raise living standards

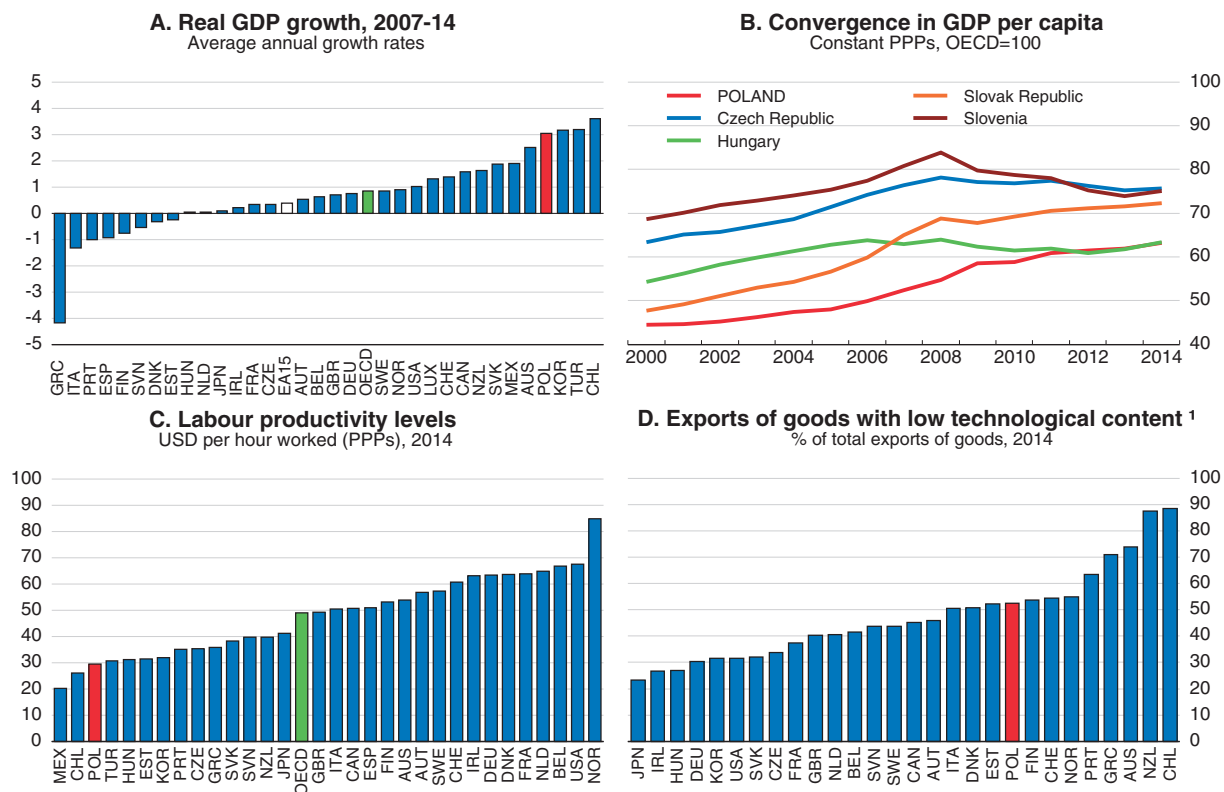
Remarkably resilient to the 2009 world economic and financial crisis, Poland has continued to grow strongly (Figure 1 Panel A) and catch up with other OECD countries in terms of GDP per capita (Panel B). Productivity has risen quickly, and this needs to continue to sustain convergence with other OECD economies, as its level is still relatively low as is the technology content of Poland's exports (Panel C and D). Moreover, Poland faces severe demographic pressures owing to low fertility and negative net migration, which will weigh on GDP growth and on Poland's ability to finance adequate pension and health-care spending in the longer term. Based on past trends migration is not expected to mitigate the sharp decline in the working-age population over the coming decades, unlike in many other OECD countries (Figure 2), although recently immigration has been rising. The new government has announced a welcome focus on strengthening skills and the economy's capacity to innovate, and its development plan foresees policies to strengthen investment in productive capital and research and development. It wants to raise labour supply; the envisaged increase in the coverage of preschools as well as the number of childcare places for less than three year-olds will be helpful in this respect. It also aims to enhance inclusiveness in a context of in-work poverty that is higher than the EU average. But plans to lower the retirement age risk reversing progress in increasing seniors' employment and worsening old-age poverty.

By 2016, the 20th anniversary of Poland's OECD membership, it had achieved levels of well-being and quality of life never before experienced. Poland scores higher than the average OECD country on personal security, social connections and education owing to a strong increase in tertiary attainment rates and high literacy and numeracy scores of 15 year-olds (Figure 3). Yet, jobs, housing and health outcomes are less favourable. The main environmental problem in Poland is poor air quality reflected by high levels of urban air pollution. It is related to the dependence on old and sometimes inefficient household heating infrastructure based on low-quality coal and a heavy reliance on car transport.

Against this backdrop this *Survey* has three main messages:

- The economy has been resilient, with robust growth, falling unemployment and a stable financial sector.
- Investment in low-emissions infrastructure and skills is essential to sustain a continued improvement in living standards, environmental quality and well-being.
- Employment rates need to increase further to head off extreme demographic pressures, and making Poland more attractive for workers would be beneficial.

Figure 1. **GDP growth has been robust, but productivity and exports' technological content have stayed weak**

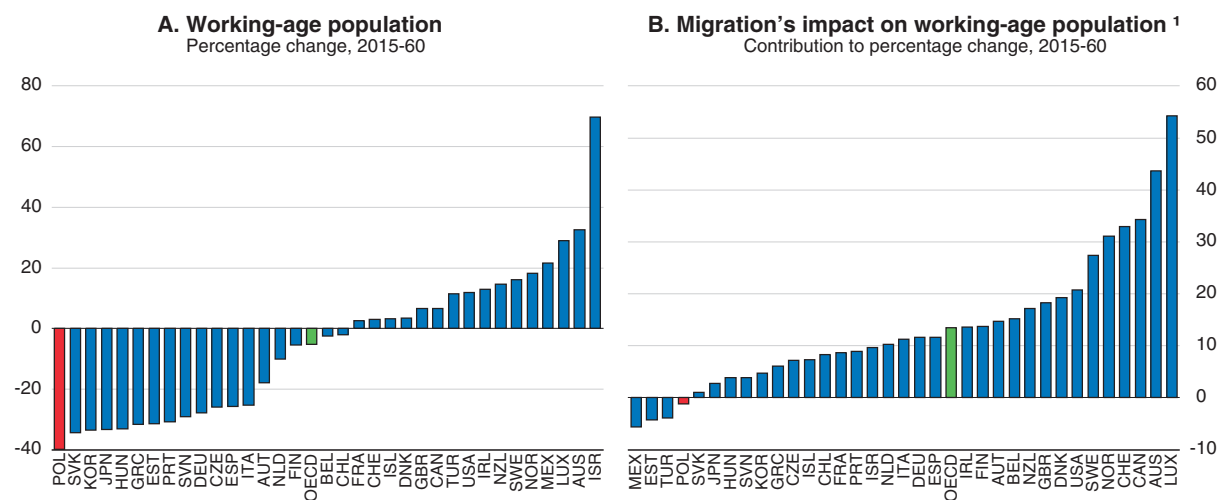


1. Includes exports of goods with low and medium-low technological content.

Source: OECD (2015), Economic Outlook 98 Database (and updates), National Accounts and Productivity Databases; and OECD calculations based on UN Comtrade data.

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Figure 2. **The working-age population is set to decline sharply**

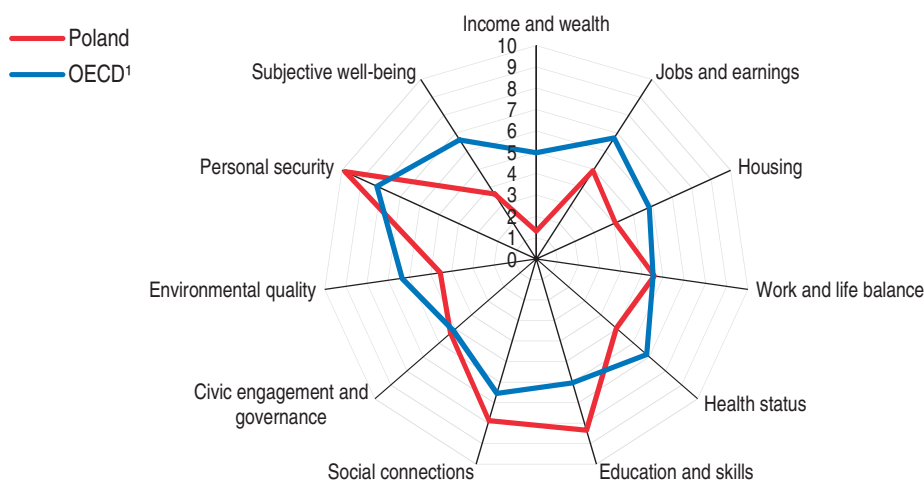


1. Projected impact of migration on the change in size of the working-age population in the 2015-60 period. This is calculated as the difference between the projected percentage change in the size of the working-age population in a scenario with migration and a scenario without migration. The migration scenario is based on past trends.

Source: United Nations (2015), World Population Prospects: The 2015 Revision.


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Figure 3. The OECD Better Life Index for Poland



1. Unweighted average.

Source: OECD (2015), *OECD Better Life Index*, www.betterlifeinitiative.org.

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Growth is solid, and the labour market situation has improved significantly

Real GDP growth is projected to remain at around 3½ per cent annually in 2016-17, supported by solid investment and consumption gains (Table 1). Considerable EU-supported infrastructure investment will continue to underpin activity increases, despite a temporary slowdown in 2016 at the switchover of budget periods for EU funds. The rapid fall in joblessness and rising real incomes related to falling food and energy prices are supporting consumption. Contained unit labour costs have underpinned Poland's continued integration into global value chains and strong export performance (Figure 4).

The rapid decline in the unemployment rate is in large part a secular phenomenon. Older workers whose skills were not fit for the market economy have exited, while a new, relatively well-trained generation has entered, reducing equilibrium unemployment. Actual unemployment has fallen in all age groups. In addition, the labour market is extremely flexible: most employment gains have taken the form of temporary jobs with limited worker bargaining power (see below). Yet, the vacancy rate has risen, and firms report growing problems in finding qualified staff, suggesting incipient labour market pressures (Grant Thornton, 2015; Manpower Group, 2014).

This projection is subject to various risks and uncertainties. Lower commodity prices would raise household disposable incomes and reduce production costs. Private consumption and investment could respond more strongly to confidence improvements and income gains. On the other hand, renewed turmoil in the euro area and a slowdown in emerging markets, China in particular, could depress exports and investment, both directly and indirectly through spending by European trading partners. A stronger-than-expected effect of the automobile emissions scandal could curb motor vehicle and parts exports more than expected.

A new 0.44% annual tax on bank assets and other additional fees on banks could reduce bank profitability further and tighten credit supply. Additional costs for banks would arise – with a possible negative impact on financial stability – if the authorities were to require banks to convert foreign-currency-denominated – mainly Swiss franc –

Table 1. **Macroeconomic indicators and projections**

	2012	2013	2014	2015	2016	2017
	Current prices PLN billion	Percentage changes, volume (2010 prices)				
GDP	1 629.0	1.3	3.3	3.6	3.4	3.5
Private consumption	1 002.7	0.2	2.5	3.0	3.5	3.6
Government consumption	292.0	2.2	4.9	3.8	2.7	2.9
Gross fixed capital formation	322.5	-1.1	9.8	6.1	5.8	6.7
Of which: Housing	43.2	0.0	3.8	3.7	3.4	3.5
Final domestic demand	1 617.1	0.3	4.4	3.8	3.8	4.1
Stockbuilding ¹	19.6	-1.0	0.5	-0.4	0.0	0.0
Total domestic demand	1 636.7	-0.7	4.9	3.4	3.8	4.1
Exports of goods and services	723.6	6.1	6.4	6.6	4.4	5.4
Imports of goods and services	731.3	1.7	10.0	6.0	5.2	6.5
Net exports ¹	-7.7	1.9	-1.5	0.4	-0.3	-0.5
Other indicators (% change, unless otherwise specified):						
Potential GDP	-	3.0	2.9	3.1	3.2	3.2
Output gap ²	-	-1.9	-1.5	-1.1	-0.9	-0.5
Employment	-	-0.1	1.9	1.0	0.6	0.5
Unemployment rate ³	-	10.3	9.0	7.4	7.1	6.9
GDP deflator	-	0.4	0.4	0.4	1.1	1.7
Consumer price index	-	1.0	0.1	-0.9	1.0	1.7
Core consumer prices	-	1.2	0.7	0.5	1.1	1.7
Household saving ratio, net ⁴	-	0.7	2.1	3.2	3.2	3.3
Trade balance ⁵	-	1.9	1.3	2.7	1.8	1.3
Current account balance ⁵	-	-1.3	-2.0	-0.2	-1.0	-1.4
General government financial balance ⁵	-	-4.0	-3.3	-3.1	-3.0	-3.0
Underlying government financial balance ²	-	-3.3	-2.8	-3.0	-3.3	-3.0
Underlying government primary balance ²	-	-1.2	-1.2	-1.4	-1.8	-1.4
General government gross debt ⁵	-	62.6	65.9	67.1	67.4	67.5
General government debt, Maastricht definition ⁵	-	55.9	50.4	51.7	51.9	52.1
General government net debt ⁵	-	35.3	38.1	39.8	41.1	42.0
Three-month money market rate, average	-	3.0	2.5	1.7	1.8	2.1
Ten-year government bond yield, average	-	4.0	3.5	2.8	3.0	3.4

1. Contributions to changes in real GDP, actual amount in the first column.

2. As a percentage of potential GDP.

3. As a percentage of the labour force.

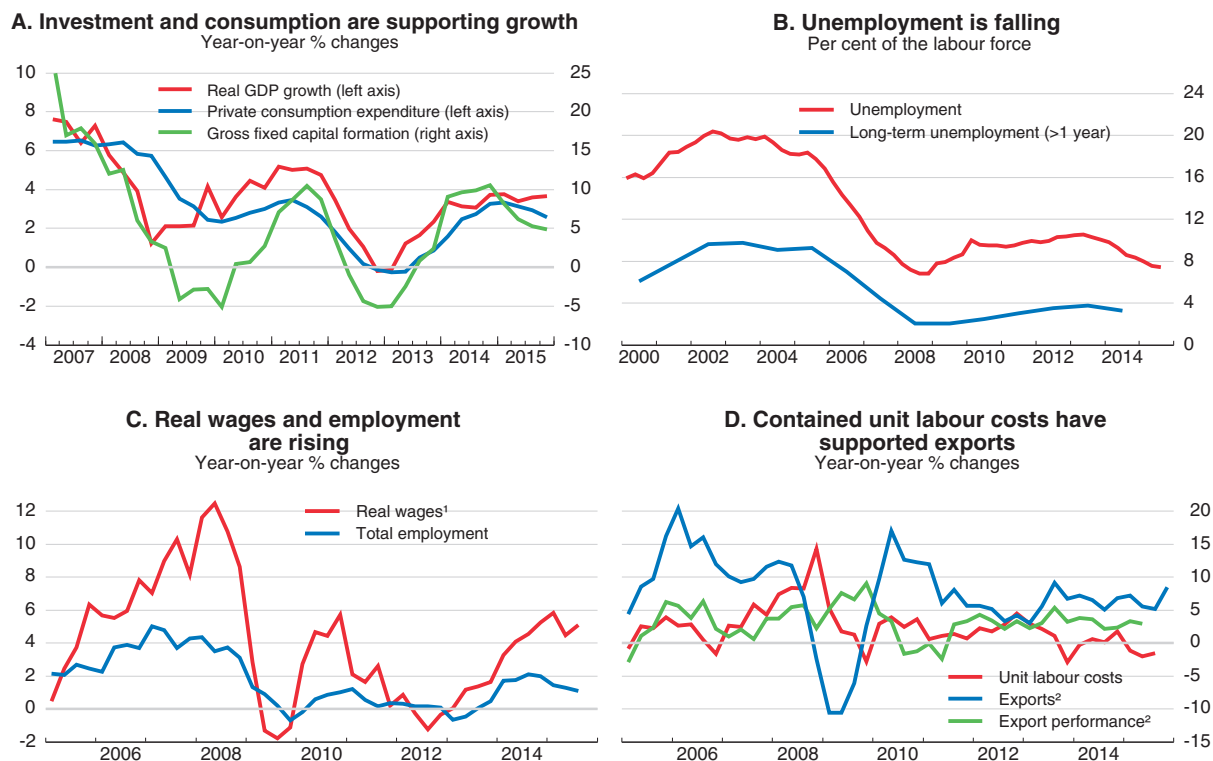
4. As a percentage of household disposable income.

5. As a percentage of GDP.

Source: OECD (2015), OECD Economic Outlook 98 Database and updates.

mortgages into domestic currency at preferential exchange rates, as proposed by a Presidential draft bill. This could have a sizeable impact on the banking sector, as the stock of such mortgages represented around 9.5% of GDP and 44.5% of all mortgages at end-2015, though mortgages in foreign currency represented less than 2% of originations in 2014/2015. Currently, the proposal does not contain a cost estimate, but this is to be provided by the Polish Financial Supervision Authority (KNF) in March. The National Bank of Poland estimates the total direct costs at PLN 38-44 billion, more than three times higher than the banking sector's total net profits in 2015 (NBP, 2016). Separately, on 15 January the rating agency Standard & Poor's downgraded Poland's foreign-currency credit rating by one notch to BBB+. Yields rose thereafter but have since returned to the levels observed before the decision. No other major credit rating agency has followed suit. Other potential yet unquantifiable shocks are enumerated in Box 1.

Figure 4. **Macroeconomic indicators**



1. Deflated by CPI.

2. Goods and services, volume.

Source: OECD (2015), *Economic Outlook 98 Database* (and updates) and *OECD Labour Force Statistics Database*.

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Box 1. Possible shocks to the Polish economy

Shock	Possible impact
Spillovers from monetary normalisation in the USA	US monetary policy normalisation could trigger capital flow reversals, exchange rate depreciation and a fall in asset prices. This would put a burden on households and fiscal policy, as the share of household and public debt denominated in foreign currency is substantial.
Geopolitical tensions	Intensified instability in Russia and Ukraine could undermine external demand (although since the conflict occurred Polish agri-food exporters have successfully found alternative markets for their products) and put pressure on natural gas prices and provision. It could also lead to an increase in military spending, sharpening problems of adequately financing much needed civilian spending. A marked reduction in tensions could raise exports.
Increasing numbers of migrants	A substantial inflow of migrants would raise medium-term labour supply. Providing them with training and granting them employment access would speed up their integration into the labour market. This would eventually have positive effects on the fiscal situation, innovation, productivity and income.
Electricity capacity shortages	Tight electricity production capacity and limited cross-border connections heightened by unintended power flows from Germany's network may trigger further electricity capacity shortages in extreme weather conditions. This would lower industrial production and could curtail FDI inflows.

Macroeconomic policies

The government needs higher revenues to finance its programmes

The new government has confirmed its determination to keep the deficit below 3% of GDP. Yet, implementing a number of government priorities would imply higher spending or lower revenues (Box 2), while new taxes already adopted or under discussion would yield revenues of a much smaller order. Some modest further income could be forthcoming from greater efforts to reduce tax evasion, especially in the VAT.

Box 2. The new government's tax and spending plans

- A law passed in February 2016 introduces a new child benefit (the “family 500+” programme) that would pay PLN 500 per month per child until age 18. It will be means-tested for the first child with a monthly income cap of PLN 800 (PLN 1200 for disabled children), but available for all children beyond the first. It will be paid out beginning in April 2016. The government estimates the costs at PLN 17 billion in 2016 and PLN 23 billion (1.3% of 2015 GDP) per year thereafter.
- The government campaigned on a promise to increase the tax-free allowance from PLN 3000 per year to PLN 8000. However, the plans have not yet been detailed, the size of the increase might end up being lower, it might be implemented in several steps, and it might be reduced for higher-income households. Without any of these changes the government estimates the annual cost at PLN 20 billion (1.1% of 2015 GDP). The Ministry of Finance will present a draft government proposal in 2016.
- A new tax on assets of financial institutions was enacted on 15 January and entered into force at the beginning of February. The tax has to be paid by banks and credit unions, insurance companies, as well as other lending institutions. The monthly tax rate is set at 0.0366% of total assets (0.44% annually). There is a tax allowance of PLN 4 billion worth of assets for banks and credit unions, PLN 2 billion for insurance companies and PLN 0.2 billion for other lending institutions. Moreover, the state-owned development bank (BGK) and banks undergoing restructuring are exempt from the tax. The government has foreseen PLN 5.5 billion of receipts in the 2016 budget (0.3% of 2015 GDP). This is roughly half of the banking sector's net profit in 2015.
- The Finance Ministry also presented the draft principles of the new retailer tax. There would be a tax-free allowance of PLN 18 million in revenue per year. The basic rate will be 0.7% of turnover. Revenue in excess of PLN 300 million a month will be taxed at 1.3%. In addition, a special tax rate would apply to revenue generated during weekends and on public holidays: of 1.3% up to PLN 300 million per month, and 1.9% above this level. The Ministry of Finance is expecting the tax to generate receipts of around PLN 2 billion in 2016 (0.1% of 2015 GDP). The final scope of the tax has yet to be decided and amendments are likely, such as a higher threshold and no surtax for Saturdays, as the bill has not been submitted to parliament and is currently being discussed with social partners and the retail sector.
- The government is working on a strategy to re-inforce the tax and customs administration. Foreseen measures include a general anti-avoidance rule, which would limit the scope for tax planning, merging the tax and customs administrations, limiting cash payments from EUR 15 000 to PLN 15 000 and introducing IT instruments to detect and combat VAT fraud. Through these measures the government hopes to increase tax revenues by PLN 12 billion in 2017 (0.6% of 2015 GDP).
- A presidential draft bill would lower the pension age to 60 for women and to 65 for men, reversing the 2012 reform that increased the retirement age in stages to 67 by 2020 for men and by 2040 for women. There is no official government estimate of the costs of this reform.

Past fiscal consolidation efforts have created the conditions for putting the debt-to-GDP ratio on a downward path, and the headline deficit is set to remain close to 3.0% of GDP in 2016 (Table 1). This is higher than the 2.8% deficit foreseen in the budget due to lower inflation and GDP growth projections in this baseline scenario. With nominal growth and long-term interest rates following the OECD long-term projections over 2018-60 and the primary deficit shrinking from 1.4% in 2016 by 0.1% of GDP each year (Figure 5, Panel A), debt would fall steadily, reaching 30% of GDP towards 2050 under the baseline scenario (Panel B). This baseline scenario takes into account the effects of ageing on labour force participation and assumes that the pension age is increased gradually in line with the 2012 reform. Debt reduction would be delayed if fiscal slippage occurred in 2016 and 2017, for example if additional revenue-raising measures disappointed (Box 2). With a deficit increase of, say, 1.5% of GDP in 2017, keeping constant the long-term growth and interest-rate trajectories, public debt would only stabilise. However, estimates of future potential growth and long-term interest rates are quite uncertain, and lower long-term growth, notably if old-age employment rates declined further than expected (see below), and higher interest rates by half a percentage point could lead to continued increases in public debt to above 60% of GDP by 2030.

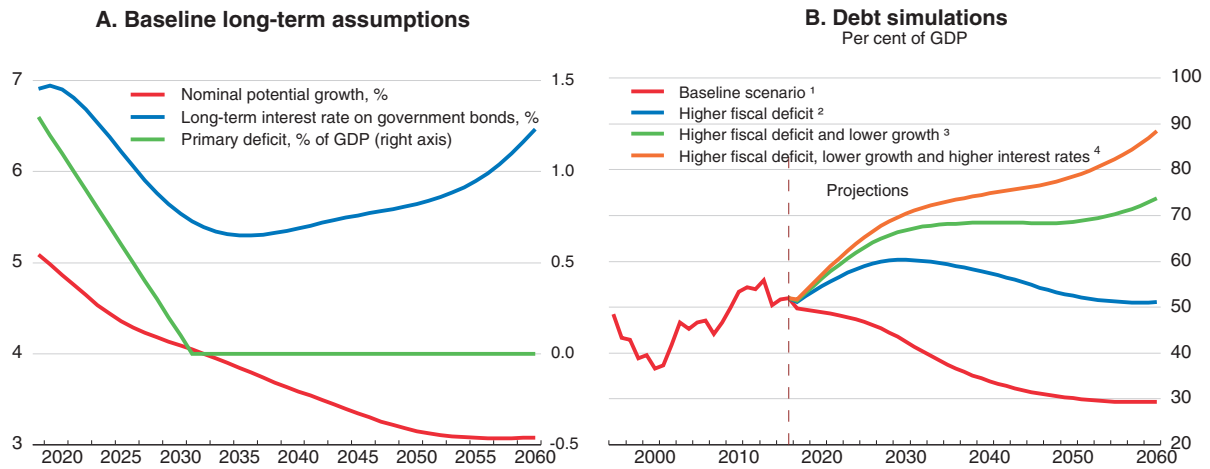
VAT exemptions and reduced rates, similarly as in other OECD countries, imply large revenue losses (Figure 6), worth more than 2.5% of GDP in 2013 (Ministry of Finance, 2014). Withdrawing them would thus yield much higher revenues than the envisaged tax increases on banks and retailers and would simplify the tax system. In contrast, taxes on individual sectors will make it more complicated. Part of the benefits of reduced VAT rates accrues to rich individuals, making it an inefficient tool to support the poor compared to targeted transfers or labour tax reductions.

Further options to increase revenues include increasing property taxes by making them market-value-based and taxing capital gains on rented properties. Green taxes could also help to raise revenues, although their main goal is to internalise externalities. Removing tax exemptions on fuel use, raising taxes on water and air pollution and implementing an aviation tax as well as an emissions-based tax on vehicles, which is currently lacking in Poland, could yield additional revenues equivalent to almost 1 ½ per cent of GDP in 2025 (Hogg et al., 2014).

The government also wants to focus on increasing tax compliance to generate extra revenues. VAT evasion has increased significantly to more than a quarter of the total liability (Figure 7). It is estimated to have increased further in 2015 (PwC, 2015). The previous government introduced counter-measures in some sectors, such as making sellers rather than buyers liable for VAT, but fraudsters have tended to move to other sectors in response. Thus, focusing on improving tax enforcement is appropriate. The government prudently assumes no increase in revenues in 2016 due to tax administration reform.

Tax administration has suffered from fragmentation within the Ministry of Finance and a lack of coordination among local and regional tax offices. Building a unified revenue administration with a strong central management structure and investing in modern ICTs, in line with the new government's plans (Box 2), should improve its effectiveness (Toro et al., 2015). Local and regional tax offices should be streamlined by grouping audit at the regions with strong management and coordination from the central government level. Ongoing efforts to strengthen analysis and planning of tax audits should continue. In

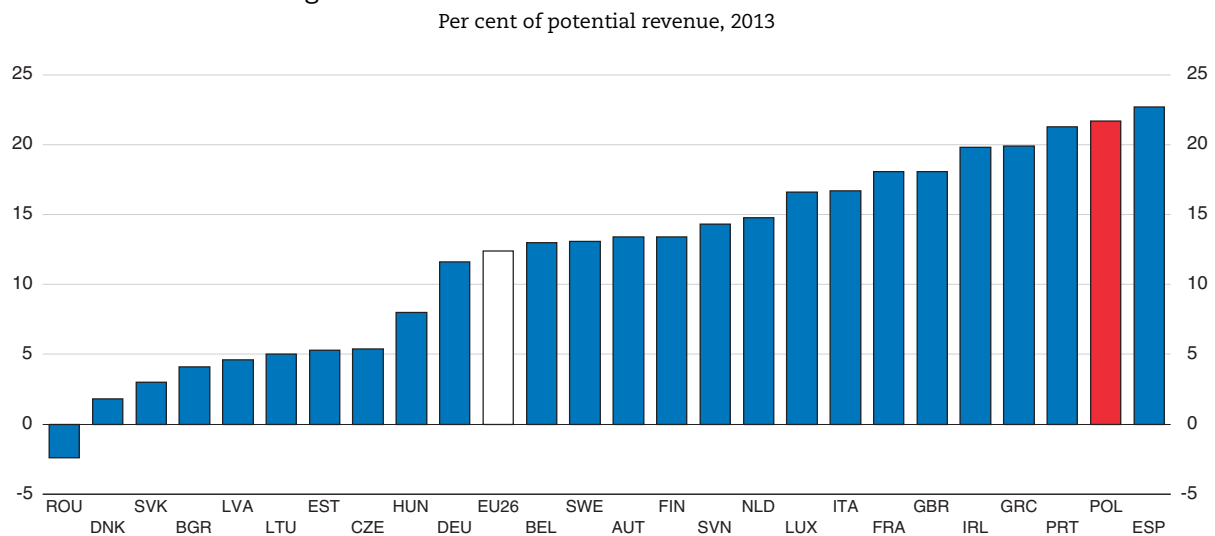
Figure 5. Debt is on a declining path



1. Baseline long-term assumptions of Panel A.
2. Same assumptions as in Panel A, except the primary deficit is higher by 0.5% of GDP in 2016 and 1.5% of GDP in 2017. Thereafter, the deficit is reduced gradually by 0.1% of GDP each year – the same pace as in Panel A – until it reaches zero.
3. Same assumptions as in 2., but nominal growth is lower by 0.5 percentage points over 2018-60.
4. Same assumptions as in 3., but long-term interest rates are higher by 0.5 percentage points over 2018-60.

Source: OECD (2015), *Economic Outlook 98 Database* (and updates); *OECD Long-Term Database* and OECD calculations.

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Figure 6. VAT revenue shortfall due to tax breaks¹

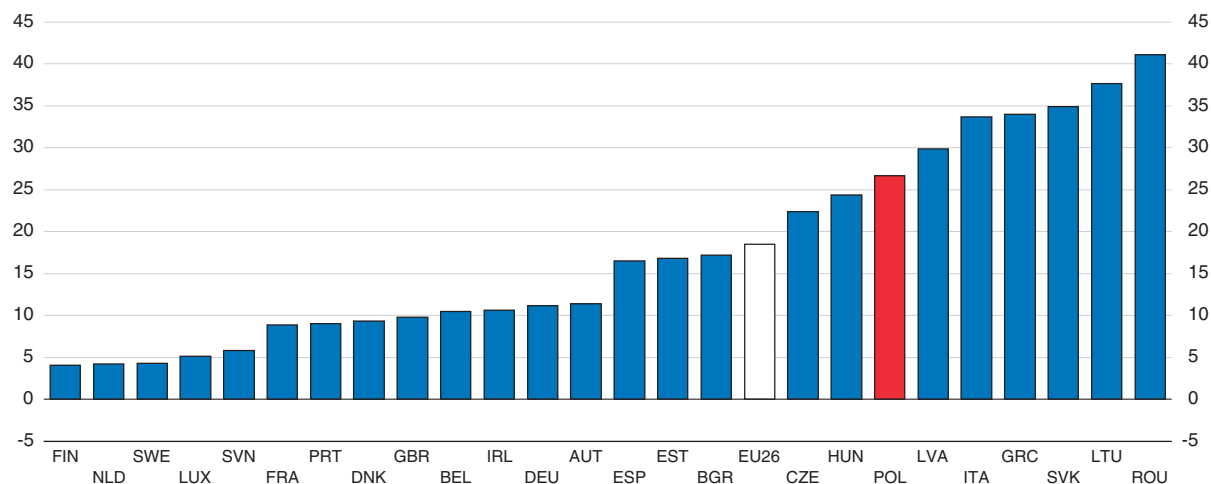
1. Measures the revenue loss due to the existence of reduced VAT rates (rate gap) and VAT-exempted supplies of goods and services (exemption gap). The exemption gap is considered net of imputed rents, financial services and public goods, for which VAT imposition is deemed technically impossible or socially unfeasible.

Source: European Commission (2015); *Study to quantify and analyse the VAT Gap in the EU Member States*.


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particular, more staff familiar with modern risk analysis techniques are needed, along with a specialised audit unit focusing exclusively on large taxpayers, who typically account for 50-70% of tax revenues (Toro et al., 2015; European Commission, 2015a). Developing international cooperation and standardised reporting in line with OECD (2015a)

Figure 7. **VAT revenue shortfall due to evasion¹**
Per cent of total tax liability, 2013



1. Corresponds to the difference in percentage terms between the amount of VAT actually collected and the VAT total tax liability.
Source: European Commission (2015), *Study to quantify and analyse the VAT Gap in the EU Member States*.

StatLink  <http://dx.doi.org/10.1787/888933339330>

recommendations would allow the tax administration to focus its audit resources more on serious fraud issues. As a welcome complement to efforts to improve tax administration, the former government prepared a law that enhances taxpayers' rights and promotes a conciliatory approach to settling disputes.

The government's plan to increase child benefits substantially should encourage young people to have more children (OECD, 2011a), improving the long-term demographic outlook. It could also help limit child poverty, although it may reduce female labour supply. The measure entails a direct transfer of 500 PLN per month until children reach age 18, which would be means-tested for the first child and available for all families for every additional child. It adds to the child tax credit. So far the government has not announced any plans to eliminate the child tax credit. Over time the government should merge these two partly overlapping measures.

Reforming the farmers' social-security scheme could also generate substantial budgetary savings, as contributions cover only a fraction of the benefits. In addition, it would promote mobility of workers from small farms to more productive parts of the economy (OECD, 2014a).

A comprehensive medium-term fiscal plan will be forthcoming in Poland's convergence programme to be published in April 2016. It will detail the costs of large spending and tax measures over 2016-19 and explain how the government intends to continue gradual, structural deficit reduction of at least $\frac{1}{4}$ percentage point of GDP per year. However, independent reviews of fiscal planning could be strengthened. The Monetary Policy Council reviews macroeconomic assumptions underlying the budget, its macroeconomic impact and points to risks. The Supreme Audit Office (Najwyższa Izba Kontroli, NIK) publishes an ex-post assessment of budgetary execution and medium-term fiscal planning, including compliance with rules. Yet, it would be helpful to have that Office or another independent institution make ex-ante assessment of the government's fiscal plans and conduct long-term fiscal sustainability analyses.

Monetary policy faces challenges

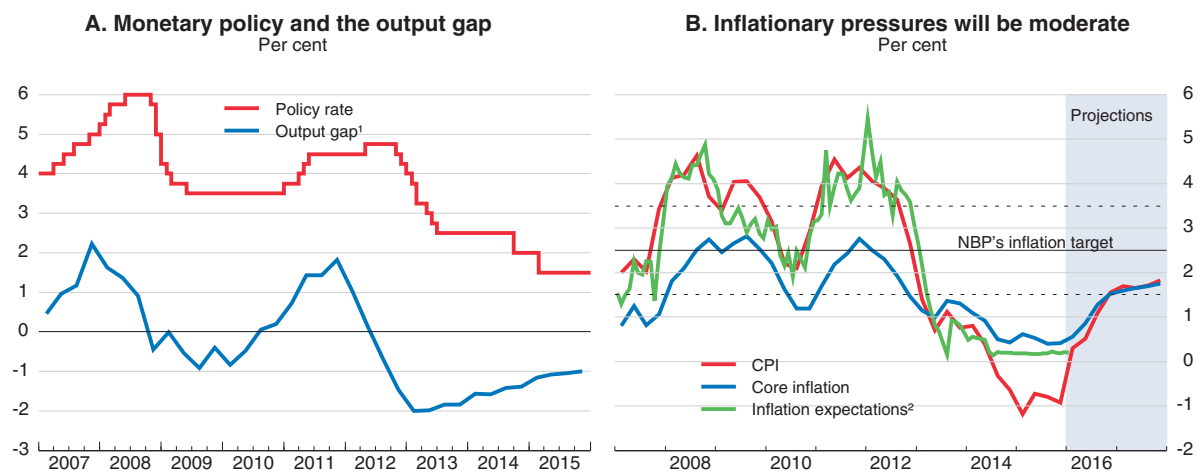
The central bank has kept the official interest rate at a record low of 1.5% since March 2015 (Figure 8, Panel A). Inflation has been well below the medium-term inflation target of 2.5% (with a tolerance band of ± 1 percentage point) for three years and has been negative since July 2014. Deflation reflects mainly global factors, such as low food prices and recurring declines in energy prices. Yet, core inflation remains close to zero. Inflation expectations have also fallen to record lows, although in Poland expectations tend to follow the actual inflation rate, and the decline is therefore unlikely to become self-fulfilling (Panel B). Unemployment is probably close to its equilibrium, and the output gap is mildly negative, yet nominal wage growth has failed to pick up. The zloty has fallen fairly steadily since May 2015, and there is much uncertainty surrounding fiscal policy, which may prove to be expansionary. Should inflation pressures build gradually, in line with OECD projections, there would be a case from a purely domestic perspective for the central bank to start increasing rates fairly soon. However, the central bank should proceed with caution, as there are ongoing headwinds to activity from slowing emerging markets and risks of financial turbulence, for example from potential tensions from divergent moves between US and euro-area monetary policies. These considerations justify keeping rates low for the time being. Should inflation continue to be quiescent and remain below target, interest rate reductions should be considered.

The financial system remains sound

Despite historically low interest rates, there are no signs of asset price bubbles nor unwarranted debt accumulation. Real credit growth has picked up (Figure 9, Panel A), but house prices have been broadly flat (Panel B), and household indebtedness has remained fairly constant overall (Panel C). Non-financial corporate debt has been stable in recent years at 46% of GDP (16% of GDP for bank credit; foreign debt stands at around 19% GDP). Poland's largely foreign-owned banking system remains well capitalised and liquid (Panel D), and the core Tier 1 capital-adequacy ratio, at 14.3%, stood well above Basel III requirements at end-September 2015. Leverage has been stable at a moderate level. However, the profitability of the banking sector is declining, due to narrowing interest rate margins (NBP, 2015). Moreover, bank costs are set to rise, as they are to contribute to a new fund for distressed debtors, which adds to a new asset tax and higher contributions to the bank-guarantee fund. These three measures would amount to around half of 2014 bank profits. As mentioned above, the authorities are also considering requiring banks to convert foreign-denominated mortgages into domestic currency at preferential exchange rates. These additional burdens may have a negative effect on financial stability by reducing the profitability of the banking sector and its capital position. This in turn would limit credit to the real economy.

Credit risks remain limited. A significant share of loans to households and non-financial corporations (Figure 10, Panel A) is in foreign currency. Yet, since 2014 banks have been allowed to provide foreign currency (FX) mortgages only to households with a steady income in the same currency. This has stopped new origination of such loans. FX mortgages are concentrated among the wealthiest households (NBP, 2013), and intercompany loans represent a majority of non-financial corporations' FX loans, mitigating apparent vulnerabilities (IMF, 2015). The financial sector was resilient to the abrupt depreciation of the domestic currency against the Swiss franc in January 2015. The share of non-performing loans (NPLs) remains relatively low (Panel B). For mortgages

Figure 8. Inflation and monetary policy



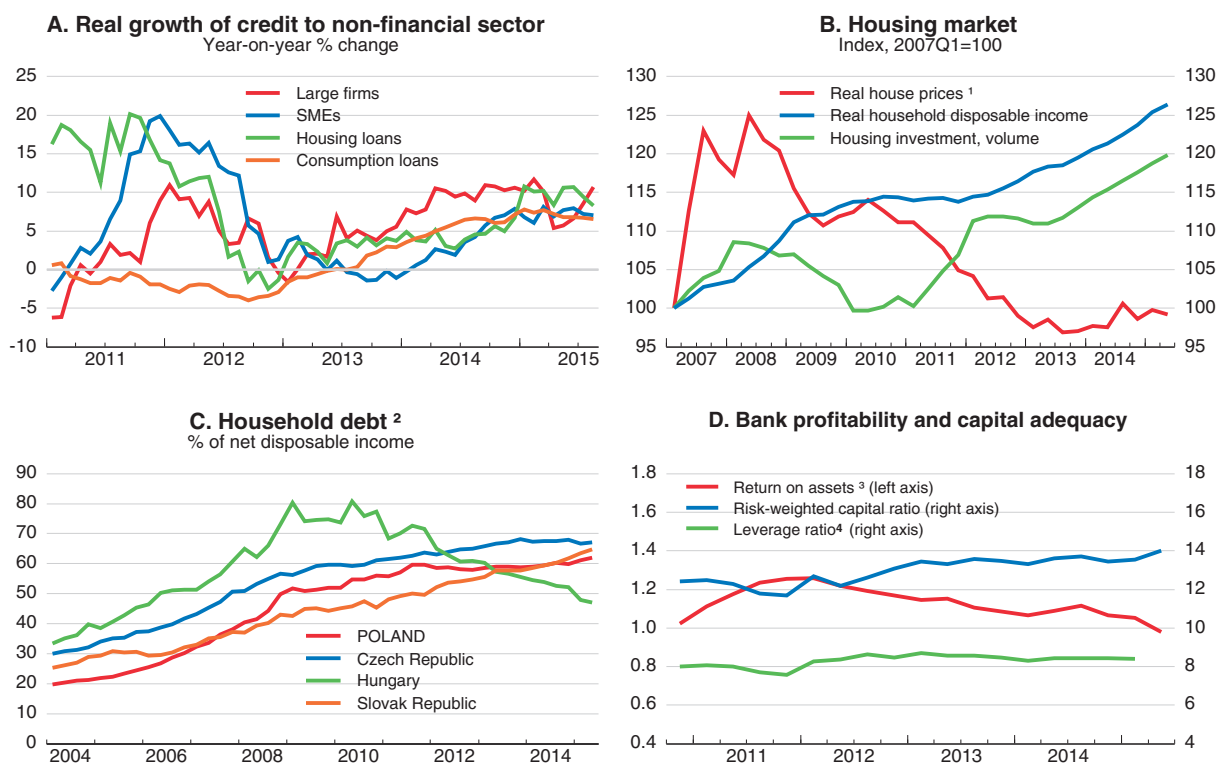
1. As a percentage of potential GDP.

2. Mean of the expected rate of inflation over next 12 months.

Source: OECD (2015), *Economic Outlook 98 Database* (and updates); Narodowy Bank Polski.

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Figure 9. Financial sector developments



1. Hedonic price index in the 10 largest cities, deflated by the CPI.

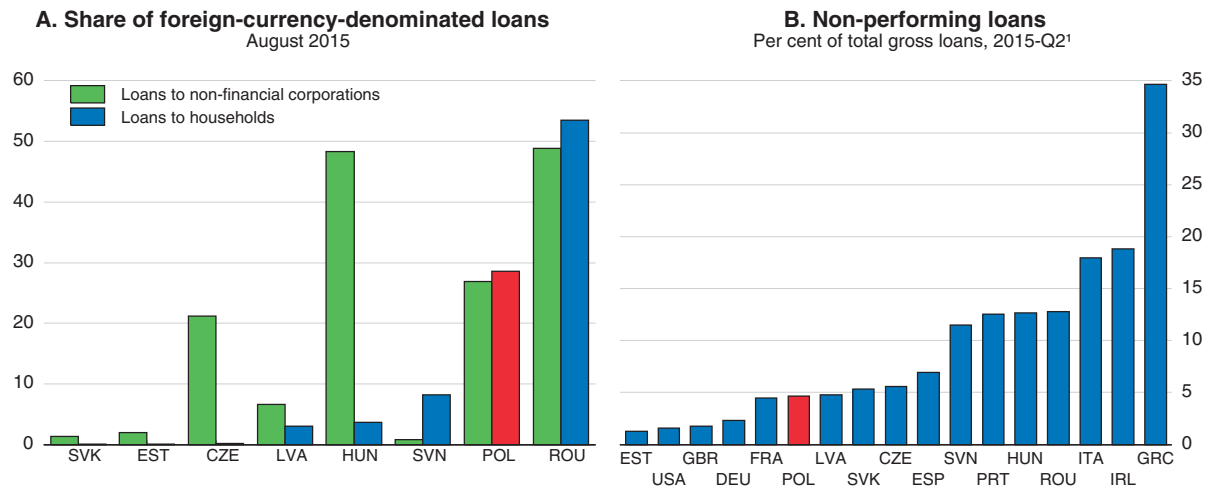
2. Household debt is computed by subtracting shares and other equity, as well as financial derivatives, from total household liabilities.

3. 12-month profits in percent of 12-month assets.

4. Median capital ratio (core capital over unweighted assets).


Source: Narodowy Bank Polski; OECD (2015), *Economic Outlook 98 Database* (and updates) and *National Accounts Database*.

StatLink <http://dx.doi.org/10.1787/888933339354>

Figure 10. **Foreign-currency-denominated and non-performing loans**

1. Or latest available information.

Source: ECB; and IMF, *Financial Soundness Indicators*.

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alone, the NPL share was 3.3% at end-September 2015 for local-currency loans and 3.1% for those denominated in foreign currency.

Poland's universal banks do not currently have access to either covered bonds or securitisation and rely on short-term deposit liquidity and foreign finance for mortgage lending. The development of mortgage banks that can issue mortgage bonds has been limited; however the legislation aimed at easing the issuance of mortgage bonds and improving long-term liquidity has only recently entered into force. In particular, a new law reduces tax barriers to the development of covered bonds and promotes pension fund, credit union and foreign investment in such assets. This would, in turn, strengthen financial stability.

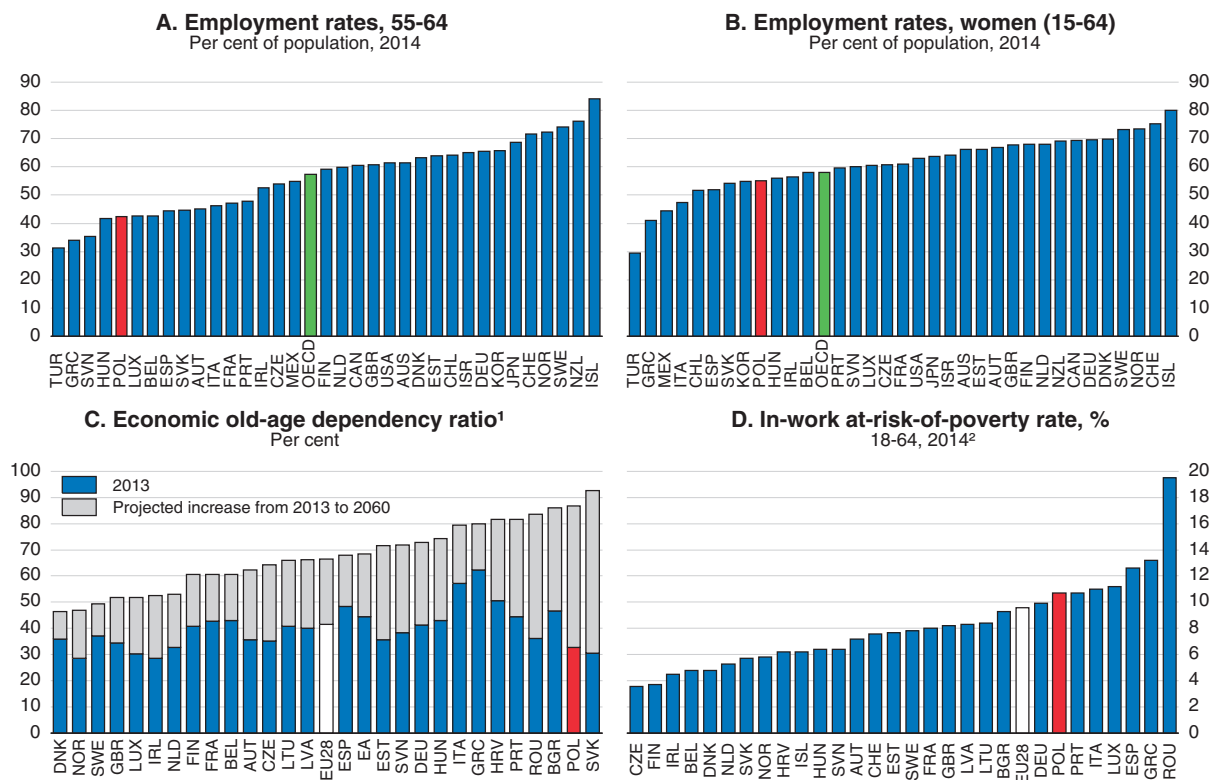
Enhancing employment and access to high-quality jobs

Improving labour force participation and employment of women and seniors

Unemployment has come down, and employment rates have increased, in line with robust economic growth. Nevertheless, labour force participation and employment rates are still among the lowest in the OECD, especially for women and older workers (Figure 11, Panels A and B). At the same time, the share of elderly citizens is high and set to increase further (Panel C), as Poland has one of Europe's lowest fertility rates. These trends jeopardise potential growth and the ability to finance adequate pension and health-care spending in the long term. Among those who are employed quite a few are poor. In fact, in-work poverty is above the EU average (Panel D). This is in part related to the prevalence of irregular work relationships.

Better opportunities to combine work and family life are needed to allow more women to work, if they so desire. One of the most effective policy measures in this respect is the provision of childcare services, which also contributes to raising fertility (OECD, 2011a and 2012). Poland extended the coverage of preschools for three- to five-year-olds to close to 80% in 2015 from just over 30% in 2002 (Figure 12, Panel A shows 2013 numbers). The number of childcare institutions for children under three quadrupled between 2011


Figure 11. **Employment rates are low in the context of rapid ageing, and in-work poverty is relatively high**



1. Measured as inactive population aged 65 and over as a ratio to the 15-64 employed population.

2. Or latest available year.

Source: OECD (2015), *OECD Labour Force Statistics Database*; European Commission (2015), *The Ageing Report*; and Eurostat.

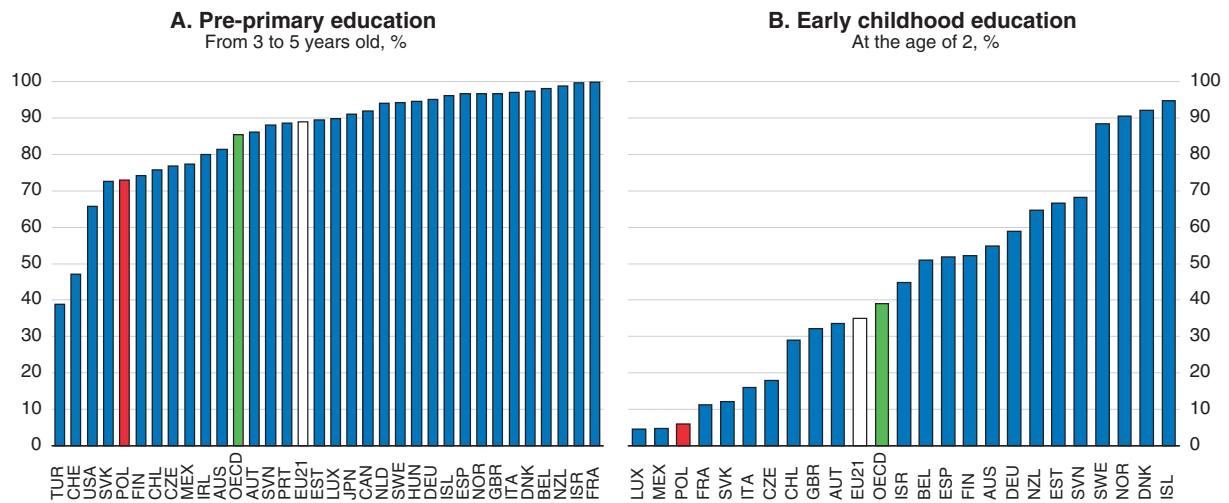
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and 2014, but coverage remains low (Panel B). The current system of joint taxation of family income implies higher tax rates for second earners – typically women. OECD analysis shows that this reduces female labour force participation and full-time employment (OECD, 2012). Moving to individual taxation would remove this distortion (OECD, 2014a).

Poland has one of the lowest pension replacement rates in Europe (OECD, 2015b) and its reduction until 2050 is estimated to be larger than anywhere else in Europe (Figure 13). This involves a serious risk of higher old-age poverty. The 2012 pension reform increased the retirement age in stages to 67 by 2020 for men and by 2040 for women. The new government campaigned on a promise to allow women to retire at 60 and men at 65, the pre-reform status quo. This would have a negative impact on the employment of seniors and thus long-term growth, though its magnitude is unclear. This can be contained to some extent if workers who retire before 67 receive a lower pension in line with their reduced contributions and – as is already the case – a correspondingly higher pension if they work beyond that. The government provides workers with annual information on their pension rights and how they would change thanks to delayed retirement. This should also be useful. OECD evidence shows that such actuarially neutral pension adjustments ensure higher labour force participation of older workers compared to systems where early retirement is possible with lower pension reductions (Johansson et al., 2013). However, the same work shows that a reduction in the legal pension age reduces older workers' labour

Figure 12. **Enrolment rates in pre-primary and early childhood education have been weak but increasing**

2013

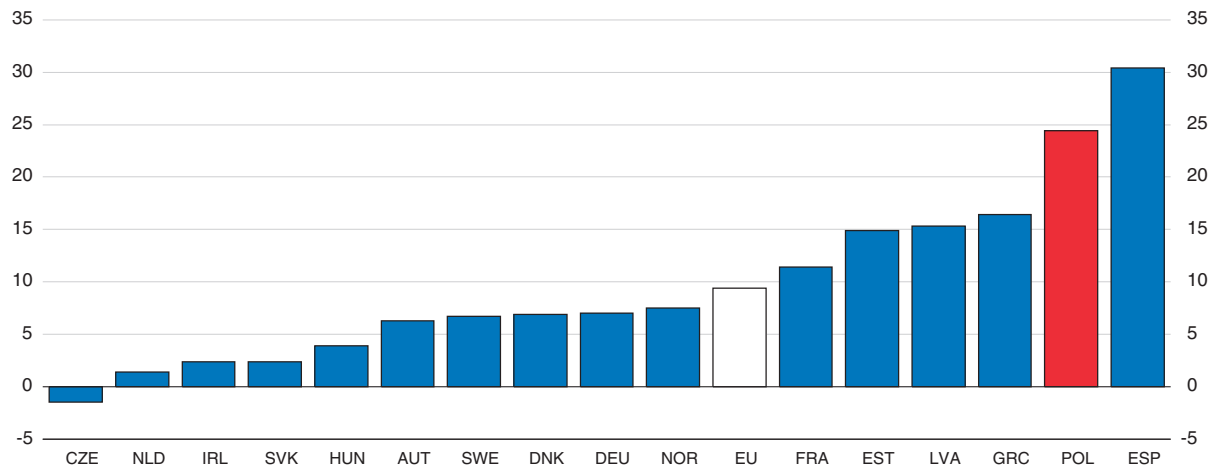


Source: OECD (2015), *Education at a Glance 2015 Database*.

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Figure 13. **Reduction in gross average replacement rates¹ of public pensions², 2013-60**

Percentage points



1. The gross average replacement rate is calculated as the average first pension as a share of the average wage at retirement.

2. Public pensions include disability, survivor and non-earnings-related benefits.

Source: European Commission (2015), *The 2015 Ageing Report*.

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force participation, with a negative impact on GDP in the long term. Lowering the minimum pension age can lead myopic individuals to retire early, even if that implies poverty. This risk would be heightened for women, who have lower earnings than men and live longer but would be allowed to retire earlier under the government's plans. Thus, the statutory retirement age should be increased, as previously planned and any possibilities to retire early should be the same for men and women and come with actuarially neutral pension reductions.

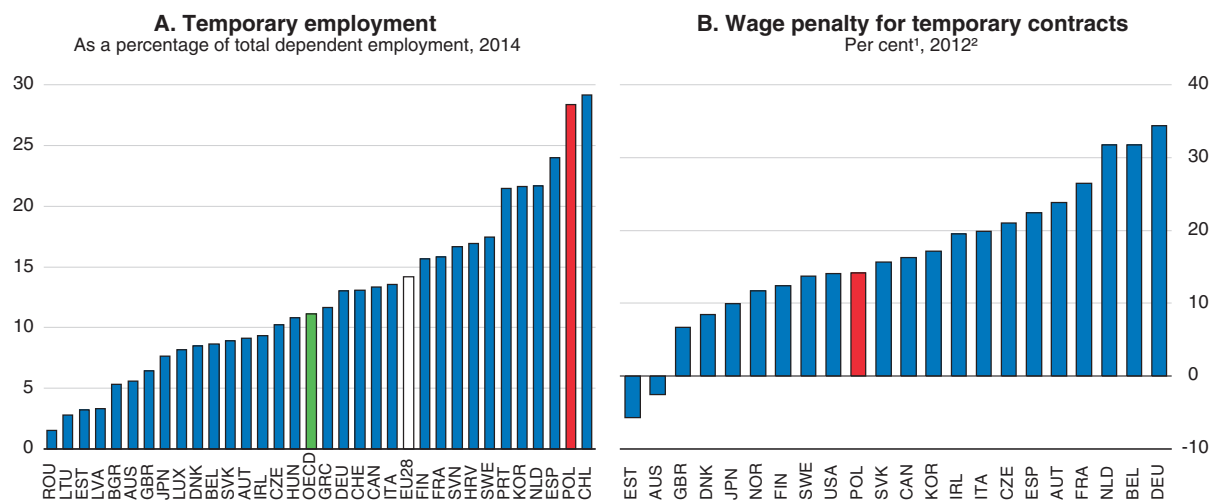
The government should continue to make efforts to raise employment opportunities for older workers, which are scarce, particularly among women. Measures that would contribute to this include developing long-term care facilities, aligning the rules of special pension schemes with the general system, harmonising employment protection for all age groups to avoid disincentives for hiring older workers and providing government support to spread good practices in terms of managing senior workers, in particular for SMEs (OECD, 2015c).

Strengthening labour mobility would also improve the functioning of the labour market. Further improving transport infrastructure (see below) and deepening the thin rental housing supply would contribute to this. The lack of local spatial plans in many areas holds back housing supply that is well connected to urban infrastructure, and parliamentary work to lower barriers for municipalities to issue such plans should be resumed (see below). Further easing rent controls and eviction of non-paying tenants by shifting the obligation to find shelter for them from landlords to the state would help to promote a rental market with reasonable tenant protection (OECD 2013a; Peppercorn and Taffin, 2013).

Improving access to high-quality jobs

Poland has the European Union's largest share of workers with temporary contracts (Figure 14, Panel A); such contracts are especially prevalent among the young and the low skilled. Prospects of moving from a temporary to a permanent job are poor (OECD, 2014b). Temporary jobs can be based on regular labour law or on civil law. Civil-law contracts are not subject to the minimum wage, paid leave, a notice period for dismissals or working-time regulations and can involve much lower social contributions (Arak et al., 2014). In firms with more than nine workers the incidence of civil-law contracts increased from 547 000 in 2010 to 1.2 million in 2014 or around 13% of total employment in those firms (GUS, 2014; GUS, 2015a). These contracts were originally created for freelance workers, but


Figure 14. Temporary employment



1. Compared to wages for permanent workers, controlling for average literacy and numeracy scores, highest qualification, occupation and industry.

2. The data cover solely the Flanders region for Belgium and England and Northern Ireland for the United Kingdom.

Source: OECD (2015), OECD Labour Force Statistics Database; and OECD Skills Outlook 2013 Database.

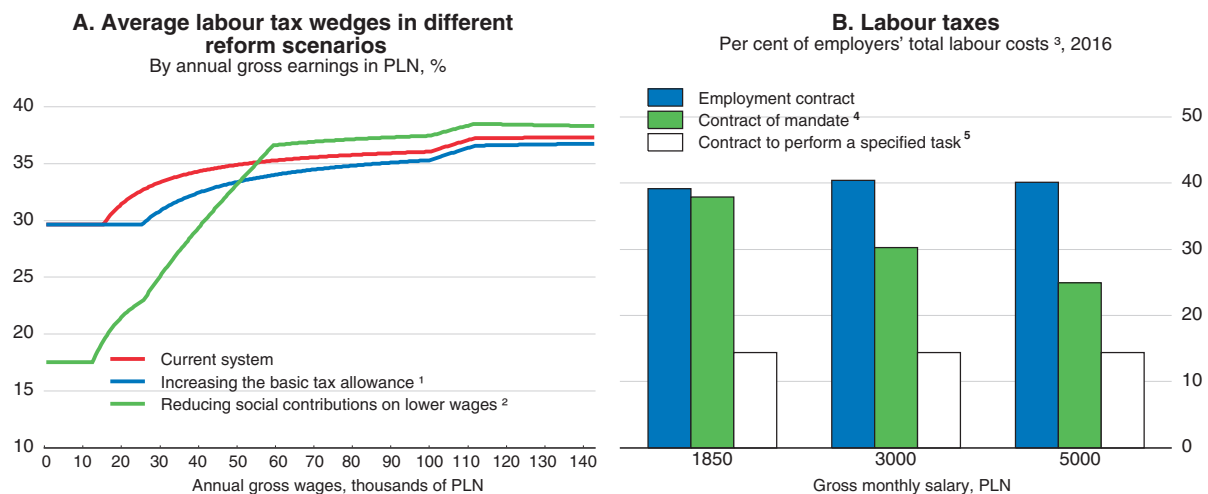
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in recent years employers have increasingly used them for jobs that have clear characteristics of dependent employment, such as a well-defined work place and hours and subordination vis-à-vis the employer. Yet, Polish authorities have found it difficult to combat abuse (OECD, 2008; Vega and Robert, 2013). In 2014 fewer than half of those found to have broken the law by improperly using civil law contracts were subject to penalties, with an average fine of just over 300 euros (National Labour Inspectorate, 2015). In addition, the share of people who work informally with no legal or social security protection whatsoever amounted to 7.5% in 2014 (GUS, 2015b).

Having so many workers on temporary and irregular contracts impinges on well-being, productivity and Poland's ability to raise the technology and skill content of its production. Weak regulation of temporary work contracts encourages their widespread use and is associated with slower productivity growth (Bassanini et al., 2008; Dolado et al., 2012). Such contracts are also associated with postponing childbirth and a lower number of children overall (Auer and Danzer, 2015; de la Rica and Iza, 2005). Workers on temporary contracts are confronted with a higher risk of unemployment, lower wages (Figure 14, Panel B), greater in-work poverty risks and poorer access to training (OECD, 2014b; Lewandowski and Kaminska, 2014) than others with otherwise similar characteristics.


Poland's tax wedge for low-wage workers on regular contracts is above the OECD average. It is essentially the same for medium or high pay, limiting the redistributive effect of the tax system (Figure 15, Panel A). This high tax wedge contributes to the widespread use of civil-law contracts, which in some cases are subject to much lower social security contributions (Panel B). The government has recently taken steps to increase social

Figure 15. **Average tax wedges on labour income**



1. The basic tax allowance would be increased from PLN 3 000 to PLN 8 000.
2. The social security contributions reform would cut employers' and employees' contributions by half for workers earning the minimum wage or less and let them increase gradually to the standard rate for wages above 1.2 times the minimum wage. The first personal income tax rate would be increased to 20%.
3. Income tax and social security contributions as a share of wages, taxes and contributions paid by employers.
4. Refers to persons with several contracts with the same employer. The first contract is subject to earnings equivalent to the minimum wage.
5. Assumes tax-deductible expenses of 50%.

Source: OECD calculations based on the OECD Tax-Benefit model; Ministry of Finance.

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contributions on some civil-law contracts, although there are still ways for employers to split contracts to minimise contributions, and this should be monitored. The government also aims to introduce an hourly minimum wage of PLN 12 applying to civil law contracts. For a standard working week of 40 hours it is higher than the monthly minimum wage for labour law contracts by 3.7% in 2016.

Cutting labour taxes significantly on regular labour-law contracts with low wages would further reduce incentives to use civil-law and other irregular contracts and would make the tax system more progressive. This could potentially be done by reducing social contributions on lower wages, but other financing would be needed to maintain benefits for these groups. Another solution would be to further align contributions between civil and labour law contracts. The government's plan to increase the tax-free allowance from 3000 to up to 8000 PLN per year (see Figure 15, Panel A) would lower taxes for everyone and would hence be very costly. To obtain a larger effect on the tax burden on lower wages one possibility would be to increase the tax-free allowance but only for income from work instead, such as proposed by Arak et al (2014). Introducing a targeted earned income tax credit would even be more effective in reducing the tax burden on low-wage workers (OECD, 2014a).

Ensuring efficient public infrastructure and better conditions for private investment

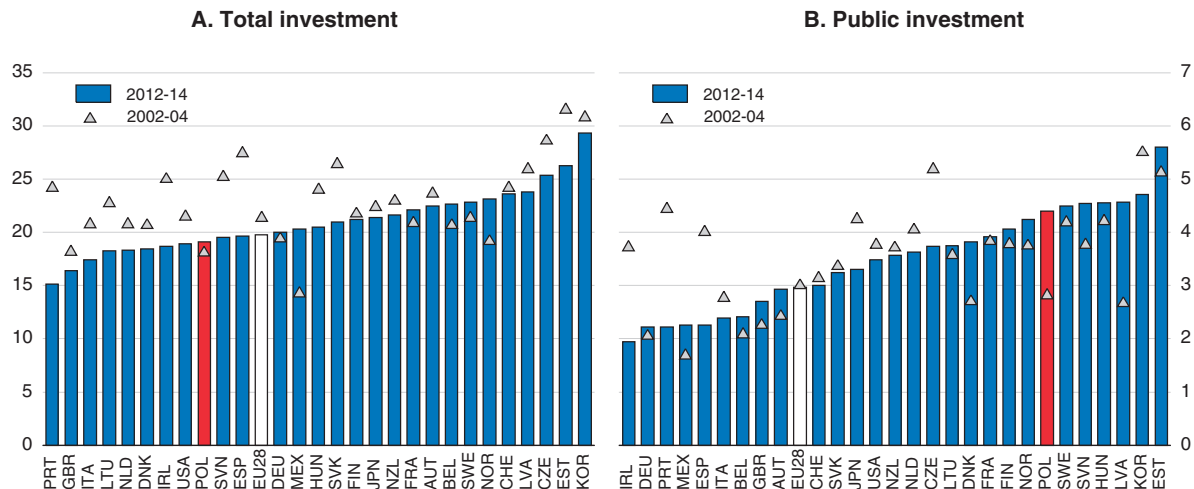
Strengthening the quality of infrastructure investment

Poland's investment has been relatively low compared to countries with similar per capita income (Figure 16). Public investment has been heavily supported by EU funds, and Poland has significantly upgraded its infrastructure networks over the past decade. However, bottlenecks still restrain productivity, and much remains to be done to enhance environmental outcomes. The EU 2014-20 programming period provides an opportunity to strengthen the management of infrastructure investment. Further improving public infrastructure, notably ICT technologies and networks, would facilitate new technology adoption. Time-series evidence points to a positive historical relationship between public and private investment and GDP growth in Poland (Rutkowski, 2009), as high-quality infrastructure promotes productivity, thereby encouraging private investment (OECD, 2015d).


Increasing administrative capacity in public procurement, public-private partnerships and infrastructure management would improve spending efficiency. Local governments lack skilled personnel, and sometimes incentives, to plan and manage infrastructure or develop local zoning plans and energy efficiency strategies (NIK, 2014a; Ministry of Economy, 2012). Providing central government technical assistance through expertise and upfront resources for the preparation of large municipal projects would help local governments deal better with such projects. There should also be a central platform for integrated e-procurement procedures. Such a platform could reduce the fragmentation of the public procurement market (Public Procurement Office, 2015). Defining metropolitan governance structures according to functional urban areas, as planned for 2016, and giving them infrastructure planning competencies could also improve cooperation among local governments (Ahrend and Schumann, 2014).

Reinforcing the independence of sector regulators would reduce regulatory uncertainties that inhibit investment. The rail network regulator, UTK, reports to the

Figure 16. **Public and private investment**
Annual averages, per cent of GDP



Source: OECD (2015), Annual National Accounts Database.

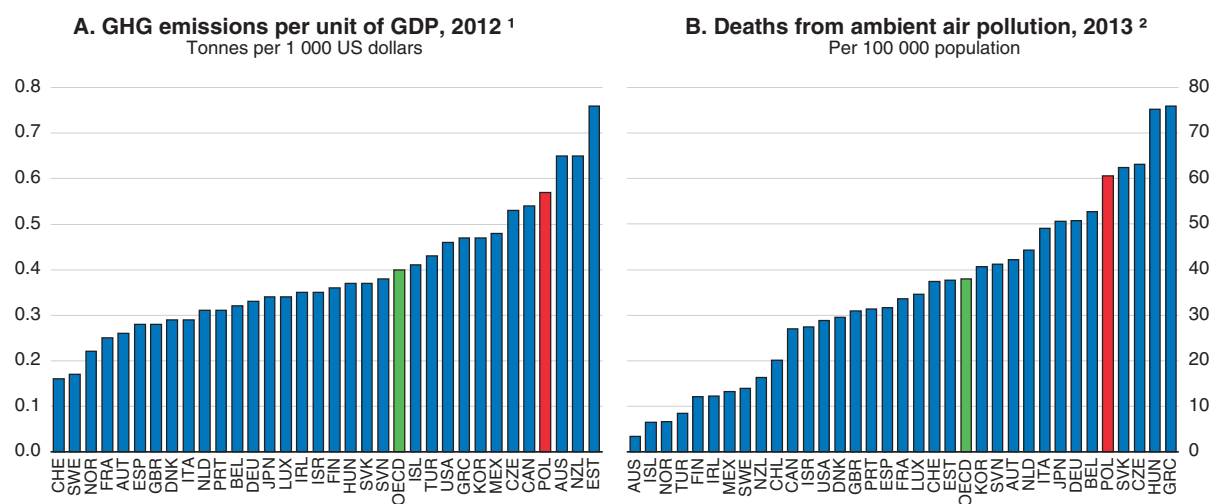
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Minister for Transport, and its president may be removed at any time, undermining its independence when dealing with state-owned companies (OECD, 2014a). Likewise, the president of the Competition Authority can be recalled without justification. Regulators should have fixed-term, non-renewable mandates during which they cannot be dismissed without fault. At the same time revolving-door opportunities should be eliminated.

Greening infrastructure

The government needs to focus more on the environmental impact of public investment. Greenhouse gas (GHG) emissions (Figure 17, Panel A) – mainly CO₂ – and urban air pollution are considerable, contributing to climate change and causing substantial health costs (Panel B). A broad-based strategy is needed to improve environmental quality and contribute to reaching the goal agreed at COP21 in Paris to hold the increase in global average temperature compared to pre-industrial levels to well below 2°C and achieve a balance between GHG emissions and removals in the second half of the century. The government is planning to increase public transport spending in 2014-20 and to progressively reduce the share of coal in the energy mix. Even though Polish power plants fulfil the relevant EU directive requirements, they are among Europe's largest contributors to health hazards and other environmental costs through industrial air pollution (EEA, 2011). The central and some local governments provide subsidies to replace highly polluting, coal-fired household heating systems with more efficient versions, and there is a will to move towards district heating. This will be less polluting, thanks to its higher efficiency, although most Polish district heating systems are coal-fired. The government should use integrated cost-benefit analysis to take health and environmental impacts more fully into account in the choice and design of infrastructure projects (OECD, 2015e).

Green taxes are crucial to internalise the externalities associated with production and consumption, thus setting the right incentives to opt for environmentally friendly infrastructure. They should therefore be an integral part of the government's strategy to reduce CO₂ emissions and air pollution. The government has implemented the polluter

Figure 17. GHG emissions and deaths from ambient air pollution


1. Excluding LULUCF.

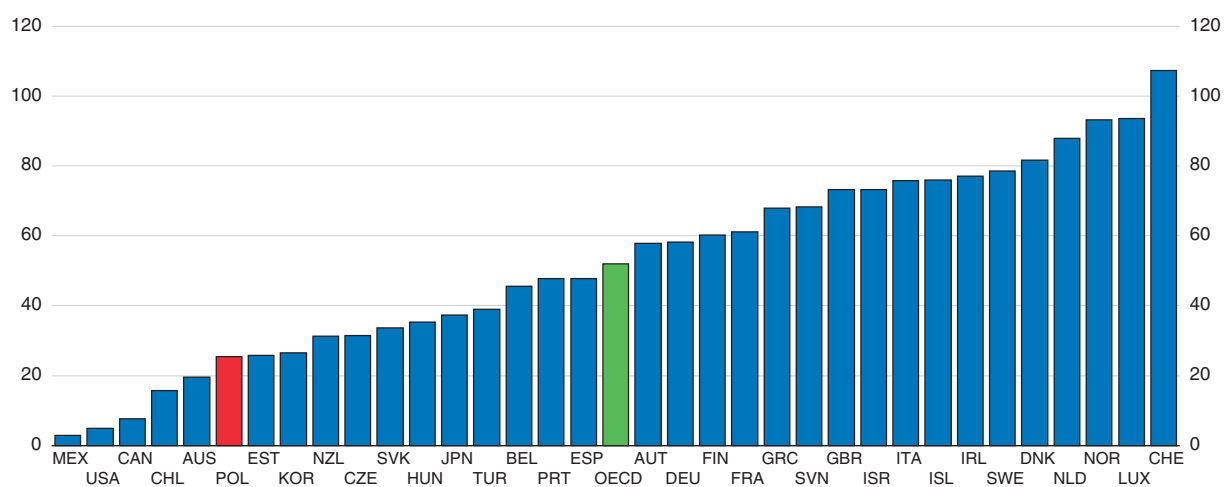
2. Deaths from ambient particulate matter and ozone pollution.

Source: OECD (2015), *Environmental Statistics Database 2015*; Institute for Health Metrics and Evaluation, <http://viz.healthmetricsandevaluation.org/gdb-compare/>.

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pays principle with taxes on air and water pollutants, but these taxes are often not high enough to internalise associated externalities (Hogg et al., 2014, OECD, 2015e). Similarly, the CO₂ tax on sectors not covered by the European Union's emission trading system (ETS) is only 0.29 PLN per tonne of carbon in 2016, and the implicit economy-wide tax rate on CO₂ emissions from energy use is low (Figure 18). Raising the CO₂ tax to around the ETS carbon price would provide a much more effective signal to reduce emissions once ETS prices recover.

Figure 18. The effective tax rate on CO₂ emissions from energy use is low

 EUR per tonne of CO₂, 2012


Source: OECD (2013), *Taxing Energy Use – A Graphical Analysis*.

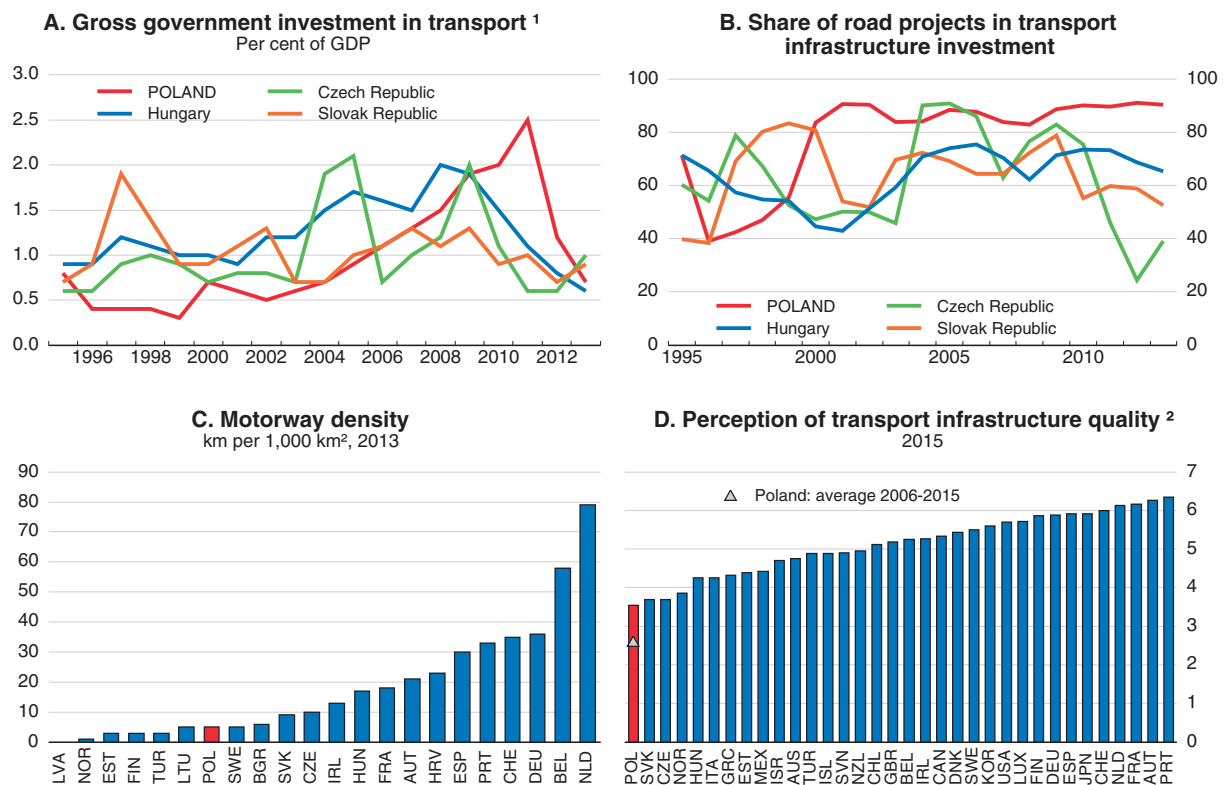
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Better collaboration between the Ministries of Finance and the Environment is needed to create strong and consistent price signals that would help to internalise the externalities associated with burning fossil fuels. As an example, diesel used in transport is taxed at a lower rate than petrol, although its CO₂ content is higher and it emits more local pollutants (OECD, 2013b and 2015e). Coal used by households for heating is a significant source of urban air pollution but is not subject to an environmental tax, which is allowed by EU regulations. A tax would reinforce the government's subsidy programmes to replace inefficient individual household heating systems and its plans to move towards district heating. CO₂ and energy taxes have been an important factor promoting district heating in Sweden and reducing emissions in the residential sector (OECD, 2011b).

Transport infrastructure needs are substantial

From 2003 to 2011 transport investment increased sharply and was heavily weighted towards roads. Nevertheless, motorway density remains relatively low, and the perceived quality of the transport network is still one of the lowest in the OECD (Figure 19). Strengthening metropolitan transport governance, building up local road and rail infrastructure-management capabilities and reducing funding uncertainty in these sectors would ensure a more efficient allocation of investment and maintenance spending.


Figure 19. Transport infrastructure



1. Gross general government fixed capital formation.

2. Index from the lowest perceived quality (0) to the highest (7).

Source: OECD (2015), *Transport infrastructure investment and maintenance spending*; Eurostat (2015), *Road, rail and navigable inland waterways network*; World Economic Forum (2015), *The Global Competitiveness Report 2014-15*.

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Integration of different types of transport is a priority, as connections between national and local roads are often lacking (World Bank, 2011). The first top-down strategy for the whole transport sector – Transport Development Strategy to 2020 (with perspectives to 2030) – was adopted in 2013. A comprehensive plan of transport investments to be implemented in the period 2014-20 is included in the Implementing Document to the Strategy, but it will need regular updates. Inland waterways have received little funding, limiting seaport catchment areas (NIK, 2014b). The 2014-20 operational programme for EU funds includes planned new and modernised intermodal terminals for passenger and freight transport, which is welcome. Intermodal projects linking railways, seaports and airports will benefit from extra points when competing for EU funds.

Given the environmental effects of intensive car traffic, the envisaged increase in spending on public transport infrastructure in the 2014-20 EU funds programming period is crucial. However, railways may still suffer from unreliable financing, notwithstanding the planned increase. The infrastructure manager, PKP PLK, signs three-year maintenance contracts with the government, but the specific budget allocations are decided on an annual basis, creating a lack of reliable financing for long-term maintenance work. In addition, most local governments offer only one-year contracts for public passenger rail service providers, effectively making investment in highly capital-intensive rolling stock unprofitable and deterring new entry. Several tenders have not been able to attract even a single bidder (European Commission, 2013). As a result, local governments usually purchase their own rolling stock, lending it on to public passenger rail service providers. However, a welcome draft programme aims to ensure more stable financing over 2016-23, notably for maintenance.

A weak spatial planning system has contributed to substantial urban sprawl (Veneri, 2015, Krajewska et al., 2014), intensifying road congestion and urban pollution. Around 70% of municipal territory lacks local spatial plans, and building permits are granted based on administrative decisions that do not ensure coherence with spatial planning (Ministry of Regional Development, 2012). Many new developments lack access to urban infrastructure, including public transport. Before the recent election there was a draft law before the parliament reforming urban planning that would tighten restrictions on granting building permits on land without local spatial plans. It would also reduce barriers for municipalities to develop such plans. The scale and scope of compensation municipalities have to pay to owners when they restrict the use of their land would be limited. At the same time, to obtain building permits faster developers would be allowed to build infrastructure themselves and provide it free of charge to municipalities. The parliamentary approval process of this reform needs to be resumed swiftly to support the development of efficient urban public transport infrastructure and reduce urban sprawl. If it proves insufficient, the government should create an obligation for municipalities to develop local spatial plans.

Road pricing could better internalise environmental externalities and take into account maintenance costs, thereby helping to promote public transport. Heavy vehicles have to pay fees on only a small part of the network, and these fees were less than half of Czech or Slovenian levels in 2012 (ITF, 2013). Allowing local authorities to set urban congestion charges could also help limit traffic congestion and local pollution, as in London, Oslo and Stockholm.

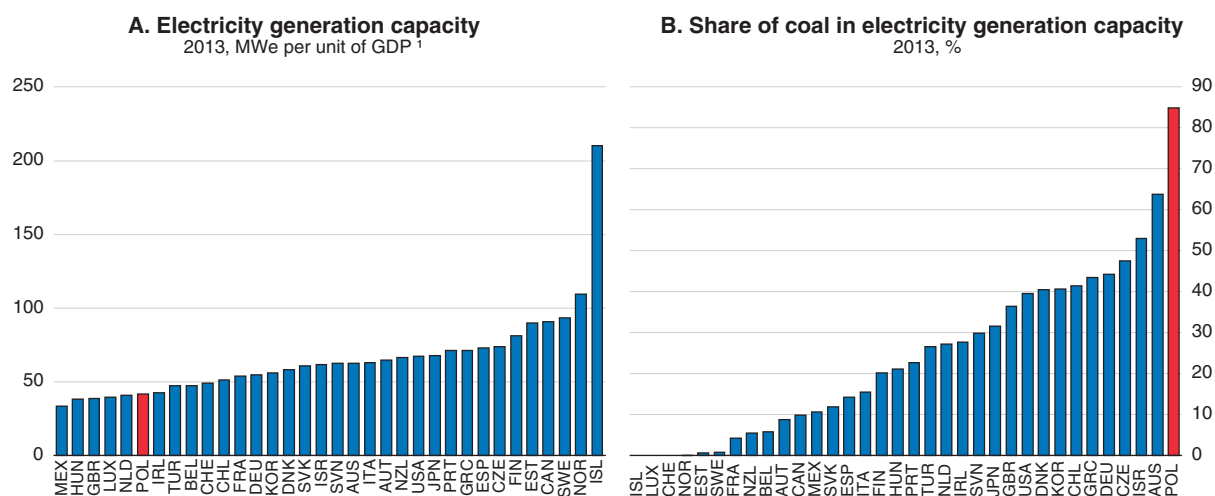
Lack of maintenance is a significant problem for local roads. They make up 95% of the road network, and local governments alone cannot afford to maintain them. Past EU financing plans have focused on new investment. Funding of local infrastructure management agencies is provided through central-government transfers, and spending decisions are taken as part of annual budget processes. This short horizon, together with the lack of long-term asset management strategies and insufficient staff skills, leads to considerable uncertainty and postponed maintenance, imposing long-term costs.

The renewal of energy infrastructure is an opportunity to go for cleaner options

Electricity generation faces two urgent challenges in Poland: ensuring the replacement of old capacity and providing incentives for an environmentally favourable diversification of the fuel mix. The generation stock is ageing (IEA, 2011), offers little spare capacity and is heavily reliant on coal (Figure 20). Emissions from the power sector of sulphur and nitrogen oxides per inhabitant are much higher than in the average OECD country (OECD, 2015f). This has important human health costs. The draft “Energy Policy of Poland until 2050” foresees partially replacing and complementing existing coal-fired power plants with high-efficiency coal plants and a sharp increase in renewable energy sources, supported by new gas plants as both reserve capacity and a basis for co-generation with heat. In addition, a first nuclear power plant is to be commissioned by 2030. However, the new government has yet to confirm this long-term strategy, and its implementation remains uncertain.

Financial returns to investments in different electricity sources need to fully internalise environmental costs to ensure competitive neutrality. Poland’s retail gas prices for businesses are close to the European average, although its retail electricity prices are relatively low (Figure 21, Panels A to C). At the same time, wholesale electricity prices are volatile and declining throughout Europe because of weakening demand and intense short-term competition (Panel D). The generating costs of new facilities are well above wholesale prices for most technologies (NEA/IEA/OECD, 2015). The government should consider introducing a market for “capacity certificates”, as in the United Kingdom and

Figure 20. **Electricity generation capacity**



1. Thousand US dollars at 2005 purchasing power parities and prices.

Source: IEA (2015), *Electricity Information 2015*; IEA (2015), *Electricity and Heat Generation*.


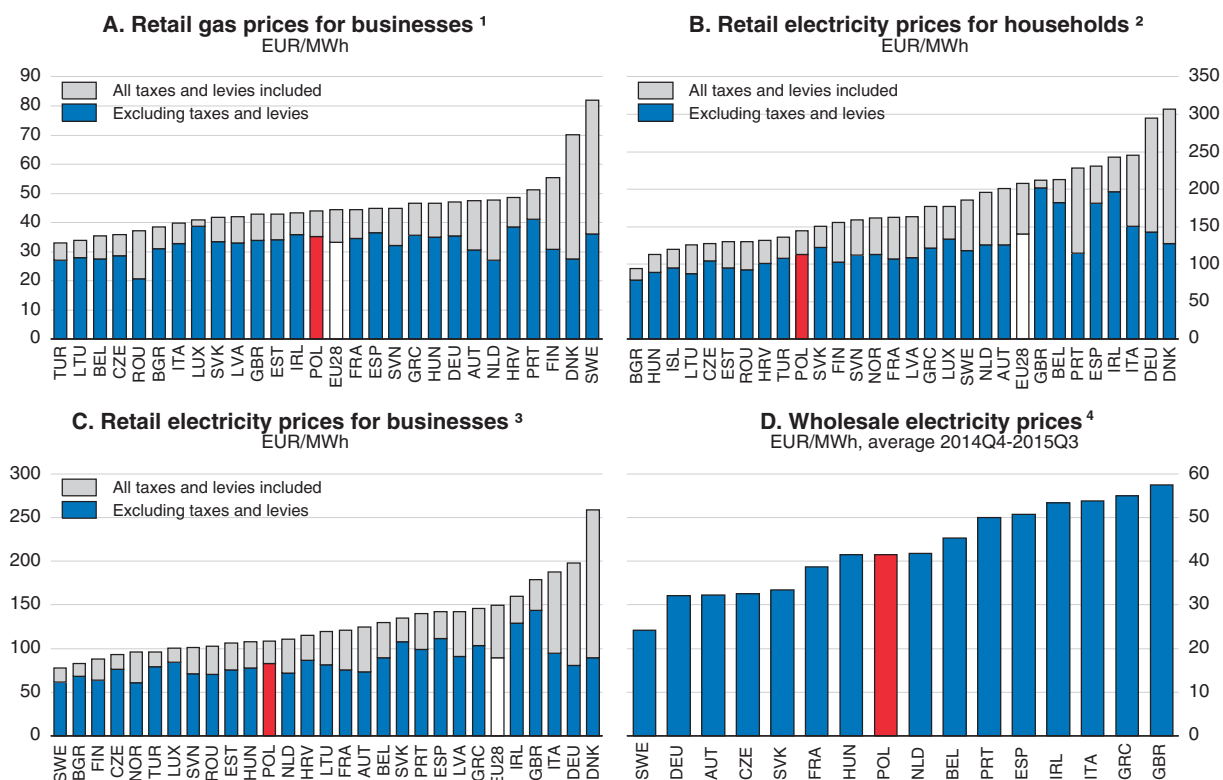

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Figure 21. Energy prices



1. Price in the first semester of 2015 for annual use of 2 778-27 778 MWh.
2. Price in the first semester of 2015 for annual use of 2 500 – 5 000 KWh.
3. Price in the first semester of 2015 for annual use of 500 – 2 000 MWh.
4. Average baseload prices.

Source: Eurostat (2015), *Energy Price Statistics*; European Commission (2015), *Quarterly Reports on European Electricity Markets, 2014Q4 to 2015Q3*.

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more recently in France: the authorities would award certificates to generators for providing reliable capacity and require each electricity supplier to purchase a certain amount of these certificates in regular auctions. Generators would thus be rewarded for providing capacity, which could ensure that it is sufficient to meet peak demand. However, such a market would need to be carefully designed to preserve retail and wholesale competition.

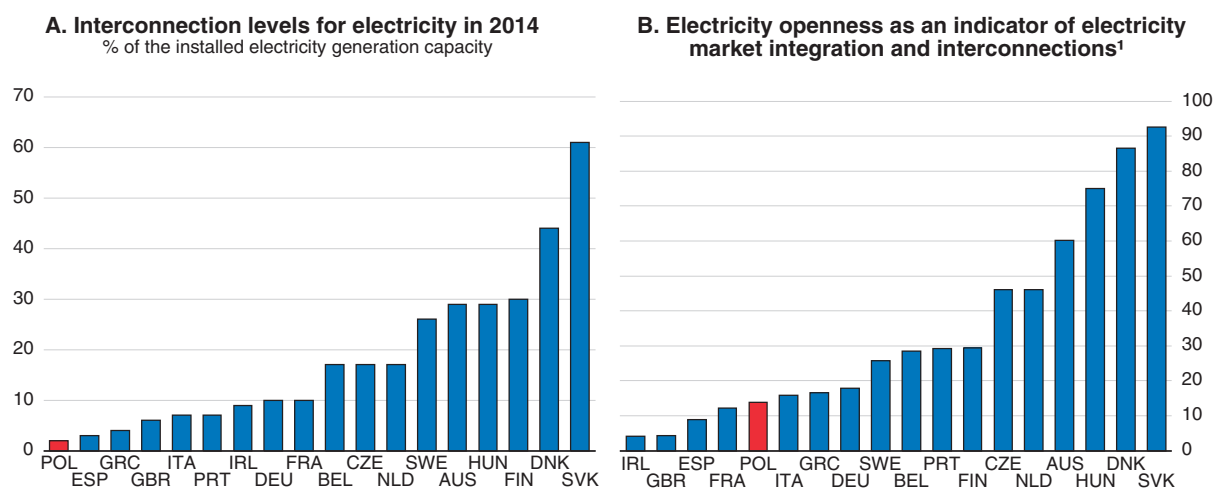
Poland is on track to reach a renewables share in total energy consumption of 15% in 2020 as set out in its National Renewable Energy Action Plan. Still, its renewable electricity sector remains underdeveloped (European Commission, 2015b). At 11% in 2013 the share of renewables in electricity generation was half the OECD average (OECD, 2015e). Their development has been hampered by regulatory uncertainty, excessive administrative burdens and a lack of inter-regional transmission capacity. In April 2014 the government approved a new renewable energy support system, based on auctions and guaranteed prices, that in 2016 will begin to replace the current system of quantitative renewable targets backed by tradable green certificates, which are awarded based on the use of renewables to generate electricity. Firms with a renewables share above the legal

requirement have been able to sell green certificates and other firms were able to comply with their obligations by buying such certificates.

Until now many electricity generators have complied with their renewables obligations by buying green certificates, holding back investment. Green certificates have been cheap because co-firing of biomass with coal (which is of little environmental benefit) has been eligible, but such support is to be phased out over the next 15 years. This could eliminate the current oversupply of green certificates and promote investment in other renewable technologies. However, the long transition period between different support systems has created uncertainty for investors. Strengthening electricity transmission and distribution capacity, as currently planned, and ensuring easy access to the electricity grid by streamlining administrative procedures would foster renewables development. Indeed, in the north of Poland, applications for connecting wind farms to the grid far exceed the available grid capacity (IEA, 2011).

Deeper infrastructure integration with neighbouring electricity markets would spread the burden of achieving European-wide GHG emissions reduction targets more efficiently across countries. With only 2% of its electricity generation capacity available for trade with other EU Member states in 2014, according to European Commission estimates, and low import and export flows (Figure 22), buffering with neighbouring transmission system operators is difficult, and power outages are relatively frequent by international comparison (CEER, 2013). Unscheduled flows from neighbouring countries (mainly Germany) are partly responsible (ACER, 2015). However, international interconnections would reach only 7% of the installed generation capacity, even after accounting for restrictions due to unscheduled flows. New investments in international links with neighbouring countries are planned under the 2014-20 EU funds programme, and regulations for building such international connections have been streamlined. Such investments would bring Poland's interconnectivity above the European Commission's (2015c) 2020 target of 10%.

Figure 22. **International interconnection capacity in the electricity market**



1. Electricity openness is calculated as the ratio of electricity imports plus exports to electricity consumption in 2012.

Source: European Commission (2015), *Achieving the 10% electricity interconnection target, Making Europe's electricity grid fit for 2020*; IEA (2015), *World: Electricity/Heat Supply and Consumption*.

There is also significant potential to improve energy efficiency. Since 2011, electricity, gas and heat suppliers have had to reduce losses in production, distribution, transmission and end-use to obtain energy-efficiency certificates (so-called “white certificates”), which are needed to meet energy-efficiency obligations. Suppliers can also buy those certificates from other compliant firms or pay a fee. More than 98% of obligations were met by paying the fee during the first tender (OECD, 2015e). The development of smart or intelligent grids would allow network operators to modulate electricity demand during peak periods and lower GHG emissions related to electricity consumption by improving consumer awareness. However, Poland is lagging in this dimension (European Commission, 2014). Moreover, thermal insulation is often poor. Easing the eligibility conditions for housing efficiency programmes, as well as developing consumer awareness through certifications, as planned, would promote household investment.

To speed up the move away from inefficient coal-fired heating furnaces and improve air quality several measures are needed. Subsidy programmes to replace inefficient furnaces should continue. To strengthen the move towards district heating improving sub-central government collaboration regarding energy and heat is essential. Despite legal obligations, municipalities have failed to develop local energy efficiency plans, holding back the development of co-generation, notably with renewables, which holds tremendous potential (CODE2, 2014).

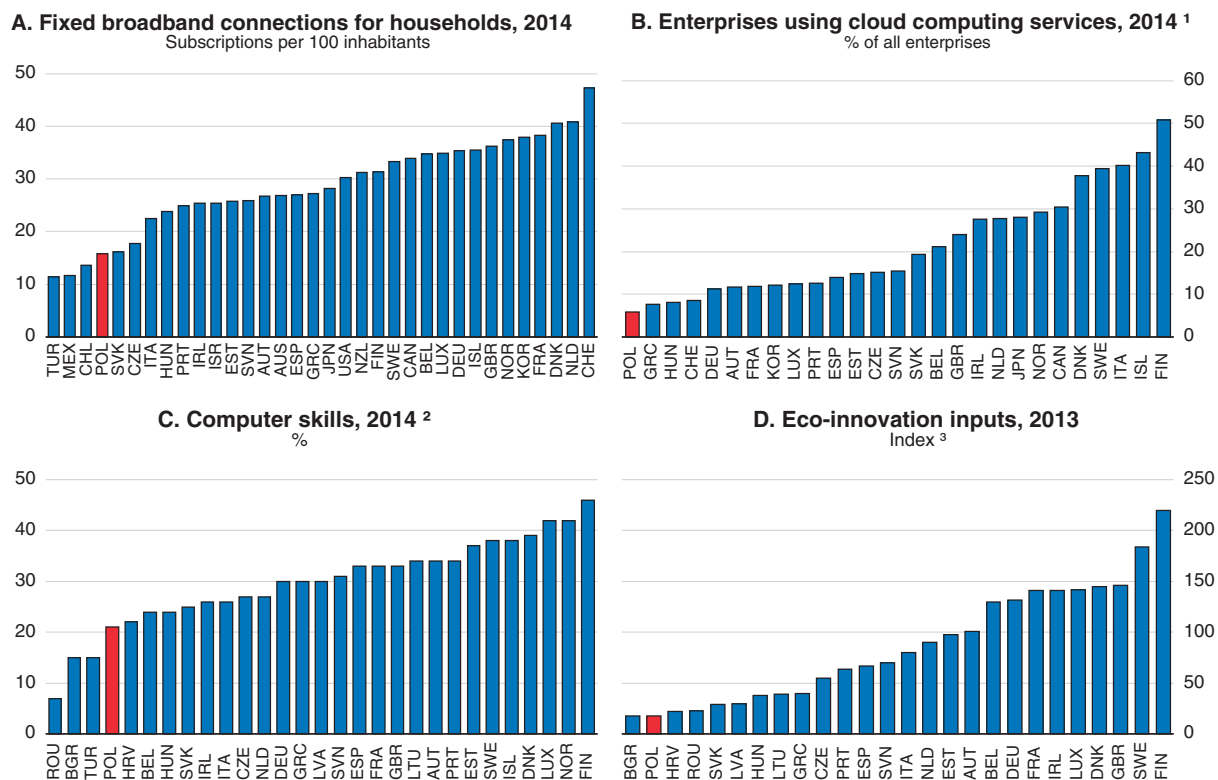
Developing ICT infrastructure

Poland lags behind most OECD countries for some indicators of Internet use by households and firms for information and computing purposes (Figure 23, Panels A and B). To reduce costs, investments in broadband and digital infrastructure should be implemented at the same time as road, rail and energy investment whenever possible, as planned (European Commission, 2015d). For example, the development of smart grids and integrated intelligent transport systems could allow better energy and transport choices and empower businesses and consumers through more complete information (OECD, 2015g). However, this would require significant upgrading of the skills of the population (Panel C) to foster diffusion, including in eco-innovation, which appears particularly low in Poland (Panel D).

Improving conditions for private investment

The new government’s plans to streamline regulations are welcome, as a reduced regulatory burden will improve the business environment and thus investment. The ongoing reform of regulated professions will ease entry and investment significantly in the services sector. Poland has also cut the average number of hours spent by firms to pay taxes though additional e-procedures for VAT and transport taxes (World Bank, 2015), and an ongoing reform is set to eliminate currently widespread inconsistencies in rulings from different local tax authorities, addressing long-standing complaints from foreign investors. However, according to corporate lawyers, starting a business remains costly in terms of both time and money (Figure 24, Panels A and B), though registration in the National Court Register takes on average less than two weeks according to the Ministry of Justice. Online registration procedures are complex and have a low take-up, despite some recent streamlining (World Bank, 2015). The late or deficient transposition of EU single-market legislation (European Commission, 2015e) also creates legal uncertainty, deterring cross-border investment. Better integrating public consultations into the elaboration of

Figure 23. Fixed broadband penetration and ICT use



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.
 2. Share of individuals aged 16 to 74 reporting to have carried out five or six specific tasks related to computer use.
 3. Index from 0 (lowest levels of inputs) to 300. The index is based on three indicators: government investments in environmental and energy R&D, green early-stage investments and total R&D personnel.
- Source: OECD (2015), *Digital Economic Outlook 2015* and *OECD Science, Technology and Industry Scoreboard 2015*; Eurostat (2015), *Individuals' level of computer skills*; European Commission (2015), *Eco-Innovation Scoreboard*.

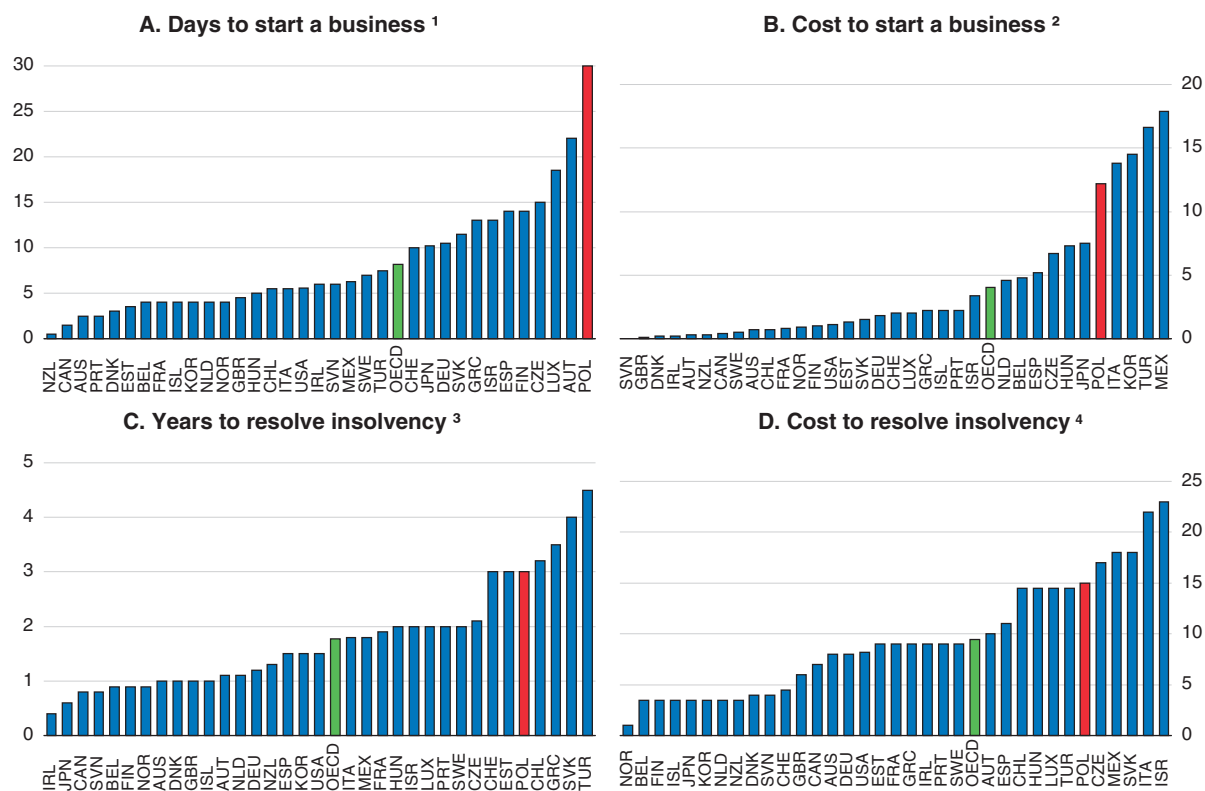
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regulations and promoting in-depth evaluation of regulations in specific sectors would strengthen the reform process and help improve the business environment (OECD, 2015h).

For Polish firms to move up the value chain they will need to undertake more research and development (R&D) for faster technology adoption (OECD, 2015i), faster productivity gains and improved competitiveness. Total R&D spending was just 0.9% of GDP in 2013, up from 0.6% of GDP five years earlier but still one of the lowest shares in Europe. Take-up of R&D tax incentives is low. Some R&D tax incentives are conditioned on investments in Special Economic Zones, but these are located in poor regions, distant from public research centres. Developing high-technology clusters around research centres would be more efficient. From January 2016, a new R&D tax credit that also supports internal R&D investments has replaced the tax relief for acquiring new technology. However, it is still wasteful (non-refundable), penalising young and small firms.

The new government places a high priority on stimulating innovation and entrepreneurship. It plans to do so by increasing tax breaks for those entrepreneurs who re-invest their profits and by decreasing the corporate income tax rate on SMEs from 19 to 15%. There can be a rationale for special tax regimes for small and initially unprofitable

Figure 24. **Procedures to start a business and resolve insolvency remain long and costly**
2015



1. Time to start a business captures the median duration that corporate lawyers indicate is necessary in practice to complete a procedure with minimum follow-up with government agencies and no extra payments.
 2. The cost to start a business is recorded as a percentage of the economy's annual GDP per capita. It includes all official fees and fees for legal or professional services if such services are required by law.
 3. Time to resolve insolvency represents the time for creditors to recover their credit in calendar years. The period of time measured by Doing Business is from the company's default until the payment of some or all of the money owed.
 4. The cost of insolvency proceedings is recorded as a percentage of the value of the debtor's liabilities.
- Source: World Bank (2015), *Doing Business*, 2016.

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firms, especially in a country with relatively high informality, to ease tax compliance and related fixed costs that are more burdensome for SMEs (OECD, 2015j). However, such reduced tax rates for SMEs may also limit firm growth, induce some firms to split into smaller entities, distort resource allocation and waste resources with little impact on innovation and entrepreneurship as they are available for all SMEs, irrespective of their investment needs (OECD, 2015j; IFS, 2010).

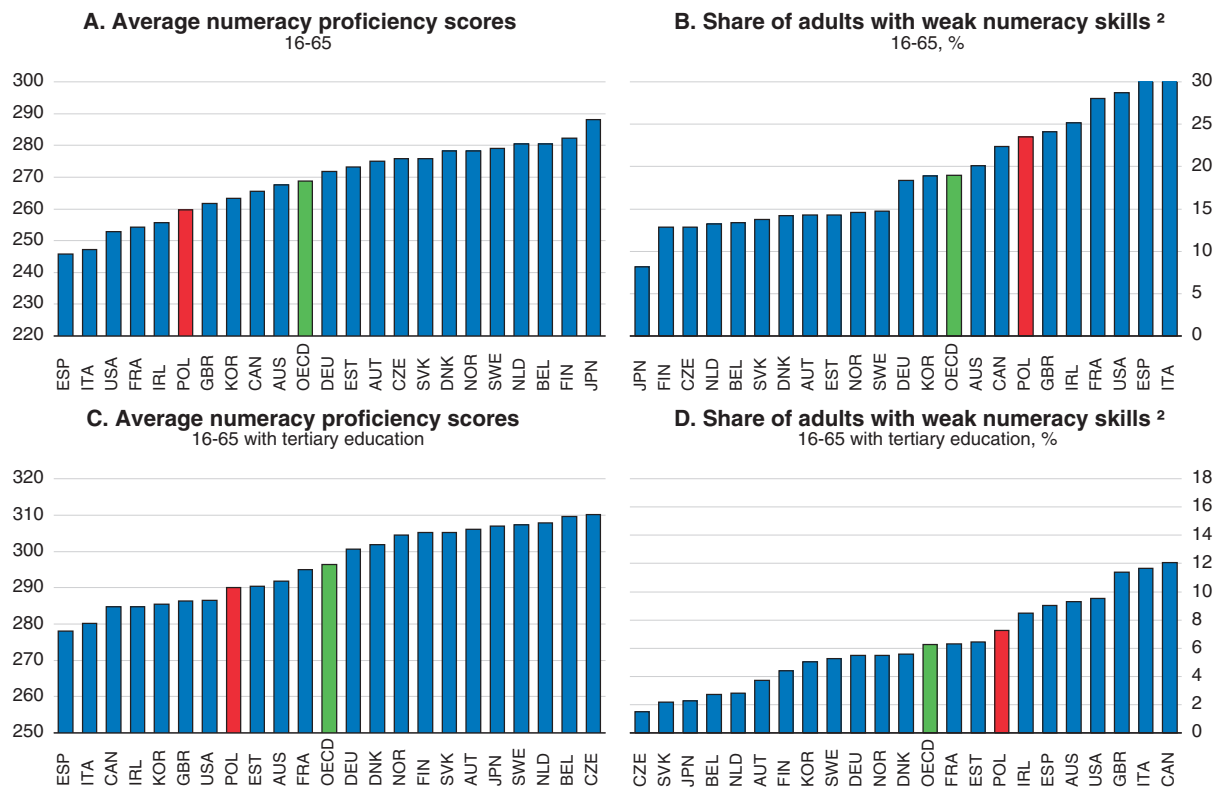
Further improving education to boost productivity and the ability to adopt innovations

The government is striving to lift learning outcomes

Average test scores in numeracy and literacy of Polish adults are relatively low according to the OECD Survey of Adult Skills (PIAAC) (Figure 25, Panel A), and the share of adults with basic skills deficiencies is correspondingly high (Panel B). This is also the case for tertiary graduates (Panels C and D).

Figure 25. **Skill test scores of adults, including those with tertiary education, are below the OECD average**

2012¹



1. The data are based solely on Flanders for Belgium and England and Northern Ireland for the United Kingdom.

2. Share of adults scoring at or below level 1 of the PIAAC scale of numeracy proficiency.

Source: OECD (2013), OECD Skills Outlook 2013 Database.

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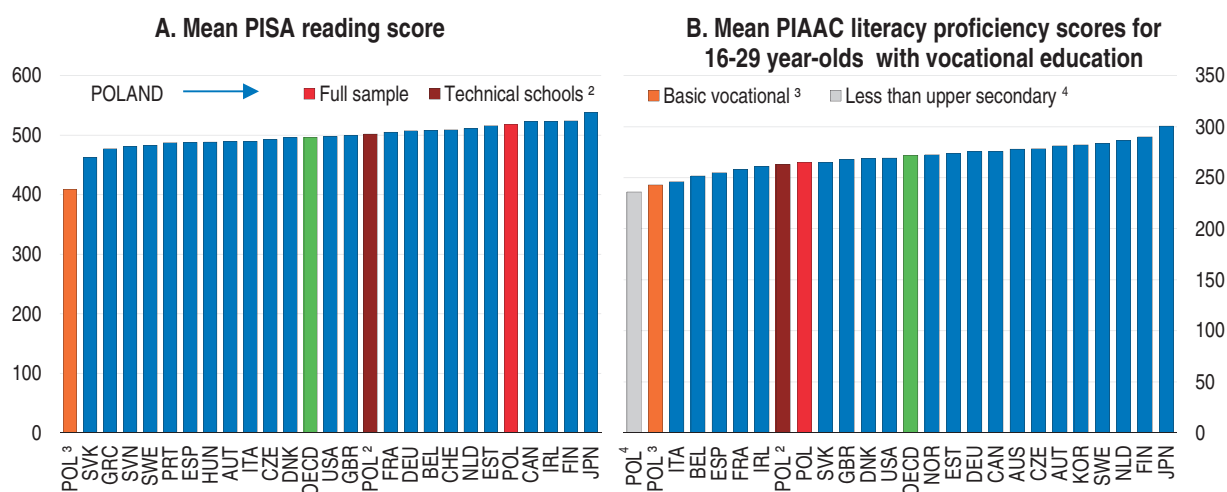
The new government is focused on raising the skills of the workforce to strengthen productivity and the economy's ability to absorb modern technologies. It can thereby build on important progress achieved over the past 20 years, including an exceptional boom in tertiary education. Learning outcomes for 15 year-olds have improved considerably and are now above the OECD average according to test scores of the Programme for International Student Assessment (PISA). Reforms that contributed to these improvements, above all for weaker students who tend to go on to the vocational stream, include: i) the postponement of tracking by one year through the introduction of lower secondary schools; ii) new national core curricula, combined with external exit exams for each school level; and iii) enhanced teacher and school autonomy (OECD, 2013c). The Ministry of National Education has now initiated experts' consultations and a broad public debate on education reforms, including curricula and examinations, teachers' skills and professional development, school governance and financing. The aim is to agree on a reform programme that will ensure equal opportunities for all young people, especially disadvantaged groups.

The government's focus on developing high-quality curricula for preschools and extending enrolment rates, building on important progress achieved in these areas, is welcome. It should continue to improve access to kindergarten especially for lower income groups, as early access to good childhood education and care has considerable potential to

increase learning outcomes of disadvantaged children throughout their lives (OECD, 2014c). This is all the more important as the government increased the compulsory school age by one year to seven, which could complicate access to pre-schools. This would especially hurt the educational prospects of poorer children. In the same vein, continuing the ongoing expansion of childcare places for under-three year-olds should remain a priority.

PISA and PIAAC results of pupils and graduates of basic vocational schools – which unlike technical vocational schools do not allow graduates to enrol directly in university – are weak. In fact, for adults they are only marginally higher than for those who completed only lower secondary schools at most (Figure 26). Equivalent general core curricula have been taught in the first year of all types of upper secondary schools since 2012; this should help weak students in basic vocational schools. OECD experience shows that organising one-on-one support and remedial classes for slow-learning students is crucial. Teachers at basic vocational schools, where students with difficulties are concentrated, should be offered better pay and career opportunities to attract particularly good staff. The government’s plans to improve professional development for teachers at vocational schools are welcome.

Figure 26. **The skills of students and graduates from basic vocational schools are weak**
2012¹




1. The data are based solely on Flanders for Belgium and England and Northern Ireland for the United Kingdom.

2. Mean reading score for 16 year-old students of Polish technical schools (Panel A) from an optional national study for the first grade of upper secondary school (16 year-olds) complementing PISA and mean PIAAC literacy proficiency score for Polish adults having attended technical schools (Panel B).

3. Mean reading score for 16 year-old students of Polish basic vocational education (Panel A) from an optional national study for the first grade of upper secondary school (16 year-olds) complementing PISA and mean PIAAC literacy proficiency score for Polish adults having attended basic vocational education (Panel B).

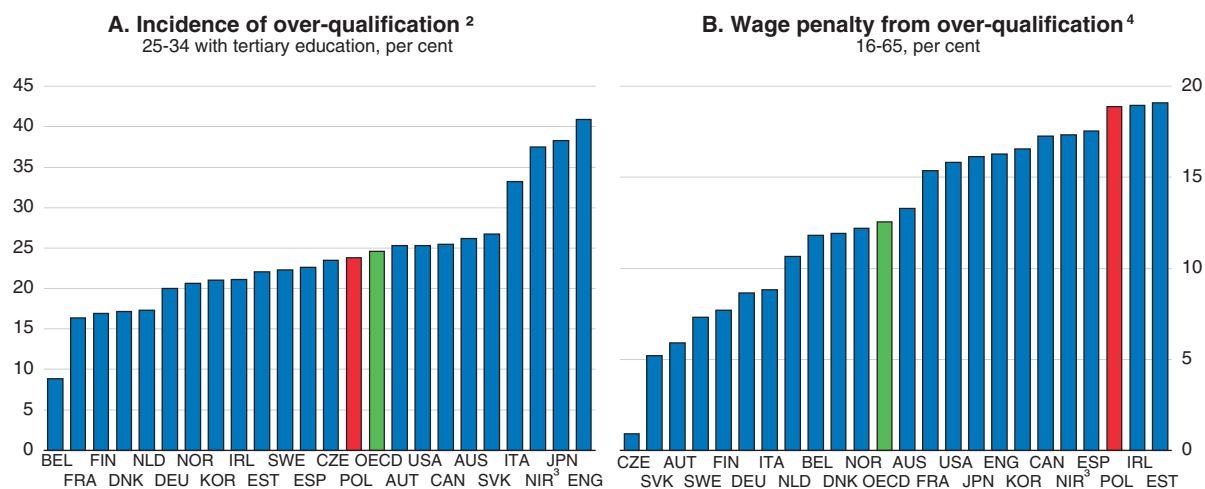
4. Mean PIAAC literacy proficiency score for adults with less than upper secondary education. (Panel B).

Source: OECD (2013), OECD Skills Outlook 2013 Database and OECD calculations.

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Making the education system more responsive to labour market needs

The education system does not respond sufficiently to labour market needs, contributing to lower productivity and wages. Although such mismatches are even higher in other OECD countries, a sizeable share of younger Poles with tertiary education work in professions that do not require such high qualifications (Figure 27). The share of younger Poles with tertiary degrees whose skills, as measured by PIAAC test scores, are higher than

Figure 27. **Qualification mismatches have important consequences**2012¹

1. The data are based solely on Belgium for Flanders.

2. Over-qualification occurs when the worker's qualification level exceeds the qualification required in his/her job.

3. Northern Ireland.

4. Compared to wages of well-matched employees, controlling for numeracy proficiency, use of skills at work, the individual's socio-economic conditions and the main characteristics of his/her employment relationship.

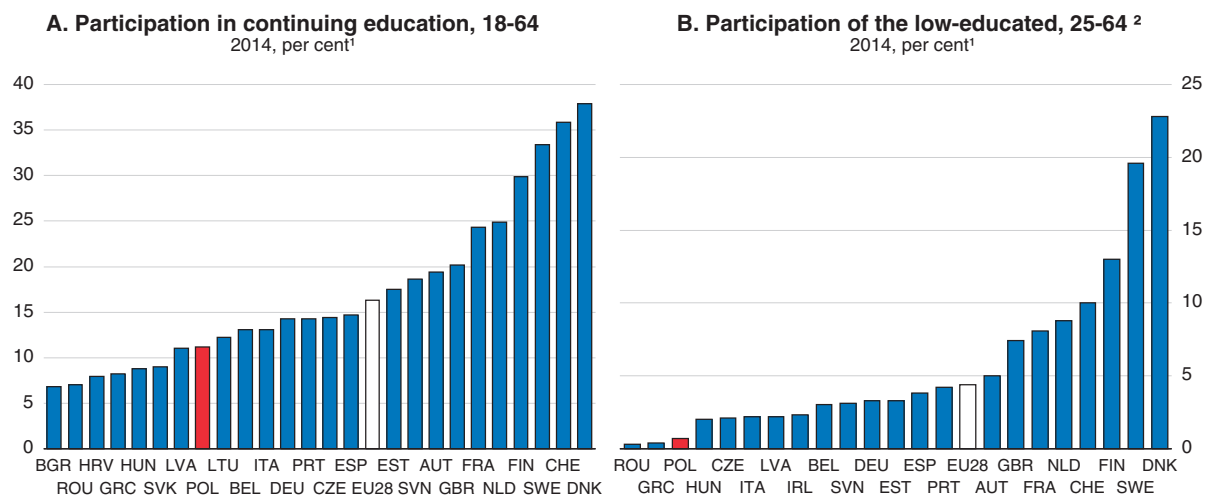
Source: OECD (2013), OECD Skills Outlook 2013 Database.

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what is required for their job is lower but still considerable at close to 15%. This brings important wage penalties and negative productivity effects (Adalet McGowan and Andrews, 2015). Vocational schools create over-supply in some professions (for example, hairdressers, cooks and vendors), for which unemployment and inactivity rates are high (Górniak, 2013), and shortages in others, including in transport and storage (Lis and Miazga, 2014). For some particularly popular fields of study at university (including humanities, pedagogy, sociology and tourism) labour market outcomes are weak, although they are stronger for others, such as mathematics and computer science (Górniak, 2013).

The government has taken action to make Polish graduates more versatile and the education system more responsive. School and university curricula are now based on learning outcomes, including general skills, such as critical thinking and teamwork, rather than on narrowly defined subject content. This gives education institutions more freedom to design their programmes, including by collaborating with employers, and should allow graduates to adapt more easily to new circumstances. Yet, despite improvements, 35% of students at basic vocational schools still obtain their practical training in workshops dedicated exclusively to educational purposes, rather than in the workplace. Encouraging employers to offer greater practical training, in particular small firms through their craft associations, would help align vocational education more with labour market needs and address employers' complaints that graduates lack job-specific skills and experience.


Participation in continuing education is poor, in particular for those who need it most (Figure 28, Panels A and B). In particular, improving participation in IT courses is crucial, given low digital skills among Polish adults (see Figure 23, Panel C above). In addition, it would be useful for Poland to develop a strategy to strengthen basic skills and combat low literacy with awareness campaigns and training offers at the workplace or in a family

Figure 28. **Participation in continuing education is poor**

1. Percentage of individuals having had training in the 4 weeks preceding the survey.

2. Less than upper secondary education, ISCED levels 0-2.

Source: Eurostat.

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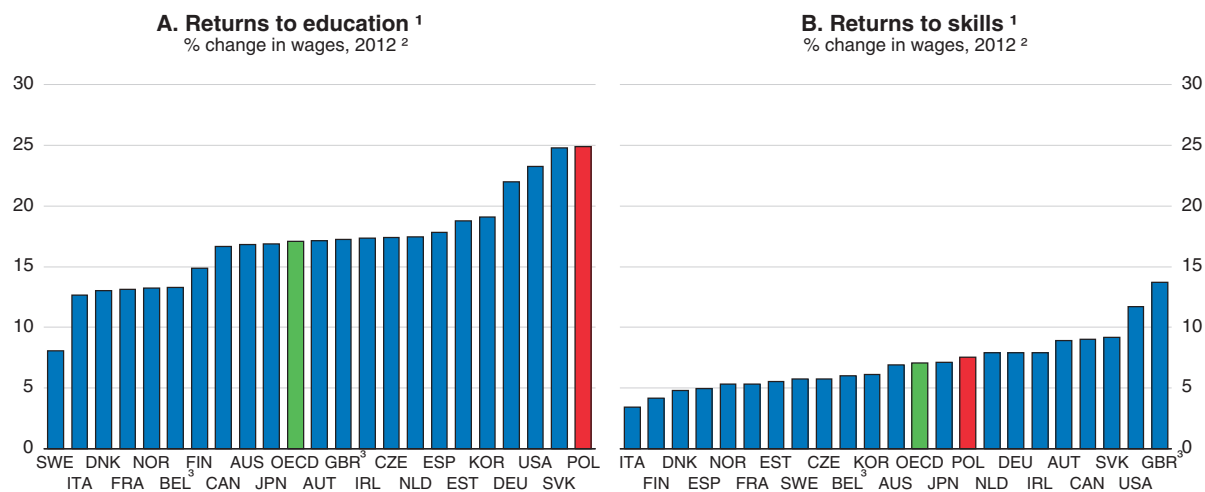
context. Practices in other OECD countries, such as the United Kingdom, France and Germany, could serve as examples.

Recent reforms to continuing vocational education should make it easier for adults to obtain new qualifications. Rather than attending full-time vocational schools, adults can now obtain new qualifications by attending shorter, often part-time and modular courses, or by confirming practical work experience. This is important, because formal qualifications, as proxied by years of education, are valued much more than demonstrable skills in the Polish workplace (Figure 29).

An earlier study of English and German language competencies among teenagers revealed that they were weaker than elsewhere in Europe (European Commission, 2012). Better language training in schools and continuing education would improve job matches, as employers in the very open Polish economy value such competencies. The government's efforts to establish first language training opportunities as early as in preschool are therefore welcome.

Raising the quality of tertiary education

Starting in the early 1990s students abandoned vocational education, while universities experienced an exceptional enrolment boom. The share of tertiary educated younger people is now above the OECD average. The increase in enrolment was accommodated by a rapid expansion of private higher education institutions (Figure 30) and fee-based programmes at public universities. Perhaps as a result of this rapid expansion private university programmes were more likely than their public counterparts to be found deficient by the National Accreditation Committee at least until recently (Ministry of Science and Higher Education, 2013). The skill level of Polish tertiary graduates is lower on average than in other OECD countries, and the share of graduates with weak basic skills is high, as in other OECD countries (see Figure 25 above). A recent law strengthened accreditation and quality controls in higher education significantly, and

Figure 29. **Qualifications are valued more than skills**

1. Coefficients from an OLS regression of log hourly wages on years of education (for Panel A) and literacy proficiency (for Panel B), interpreted as effects on wages in per cent. Coefficients are adjusted for age, gender, foreign-born status and tenure.
2. Percentage change in wages associated with a one standard deviation change in years of education (for Panel A) and proficiency in literacy (for Panel B).
3. The data are based solely on Flanders for Belgium and England and Northern Ireland for the United Kingdom.

Source: OECD (2013), OECD Skills Outlook 2013 Database.

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several institutions that were found to be insufficiently staffed or wanting in quality have been closed down.

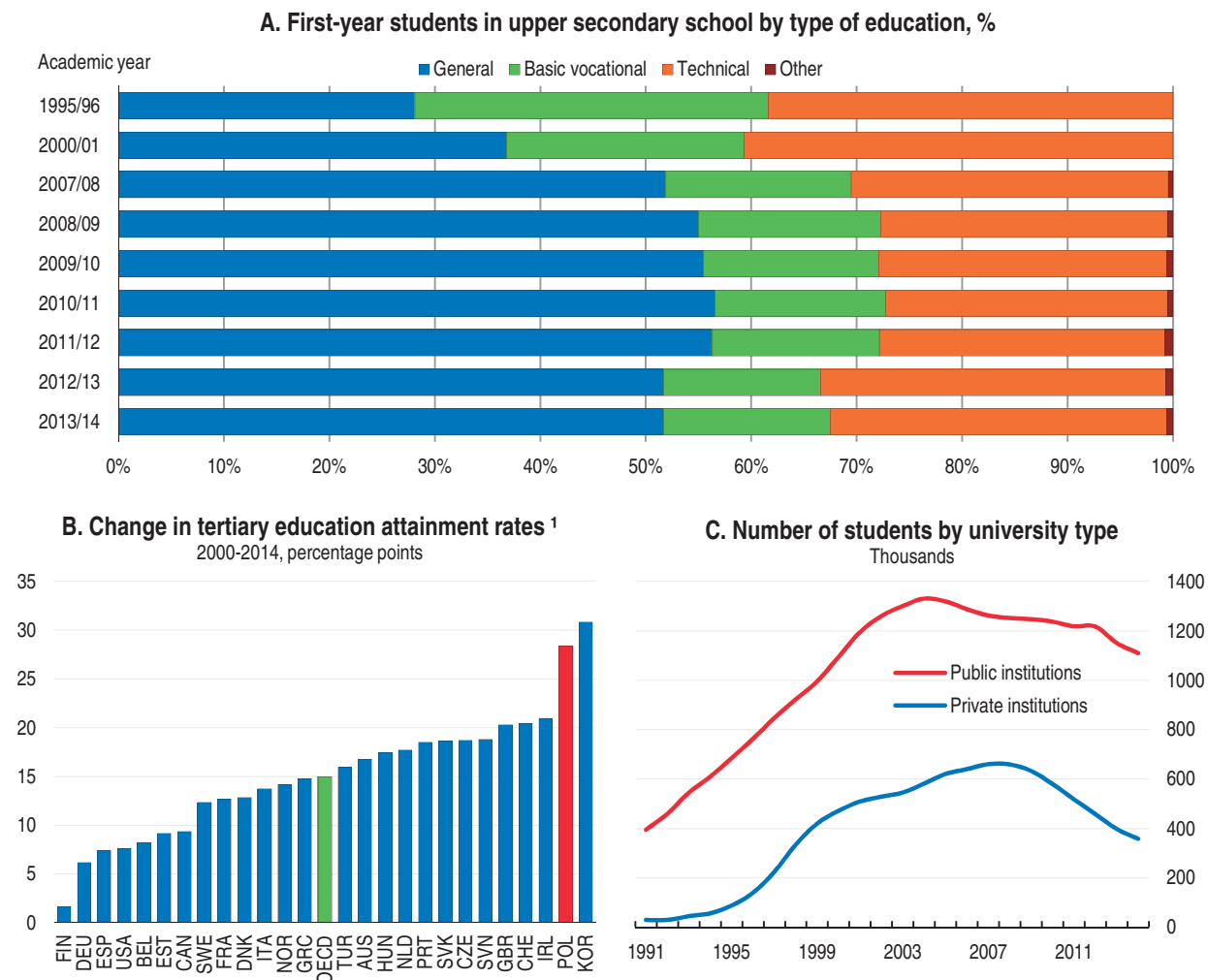
The government has made important efforts to increase academics' wages over recent years. Many had been forced to combine teaching at several higher education institutions before the practice was banned. The new government plans to align pay and career prospects with performance in teaching and research, a welcome initiative. Efforts to strengthen relations with foreign universities should also continue. There is evidence that Polish researchers collaborating with foreign colleagues are more productive in terms of research output (Kwiek, 2015; Appelt et al. 2015). Although this might well reflect the fact that better researchers are more likely to collaborate internationally, establishing closer ties to foreign universities would enrich Polish higher education.

Improving information and guidance services

Despite a legal obligation to provide secondary students with guidance, establishing high-quality orientation services remains a challenge both in schools and universities. Many pupils and students are unaware of the existence of guidance services, and even fewer seek advice (Ministry of Education, 2011; Sroka, 2014). While about three-quarters of higher education institutions operate a careers office, many are small relative to the student population served (OECD, 2013c). Laudably, regional labour offices are now obliged to cooperate with academic careers offices. The government should continue to support tertiary education institutions that want to improve the staffing of these offices and to train secondary school guidance counsellors.


The government has established a regularly updated information system on higher education institutions' programmes, staffing and research infrastructure (POL-on), among other matters. It will provide information inter alia on graduates' careers tracked through

Figure 30. **Tertiary education boomed, and students abandoned vocational education until recently**



1. Data refer to the 25-34 age group.

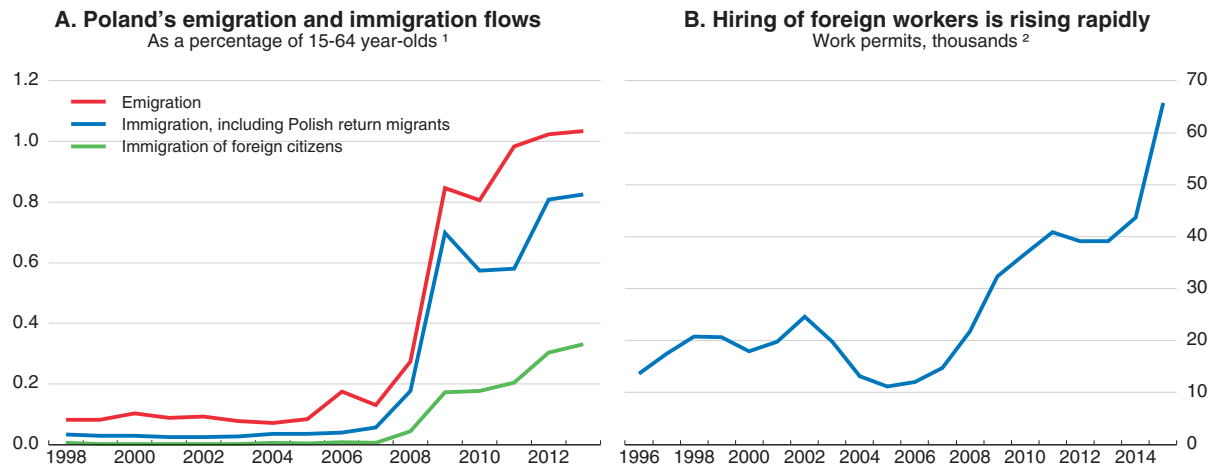
Source: GUS (2014), *Education in the 2013/2014 School Year*; GUS (2014), *Higher Education Institutions and their Finances in 2013*; and OECD (2015), *Education at a Glance 2015 Database*.

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information from the university, which is to be crossed with anonymised social security records. The relevant regulation has already been adopted, and a pilot for this programme is currently being developed. This could be valuable to orient students' choices and programme development in higher education institutions. A similar system is planned for vocational graduates.

Making better use of migrants' skills


Poland has long experienced net emigration, mainly of working-age people, which intensified considerably after Poland's EU accession in 2004 (Figure 31, Panel A). Owing to somewhat lower incomes, a much steeper rise in unemployment during the transition to a market economy and a larger low-productivity agricultural sector, emigration from Poland has been much higher than from the Czech Republic, Hungary and Slovenia. The rising trend in emigration has continued in recent years, despite improving employment outcomes. An increasing number of emigrants report that they intend to stay abroad for

Figure 31. **Emigration from Poland is significant**

1. The series are subject to a break in 2009. The series were based on the register of permanent residents before 2009 and on survey data after that. This increases the numbers of both immigrants and emigrants after 2009.

2. Work permits granted individually and to sub-contracting foreign companies.

Source: OECD (2015), *International Migration Database*; Eurostat; and Ministry of Labour.

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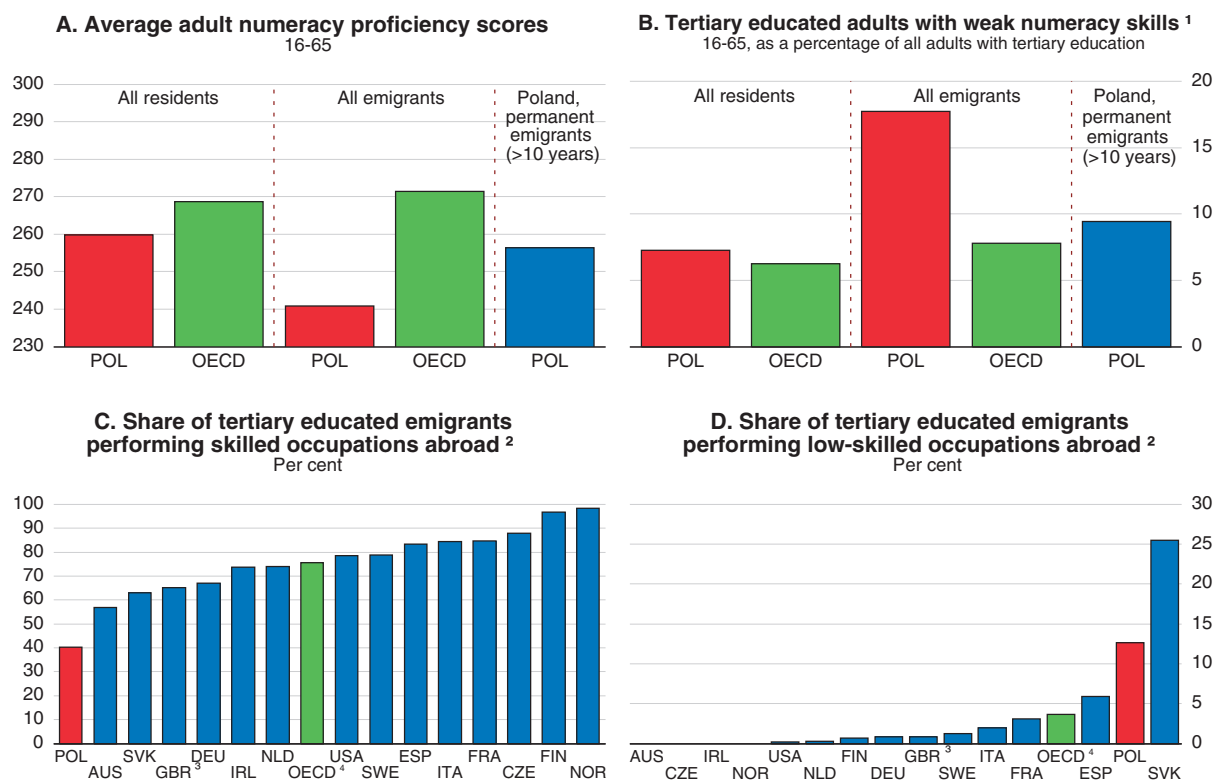
good (Chmielewska, 2015). On the other hand, immigration to Poland, mainly from neighbouring countries, has been rising fast lately, but from a very low level.

Given Poland's pressing demographic issues, it would benefit from becoming more attractive for workers of both Polish and foreign origins. This requires first and foremost policies that would improve domestic income, and working and living conditions, as discussed before. More immigration combined with policies ensuring fast integration into the domestic labour market would improve the fiscal situation in the long run (OECD, 2013d) and strengthen innovation and productivity, in particular if Poland opens up to migrants from diverse backgrounds (Ozgen et al., 2011; Peri, 2012; Alesina et al., 2013).

Requiring only a simple declaration of intent by employers to hire workers from neighbouring non-EU countries for short-term assignments makes Poland one of the most open countries in the OECD. The use of this procedure has risen considerably, more than doubling in the first half of 2015 compared to a year earlier for Ukrainians, the main users of this provision (Figure 29, Panel B). So far, such migrants seem to have largely complemented the local workforce (Duszczek et al., 2013). Immigrants from more diverse backgrounds will need opportunities to learn Polish and enrol their children in education from a very young age. Housing policies will need to ensure they are integrated into a wide range of neighbourhoods to avoid excessive residential segregation.


Many emigrants have tertiary education, and this trend intensified after Poland's EU accession (Kaczmarczyk, 2012; OECD, 2015k). This finding is qualified to some extent by emigrants' PIAAC test scores, which are much lower than those of the Polish resident population (Figure 32, Panel A). Very weak basic skills are particularly widespread among emigrants, including those with tertiary education (Panel B). While this is likely at least in part to reflect language problems, test scores of emigrants from higher-income OECD countries tend to be much closer to the average among the resident population in their home countries and often even higher. Moreover, even Polish emigrants who have

Figure 32. **Skills of Polish emigrants are low, and they tend to perform simple jobs abroad**
2012



1. Percentage of adults scoring at or below level 1 of the PIAAC scale of numeracy proficiency.
2. Skilled and elementary occupations are defined based on ISCO classification.
3. The data are based solely on England and Northern Ireland for the United Kingdom.
4. Simple average across countries with available observations.

Source: OECD (2013), *OECD Skills Outlook 2013 Database* and OECD calculations.

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stayed in the foreign country for over 10 years still have lower average test scores than the Polish resident population, although the gap is narrower. Yet, there are limitations to PIAAC data, namely the narrow representativeness for subgroups, such as emigrants from a single country, and the difficulty to tell the difference between language problems and fundamentally low skills. On balance, the observation that Poland has lost many workers with high qualifications seems more important.

Polish emigrants work in low skilled occupations particularly often and rarely in skilled occupations, even if they have tertiary education (Chmielewska, 2015; Kaczmarczyk and Tyrowicz, 2015; Figure 32, Panels C and D). Similarly, immigrants to Poland often have advanced qualifications but work in low-skill jobs, such as agriculture or domestic services. These migrants suffer from a loss of hard and job-specific skills, probably associated with their often poor ability in their destination country's language. Polish return migrants often do feel they have acquired new – in particular soft – skills, including in management and languages, both on the job and through training, but also often complain that these are not valued on the Polish labour market (Brzozowski, 2012; Szymanska et al., 2012).

Specialised job counsellors would help to better integrate migrants into the Polish labour market as would better recognition of foreign credentials, of work experience and of

skills acquired abroad. The new opportunities to validate practical experience and skills with vocational qualifications might thus prove particularly useful for migrants. The recently adopted integrated qualifications framework is another important project in this respect. With the same methodology as the European qualifications framework it describes the knowledge, skills and competences associated with qualifications, so that they can be more easily compared across countries. Similar, perhaps bilateral, initiatives would be helpful for non-EU countries.

A more active outreach to the Polish diaspora would also be beneficial. The previous government developed a programme to maintain ties with the Polish diaspora and encourage them to transmit a positive image of Poland. This is welcome and should also be used to advertise the country's interesting business and job opportunities. Information on practical details of coming to Poland is available on the website www.powroty.pl, which targets return migrants. It would be useful to provide similar information in English for foreigners interested in coming to Poland.

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ANNEX

Progress in structural reform

Recommendations	Action taken since the beginning of 2014
Product and financial market competition	
Give the Competition Authority more powers to split up firms to reduce dominant market positions and to impose vertical separation as a remedy for reduced third-party access in network industries. Create an independent regulator for water and sanitation services.	The Competition Authority can now impose structural remedies, when behavioural measures prove insufficient or overly damaging to the undertaking. After a two-year monitoring period and consultations, the Competition Authority may be given new powers.
Modify public procurement practices to select the contractors offering the best value for money rather than the lowest price. Focus procurement decisions on a mix of prices and technical bid details, including environmental impact assessments. Enhance staff skills to deal with complex selection criteria.	The application of the price as sole award criterion has been restricted to contracts for standard goods and services. Contracting authorities have been encouraged to consider innovative, environmental and social characteristics. Specific guidelines and training measures have been provided to contracting authorities. Governmental institutions now have to respect some social clauses in procurement contracts.
Make the judicial environment friendlier to class actions in cases of competition breaches. Accelerate the functioning of the judicial system to shorten the time between the Competition Authority's decisions and a final court decision in antitrust cases.	No action taken.
Pursue privatisation, and substantially reduce government ownership in competitive segments of the economy while ensuring sound governance of remaining state-owned enterprises. Remove regulations and implicit subsidies distorting competition between public and private firms.	The number of companies the Treasury supervises fell from 387 in January 2014 to 281 in December 2015. The government envisages selling further minority shares. A new target for gender composition, additional financial planning and extra training of state-appointed directors have together strengthened SOE boards.
Fully implement the second and third stages of the liberalisation of professional services.	The second and third stages entered into force in August 2014 and December 2015.
Reduce anti-competitive pressures resulting from the participation of Polish Airports State Enterprise (PPL) in many airport entities, and consider long-term concession agreements or privatisation for airport entities. Privatised the national air carrier (LOT).	PPL is running its business on its own behalf and risk. It has shares in entities managing the most important Polish regional airports, running their business under commercial law. The analyses for the privatisation of LOT are ongoing.
Deepen financial development through a consolidation of co-operative banks and an improved legal framework for collateral. Set a cap on interbank fees for credit card transactions to reduce the effects of market concentration in line with the 2013 EU proposal.	New regulations allow co-operative banks to set up institutional protection schemes, which group institutions together. A cap on interbank fees was introduced and reduced to 0.3% and 0.2% for credit and debit card transactions, respectively.
Fiscal policy and the budgetary framework	
Improve tax compliance and cut tax expenditures. Simplify tax regulations. Reinforce the monitoring and enforcement of the tax system. Eliminate the preferential regimes for the self-employed and link their social security contributions to their actual earnings. Broaden tax bases by introducing cash registers for all professional services to improve VAT collection and by significantly tightening eligibility for the lump-sum income tax. Extend the social insurance contribution base to uncovered earnings.	A law passed in 2015 assigns more tax administration staff to inspection and enforcement. There is now pre-filing for tax declarations, and the number of required documents was reduced. Companies will be assigned to a single tax office, and tax rulings will now clarify all cases of identical content. Mandatory cash registers were extended to several professional and personal services. Supervisory board members now have to pay social contributions.
Redesign and increase the least distortive taxes, by establishing market-value-based property taxes and by taxing capital gains on rented properties.	No action taken.
Further tighten eligibility criteria in the generous disability pension system. Substantially reduce subsidies to the farmers' social security scheme, eliminate pension privileges for certain occupations, and increase the female retirement age at a faster pace, e.g. to reach 67 by 2030 instead of 2040 as currently scheduled. Strengthen the fiscal framework by: introducing a deficit rule; creating an independent fiscal council at least to monitor fiscal performance relative to targets; and harmonising the domestic and Maastricht definitions of government debt.	Since January 2015 farmers undertaking additional work on a contract of mandate pay contributions to the universal ZUS insurance for that part of their revenues. Prevention and rehabilitation by KRUS will be financed almost fully by farmers' contributions. However, a presidential draft bill envisages lowering retirement ages. An expenditure rule was introduced into the budget process in 2014. It was amended in late 2015: the scope of entities covered was increased, the inflation forecast used to determine the spending limit was replaced by the MPC target, and a possibility to increase expenditures in case of positive one-offs was introduced. The government considers that most elements of a fiscal council are in place, as the supreme audit office assesses budget execution in terms of its compliance with fiscal rules.
Labour markets (see also Chapter 1 herein)	
Allow the public employment services to hire more skilled staff, and ensure that overall resources are better allocated to front-line placement tasks. Promote the adoption of best practices through performance management and benchmarking of employment-service providers.	Managers of local labour offices and placement officers with good results can now receive performance-based rewards. As of 2017 external employment service providers will be benchmarked based on placement and three-month retention rates.
Rationalise ALMPs by focusing more on job-search assistance, career guidance and work schemes having a high training content. Improve job-seeker profiling. Reduce passive social assistance by making more transfers (such as childcare subsidies) conditional in part on being employed or seeking work. Expand the scope of private employment services.	Different tasks at local labour offices were combined to create client advisor posts in 2014. The number of such client advisors, including staff involved in job-search assistance, grew in total to 7812. Needs-based intensity-of-service provision based on profiling was introduced. The possibility to outsource job-placement services to private providers was introduced in 2015.

Recommendations	Action taken since the beginning of 2014
Consider merging local labour offices with unemployment benefits and social assistance administration to create a one-stop shop and more fundamentally to integrate the management of those activities. Enhance coordination and automatic exchange of information between local labour offices, firms, assistance centres and education institutions.	Since 2014 unemployed recipients of social assistance can be guided towards activation and social integration programmes under joint supervision by local labour offices, the social welfare centre and NGOs under the Activation and Integration Program (PAI).
Refrain from increasing the minimum-to-average wage ratio. Consider differentiating the minimum wage across regions depending on local labour-market conditions. Reduce wage rigidities by bringing the effects of age and education on public-sector wages closer to private-sector standards.	In January 2016, the minimum wage was increased by 6% for full-time workers with more than one year of tenure. This is above the increase in the average wage projected by the OECD.
Consider introducing an earned-income tax credit to encourage labour market participation by marginal groups.	No action taken.
Eliminate pre-retirement schemes, and prevent disability pensions from becoming attractive relative to old-age pensions. Remove the prohibition to lay off workers less than four years before retirement. Scale back survivors' pensions to reduce the labour tax wedge.	No action taken.
Promote the employment of people with disability by: reducing the employment quota of 6% and raising the penalty for firms failing to reach the revised level; and better training and activating workers with disability.	In 2014 subsidies for employing disabled people in sectors not specialised in employing disabled workers were increased, and a draft law foresees extending the scope of subsidies. There is new financial support for training disabled people. Public sector personnel and job coaches were trained to manage disabled employees and assist them.
Health care	
Broaden access to care and reduce inequality by: targeting extra resources to shortening waiting lists; extending dental services covered by public insurance; introducing co-payments on medical services while imposing a means-tested cap on the level of out-of-pocket payments; and increasing transparency of dual physician employment in the public and private sectors.	Fast-track waiting lists for cancer patients were introduced in 2015. They are now guaranteed treatment within a specified period, and there are no financing limits for treatment. Health-care providers who ensure timeliness and comprehensiveness of health-care services face no financing ceilings. But waiting lists for several other procedures remain extremely long. Work is underway to extend the basic health-benefit package in stomatology and dental care.
Improve the allocation and use of current resources by: shifting resources from hospitals to primary and long-term care, potentially by integrated health-care delivery models; strengthening the gate-keeping role of primary medicine; providing clearer incentives to hospitals to make them respect their financial commitments and rationalise the use of their resources; promoting the development of hospital management skills; and streamlining the responsibilities of the NFZ and central and local governments.	New schemes of integrated health-care will be tested in 2016-20. Since 2015 referrals of primary doctors are obligatory for ophthalmologists and dermatologists. Primary health-care was strengthened in oncology. The Minister of Health in cooperation with the National Institute of Public Health will finalise health needs maps in 2016 as a basis for the National Health Fund to purchase health-care services.
Develop a comprehensive strategy to address growing long-term care needs. Avoid labour shortages in the health-care sector by: training more staff; improving retention, particularly through better management policies and delaying retirement; enhancing re-integration in the health workforce of those who have left it; adopting a more efficient skill mix by enhancing the role of advanced practice nurses and physicians' assistants; improving productivity, in particular by linking pay to performance; and developing targeted immigration policies.	The <i>National Health Program 2016-20</i> , under discussion, includes a strategy to address senior citizens' health needs through public information campaigns and improved services, notably early diagnosis and training in geriatric health. Some 200 medical care givers in geriatrics have been trained in 2012-15. New specialisations for medical professions and modular training reduced the time to obtain a specialisation in 2013-15. A September 2015 law eased foreigners' employment as nurses or midwives and facilitated returning to health professions after a long break and combining teaching and practice.

This Survey is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.

The economic situation and policies of Poland were reviewed by the Committee on 8 February 2016. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 4 March 2015.

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