POLICY PRIORITIES FOR MAKING POLAND A MORE INCLUSIVE AND KNOWLEDGE-BASED ECONOMY

Better Policies Series

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OECD
BETTER POLICIES FOR BETTER LIVES

This document is part of the "Better Policies Series". Under the guidance of Gabriela Ramos and Juan Yermo, Isabell Koske coordinated the publication, with the help of Joshua Polchar. Contributors: Jonathan Barr, Kris Boschmans, Nicola Brandt, Stijn Broecke, Mario Cervantes, Sara Fyson, Daniela Glocker, Alberto Gonzalez Pandiella , Antoine Goujard, David Halabisky, Herwig Immervoll, Peter Jarrett, Malgorzata Kuczera, Andrew Macintyre, Iota Nassr, Adam Ostry, Arturo Rivera Perez, Sarah Perret, Jonathan Potter, Andreas Schleicher, Blandine Serve, Patrizio Sicari, Monika Sztajerowska, Barbara Ubaldi, Gert Wehinger, Theodora Xenogiani, Gang Zhang, Sabine Zigelski. Ewa Klimowicz proof-read the translation into Polish. Isabelle Renaud provided production and administrative support.

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2016 Poland's 20th Anniversary in the OECD

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Foreword

Since 1990, when collaboration with the OECD started under the Partners in Transition Programme, Poland has made impressive progress in raising the living standards of its citizens. Between 1990 and 2015, the country managed to close the GDP per capita gap with the OECD average by more than 25 percentage points. This catch-up was helped by important economic reforms, including privatisation of many state-owned enterprises and liberalisation of trade and capital flows. OECD analysis and policy advice and the opportunity for Poland to draw on the experiences of other OECD countries have contributed to shaping these reforms. The Polish economy has also proven quite resilient to the 2009 world economic and financial crisis and the current low-growth environment, growing at a robust rate of more than 3% on average between 2007 and 2015.

Poland's economic progress was accompanied by significant social achievements. For example, the share of the labour force with tertiary education has more than doubled since the early 1990s, rising from 13% in 1992 to 31% in 2015. Similarly, Poland has achieved significant improvement in the OECD Programme for International Student Assessment (PISA). While the performance of Polish 15-year-olds was still below the OECD average in 2000, it now surpasses that average by a sizeable margin. Poland has also made remarkable progress in terms of the health outcomes of its citizens. Life expectancy increased from 71 years in 1990 to 77 years in 2014.

However, despite these achievements, Poland's catch-up potential with more advanced OECD economies remains substantial. In 2015, its level of GDP per capita was still 35% below the OECD average, while productivity (as measured by GDP per hour worked) was 39% below the OECD average. To close these gaps, it will not be possible for Poland to compete mainly on the basis of cheap labour, a key success factor behind past economic achievements. Sustained improvements in living standards will require the country to search for new activities in which it can successfully compete at a global level. Poland needs to move up the value ladder and become more specialised in more knowledge-intensive, higher-value-added activities.

This Better Policies Series report has been prepared to support the government in this endeavour. It highlights the importance of putting in place the right framework conditions to encourage firms to adopt new technologies and invent new processes, products and management techniques. Some of the recommendations in this report could help lift GDP per capita by between 2% to 3% over the next five to ten years through higher productivity and employment. More fundamentally, they would help to create a more fertile ground for innovation to flourish. This requires making the regulatory environment more conducive to competition, upgrading the country's infrastructure, improving the design of innovation policies and fostering innovative entrepreneurship. It also requires sound macroeconomic policies and a strong public governance framework. The shift to a knowledge-based economy will entail some important changes to the way the economy operates, with some sectors of the economy growing and others declining in importance. To make sure that no one is left behind in this transformation, Poland also needs to put in place strong labour market and social policies and equip all of its people with relevant skills.

This publication has been prepared on the occasion of the 20th anniversary of Poland's membership in the OECD. We are proud to have been working with and for Poland during all these years and look forward to the next 20 years of fruitful collaboration. Together, we can design, develop and deliver better policies for better lives for all Polish citizens.

Angel Gurría
Secretary-General, OECD

Content

Key recommendations

- Ensure that plans for new spending and tax reductions are financed in a sustainable way.
- Increase the statutory pension age, as previously planned and, if early retirement is allowed, ensure that it is at the same age for men and women and at actuarially neutral discount rates.
- Ensure that climate change policies are clear and aligned with European and international objectives, notably the long-term goals of the Paris Agreement.
- Clarify the strategy for reducing the environmental impact of the power sector, including coal use for electricity production.
- Have an independent authority undertake regular in-depth reviews of regulations in key sectors of the Polish economy, possibly drawing on the OECD Competition Assessment Toolkit, to identify and abolish regulations that unduly restrict competition or put unnecessary regulatory burden on firms.
- Increase the contribution of public research to innovation by combining public research reforms with measures for strengthening industry-science relations and commercialisation of research.
- Broaden the criteria used to assess the performance of academic staff to include entrepreneurship support activities and joint research projects with industry.
- Strive to make the vocational education and training system more responsive to local labour market needs, including through thorough engagement of employers at both the strategic level and in offering work-based learning opportunities.
- Strengthen labour law enforcement, and further align contributions on civil and labour law contracts.
- Enhance inter-municipal planning and service delivery within functional urban areas, and ensure integrated planning across sectors by strengthening inter-ministerial co-ordination at the central level.

1 Introduction

Twenty years into its membership in the OECD, Poland has achieved impressive progress in terms of the living standards of its citizens. The country did not only manage to significantly reduce the GDP per capita gap with other OECD countries, but it also caught up with respect to several other dimensions of well-being. To ensure further widespread improvements in living standards, Poland needs to continue to move towards higher-technology production, boosting productivity and improving access to high-quality jobs and good pay. This report reviews recently implemented and planned reforms that aim to achieve these goals and proposes further policy measures to help Poland make the shift towards a more knowledge-based economy. To safeguard inclusiveness, it is crucial that the government also put in place appropriate policies to ensure that no one is left behind during this transformation and that all firms and all citizens can equally participate in and benefit from it.

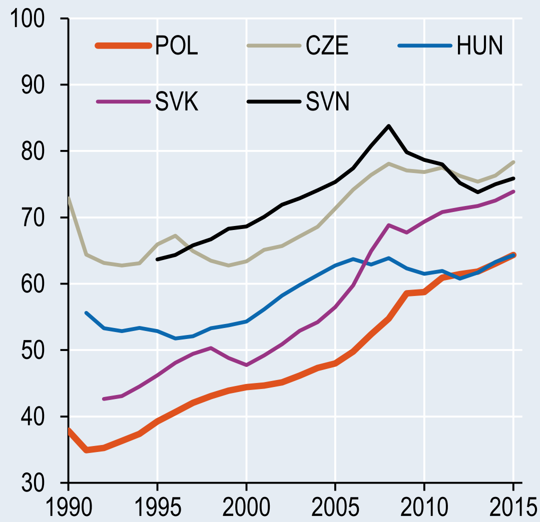
Poland has achieved an impressive improvement in living standards

Poland has achieved an unprecedented improvement in living conditions over the past 25 years. Between 1990 and 2015, Poland managed to close the GDP per capita gap with the OECD average by more than 25 percentage points (Figure 1.1). Since the start of its collaboration with the OECD under the Partners in Transition Programme in 1990, Poland's economy has undergone sweeping change, with privatisation of many state-owned enterprises and liberalisation of prices, trade and capital flows.

On the OECD's Better Life Index, Poland scores higher than the OECD average on work-life balance, personal security and education (Figure 1.2). Just 7% of employees worked long hours in Poland in 2014, compared to 13% in the OECD, and the homicide rate was just 1% in 2013, compared to 4% in the OECD. The good performance with respect to education is due to traditionally high upper secondary graduation rates (currently 91% of adults aged 25-64, the highest rate in the OECD) and an unprecedented boom in tertiary education during the transformation to a market economy. Another factor is school reform in the 1990s, which helped to significantly improve educational outcomes, as reflected in the literacy and numeracy results of 15-year-old students in the OECD Programme for International Student Assessment (PISA).

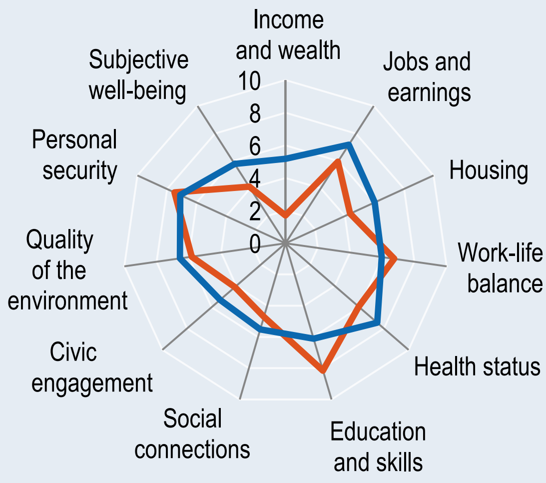
FIGURE 1.1. **POLAND'S ECONOMY IS CATCHING UP**

GDP per capita, constant PPPs, OECD = 100



Source: OECD (2016), OECD National Accounts Database.

FIGURE 1.2. **HOW'S LIFE IN POLAND?**



Note: This chart shows well-being outcomes in various dimensions for Polish people compared to the OECD average. Outcomes are shown as normalised scores on a scale from 0 (worst condition) to 10 (best condition) computed over OECD countries, Brazil, the Russian Federation and South Africa.

Source: OECD Better Life Initiative 2016.

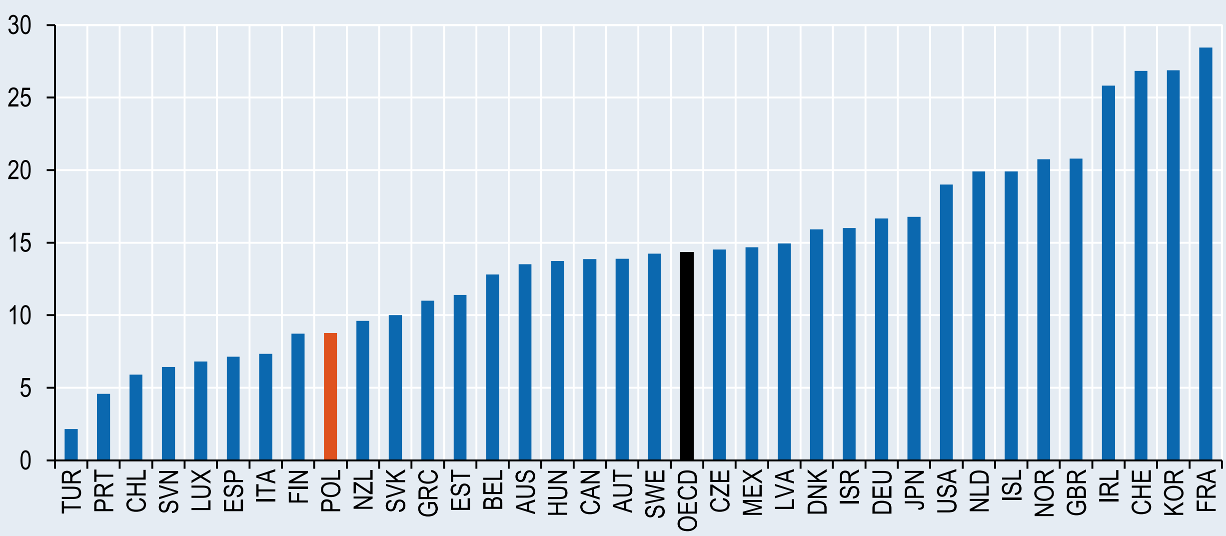
But there is room for further progress

With GDP per capita 35% below the OECD average and GDP per hour worked 39% below the OECD average, there is still an important catch-up potential. To realise this potential, it will not be possible for Poland to compete mainly on the basis of cheap labour, one of the important factors behind past economic successes. Continued improvements in living standards will require Poland to search for new activities in which it can excel and confront foreign competition. Poland needs to move up the value ladder and become more specialised in more knowledge-intensive, higher value-added activities. Currently, Poland lags well behind many other OECD countries on the technology content of its exports (Figure 1.3), and innovation outputs such as patents and top scientific research publications cannot yet compete with the top OECD economies (Figure 1.4).

Becoming a more innovation- and knowledge-based economy will entail a continuous process of change, innovation and productivity growth. In the process, Poland needs to ensure that no one is left behind and that all firms and all citizens can participate in and benefit from Poland's transformation. Currently, Poland performs rather well in terms of income inequality. In 2013, the average income of the top 10% of the population was 7.5 times as high as the income of the bottom 10%, compared to almost 10 times in the OECD. And, contrary to what happened in many other OECD countries, the ratio has even come down in recent years (from 8.1 in 2007). Similarly, the poverty rate is below the OECD average (10.5% of the population had an income of less than 50% of the national median income in 2013, compared with 11.1% in the OECD). The challenge will be to sustain and even expand this good performance by putting in place the right policies to ensure that the benefits of Poland's transformation to a knowledge-intensive economy are broadly shared.

FIGURE 1.3. **POLAND HAS ROOM TO MOVE TO HIGHER-TECHNOLOGY EXPORTS**

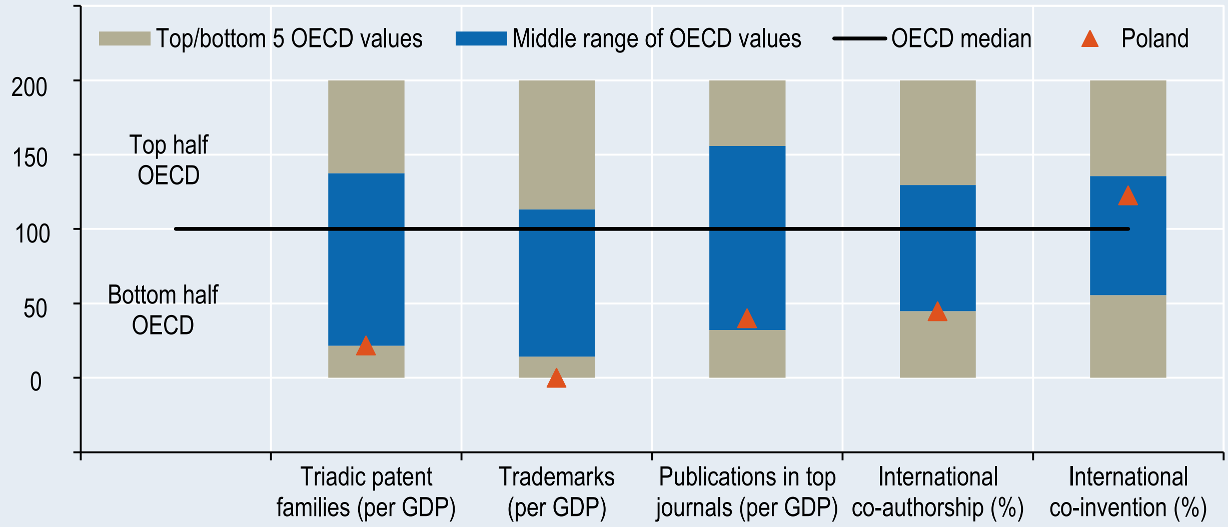
Share of high-technology products in total manufactured exports in %, 2015 or latest available year



Source: World Bank (2016a), World Development Indicators.

FIGURE 1.4. **POLAND'S INNOVATION PERFORMANCE IS BELOW THE OECD AVERAGE**

Normalised index of performance relative to OECD median



Source: OECD (forthcoming a), OECD Science, Technology and Innovation Outlook, OECD Publishing, Paris.

Some recent and planned reforms should help foster innovation and inclusiveness

To sustain further progress the country needs to strengthen its capacity to adopt innovations and produce higher-technology goods and services. Plans to increase the share of R&D expenditure in GDP from 0.8% in GDP to 2% by 2020 through more effective tax support and reforms of scientific research institutes could potentially lift GDP per capita by 0.5% in the five years following the reform, based on the OECD's framework for quantifying the impact of structural reforms (Égert and Gal, forthcoming). But this requires complementary reforms to make the overall innovation system more effective and to facilitate the reallocation of workers across firms, sectors and regions – so that successful firms can find the labour and capital resources they need to quickly scale up production and non-performing firms can be allowed to exit the market.

Tax reductions, in particular for lower-wage workers, could also be beneficial. The government has reduced the corporate income tax rate for small enterprises, but this concerns only a small share of total corporate turnover and of small and medium-sized enterprises (SMEs), most of which are liable for personal rather than corporate income tax. Yet the government's plans to unify social contributions and personal income taxes could be designed to make the system more progressive and reduce labour taxes on lower wages. This could increase GDP by 0.2% after ten years.

The government also introduced a sizeable child benefit, worth around 1 percentage point of GDP in 2016 and somewhat more than that in the following years. This is meant to address low birth rates and rapid ageing. Some research indeed suggests that large child benefits can increase fertility and reduce child poverty, although there is also a risk that they may discourage female employment (OECD, 2011a). Research underlying the OECD framework quantifying reform effects on economic growth has found no statistically significant impact of child benefits. However, family benefits in kind, such as child care, are found to promote female employment. An increase of 1 percentage point of GDP in such spending could thus lift GDP per capita by 1.5% after five years and raise the female employment rate by a full percentage point. This demonstrates the need to continue expanding access to child care, which is currently weak, particularly in rural areas.

Some recent policy initiatives pose challenges and will require a redoubling of efforts to strengthen the economy's capacity to grow. The monthly minimum wage will increase by close to 6% in 2016 and 8% in 2017, above the expected rise in mean wages. Moreover, the reduced minimum wage rate of 80% for people during the first year of employment in which social security contributions were paid has been abolished, meaning that these people, mostly youth, will be subject to the full minimum wage. While improving the incomes of low-wage workers, these reforms imply risks for employment prospects, particularly of young people and women. They could reduce GDP per capita by 0.36% after five years according to OECD simulations. Moreover, the government plans to reduce the retirement age for women to 60 and for men to 65, rolling back an earlier reform that would have taken it to 67 in stages for both women and men. This involves risks for employment of elderly workers and long-term growth. As a result, GDP per capita could eventually be 0.6% lower compared to a situation in which the earlier reform was maintained.

More work lies ahead

But there is more that the Polish government can do to encourage its firms to adopt new technology, innovative products and processes and new management methods. And there is more it can do to promote inclusiveness and ensure that improvements in living standards are spread widely across the population. This report makes suggestions for how Poland can shape policies in these directions.

Innovation policies can help increase the level of knowledge and technology embodied in production and exports (Chapter 6). According to the OECD's simulation framework (Égert and Gal, forthcoming), a shift from direct to indirect support for business R&D and innovation could lift GDP by around 0.3% after ten years by supporting all stages of the business innovation process (Table 1.1). Innovation also requires a market environment that is sufficiently competitive to give firms strong incentives to strive for development and commercialisation of new and better-quality products at low costs (Chapter 5). The reforms proposed in this report to lift barriers to market entry and streamline regulations through greater use of regulatory impact assessment could boost GDP by around 0.3% after five years and 0.4% after ten years (Table 1.1). Over 2013-15 Poland has made important steps to liberalise professional services. Stronger competition in these areas is important to improve the quality and reduce the cost of services which are often used by firms in other industries as an input in their own production. It can thus reduce prices for consumers and improve competitiveness on export markets. In fact, taking reforms further could help increase GDP by 0.2% after five years and 0.3% after ten years.

Improving the quality of Poland's infrastructure would also help encourage productive private investment and the development of new activities (Chapter 4). Upgrading the telecommunication and information technology infrastructure is particularly important in light of the country's ambition to move to a more knowledge-intensive economy. Better infrastructure would also be beneficial for inclusiveness by helping remote regions to better connect to the rest of the country. Critically reviewing state control and ensuring competitive neutrality in electricity and gas sectors would boost GDP by 0.2% after ten years (Table 1.1).

A more innovative and productive economy requires more opportunities for many workers to strengthen their basic competencies and a better alignment of skills with labour market needs (Chapter 8). This is a particular challenge for Poland, where the average level of skills proficiency, the level of skills and the intensity of use of such skills are among the lowest of all countries that participated in the OECD Survey of Adult Skills. As Poland transitions to a more knowledge-based economy, it will be essential to exploit the skills potential of its entire population. Policies to strengthen weak participation in adult learning and continuing training could also be beneficial, by helping workers improve and update their skills and better align them with labour market needs. OECD simulations suggest that boosting activation and training could raise GDP by 0.3% after five years and 0.4% after ten years (Table 1.1). Reforming the vocational education and training system and strengthening remedial education more generally would reinforce these effects. A focus is needed on remote rural areas, where many people have basic skills deficiencies and few opportunities to participate in learning. Continued efforts to build capacity in schools and universities to teach key competences required for starting a business would enhance business creation, while promoting start-up financing and effective export credit schemes would improve opportunities for young and small firms to innovate and imitate (Chapter 7).

Fostering inclusiveness also requires further efforts to increase the employment rates among older workers, women and youth and to fight labour market segmentation (Chapter 8).

While unemployment has fallen sharply, many workers earn low wages, and irregular employment with weak access to training and social security is widespread. The number of work relationships based on civil law rather than regular labour law, which are only partly covered by social security and not subject to minimum wage or leave provisions, has been rising. But starting in 2017, the minimum wage will apply to certain civil-law contracts. According to the OECD's simulation framework, the reforms proposed in this report to increase the statutory pension age and expand formal childcare could boost GDP by 0.3% over five years and 0.4% over ten years (Table 1.1).

As the required reforms touch upon various policy areas, a whole-of-government approach is needed, with strong co-operation among different government agencies (Chapter 10). Open government and strong consultation can be key vehicles to partner with citizens in the design and implementation of policies. In addition, the ambitious reform agenda requires reliable and stable fiscal and monetary policies to finance its policy initiatives and provide an attractive investment environment (Chapter 2). Withdrawing inefficient tax expenditures, such as reduced rates of value added tax (VAT), can make the tax system simpler, facilitate enforcement and help raise revenues for much needed investments in infrastructure, innovation and skills (Chapter 3). Given the small distortive nature of these types of taxes, the negative side effects on economic growth would be limited. Shifting the tax burden from labour more onto immovable property and VAT, without increasing the overall amount of taxes collected, would even increase GDP. OECD simulations point to an increase in the level of GDP by 0.5% after ten years (Table 1.1). Making the personal income tax system more progressive, by reducing the labour tax wedge for low wage earners, would increase GDP by 0.2% after ten years, as outlined above.

TABLE 1.1. **THE REFORMS PROPOSED IN THIS REPORT WOULD BOOST THE LEVEL OF PRODUCTIVITY, EMPLOYMENT AND GDP**

In percent

	Impact after five years			Impact after ten years		
	GDP	Via employment growth	Via productivity growth	GDP	Via employment growth	Via productivity growth
Product market reforms:						
• Further advance the liberalisation of professional services	0.22	0.03	0.19	0.31	0.04	0.27
• Remove structural impediments to firm entry and competition	0.31	0.04	0.27	0.43	0.06	0.37
• Critically review state control and ensure competitive neutrality	0.15	0.02	0.13	0.21	0.03	0.18
Labour market and social policies reforms:						
• Increase statutory pension age as planned	0.11	0.11		0.14	0.14	
• Expand formal childcare facilities	0.19	0.19		0.25	0.25	
• Strengthen activation	0.33	0.27	0.06	0.41	0.33	0.08
Tax reforms:						
• Shift the tax burden from labour to immovable property and VAT	0.52		0.52	0.52		0.52
• Increase progressivity by reducing the labour tax wedge for low-wage earners	0.13	0.23	-0.10	0.19	0.29	-0.10
Innovation policy reforms:						
• Increase spending on business R&D by moving towards an appropriate mix of grants and market-based measures	0.29		0.29	0.29		0.29
Total	2.25	0.89	1.36	2.75	1.15	1.60
Average annual growth	*0.45*	*0.18*	*0.27*	*0.27*	*0.11*	*0.16*

Source: OECD calculations.

2 Maintaining a strong macroeconomic policy framework

Growth in Poland has been solid over the last decade. The central bank's inflation-targeting framework has served Poland well, and monetary policy has been appropriately supportive, as consumer prices have been falling, mainly due to downward pressures on energy prices. Although energy prices have stabilised and wages are now growing strongly, GDP growth has been slowing. The OECD projects the central bank to start increasing rates towards the end of 2017, as inflation picks up. A number of recent regulations and taxes are weighing on banks' profitability and capitalisation, and the authorities are still looking for a solution to restructure foreign-currency mortgage loans. Given the need to enhance credit flows to young and innovative firms, the costs for banks should be carefully balanced against the benefits of restructuring. Regarding fiscal policy, the main challenge will be to finance new public spending and tax reductions in a sustainable way so as to maintain fiscal stability.

Thanks to strong growth, Poland's catch-up with more advanced economies continues

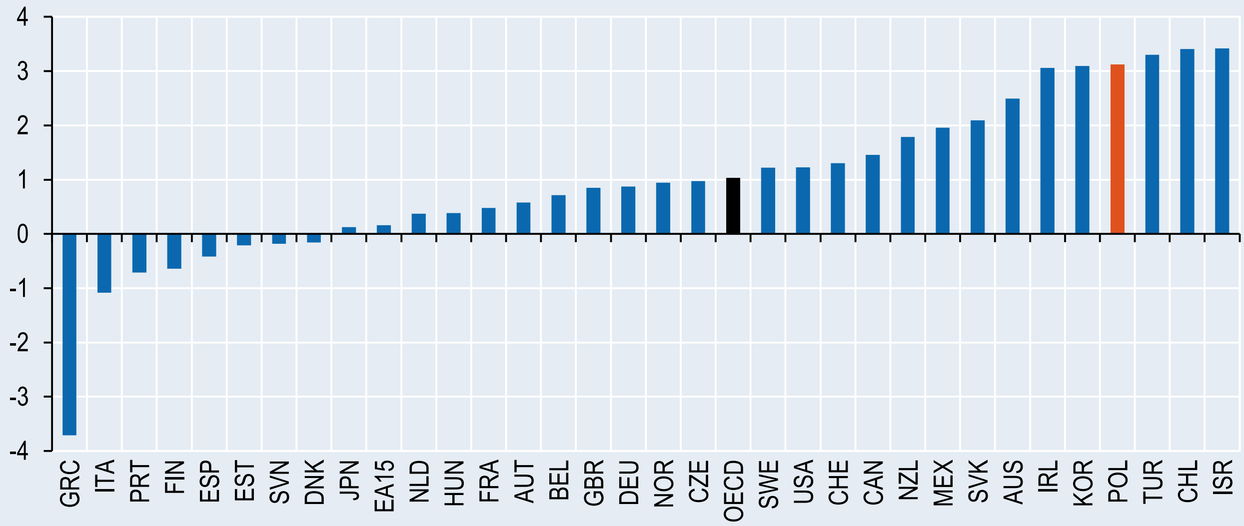
Poland's growth performance has been strong over recent years (Figure 2.1), and this is set to continue. Exports are expanding fast, owing to a progressive recovery in export markets and contained growth in unit labour costs. At the same time, steady gains in employment and wages, low energy prices and new family benefits are supporting domestic consumption. Investment, however, has been held back by the switchover of budget periods for EU funds, new sector-specific taxes and political uncertainties (e.g. regarding energy policies and the treatment of foreign-currency loans).

Real GDP is projected to grow by around 3% annually over 2016-18, supported by rising labour incomes and higher social transfers. Falling spare capacity and favourable financing conditions should support business investment, while public investment should pick up. A gradual recovery of external demand is expected to offset unit labour cost increases, allowing exports to continue to expand at a solid pace.

However, there are a number of risks. The Brexit vote might have substantial repercussions on exports, as would a sharper-than-expected slowdown in China and weaker-than-projected global trade. Uncertainty about public deficit and debt developments and the

FIGURE 2.1. **GDP GROWTH HAS BEEN SOLID**

Average annual growth, 2007-15



Source: OECD (2016a), Economic Outlook No. 99 (and updates) and National Accounts Databases.

repercussions of financial sector policies could affect business confidence and investment. Alternatively, the new family benefits and efficient implementation of the long-term economic development plan could strengthen private spending more than expected.

Monetary policy remains challenging

The central bank targets annual inflation of 2.5% with a tolerance band of ±1 percentage point. Inflation has been well below this target for more than three years and negative since July 2014. The central bank has appropriately kept the official interest rate at a record low of 1.5% since March 2015. While consumer prices continue to fall, deflation reflects mainly global factors, such as low food prices and recurring declines in energy prices. Core inflation remains close to zero, and inflation expectations have 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.

Against this background, monetary policy still needs to remain supportive for some time, especially given falling investment and the recent GDP slowdown. However, the steady decline in the unemployment rate, a minimum wage hike and higher social levies on some atypical labour contracts are set to further increase wage growth and reduce earnings inequality. Stabilising energy prices, rising social transfers and the pass-through of new taxes to consumers will underpin a return of inflation within the target range towards the end of 2017. Based on these OECD projections, the central bank should gradually start normalising rates at that time, to avoid future overheating. However, deciding on the timing and the pace of monetary policy normalisation will be challenging, given uncertainties regarding global economic developments and risks of financial turbulence (for example, potential tensions from divergent moves between US and euro-area monetary policies).

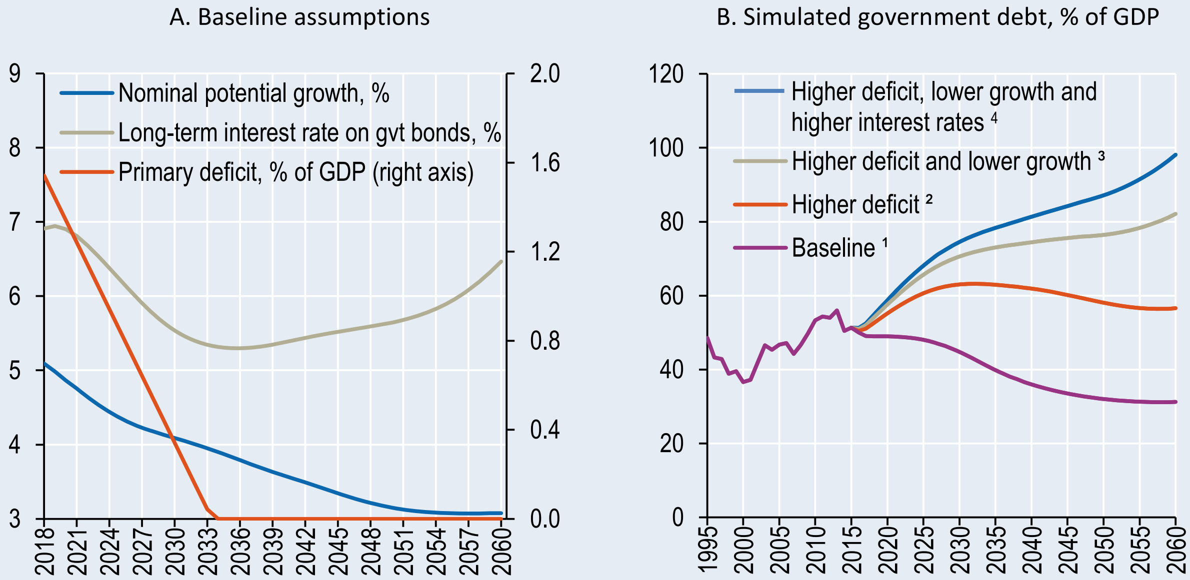
Caution is needed in dealing with foreign currency loans

Despite historically low interest rates, there are no signs of asset price bubbles or unwarranted debt accumulation. Polish banks are well capitalised, and leverage is limited, but recent policy decisions imply new financial burdens for the banking sector. A new 0.44% annual tax on bank assets, as well as slightly higher contributions to a bank guarantee fund and a new fund for distressed assets, could amount to about half of the sector's 2015 profits. In addition, in August 2016, the Office of the President of the Republic of Poland presented a draft law to compensate foreign-currency mortgage holders for the costs of bid-ask spreads charged by banks prior to 2011. This draft law would involve lower costs for banks than a previous proposal. A High-Level Expert Group of the Financial Stability Committee is reviewing the legislative changes. The solution should aim to strengthen mutual trust between banks and customers, while preserving financial stability.

Sustainable financing of fiscal measures is needed

The new government has confirmed its determination to keep the deficit below 3% of GDP. But recently implemented and planned reforms imply considerable fiscal costs: spending on the new family benefit will amount to at least 1.3% of GDP annually over time. The government's original plans to lower the general tax allowance would add another percentage point of GDP, although less onerous options targeted at lower-income families are under discussion. The envisaged reduction of the pension age would cost another 0.5 percentage points of GDP annually, according to government calculations. The government will also need to invest in skills and in the expansion and maintenance of infrastructure, while supporting EU funds may decline substantially after 2020. New sectoral taxes implemented by the government will yield benefits of a much smaller order than what is needed, around 0.3% of GDP.

FIGURE 2.2. **DEBT IS ON A DECLINING PATH**



Note: 1. Baseline long-term assumptions of Panel A. These assumptions are from the OECD long-term baseline scenario. Ageing is a driver of both rising interest rates and the fall in potential output growth. In addition, the scenario assumes a normalisation of policy interest rates worldwide and hence increasing long-term interest rates, including in Poland.
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 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 (2016a), Economic Outlook No. 99 Database; OECD Long-Term Database and OECD calculations.

Additional public spending and revenue reductions will require sustainable financing. Past fiscal consolidation has created favourable conditions for lowering the debt-to-GDP ratio and thus limiting risks due to exposure to foreign credit. With nominal growth and long-term interest rates following the OECD long-term projections over 2018-60 and the primary deficit shrinking from 1.64% in 2017 by 0.1% each year (Figure 2.2, Panel A), debt would fall to just above 30% of GDP towards 2050 in the baseline scenario (Figure 2.2, Panel B). This takes into account the effects of ageing on the labour force and assumes that the pension age is increased gradually in line with the 2012 reform. Debt reduction would be delayed if fiscal slippage occurred, for example if additional revenue-raising measures (notably efforts to improve tax compliance) disappointed. With a primary deficit that is 1.5% of GDP higher than under the baseline scenario in 2017, public debt would only stabilise under otherwise identical assumptions for long-term growth and interest rate trajectories. But these trajectories are quite uncertain. If long-term growth were lower than expected, for example because old-age employment declined faster than expected as a result of the envisaged reduction of the pension age (see Chapter 1), debt would continue to rise. This effect would be compounded by higher interest rates. Tax reforms that would help finance the envisaged fiscal measures are presented in Chapter 3.

Key recommendations

- Spell out plans to convert foreign-currency-denominated mortgage loans to limit the cost for banks, and avoid regulations or taxes that would imply further burdens for them.
- Ensure that plans for new spending and tax reductions are financed in a sustainable way.
- Increase the statutory pension age, as previously planned and, if early retirement is allowed, ensure that it is at the same age for men and women and at actuarially neutral discount rates.

3 Revisiting the design of tax policies

The government's additional public spending and revenue reductions will require financing that is sustainable and does not create undue distortions to the economy. The government's strategy is to focus on improving tax compliance to increase revenues. VAT evasion is substantial and has increased over recent years to more than a quarter of the total liability. The envisaged tax administration reform is therefore welcome, as are recent measures to avoid base erosion and profit shifting. However, reaping the benefits of such a reform will likely take time, and it is very uncertain how much extra revenue should be counted on. Therefore, additional taxes will be needed. Increasing recurrent taxes on immovable property and on environmental externalities, including greenhouse gas emissions, and scaling back reduced VAT rates and exemptions could potentially yield substantial revenues and would help to improve the quality of the environment and well-being.

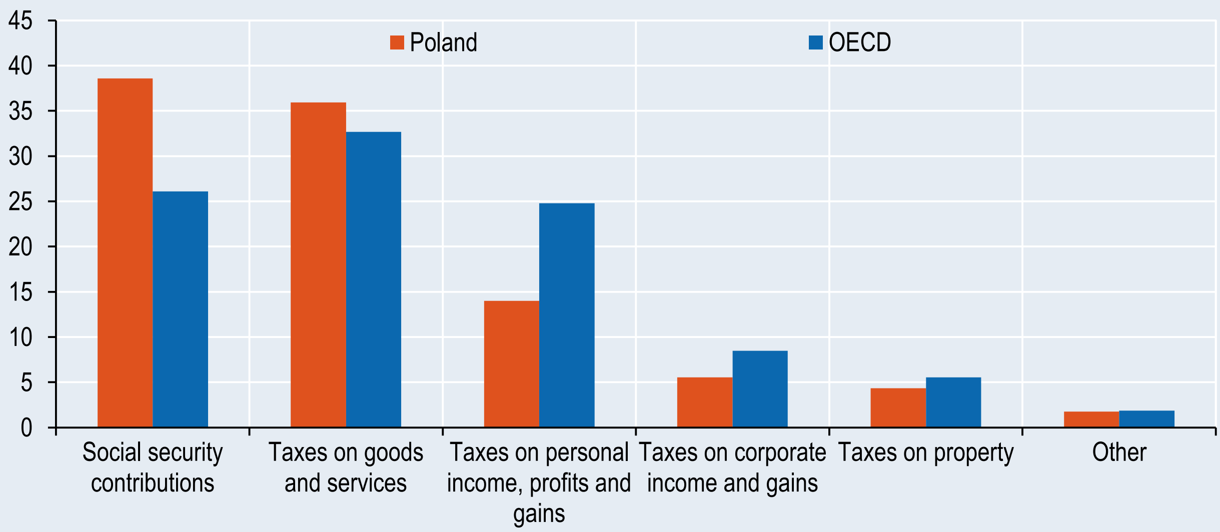
Higher tax revenues are needed to finance the planned increase in spending

Tax revenues amounted to 31.9% of GDP in 2013, slightly below the OECD average of 34.2%. The new government, which has confirmed its determination to keep the fiscal deficit below 3% of GDP, is planning to raise revenues. Yet the new taxes that Poland has either already adopted or is currently discussing are expected to yield revenues of a much smaller order than the planned spending increases (see Chapter 2).

The additional tax revenues should be generated in a way that avoids creating distortions to the economy. Past OECD research (OECD, 2010) suggests that recurrent taxes on immovable property and environmentally-related taxes are amongst the least detrimental to long-run GDP per capita. Poland currently only raises a very small share of total tax revenues through such taxes (4.4% from taxes on immovable property in 2013 compared to the OECD average of 5.6% and 6% from environmentally-related taxes, compared to the OECD average of 6.6%). Revenue from taxes on immovable property could be raised by basing them on market value. With regard to environmentally-related taxes, it is estimated that 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 (currently lacking in Poland) could yield additional revenues equivalent to about 1.5% of GDP in 2025 (Hogg et al., 2014).

FIGURE 3.1. **POLAND'S TAX REVENUE MIX IS SKEWED TOWARDS SOCIAL SECURITY CONTRIBUTIONS**

Percentage share of different tax types in total tax revenues, 2013



Source: OECD Revenue Statistics 2015.

Even though consumption taxes are the second-largest source of tax revenues in Poland (Figure 3.1) after social security contributions (SSCs), the existence of reduced value added tax (VAT) rates and compliance issues contribute to a significant gap in VAT revenues. The VAT Revenue Ratio (VRR) is the ratio between the revenue collected from VAT and the revenue that would be raised if the standard VAT rate were applied uniformly to all final consumption, with perfect tax enforcement. In other words, the VRR combines the degree to which VAT policy is designed to tax consumption at a uniform rate together with the quality of compliance and tax administration. In 2012, Poland had one of the lowest VRRs in the OECD, pointing to both a narrow VAT base and weak enforcement and compliance. Broadening the VAT base, by scaling back the use of reduced VAT rates and exemptions, and strengthening VAT enforcement could help boost revenues and contribute to financing Poland's planned spending increases.

Poland's tax system could be made more redistributive

In addition to raising revenues to finance public expenditures, taxes play an important role in redistribution and narrowing income gaps across the population. They can thus be an important policy lever to create a more inclusive society (Brys et al., 2016). However, Poland's tax system is one of the least redistributive in the OECD. One of the characteristics of the Polish tax system is the high SSCs that both employers and employees have to pay and the comparatively low personal income taxes (PIT) (Figure 3.1). Because SSCs are levied at proportional rates, the average tax wedge – or total tax burden on labour income including both SSCs and PIT – is relatively flat, meaning that it does not vary much along the income distribution. In fact, because there is a ceiling on SSCs, the total tax burden on labour income becomes slightly regressive after a certain income threshold (i.e. PLN 118 770). For low-income workers, on the other hand, the tax wedge is comparatively high, which tends to discourage employment and encourage the use of irregular contracts (typically false self-employment) which are subject to much lower SSCs.

To address some of these issues, the government is considering merging SSCs with the PIT into a single tax which would be implemented in 2018. The single tax would also involve an increase in the personal tax allowance. It is envisaged that imposing higher tax rates on higher earnings would compensate for the effect of the increase of the personal allowance on the state budget. In general, a reform of the labour tax system is welcome; it should ensure that labour taxes are more progressive and reduce the differences between the tax treatments of different labour contracts.

The new corporate tax regime may need to be revisited

Recent corporate tax reforms have focused on stimulating innovation and entrepreneurship as well as on measures to limit international tax avoidance. Poland's combined (central and sub-central) corporate income tax (CIT) rate of 19% is below the OECD average of 25%. In January 2016, a new R&D tax credit that supports internal R&D investments replaced the tax relief for acquiring new technology. To support entrepreneurship, the CIT rate for small firms will also be reduced to 15%. Evidence regarding the effectiveness of special tax provisions for R&D and SMEs is mixed, however, so the effects of these new measures should be carefully evaluated.

Poland also made significant efforts to implement Base Erosion and Profit Shifting (BEPS) counter-measures. Poland introduced controlled foreign company rules in 2015 which aim to prevent profit shifting through parent companies assigning passive or mobile income (e.g. from intellectual property, services and digital transactions) to foreign subsidiaries in which they have a controlling interest and which are located in low-tax jurisdictions. Poland also made significant changes to its transfer pricing regulations in line with the recommendations of the OECD/G20 BEPS project.

Poland introduced a tax on the assets of financial institutions which may have distortive effects on their profits. The tax, which entered into force in February 2016, has to be paid by banks, credit unions and insurance companies, as well as other lending institutions. The monthly tax rate is set at 0.0366% of total assets (0.44% annually), but some deductions from the tax base are envisaged (the tax does not apply, inter alia, to government bonds, bank capital, and assets lower than PLN 4 billion). Moreover, banks that run obligatory rehabilitation plans are exempted from the tax. This tax reduces bank profitability and – according to some studies (IMF, 2016) – may also have adverse effects on lending activities (although it remains to be seen to what extent this risk materialises). The government could envisage replacing the tax on assets with an instrument levied on the sum of profits and remuneration of financial institutions.

In addition to changes in the overall tax level, Poland should consider ways to ensure efficiency of fiscal or other incentives allocated to firms. Several OECD instruments highlight that fiscal and in-kind incentives provided to firms – such as tax exemptions, subsidies, or Special Economic Zones (SEZs) – should be periodically evaluated to ensure their relevance, effectiveness and cost-efficiency (OECD, 2015a; OECD, 2003). Such evaluations should not only consider the direct costs and effects associated with the support but also indirect effects on employment, competition and regional development, for example (Cizkowicz et al., 2015). There are currently 14 SEZs operating in Poland, whose functioning was prolonged until 2026. The government is also in the process of revamping the institutional framework for investment promotion, notably through the creation in 2017 of a new investment and trade promotion agency (PAHiI) to complement the activities of the existing one (PAIiIZ). It may, hence, be a timely moment for the government to undertake a review of its investment promotion structures and incentives now in place to ensure that the reform builds on the available international best practices and achieves its intended effect.

Tax compliance and tax administration should be further strengthened

Tax administration suffers from fragmentation within the Ministry of Finance and a lack of co-ordination among local and regional tax offices (OECD, 2016b). Building a unified revenue administration with a strong central management structure and investing in modern information and communication technologies, in line with the new government's plans, should improve its effectiveness (Toro et al., 2015). Ongoing efforts to strengthen analysis and planning of tax audits should continue. In 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). 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 (OECD, 2016b).

Key recommendations

- Raise more revenues through recurrent taxes on immovable property and environmentally-related taxes.
- Collect greater VAT revenues by scaling back reduced VAT rates and exemptions and by strengthening VAT enforcement.
- Ensure greater progressivity in the personal income tax system, for instance by implementing the planned merger of SSCs and PIT.
- Continue efforts to address international tax avoidance as part of the OECD/G20 BEPS project.
- Abolish corporate tax incentives to the extent that the benefits do not outweigh the costs.
- Examine the effects of the new tax on financial institutions and consider replacing it with a tax on profits and remuneration.
- Strengthen tax compliance and the efficiency of tax administration with a focus on building a strong central management structure and reinforcing tax audit capacity.

4 Improving the quality of Poland's infrastructure

Poland has significantly upgraded its infrastructure over the past two decades. However, bottlenecks still weigh on productivity growth and environmental and health outcomes. The authorities' plans to increase spending in railway and urban public transport over 2014-20 are welcome. But past concentration of investments in the road sector has left less developed regions without access to fast trains (with speeds above 120 km/h), hampering inclusiveness. Electricity generation capacity may be constrained in the medium term and remains dominated by fossil fuels, although the share of renewables has increased. Fostering telecommunication and information technology infrastructure would also help to develop a more sustainable and inclusive growth model. At the same time, the regulatory framework and the infrastructure investment process need strengthening.

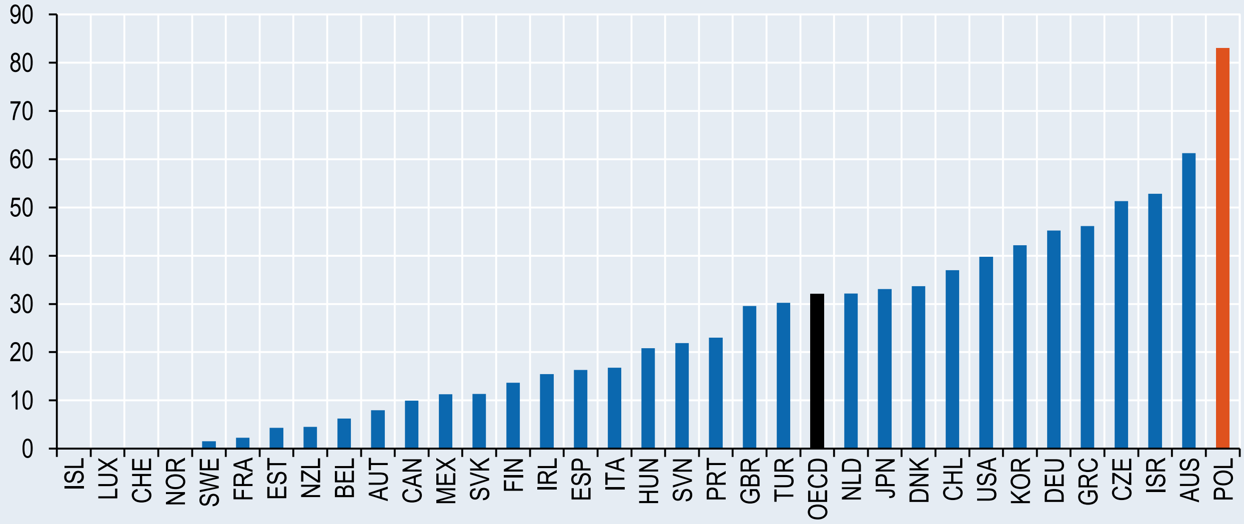
Infrastructure investment needs remain substantial

Improving infrastructure is key to keeping the Polish economy on a steep long-term growth path, enabling productive private investment and the development of new activities. Even though Poland has significantly upgraded its infrastructure over the last 20 years, it still ranks poorly in terms of the perceived quality of transport infrastructure (World Economic Forum, 2016). Electricity supply remains lower and information and communication technology (ICT) infrastructure less developed than in most OECD countries. Greenhouse gas (GHG) emissions and urban air pollution are sizeable, contributing to climate change and substantially harming health outcomes (OECD, 2015b; OECD, 2016b; Goujard, 2016). Ageing electricity generation capacity and household heat production rely mainly on solid fuels. This reliance on solid fuels and the use of poor quality coal by households produce substantial urban pollution and heavy carbon emissions. GHG emissions per unit of GDP have declined over the long term, but the carbon intensity of the economy remains well above the OECD average.

The Polish authorities are planning substantial investment in new infrastructure over the period 2014-20. They intend to develop public transport spending and green transportation systems. They also expect to diversify the energy mix, while expanding the electricity and gas transmission networks and improving energy efficiency (Ministry of Development, 2016). Structural and cohesion funds, co-financing numerous infrastructure projects, are set to reach nearly 3% of 2013 GDP per year over the EU 2014-20 period. Improving the management of infrastructure investment would help reap their full benefits.

FIGURE 4.1. **COAL ACCOUNTS FOR THE BULK OF POLAND'S ELECTRICITY GENERATION CAPACITY**

Share of coal in total electricity generation capacity in percent, 2014



Source: IEA (2016), World Energy Balances.

Strengthening transport infrastructure would improve productivity and health outcomes

The envisaged rise in spending on public transport is crucial, since past efforts were devoted mostly to roads. Intensive car use has significant negative effects, and some major agglomerations and less-developed regions lack access to fast trains (in fact, only a little more than one-third of the railway network allows for speeds greater than 120km/h). However, railways still suffer from unreliable financing. The infrastructure manager typically signs three-year maintenance contracts with the government, but the specific budget allocations are decided on an annual basis, creating uncertain financing for long-term upkeep. A welcome draft programme for 2016-23 aims to ensure more stable financing, notably for maintenance.

Public urban transport is also insufficient, with detrimental effects on labour market mobility and environmental outcomes. A weak spatial planning system has contributed to substantial urban sprawl, intensifying road congestion and urban pollution. Around 70% of municipal territory lacks local spatial plans, and the quality of land administration is low in the main cities (World Bank, 2016b). It is crucial to support the development of local spatial plans and tighten restrictions on building permits for land without such plans, as foreseen by projected reforms of spatial planning regulations. The government has allowed metropolitan governance structures in line with functional urban areas to be established on a voluntary basis as of 2016. This should be pursued more systematically, while endowing these structures with infrastructure planning competencies. Indeed, existing Polish metropolitan governance bodies lack formal powers and usually cover a small fraction of current functional urban areas (Ahrend and Schumann, 2014). Ongoing reforms should further facilitate co-ordination of local planning policies, notably in metropolitan areas.

Promoting appropriate energy infrastructure investment is also crucial

The modernisation of the energy sector and the diversification of energy sources would help to raise Polish competitiveness and private investment and reduce environmental impacts. Poland relies mostly on coal for its electricity generation (Figure 4.1), using ageing generation capacity. Although Polish power plants fulfil the requirements of the relevant EU directive, they are among Europe's largest contributors to health hazards. The authorities foresee partially replacing existing coal-fired power plants and complementing them with high-efficiency units and a sharp increase in renewable energy production, supported by new gas plants. In addition, a first nuclear power plant is planned to be commissioned by 2030.

Deeper infrastructure integration with neighbouring electricity markets would spread the burden of achieving Europe-wide GHG emissions reduction targets more efficiently across countries. With only 2% of Poland's electricity generation capacity available for trade with other EU member states in 2014, buffering with neighbouring transmission system operators is difficult, and power outages are frequent. Limiting the negative impact of unscheduled flows from neighbouring countries (mainly Germany) on international trade capacity would be useful (ACER, 2015), but additional international interconnections are also needed. Investments in international links must progress quickly to reach the 2020 threshold of 10% fixed by the European Commission.

Ensuring stable incentives is key for investment in electricity capacity. Weakening demand and intense short-term competition have recently led to low wholesale power prices across Europe (IEA, 2016), and the generating costs of new facilities are above wholesale prices for most technologies (NEA/IEA/OECD, 2015). The government could consider introducing a market for "capacity certificates", as in the United Kingdom and France. The authorities would award certificates to generators for providing reliable capacity and require each supplier to purchase a certain amount of these certificates in regular auctions. Generators would thus be rewarded for providing capacity, which would ensure peak demand is met. Such a market would need to be carefully designed to preserve retail and wholesale competition.

Regulatory uncertainty, excessive administrative burdens and a lack of inter-regional transmission capacity have hampered the development of renewables. At 13%, the share of renewables in electricity generation was well below the OECD average in 2014 (OECD, 2015b). Strengthening electricity transmission and distribution capacity, as currently planned and ensuring easy access to the electricity grid would foster the development of renewables. It is also crucial to secure the implementation of the new renewables auction market and the regulatory framework in line with the OECD's policy guidelines (OECD, 2015c), as new wind farm regulations have recently made their development more difficult.

There is significant potential to improve heating efficiency. The use of coal for household heating, typically of poor quality and often in inefficient, old and inadequate systems, is an important source of urban air pollution, but it is not subject to any environmental tax or to the EU Emissions Trading System. A tax could reinforce the effect of the government's subsidies to replace inefficient household heating systems and help move further towards district heating, as in Sweden. Improving subcentral government collaboration regarding energy and heat is also essential. Municipalities have often failed to develop local energy efficiency plans, holding back the development of co-generation, notably with renewables.

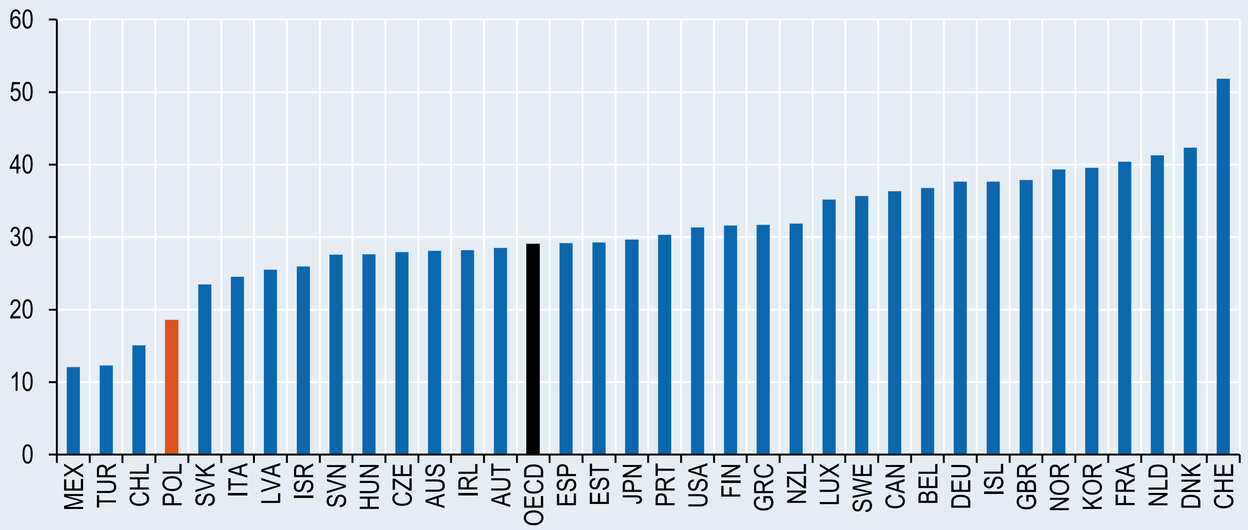
ICT infrastructure needs to be further developed

Poland ranks poorly on some indicators of broadband connections (Figure 4.2), although envisaged developments should help reduce persistent regional disparities. Fostering diffusion will also require significant upgrading of the skills of the population, as average digital skills remain weak (OECD, 2016b). To cut costs, investments in broadband and other digital infrastructure should be implemented at the same time as road, rail and energy investment whenever possible. In 2016, reforms lowered regulatory barriers for the deployment of the broadband network. Over the medium term, the Operational Programme Digital Poland, a unique programme at the level of the European Union, with a budget of EUR 2 billion, will reinforce Poland's digital potential by ensuring common access to fast Internet, providing public services electronically and improving citizens' digital competences and skills.

The risk for companies in areas such as transport and energy to be "locked in" to a single mobile operator and its network in their use of the "Internet of Things" also warrants special attention (OECD, 2015d). One way of solving this issue is the liberalisation of access to blocks of international mobile subscriber identities (IMSIs) for SIM cards to allow public and private players to have access to SIM cards, as in the Netherlands. An alternative is "over-the-air provisioning" (OTA), which consists of remotely programming the SIM module so that it can be operated by a different mobile network provider. However, there is no certainty on the timeline of the standardisation process needed for OTA. Thus, in the short term, IMSI liberalisation can be undertaken if enough safeguards are implemented.

FIGURE 4.2. **POLAND LAGS BEHIND OTHER OECD COUNTRIES IN TERMS OF BROADBAND PENETRATION**

Fixed broadband subscriptions per 100 inhabitants, 2015



Source: OECD (2016), OECD Broadband Portal, http://www.oecd.org/sti/broadband/oecdbroadbandportal.htm.

A sound institutional framework is key for infrastructure investment

Local governments will have a more prominent role in the allocation of EU funds over 2014-20, and there will be a need to increase their accountability and resources. They lack skilled personnel, and sometimes incentives, to plan and manage infrastructure and energy efficiency strategies. Increasing local administrative capacity in public procurement, public-private partnerships (PPPs) and infrastructure management would improve spending efficiency. Providing central government technical assistance through expertise and upfront resources for the preparation of large projects would be helpful, in line with the OECD's guidelines for investment and multilevel governance of infrastructure (OECD, 2015e; OECD, 2015f). There should also be a central platform for integrated e-procurement procedures in order to ease local collaboration.

More generally, cost-benefit analysis (CBA) should play a larger role in the development of infrastructure. At the feasibility study stage, EU regulations require a CBA of all major investment projects applying for assistance. However, several past Polish strategies and policy documents in key areas failed to include either a proper CBA or estimates of the cost of inaction. A more consistent use of CBA could help identify projects with the largest social returns and reduce fiscal risks. A central body could be in charge of securing uniform CBA, taking into account environmental and health impacts and other policy objectives, and independent second opinions could be required for the largest projects.

Reinforcing the regulatory framework and improving the independence of sector regulators would also reduce regulatory uncertainties that inhibit investment (see Chapter 5). Indeed, public ownership remains widespread and may lead to potential conflicts of interest, notably in network sectors.

Key recommendations

- Ensure that climate change policies are clear and aligned with European and international objectives, notably the long-term goals of the Paris Agreement.
- Invest in interconnections with neighbouring countries in the electricity and gas sectors.
- Ensure that the new law on renewables, together with the EU emissions trading system, provides appropriate incentives for investment in new generation capacity.
- Evaluate the need for an electricity capacity market to help finance base-load and peak-load capacity.
- Clarify the strategy for reducing the environmental impact of the power sector, including coal use for electricity production.
- Systematically publish CBAs with sufficient details and bolster the technical quality of CBAs by creating a reference centre able to help agencies involved in the analyses.
- Develop and regularly update local spatial plans.
- Increase local capacity by providing central government technical assistance and developing integrated e-procurement processes.
- Reduce lock-in effects for the "Internet of Things" in critical sectors of Poland's economy, such as transport and energy, including by liberalising access to IMSI numbers for SIM cards.

5 Making the regulatory framework more conducive to competition

A regulatory framework that is conducive to competition should be a key pillar of Poland's strategy to move up into higher value-added activities, as competition encourages firms to adopt new technologies and products and to improve their processes and management methods. Despite sizeable progress, product market regulations remain rather stringent in many sectors, hampering both domestic and foreign competition. Administrative burdens on start-ups are still relatively heavy, and substantial state involvement in key network industries, where regulators sometimes depend directly on ministries, can make it difficult for private actors to obtain equal conditions to compete. This creates regulatory uncertainty. A comprehensive programme to review and remove the regulations facing these key sectors could help improve their performance significantly.

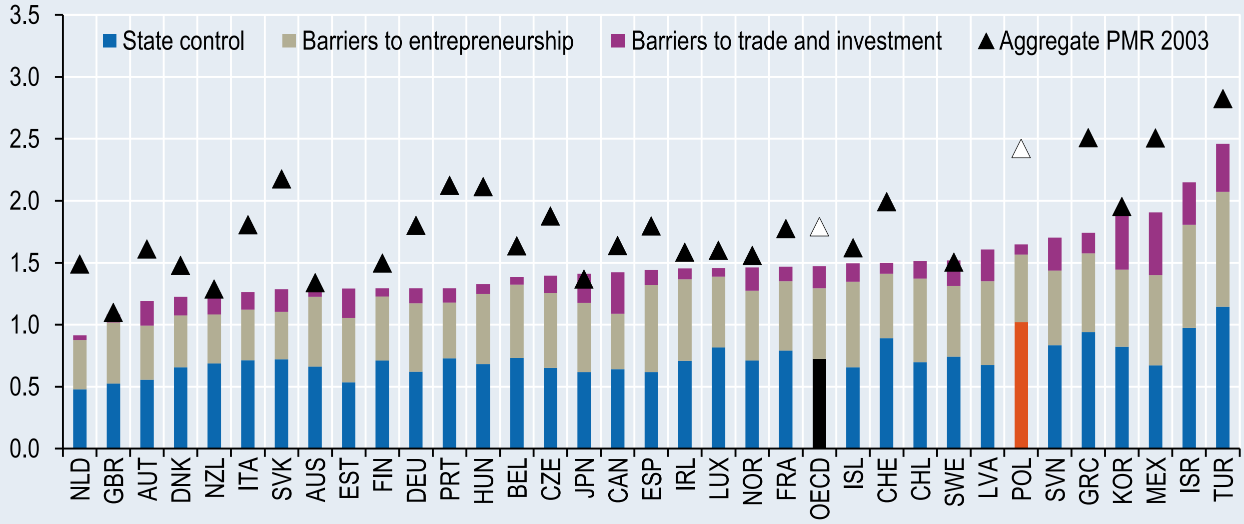
Entry barriers need to be lowered and regulatory independence strengthened in key industries

Poland has undertaken significant efforts to improve its business environment over the past decade, as revealed by its improved ranking among OECD countries in the World Bank's Doing Business report, from 31 in 2010 to 18 in 2016. The OECD's Product Market Regulation Indicator for Poland has also declined significantly since 2003 (Figure 5.1), thanks to a reduction of barriers to competition in network industries, fewer antitrust exemptions and a sparser use of command-and-control policies, along with some privatisations. Another recent initiative was an extensive programme to liberalise regulated professions, rolled out over 2013-15. Poland has also cut the average number of hours spent by firms to pay taxes through additional e-procedures for VAT and transport taxes (World Bank, 2016b).

Yet overall, the stringency of product market regulation remains above the OECD average, and administrative burdens on start-ups are still relatively heavy. In particular, online registration procedures are complex and have a low take-up, despite some recent streamlining (World Bank, 2016b). The role of state-owned enterprises (SOEs) is also substantial. While the overall number of SOEs is not particularly high (in 2012, there were around 325 SOEs in Poland, employing around 160 000 people), there is a heavy concentration of SOEs in certain sectors, such as energy, transportation and other utilities. This can raise competition issues, as the independence of the main network regulators and the Competition Authority is not fully guaranteed (Égert and Goujard, 2014).

FIGURE 5.1. **DESPITE SIZEABLE IMPROVEMENTS, PRODUCT MARKET REGULATIONS REMAIN RATHER STRINGENT IN POLAND**

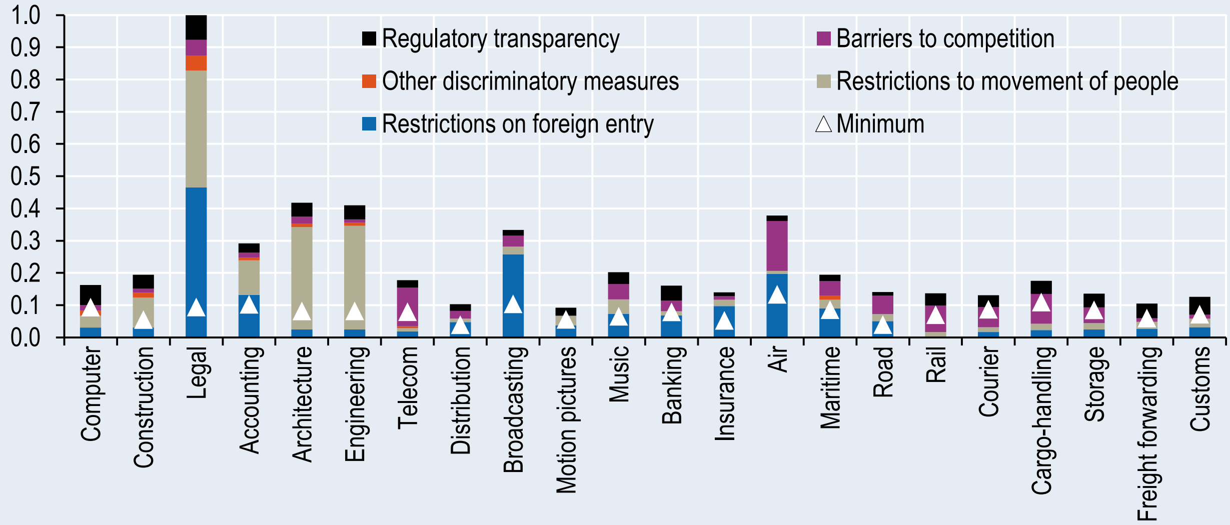
OECD Product Market Regulation Indicator, from 0 (least restrictive) to 6 (most restrictive), 2013



Source: OECD Product Market Regulation Database, www.oecd.org/eco/pmr.

FIGURE 5.2. **PROFESSIONAL SERVICES SECTORS STILL SUFFER FROM IMPORTANT TRADE RESTRICTIONS**

OECD Services Trade Restrictiveness Index, from 0 (least restrictive) to 6 (most restrictive), 2015



Note: The STRI regulatory database contains information on regulation for the 35 OECD members countries, Brazil, China, Colombia, India, Indonesia, Russia and South Africa. It records measures on a Most Favoured Nations basis. Preferential trade agreements are not taken into account. Air transport and road freight cover only commercial establishment (with accompanying movement of people).

Source: OECD Services Trade Restrictiveness database.

For example, the railway network regulator, UTK, reports to the Ministry responsible for Transport, and its president may be removed at any time, creating potential conflicts of interest when supervising the government-controlled infrastructure manager and network operators. In late 2016, the law was being amended to make the President of UTK be independent from the Minster responsible for Transport. The fixed-term contract of the president of the Energy Regulatory Office can be renewed once, and the president of the Competition Authority can be recalled without justification, potentially exposing both authorities to political pressures.

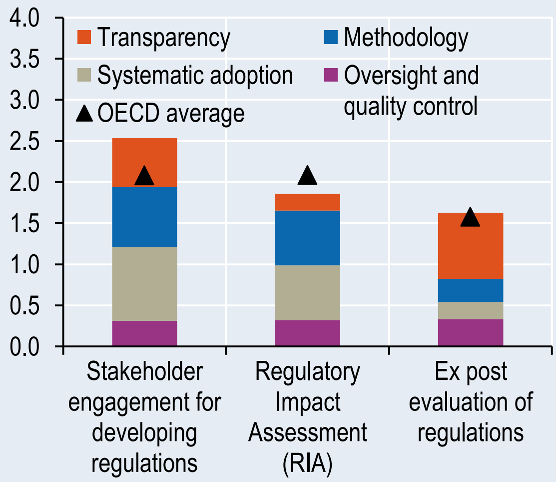
Lowering barriers to cross-border trade in services could significantly raise competitiveness

In addition to lowering barriers to domestic competition, Poland needs to ease barriers to foreign competition, both at and behind the borders. Although Poland performs well in many areas of the WTO Trade Facilitation Agreement, it could benefit from further improvements, potentially reducing trade costs for businesses by almost 12% (OECD, 2015g). Increased productivity of Poland's services sector – which accounts for 55% of its value-added exports and around 60% of employment – would not only benefit aggregate demand, but also enhance the competitiveness of the manufacturing sector.

Although the OECD Services Trade Restrictiveness Index (STRI) shows that Poland is more open than the STRI average in 16 out of 22 sectors, it also shows that significant

FIGURE 5.3. **FULL IMPLEMENTATION OF REGULATORY POLICY REMAINS A CHALLENGE**

Regulatory Governance Indicators, from 0 (worst performance) to 4 (best performance)



Source: OECD Indicators of Regulatory Policy and Governance (iREG) 2015, http://www.oecd.org/gov/regulatory-policy/indicators-regulatory-policy-and-governance.htm.

trade barriers still exist across a number of specific sectors. For example, for architects and engineers to practise in Poland, they must hold Polish or EU citizenship. In the legal sector, foreign lawyers from countries not participating in reciprocal recognition schemes of foreign qualifications are required to completely requalify to practice in Poland. In addition to targeted reforms to these sectors, trade in services could be enhanced across the board by lifting labour market test requirements for contractual and independent services suppliers and reducing the minimum capital requirement to register a company. Further efforts could also be made to reduce the number of documents required for a visa and procedures to register a company, which currently are all significantly longer or more numerous than best practice.

Poland has a good regulatory governance framework, but faces implementation challenges

Poland has substantially improved its regulatory governance system over the last years. The government introduced a central online system to provide access to the general public to Regulatory Impact Assessment (RIA) and other documents sent for consultation to selected groups, such as trade unions and business. Public consultation is conducted for some regulatory proposals over the Internet in a pilot project allowing users to comment on draft legislation and RIAs and to view comments provided by others. New guidelines for RIA, consultation and ex post evaluation of regulation were adopted in 2015, providing more detailed guidance and stronger emphasis on public consultation. The Ministry of Economy co-ordinated the implementation of the Better Regulation Programme 2015, reporting to the Council of Ministers. The Programme has been prepared in co-operation with the Chancellery of the Prime Minister, which oversees the quality of RIA, and the Government Legislation Centre, which is in charge of ensuring legal quality.

Like many countries, Poland faces challenges to fully implement its regulatory governance requirements and to ensure that RIA and consultation comments received are actually used to improve decision-making (Figure 5.3). For example, minimum periods for consultation with stakeholders are not always respected. Poland may also extend its online public consultation system and consider using instruments such as green papers more systematically for early-stage consultation, to identify options for addressing a policy problem and to avoid "regulating by default". Steps taken in 2014 to introduce ex post evaluation of regulations are encouraging. Poland would further benefit from establishing an independent standing capacity to regularly undertake comprehensive in-depth reviews of regulations in specific areas in order to inform structural reforms.

Key recommendations

- Further advance the liberalisation of professional services, particularly focusing on the movement of temporary workers, efforts to ease licensing and nationality requirements, and improving the recognition of foreign qualifications for non-EU citizens.
- Further lower the cost of firm entry and exit, in particular by cutting red tape.
- Encourage widespread use of RIA and consultation by respecting minimum consultation periods.
- Adopt instruments such as green papers for early-stage consultation.
- Have an independent authority undertake regular in-depth reviews of regulations in key sectors of the Polish economy, possibly drawing on the OECD Competition Assessment Toolkit, to identify and abolish regulations that unduly restrict competition or put unnecessary regulatory burden on firms.
- Ensure that all regulators have fixed-term, non-renewable mandates during which they cannot be dismissed without fault.
- Critically review state control, and ensure competitive neutrality, streamlining and better co-ordinating the exercise of ownership.

6 Enhancing the general framework conditions for innovation

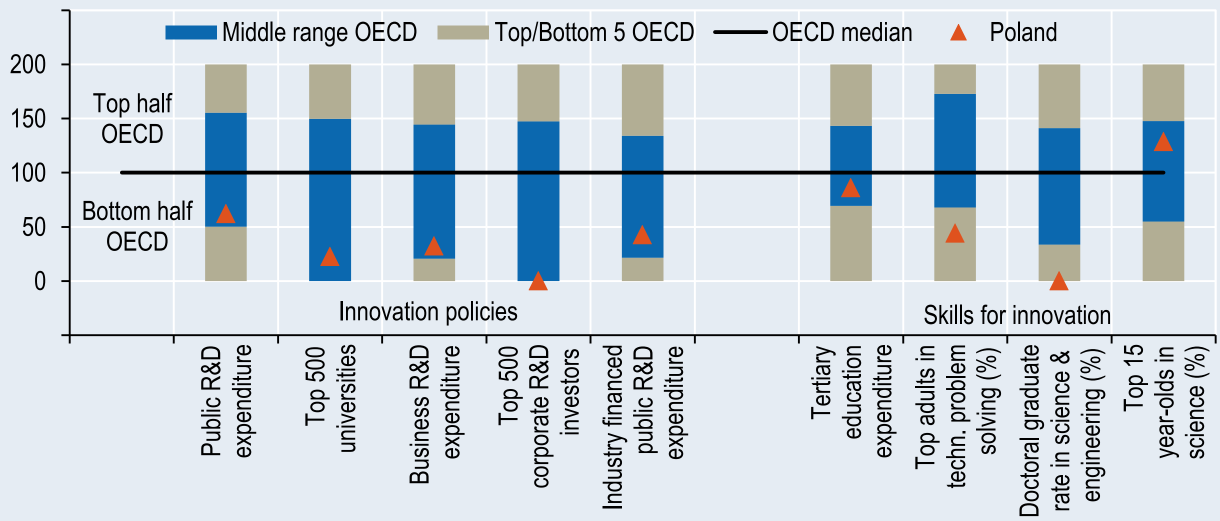
Boosting Poland's innovation capability and performance is crucial for the country to succeed in moving towards knowledge- and innovation-based economic growth. Indicators of innovation performance, such as the number of patents and trademarks registered, put Poland well behind other OECD countries. The government is currently implementing a number of initiatives, notably the Strategy for Innovation and Efficiency of the Economy: Dynamic Poland 2020 (2013-20), the Entrepreneurship Development Programme (EDP) and the National Research Programme (NRP), as well as the Smart Growth Operational Programme, which is part of Horizon 2020 and is Poland's largest programme for research, development and innovation undertaken with EU funding. But despite recent improvements, the country still scores only moderately on measures of innovation investment and performance. While the regulatory reforms proposed in Chapter 5 should help open up pathways to innovation and investment, it is equally important for Poland to enhance framework conditions for innovation in order to fully unleash the economy's innovation potential that is needed to compete in global value chains.

Poland needs to improve the policy mix for innovation support

The Polish business sector, especially SMEs, shows a relatively low interest in investing in research and development (R&D). Business Expenditure on R&D (BERD) was only 0.44% of GDP in 2014, far below the OECD median (Figure 6.1), and the country performs rather poorly when it comes to innovative entrepreneurship (see Chapter 7). Unlike other OECD countries, Poland relies almost exclusively on direct public support measures such as grants and contracts in supporting business innovation. The risk-adverse selection process steers large proportions of public funding to big companies, in the form of grants for absorption-oriented activities, and neglects innovative SMEs (Kapil et al., 2013). It is therefore recommended to give a greater role to the indirect support measures, such as tax incentives, in order to create a more appropriate policy mix for supporting business innovation that can support all kind of firms and the different stages of the innovation process. Currently, take-up of R&D tax incentives is low.

FIGURE 6.1. **POLAND COULD IMPROVE THE FRAMEWORK CONDITIONS FOR SCIENCE AND INNOVATION**

Comparative performance of national science and innovation systems, 2016



Note: Normalised index of performance relative to the median values in the OECD area (Index median=100). Unless indicated otherwise, indicators are expressed per GDP.

Source: OECD (forthcoming a) OECD Science, Technology and Innovation Outlook, OECD Publishing, Paris.

Some R&D tax incentives are conditioned on investments in Special Economic Zones (see Chapter 3), 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 non-refundable, penalising young and small firms. An amendment to these rules to tackle this issue is currently in preparation.

Industry-science relations and the commercialisation of public research need strengthening

Industry-science linkages are underdeveloped in Poland, as reflected by the low share of public R&D funded by industry (Figure 6.1). On one hand, this is due to the low demand for innovation by Polish industry, which has been primarily interested in technology absorption. On the other hand, while legalistic reforms have been carried out to provide the legal framework, including the rules for intellectual property rights for commercialisation of public research, barriers to commercialisation still exist. These include lack of sufficient skills among researchers to engage in R&D commercialisation and lack of incentives for public research institutes to look for new sources of financing, due to the high share of institutional funding. Last but not least, commercialisation is still not part of the formal career evaluation of individual researchers (European Commission, 2015). To address this situation, research organisations and enterprises participating in the Development Projects (2012-15) initiative are required to enter into consortium agreements, while the BRIdge VC (2013-17) programme specifically supports the commercialisation of public R&D results. Major reforms to improve the efficiency and quality of public research and universities, underway since 2010, have also aimed to enhance industry-science relations and commercialisation of research. Further efforts could focus more on providing an incentives scheme for researchers balanced between publishing and commercialisation of research results, on promoting intersectoral mobility of researchers between academy and industry, and on fostering entrepreneurial spirit and supporting entrepreneurial activities, especially among the younger generation of researchers.

Poland's innovation system is characterised by weak governance

Poland suffers from institutional fragmentation between agencies and support programmes. On the national level, responsibilities for strategy, financial planning and implementation are unevenly distributed between 5 different agencies and ministries, which manage some 22 innovation support programmes (Kapil et al., 2013). Most of the programmes package innovation with other objectives related to regional development, human development or the promotion of SMEs. At the same time, each of Poland's sixteen regions has its own innovation support initiatives. According to Kapil et al. (2013), this high level of fragmentation "duplicates objectives, discourages information sharing, disperses responsibility and accumulates administrative costs for the public sector as well as the grant applicants and beneficiaries".

Recognising the importance of multi-stakeholder co-ordination and a holistic approach to policy design and implementation, a national Council for Innovation was created in 2016 to better co-ordinate research and innovation policies. Further effort can take the direction of consolidating institutional structures, as OECD experience suggests that consolidation of institutional structures is necessary to reduce fragmentation and the resulting need for co-ordination of policy implementation. While there is no one-size-for-all recipe on how to streamline institutional structures, the principles for streamlining agencies and programmes could be based either on functionality of agencies (which is more typical in most countries), or on target group similarities, which is more demanding, as it often requires the resulting agencies to manage several different types of programmes. Whichever approach is adopted for institutional streamlining, the effective implementation of the whole-of-government approach to innovation will be important for the success for Poland's transformation to a knowledge- and innovation-based economy.

Poland faces the challenge of addressing a skill deficit for innovation

The share of the Polish adult population with tertiary qualifications, the technical problem-solving skills of adults and, in particular, the share of PhD graduates in science and engineering are all far below the OECD median (Figure 6.1), and computer skills are generally weak (OECD, 2016b). Following recent initiatives to support skills development and education, a Higher Education and Science Development Programme for 2015-30 was adopted in 2015 to further increase the quality of education and public research. The current government is also focused on raising the skills of the workforce to strengthen productivity and the economy's ability to absorb modern technologies and to innovate. Developing high-quality lifelong education and reducing irregular work relationships (see Chapters 8 and 9) would strengthen the skills of the population and their capacity to innovate. Given the demographic challenge, a policy targeted at skilled immigrants coupled with measures to ensure fast labour market integration could also help ease the skills deficit and strengthen innovation and productivity.

Key recommendations

- Shift from direct support for R&D and innovation towards an appropriate mix of grants and market-based measures that support all stages of the business innovation process.
- Increase the contribution of public research to innovation by combining public research reforms with measures for strengthening industry-science relations and commercialisation of research.
- Ensure a co-ordinated approach to science, technology and innovation policy making and implementation to reduce institutional fragmentation and the cost of public support, while increasing its efficacy and capacity.
- Combine government measures for improving education and skills formation with policies to attract and integrate skilled immigrants.

7 Fostering innovation through entrepreneurship

Poland has recently taken actions to promote innovative entrepreneurship by increasing entrepreneurship support in higher education and stimulating equity investments in innovative start-ups. The inclusion of entrepreneurship in the National Qualifications Framework for higher education has increased the availability of formal and informal entrepreneurship education, which has created momentum for strengthening business start-up support for students and academic staff. However, there is a need to adopt more active learning methods and provide more support for academic staff to be engaged in the entrepreneurial agenda, including the transfer of knowledge to the business community. Moreover, to ensure financing of innovation and entrepreneurship, it will be crucial to safeguard a sound banking system.

Innovative entrepreneurship is crucial for Poland to become a more knowledge-based economy

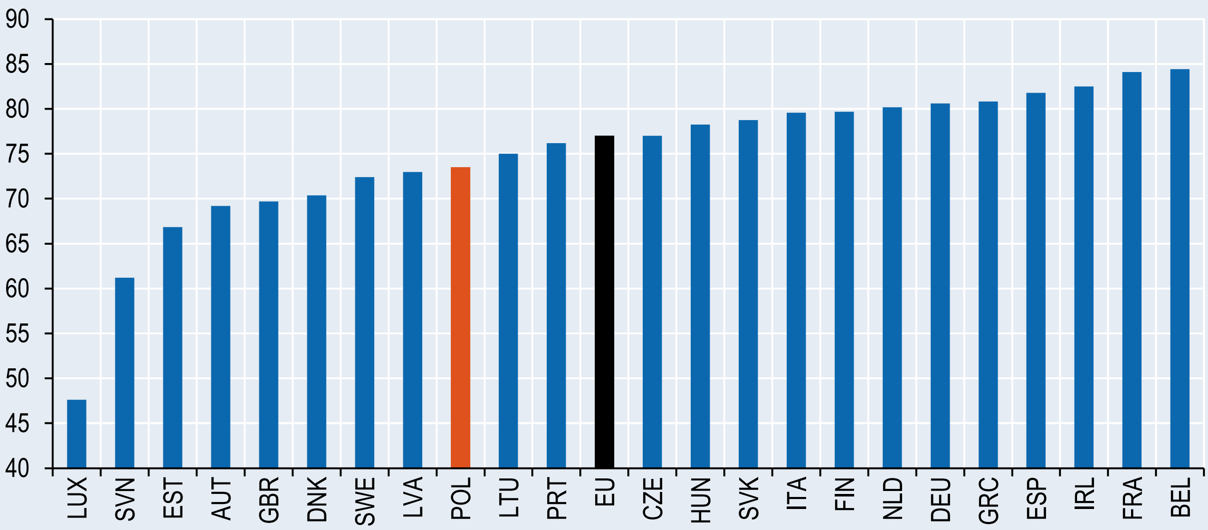
New business creation can make a critical contribution to innovation by introducing new products and services and new ways of operating. In Poland during the period 2010-14, 9.9% of adults started a new business or managed a young business (under 42 months old), higher than the European Union average of 6.5% (OECD/EU, 2015). However, the businesses started in Poland were less likely to be introducing products and services that are new to customers than in most European Union countries (Figure 7.1).

Higher education institutions can play a key role in promoting innovative entrepreneurship

One of the most promising routes to promote innovative entrepreneurship is through appropriate support in higher education institutions (HEIs). They can make an important difference by working through three channels: developing entrepreneurial mindsets among students; supporting business start-ups by students and staff; and engaging in knowledge exchanges with business.

FIGURE 7.1. **POLISH ENTREPRENEURS ARE LESS INNOVATIVE THAN THEIR PEERS IN OTHER EU COUNTRIES**

Innovative entrepreneurs, in percent of all new entrepreneurs, 18 to 30-year-olds, 2010-14

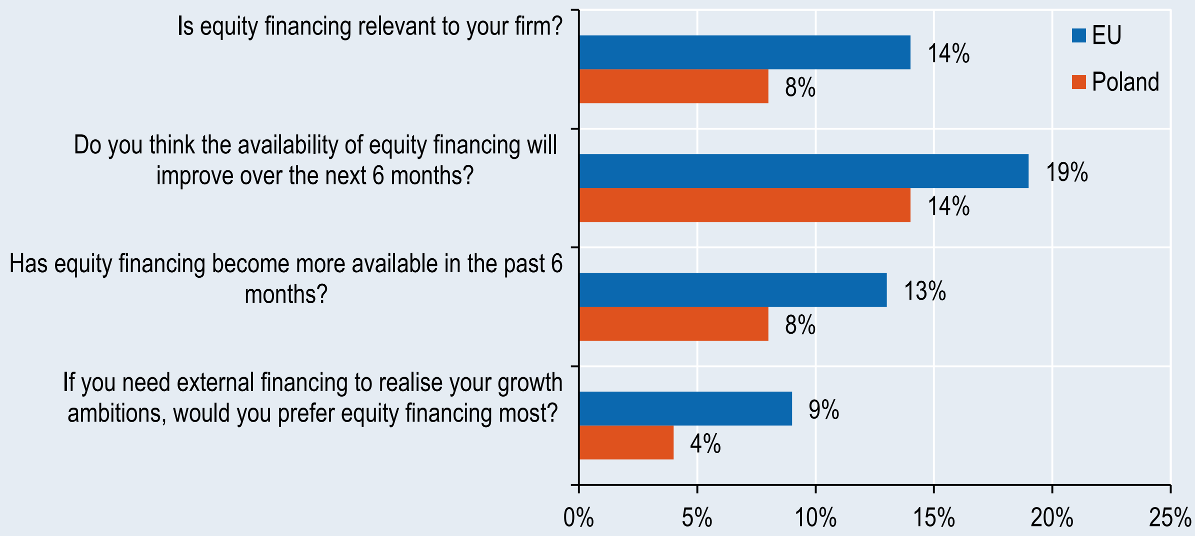


Note: This rate measures the proportion of new entrepreneurs (i.e. those operating businesses that are less than 42 months old) whose products or services are new to all or some customers and who have few or no businesses offering the same products or services.

Source: Global Entrepreneurship Monitor (GEM) (2016), Special tabulations of the 2010-14 adult population surveys from Global Entrepreneurship Monitor.

FIGURE 7.2. **EQUITY FINANCING PLAYS A LESS IMPORTANT ROLE IN POLAND THAN IN THE EUROPEAN UNION ON AVERAGE**

Percentage of respondents answering yes



Source: 2016 SAFE Survey, European Central Bank / European Commission.

Nearly all Polish Higher Education Institutions (HEIs) offer a range of learning opportunities to help students develop entrepreneurial mindsets. This is driven partially by student demand, but also by the inclusion of entrepreneurship skills in the National Qualifications Framework for most fields and levels of study. The availability of formal entrepreneurship modules and courses has increased in recent years, and extra-curricular learning opportunities have also been growing. However, there is still a need to increase the experiential learning component of the teaching approach (e.g. living labs, the use of case studies, games and simulation). Higher education teachers also require more training and resources for entrepreneurship education, such as good practice exchange platforms (OECD, forthcoming b; OECD, 2013a).

Business start-up support for students is typically built around a network of Academic Incubators operated by the Foundation of Academic Incubators of Entrepreneurship. The Foundation has agreements to operate the incubators in 56 HEIs. The incubators provide students with basic support, such as business counselling, to launch their ideas. For more intensive supports, students are often referred to off-campus services by the incubators and career offices, but this part of the support system is less developed. For academic staff, the main supports include technology transfer offices and special-purpose vehicles. These services are of high quality, but it is very rare for an HEI to take more than one or two research outputs to market per year (OECD, forthcoming-b).

HEIs also have an important function in Poland's national and regional Smart Specialisation Strategies. In particular, participation in HEI/industry knowledge exchange partnerships is now a requirement for HEI funding from the National Centre for Research and Development. However, the degree and success of co-operation could be increased with measures to clarify the management of joint HEI-industry intellectual property and to include knowledge exchanges with business alongside the production of academic publications in the criteria for the career progression of researchers (OECD, forthcoming b).

Entrepreneurs' access to finance needs to be enhanced

Financing gaps are typically more pronounced for innovative, fast-growing ventures than for new and small businesses more generally. Innovative entrepreneurs are more likely to use equity financing alongside debt financing for the start-up and expansion of their businesses. Evidence suggests that access to bank credit is relatively favourable in Poland. Loans and advances to SMEs rose by 45% between the beginning of 2009 and July 2016. Moreover, survey data from the second half of 2015 indicate that more SMEs have made recent use of bank financing in Poland than in the

European Union on average and that only 4% of SMEs that applied for a bank loan, were rejected (ECB, 2016; OECD, forthcoming c). However, dangers to credit supply stemming from banks' reduced profitability (see Chapter 2) could affect entrepreneurship.

Equity finance instruments remain underdeveloped in Poland. For example, venture capital investments as a percentage of GDP were less than half of the EU average over the 2011-15 period. This is because equity financing is not widely available and Polish SMEs have a lower preference for equity-type financial instruments than their peers in other EU countries (Figure 7.2). The Polish government has recently taken action to address these issues. The Polish Growth Fund of Funds was established in 2013 to stimulate equity investments into growth-focused enterprises, and the National Capital Fund is being refocused on venture capital funds supporting the start-up phase of innovative SMEs. In addition, NewConnect, the specialised platform for SME listings, which is part of the Warsaw Stock Exchange, benefits from a regulatory architecture designed for smaller enterprises.

The development of SME-specialised ecosystems (including investment banks, SME-specialised banks, research analysts, sales, brokers, market makers and other third party advisors focused on SMEs) that can support small public equity offerings on their listing and in the aftermarket should be supported. The provision of well-co-ordinated and focused financial education action can further enhance the development of non-bank financing instruments, raise awareness of financing options through capital market instruments and allow young and innovative SMEs to assess the appropriateness of risk finance for their business model and respond to public listing and market requirements.

The 2016 draft "Plan for Responsible Development" aims to foster business investment and innovation by reforming public aid for firms (see Chapter 6), creating a Polish Development Fund, merging the state-owned development bank and other public institutions to support entrepreneurship and SMEs, promoting efficient use of EU funds and encouraging savings and employee equity ownership plans. While such measures are welcome, specific sectoral policies and numerical targets for investment spending carry risks of policy errors and distortions. Broader framework policies are preferable.

Key recommendations

- Build a resource base for entrepreneurship education in HEIs, including platforms for good practice exchange and networks for entrepreneurship professors.
- Provide more financial resources to support the commercialisation of academic research from HEIs (e.g. for intellectual property protection).
- Broaden the criteria used to assess the performance of academic staff to include entrepreneurship support activities and joint research projects with industry.
- Monitor and evaluate the effectiveness of current policies to stimulate equity investments in Poland.
- Consider the adoption of additional measures to improve alternatives to bank credit for financing innovative entrepreneurship, such as the provision of fiscal incentives to investors and raising awareness among SMEs of alternative finance options.
- Revise existing support measures for innovation towards stronger support for early-stage business innovation and high-tech start-ups.

8 Making sure that the education system equips people with good and relevant skills

A highly-qualified workforce is vital for Poland's transformation to a knowledge-based economy. Poland's secondary school system performs well, as measured by attainment, indicators of educational equity and the country's performance in the OECD Programme for International Student Assessment (PISA) that assesses the skills of 15-year olds. But low levels of digital skills constitute a key challenge, and there are important deficiencies in both vocational education and training and the tertiary education system.

Tertiary education and vocational education and training need reform

While the performance of the school system, based on results of PISA, has been improving in Poland, the performance of the university sector and the vocational education and training (VET) system remain weak. The 2012 OECD Survey of Adult Skills reveals that, in addition to the one in five of the adult population with no computer experience, a significant number of young university students and university-educated people do not have sufficient basic skills to succeed in the labour market (OECD, 2013b). Formal and non-formal continuing education is less developed than in other OECD countries, especially in rural areas, where many people have weak basic skills. Currently, only 3% of the population aged 30 to 39 are enrolled in full-time or part-time education, compared with 6% on average across the OECD. Relatively few adults participate in employer-sponsored education: 38% of 35-44 year-olds took part in such programmes in the 12 months prior to the 2012 OECD Survey of Adult Skills in Poland compared to 52% across OECD countries.

Now is the time to act so that Poland can set the right course for developing, activating and using the skills required by tomorrow's innovation-driven economy. Improved access to quality education and training, better learning outcomes, responsive labour markets and high-performing workplaces will require a coherent and strategic approach to the design and implementation of skills policies. Developing an effective skills strategy for Poland which converts skills into jobs, growth and social inclusion will require a whole-of-government approach and whole-of-society engagement. Poland should therefore consider launching a comprehensive national Skills Strategy to address these issues. In 2013, the Polish Broad Alliance for Digital Skills was launched to stimulate the development of digital skills.

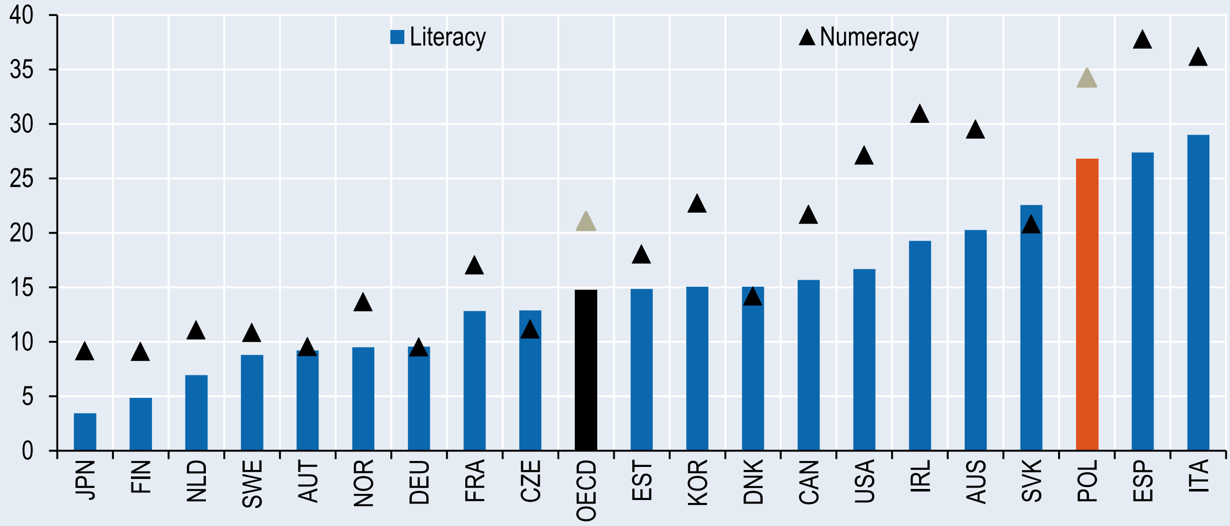
The quality of education needs to keep pace with the quantity of students

University education attainment levels have grown rapidly in Poland in recent years and now exceed the OECD average for younger age groups: some 43% of Polish 25-34year-olds are educated to this level, compared to the OECD average of 42%. This rapid expansion seems to have come with quality weaknesses in some higher education institutions. A study by the Polish Accreditation Committee suggests that the share of poor-quality higher education institutions is larger among private than public institutions. The national authorities have moved to address these quality


Tomasz Biderman/Shutterstock.com

FIGURE 8.1. **A SIZEABLE SHARE OF YOUNG UNIVERSITY GRADUATES IN POLAND HAVE LOW LITERACY AND NUMERACY SKILLS**

Percentage share of university graduates aged 20-34 with PIAAC proficiency Level 2 and below



Note: As measured by the OECD Survey of Adult Skills, a product of the Programme for the International Assessment of Adult Competencies (PIAAC), people at Level 2 or below struggle with basic quantitative reasoning or have difficulty understanding simple written information. University graduates with these levels of skills are considered insufficiently equipped for what their jobs demand of them.

Source: OECD calculations based on the Survey of Adult Skills, 2012.

concerns, the main goal of the 2012 higher education reform being to enhance the quality of education and training. Nevertheless, at least in the past, higher education was relatively unsuccessful in conveying high skills to students. The International Adult Literacy Survey showed that in the 1990s, higher education diploma holders (16-65 year-olds) in Poland performed on average less well than those with upper-secondary education in many other countries participating in the study, and even less well than those who had not even obtained upper-secondary education in Germany and Sweden (OECD/Statistics Canada, 2000). These outcomes continue to be evident in the OECD Survey of Adult Skills (Figure 8.1).

A recent law significantly strengthened higher education accreditation and quality control procedures. All higher education institutions now have to be accredited based on the adequacy of their staffing and the quality of their programmes. Several institutions that were unable to meet standards within the time they were given to improve were closed down. These important efforts should continue. Another crucial factor to ensure high quality is attracting good teachers. The government has made important efforts to increase academics' wages in recent years. Many had been forced to combine teaching at several higher education institutions before the practice was banned. The new government now plans to align pay and career prospects with performance in teaching and research, a welcome initiative. Finally, boosting Polish universities' international co-operation could help to improve the relevance and quality of tertiary education and research.

Reforming vocational education in the upper secondary system

Countries with effective apprenticeship systems tend to see much lower youth unemployment and higher levels of educational participation, which suggests that hands-on workplace training helps to integrate diverse groups of young people, encouraging them to stay in or re-engage with education and smooth the transition to work. However, apprenticeships, where students combine education and training in schools with work placement in companies, have not been common in Poland. According to the data from the Survey of Adult Skills in 2012, around 5% of all students in vocational education and training reported being in apprenticeship or receiving training with employers, well below the OECD average of 17%.

To address this challenge, the VET system has recently been reformed. The reform aims to strengthen employers' engagement in VET and to expand apprenticeships, in order to make the VET system more responsive to labour market needs. In the short VET track (provided by *zasadnicze szkoły zawodowe*), 65% of students now receive their practical training in firms rather than in workshops confined to training purposes. The reform also aims to improve basic skills in the short VET track. For example, it introduces a common first-year curriculum for all types of schools. This is consistent with OECD analysis (OECD, 2016b) that found that it is vital to assess the basic skills of students at the start of programmes and integrate basic skills development into professional programmes. It will help to ensure that students leave programmes with essential literacy and numeracy skills. These changes are welcome, as evidence points to a very low quality of the shorter vocational track in Poland, in terms of both development of basic skills and preparation for the labour market. Young graduates from this track have basic skills and labour market outcomes very similar to those who did not even complete upper secondary education (OECD, 2013b).

Collaborating closely with employers when designing vocational education and training as well as apprenticeship programmes is also vital to ensure that they are relevant to labour market needs and that higher education institutions are well connected with the world of work. Recent Polish initiatives along these lines are both welcome and in line with best OECD practices, but more could be done to engage with local employers at the strategic level (i.e. in steering local decision-making related to VET), as well as in the day-to-day practicalities of offering work-based learning opportunities (OECD, 2016c). Poland should provide incentives for employers to invest in education and training and seek to attract the best teachers to basic vocational schools by improving their pay and career opportunities.

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 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. The Ministry of National Education has completed 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, including disadvantaged groups, and make the VET system more responsive to labour market needs.

Key recommendations

- Fully consider the short-term and long-term impacts on low-performing students of the recent proposal to advance tracking by one year.
- Improve teaching of basic skills in short VET programmes.
- Scale up adult education programmes, and put suitable incentives in place for employers to invest in education and training.
- Continue to strengthen individual support for weak students in elementary and lower secondary education.
- Attract the best teachers to basic vocational schools (e.g. by improving their pay and career opportunities).
- Expand offerings to improve basic and generic skills, and complement such initiatives with remedial courses to reach those already outside the training and education system.
- Strive to make the VET system more responsive to local labour market needs, including through thorough engagement of employers at both the strategic level and in offering work-based learning opportunities.
- Link university teachers' pay and career prospects to their performance, and continue strengthening links with business and foreign universities.

9 Labour market and social policies to foster inclusiveness in a knowledge economy

To foster inclusive and sustained economic growth in the face of population ageing, Poland needs to do more to increase the employment rates among older workers, women and youth. Employment rates among these groups are much lower than those of the overall population. By removing barriers to their participation in the labour force, while reducing the incidence of "false" self-employment and making income support more generous and more responsive to people's job-search efforts and economic needs, Poland can achieve stronger and more inclusive growth.

Increasing the employment rates of older workers, women and youth is key to foster inclusive growth

While the employment rate for older workers in Poland has increased substantially over the past decade, it remains well below the OECD average (55% versus 67% for the age group 55-59 in 2013). A number of policy measures are being implemented, including terminating some early retirement schemes. On the other hand, the government plans to reverse an earlier reform that would have gradually increased the statutory retirement age to 67 for both women and men. Instead it plans to allow women to retire at 60 and men at 65, which would have negative effects on employment and long-term growth, according to OECD simulations (see Chapter 1). To strengthen old-age employment, Poland also needs to engage older workers better in training and lifelong learning programmes, including through recognition of prior learning and ensuring that training is more work-focused.

At 56.6%, the proportion of women employed in Poland is slightly below the OECD average (58.6%), but considerably below the proportion of men employed (69.3%). 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. In addition, 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. Moving to individual taxation would remove this distortion.

Turning to young people, the youth (15-24) unemployment rate in Poland is considerably higher than the OECD average (20.3% versus 13.4% in the last quarter of 2015). Poland needs effective policies to strengthen the employability of youth while removing barriers to their hiring. The government's decision to abolish the reduced minimum wage for people during the first year of employment in which social security contributions were paid (so that the full minimum wage will apply to them) is likely to act in the opposite direction – especially given the substantial increases in the Polish minimum wage in recent years. In addition, Poland's tax wedge for low-wage workers on regular contracts is above the OECD average, which will also act as a barrier to hiring youth.

Promoting inclusiveness also requires concerted efforts to fight poverty

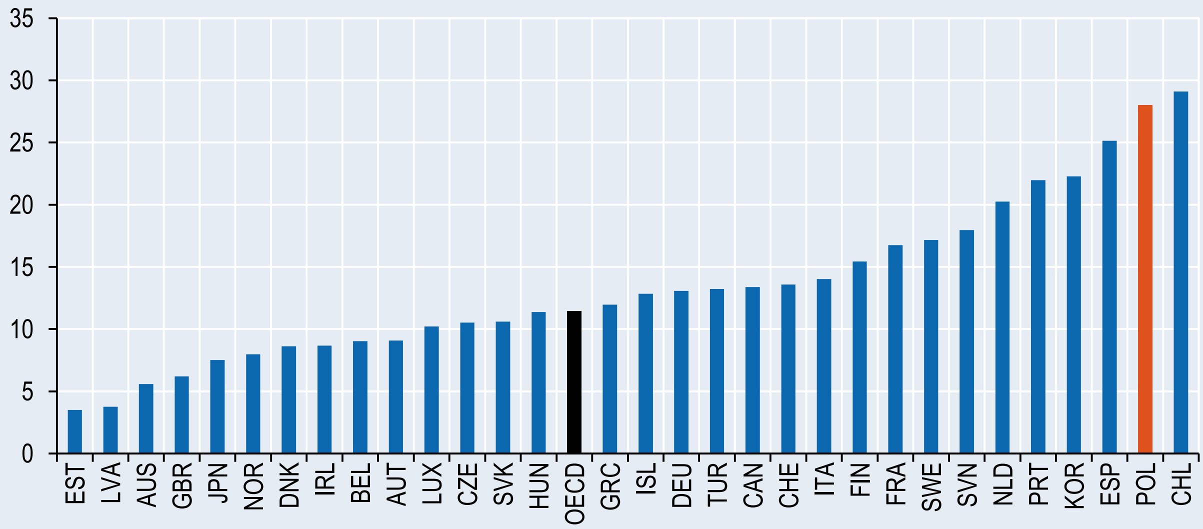
Another aspect of labour market inequalities in Poland is that, among those who are employed, quite a few are poor. In fact, in-work poverty is above the EU average in Poland. This is in part related to the prevalence of irregular work relationships. Poland has a high share of temporary employment, 28.0% of all dependent employment compared to 11.5% on average in OECD countries in 2015 (Figure 9.1), although the amendment to the Labour Code that came into force on 22 February 2016 should help to reduce this labour market duality.

A particular concern in Poland is the large number of workers on civil law contracts, which 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 and thus claims to benefits. These contracts were originally created for freelance workers, but 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 in relation to the employer – so-called "false" self-employment. Poland should strengthen labour law enforcement to crack down on such practices. In addition, the government should further align social contributions between civil and labour contracts to reduce the incentives employers currently face to hire on civil-law contracts. It is, therefore, a welcome step that the minimum wage will apply to certain civil-law contracts starting in 2017.

Poverty is also an issue for those out of work in Poland, and making income support more generous and more responsive to people's job-search efforts and economic need is a key priority. Out-of-work support in Poland is comparatively difficult to access and provides relatively little assistance to those looking for work or transitioning between jobs. OECD data on benefit recipients show that fewer than 25% of active job seekers receive benefits,

FIGURE 9.1. **POLAND HAS A HIGH SHARE OF TEMPORARY EMPLOYMENT**

Incidence of temporary employment as a share of dependent employment, 2015



Note: Data for Australia refer to 2013.

Source: OECD Labour Force Statistics Database.

and only a small minority of income-poor households receive income top-ups through the guaranteed minimum income programme. The benefits provided by minimum-income programmes are also very low relative to commonly used poverty thresholds. The recent substantial expansion of family benefits, including the so-called 500+ PLN programme, does make overall support for families with children significantly more generous. But while this reduces poverty for many low-income families, it is no substitute for effective out-of-work benefits, as the family transfers do not link benefit receipt with employment-support measures and related programmes aiming to aid self-sufficiency. There are also risks for female employment.

Finally, more generous out-of-work benefits would have to be accompanied by a strengthening of activation policies, and recent reforms of the public employment services in Poland are a welcome development in this regard. The reforms introduced profiling procedures to help tailor services to the specific needs of jobseekers and established the possibility of outsourcing certain activation services. The challenge now lies in the effective implementation of these reforms. Two areas in particular raise concerns. Given the increased emphasis and incentives on meeting performance management objectives, there is a risk of labour offices "gaming" the system to inflate performance measures through methods such as "creaming" (only serving the most employable clients) or other types of "creative accounting". This system may also encourage public employment service (PES) offices to rapidly place clients into jobs, even if these jobs are a bad skills match or of low quality.

Key recommendations

- Increase the statutory pension age, as previously planned.
- Better engage older workers in training and lifelong learning through improved recognition of prior learning and ensuring that training is more work-focused.
- Continue to expand formal childcare capacity.
- Promote a more gender-equitable use of both flexible working time arrangements and parental leave entitlements.
- Move towards individual taxation only.
- Reduce hiring costs for youth by lowering the tax wedge for low-wage workers on regular contracts.
- Strengthen labour law enforcement, and further align social contributions between civil and labour contracts.
- Make unemployment benefits and minimum-income safety nets more accessible for active jobseekers.
- Carefully monitor the new PES reforms and adjust them as necessary to prevent unintended consequences and to allow for tailoring to local conditions.

10 Promoting inclusiveness through better public governance

Poland has taken important steps toward designing and implementing a governance framework that supports a more inclusive and knowledge-based economy. In 2009, the government of Poland adopted a national development strategy which highlighted the need to make the state more citizen-friendly and more effective at meeting citizens' needs. Faced with the prospect of slower growth, a tighter fiscal space, persistent regional disparities and an ageing population, the national government also adopted a National Urban Policy in 2015 to strengthen cities as the main driver for economic growth and the places where a large share of the population can be targeted by policy interventions. Through its Plan for Responsible Development, Poland plans to address many of its public governance challenges. It will be important to monitor progress and assess whether the governance reforms identified are indeed enhancing the government's capacity to achieve the inclusive-growth results for citizens and regions that have been identified as priorities.

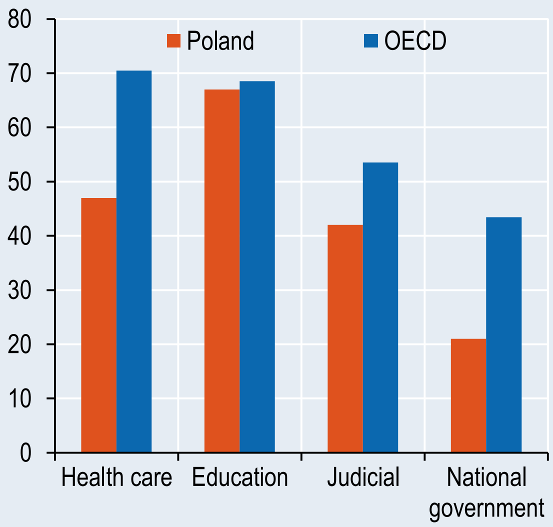
The "Efficient State" is an important enabler of inclusive growth

In February 2016, Poland's Council of Ministers adopted the Plan for Responsible Development, a new vision for the development of the country with the aim of enhancing the efficiency of the state. The Plan argues that to achieve a strong Polish economy, the functioning of the state itself needs to be improved through a more efficient and effective government model, based on the premise that the development of Poland is a whole-of-government, not just a ministerial, challenge. Specifically, the plan aims to enhance cross-ministry co-ordination of economic policy, unify each of the government's IT, procurement and human resources management strategies, promote better inter-ministry mobility for civil servants to build expertise and experience, use multi-ministry taskforces more frequently to address multidimensional policy challenges, and focus more deliberately on goals-based management – components that echo the advice in the OECD 2013 Public Governance Review.

Poland is also focusing on improving engagement with citizens, a key component of effective public governance, both through a renewed Regulatory Impact Assessment framework that emphasises engagement at all key stages in the policy-making cycle (see Chapter 5) and by adopting an online consulting mechanism to enable citizens to comment on draft legislation. While Poland is also looking to harness digital government and ICTs to drive the development of the digital economy, the strategic use of digital technologies as an important component of a knowledge economy is relatively nascent in Poland. For instance, Poland currently lags behind in the OECD OURdata Index, which benchmarks open government data (OGD) policies across OECD member countries. However, based on the National Programme of the Integrated Informatisation of the State, adopted by the Council of Ministers in September 2016, Poland defined key targets in the area of public service digitalization, together with instruments and a timetable for their implementation. Open government data policies call for the

FIGURE 10.1. CITIZENS' SATISFACTION WITH PUBLIC SERVICES IS RELATIVELY LOW IN POLAND

% of citizens expressing confidence/satisfaction, 2015



Source: Gallup World Poll.

development of a pro-open-data institutional culture inside public institutions to improve "the supply side" of OGD by building a common narrative and commitment favouring more proactive behaviour on OGD across the administration. In June 2016, the Polish government adopted the Act on the Reuse of Public Sector Information and launched the Programme for the Opening of Public Data. Both initiatives will facilitate the reuse of government data published as open data. Poland also needs to accelerate efforts to stimulate the "demand side" for OGD by strengthening engagement with specific data user groups, including the media, to identify their data needs, prioritise the publication of open data, focus efforts inside government institutions and spur opportunities to reuse data, building on the usefulness of OGD for users (OECD, 2015h).

Stronger cities can spur economic growth and inclusive development

Urban areas in Poland are home to the majority of the country's population. They are also the main driver of economic growth. The 2011 OECD National Urban Policy Review for Poland identified insufficient co-operation between municipalities as a main factor for uncontrolled urban sprawl and inefficient service provision. Although some governance structures exist to support collaboration among municipalities on transportation issues or shared services, these tend to be voluntary and limited in scope. The Government's National Urban Policy, adopted in 2015, reflects many of the conclusions from the OECD National Urban Policy Review conducted in 2011.

The need for co-ordination becomes evident in the sizeable housing deficit in Poland's urban areas. The shortfall results in higher housing costs compared to OECD peers and limits migration to urban areas, which constrains the labour market in the country's growth engines. The lack of affordable housing, in combination with demographic changes and poorly connected neighbourhoods, has contributed to degraded areas and growing inequalities within cities. Inequality within urban areas is higher than across regions in Poland, with poverty being most severe in urban areas. Despite their economic importance, larger urban areas have median incomes almost 50% below the poverty line.

Improving cities is therefore a first-order priority for economic development and for improving quality of life for large parts of the Polish population. The Council of Ministers acknowledged this priority in passing the National Urban Policy 2023 in 2015, which aims to guide urban policy around a set of key issues towards a sustainable future. Many recommendations from the OECD National Policy Review are reflected in this document, for example through its focus on the improvement of the quality of management and co-operation in urban areas targeted by means of partnership and stronger multi-level governance.

Key recommendations

- Monitor progress in achieving the stated goals and outcomes presented in the Responsible Development Plan.
- Identify possible policy and governance bottlenecks that may be impeding the achievement of the Plan's stated goals and outcomes.
- Enable the government to adjust course over time if the results identified in the Plan are not being achieved properly.
- Create a collective commitment toward the Open Government Data agenda across the public sector and around common objectives, and strengthen systematic engagement with data user groups for this purpose.
- Enhance inter-municipal planning and service delivery within functional urban areas, and ensure integrated planning across sectors by strengthening inter-ministerial co-ordination at the central level.

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2, rue André Pascal, 75775 Paris Cedex 16
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