Main messages

- Economic growth and the labour market are strong
- Stronger investment in higher education and research excellence is needed
- Business engagement in vocational education and adult learning should improve
- Stronger senior and female employment would help counteract demographic decline
- Financing investment in infrastructure and innovation requires tax and spending reform
Living standards are rising

Convergence in GDP per capita continues
Constant PPPs, Index OECD=100

Family benefits helped lower child poverty

**Absolute poverty among children has fallen**
0-17 years old, per cent

Source: Statistics Poland.
Investment in research excellence is needed

Poland's share of global top publications is low
Per cent of all documents¹, 2015

1 Share of the scientific output of domestic research institutions that is included in the set of the 10% most cited papers in their respective scientific fields, fractional counts.

Demographic challenges are rising rapidly

The working-age population will decline sharply
Percentage change, 2015-2060

Maintaining macroeconomic stability and sustainable growth
Economic activity is expanding rapidly

Real GDP growth in %

The labour market is tightening

Unemployment rate
Total, % of labour force, Q4 2017 or latest available

Investment is weak

Investment-to-GDP ratio, current prices

1 Unweighted average of Hungary and the Czech and Slovak Republics.

Inflation is close to the central bank’s target

Inflationary pressures are rising

Year-on-year % changes

Source: National Bank of Poland.
The general government deficit shrank, but the structural deficit is expected to widen

Headline and cyclically-adjusted deficits

Investment in infrastructure, skills and health are needed

Public spending on health care
Per cent of GDP, 2016

Source: OECD (2017), Health Statistics (database).
Further revenue-raising reforms would help finance Poland’s spending needs.

Tax revenues
Per cent of GDP, 2015¹

1. Or latest year available.

Main recommendations to maintain macroeconomic stability and sustainable growth

- Implement a tighter fiscal stance through revenue-raising tax reforms or increased spending prioritisation.

- Strengthen environmentally related taxes, limit the use of reduced VAT rates and exemptions, and make the personal income tax more progressive, e.g. by introducing a lower initial and more intermediate tax brackets and ending the preferential tax treatment of the self-employed.

- If the NBP’s economic assessment suggests considerable upward risk for price stability, it should raise interest rates in a timely fashion to ensure that inflation remains well within its target range.

- Develop and implement clear and stable climate-change policies aligned with European and international objectives to reduce uncertainty for innovative green investments. Ensure the stability and clarity of policies affecting investment decisions.
Strengthening employment to confront demographic challenges
Women’s retirement age is set to remain low

Women's average effective retirement age is low
2016

There is a risk of old-age poverty

The share of female minimum pensioners is expected to increase sharply
Simulations based on an overlapping generations model, per cent

Increasing female participation is a challenge

The new child benefits may weigh on female labour force participation

Better access to subsidised childcare would help

Participation rates in formal childcare and pre-school services¹
0-to-2 year-olds with mothers without tertiary education, 2014²

1. Data refer to children using centre-based services (e.g. nurseries or daycare centres and pre-schools, both public and private), organised family daycare, and care services provided by paid professional childminders, excluding those using unpaid informal services provided by relatives, friends or neighbours.

2. Or latest year available.

A migration policy is needed

Hiring of immigrant workers is increasing sharply
Thousands

1. 12-month moving sum.

Main recommendations to strengthen employment

✓ Evaluate the pension reform’s effects, and make corrections such as aligning male and female retirement ages and indexing them to healthy life expectancy.
✓ Inform the public about the impact of working longer on pension income
✓ Invest in childcare and long-term care facilities.
✓ Taper the phase out of the child benefit for the first child.
✓ Develop a migration policy strategy to better monitor integration of foreigners in line with labour market needs, the protection of their rights and access to education and training for them and their children.
Strengthening innovation, research and skills
Investment in research excellence is needed

Tertiary education spending per student is relatively low
Thousand USD in PPPs, 2014

The supply of researchers is insufficient

Share of researchers in total employment
Per thousand employed workers, 2015

Industry-science cooperation is limited

Industry-financed public R&D
Per cent of GDP, 2015

**Adult learning and vocational training need strengthening**

**Low skills are pervasive among Polish managers¹, 2012**
Share of low-skilled managers aged 20-65 with at least upper secondary education

1. Share of managers with at least upper secondary education scoring below level 2 in at least one of the PIAAC proficiency scales, i.e. literacy, numeracy and problem-solving in technology-rich environments.

*Source: OECD (2013), OECD Skills Outlook 2013 (database).*
Participation in adult learning is weak

Adult participation in lifelong learning
25-64 year-olds, % of population

Main recommendations to strengthen research and skills

- Continue to increase funding for higher education and research over time, to merge small universities and independent research institutes to build strong research universities, and to allow underperforming institutions that do not improve over time to shut down.

- Improve the quality of doctoral training by structuring it through coursework and tutoring and tightening entry criteria.

- Offer well-remunerated academic positions, and base career progression on an evaluation of research and teaching quality by faculty and external experts.

- Develop a national skills strategy with a strong basic skills component.

- Give employers incentives to develop workplace-based vocational education and adult training.
Financing innovative business investment
A higher quality capital stock is needed

Reported quality of capital stock
Proportion of state-of-the-art machinery and equipment, including ICT
Per cent, 2015

A much needed increase in public support for business R&D lies ahead

Public support for business R&D
As a percentage of GDP, 2014¹

1. Or latest year available.
2. In Poland, indirect support refers to PLN 284 million CIT tax exemptions granted for innovation activities in 2014.

Financing for innovative start-ups is increasing

Venture capital investment
As a percentage of GDP\(^1\), 2016\(^2\)

1. Only the value of total venture capital investments is available for Korea and New Zealand.
2. Or latest year available.

Government loan guarantees are extensive

Government loan guarantees for SMEs
As a percentage of GDP, 2015¹

1. Or latest year available.
2. 2016 data for Poland. They refer to PLN 13.9 billion of outstanding De Minimis guarantees at end-2016 and PLN 1.59 billion of guarantees from local and regional funds.

Bankruptcy procedures are lengthy

Length of bankruptcy procedures\(^1\)
Number of years as of June 2017

1. Period from the company’s default until the payment of some or all of the money owed to the bank.

Main recommandations to foster innovative business investment

- Plan for the national financing of business R&D and innovation programmes beyond the current EU budgetary cycle, if necessary.
- If the take-up of the new R&D tax allowance is low among small innovative firms, adjust its provisions.
- Rigorously evaluate the general loan-guarantee programme for SMEs and adjust its provisions if needed as it can lock in resources in low-productivity firms and crowd-out alternative financing sources.
- Improve transparency, stability and impact assessment of public support by involving the private sector in the Innovation Council.
- Make more extensive use of impact analyses, notably by engaging with stakeholders in *ex ante* consultative processes and *ex post* evaluations.
- Reduce the bias towards debt over equity financing of businesses.
- Include a simplification component for SMEs to the government’s tax compliance strategy.
For more information

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