OECD*publishing*

Please cite this paper as:

Égert, B. and R. Kierzenkowski (2013), “Challenges to Sustain Poland's Growth Model”, *OECD Economics Department Working Papers*, No. 1054, OECD Publishing, Paris. http://dx.doi.org/10.1787/5k452kltcxxq-en

OECD Economics Department Working Papers No. 1054

Challenges to Sustain Poland's Growth Model

Balázs Égert, Rafal Kierzenkowski

JEL Classification: E6, F3, F4, N4

Unclassified **ECO/WKP(2013)46**

Organisation de Coopération et de Développement Économiques
Organisation for Economic Co-operation and Development

05-Jun-2013

English - Or. English

ECONOMICS DEPARTMENT

ECO/WKP(2013)46
Unclassified

CHALLENGES TO SUSTAIN POLAND'S GROWTH MODEL

ECONOMICS DEPARTMENT WORKING PAPERS No. 1054

By Balázs Égert and Rafał Kierzenkowski

All Economics Department Working Papers are available through OECD's Internet website at http://www.oecd.org/eco/Workingpapers

JT03340992

Complete document available on OLIS in its original format

English - Or. English

ABSTRACT/RÉSUMÉ

Challenges to sustain Poland's growth model

Notwithstanding a very strong economic performance over the past decade or so, Poland's per capita income is substantially lower in comparison with the United States and per capita income growth will be sharply slowing down over the coming decades under the scenario of gradual policy changes mostly because of population ageing. Bold structural reforms are needed to boost labour productivity and labour resource utilisation. This paper argues that in order to increase labour resource utilisation, policy action should focus on raising the effective retirement age, encourage childbearing and lower high unemployment rates for young people and the unskilled via increased and more efficient active labour market policies. Labour productivity could be boosted via rendering the tax system more growth friendly, reducing product market regulation (including heavy government involvement in the economy, high administrative costs of running and starting businesses and increasing competition in uncompetitive segments of the economy). Investing in human capital and encouraging innovation are also essential for long-term productivity growth.

JEL classification codes: E6 ; F3 ; F4 ; N4
Keywords: Poland; economic growth; potential growth; structural reforms

****

Les défis pour soutenir le modèle de croissance économique en Pologne

En dépit d'une performance économique remarquable au cours de la dernière décennie, le PIB par habitant de la Pologne est nettement plus faible en comparaison avec les États-Unis et la croissance du PIB par tête va fortement ralentir au cours des prochaines décennies, selon un scénario de changements progressifs de politiques économiques essentiellement en raison du vieillissement de la population. Des réformes structurelles audacieuses sont nécessaires pour accroître la productivité du travail et l'utilisation des ressources du travail. Cet article soutient que pour augmenter l'utilisation des ressources du travail, l'action de politique économique devrait se concentrer sur l'augmentation de l'âge effectif du départ à la retraite, d'encourager la maternité et de diminuer les taux de chômage élevés pour les jeunes et les travailleurs peu qualifiés via des politiques actives du marché du travail plus étendues et plus efficaces. La productivité du travail pourrait être stimulée par un système fiscal plus favorable à la croissance, par la réduction de la réglementation des marchés de produits (y compris la forte implication du gouvernement dans l'économie, les coûts administratifs élevés de fonctionnement et de création d'entreprises, et en augmentant la concurrence dans les segments non compétitifs de l'économie). Investir dans le capital humain et encourager l'innovation sont également essentiels pour la croissance de la productivité à long terme.

Classification JEL : E6 ; F3 ; F4 ; N4
Mots clefs : Pologne ; croissance économique ; croissance potentielle ; réformes structurelles

Table of contents

Figures

Challenges to sustain Poland's growth model

By

Balázs Égert and Rafał Kierzenkowski[1]

Past growth performance has been strong

Poland has recorded robust GDP growth since the beginning of the transition process and a strong resilience during the global crisis, which led to pronounced gains in the standards of living. The average annual growth rate in GDP per capita reached 4.0% between 2000 and 2011, against 1.8% for the OECD average, and was higher than in other Central and Eastern European countries (Figure 1). Between 2000 and 2011, rises in labour productivity fed the catch-up process mainly owing to advances in multi-factor productivity, whose contribution to per capita income growth was more than 3 percentage points. The liberalisation of the domestic economy coupled with greater knowledge and technology transfers from abroad led to major improvements in labour efficiency. However, despite significant increases in the capital stock, capital intensity subtracted 0.5 percentage point from annual growth in GDP per capita. This was similar to the Slovak Republic but in contrast with a positive contribution recorded in Estonia, Hungary and Slovenia. Poland's growth model benefitted comparatively less from foreign direct investment inflows and from a business climate and regulations less conducive to greater investments. Human capital contributed positively to growth by almost 0.5 percentage point, more than for other regional peers. This reflects Poland's progress in educational attainment and the quality of its secondary education as confirmed by good PISA (Programme for International Student Assessment) scores, in particular in mathematics and science. Finally, steady decreases in the unemployment rate underpinned employment rises and growth, notably driven by better training of the unemployed, a higher share of workers with better qualifications and less labour market mismatch (Kierzenkowski et al., 2008).

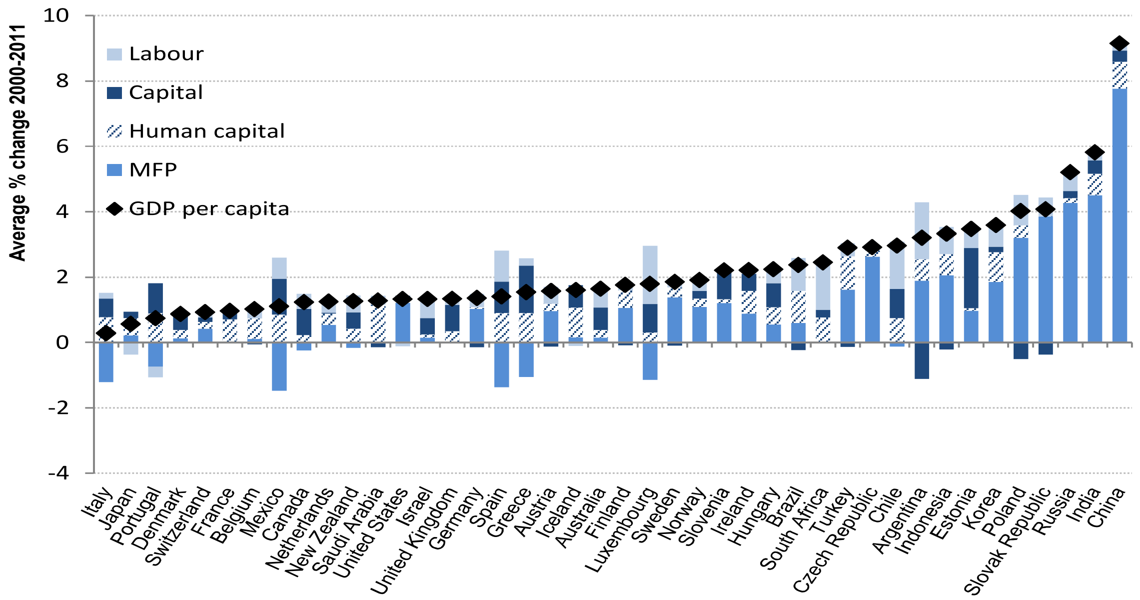
But there is a long way to go to close the per capita income gap to the most advanced OECD nations

Despite a strong performance over the recent past, per capita income is almost 90% lower than in the United States, and this gap is mainly explained by a shortfall in labour productivity (Figure 2).[2] Even though overall labour resource utilisation is not significantly lagging, its breakdown shows that average annual hours worked are high and the activity rate is low. The combination of low labour market participation and high unemployment results in a low employment rate. The participation rate of the working-age population (15 to 64 years) in Poland is among the lowest in Europe: around 65% against rates close or even beyond 80% in the Nordic countries. The major explanation is reduced activity of older workers, low-skilled workers and women. Figure 3 shows that only every second individual between

1. The authors are members of the Economics Department of the OECD. The authors are thankful to Mee-Lan Frank for excellent editorial support. The views expressed herein in no way represent those of the OECD nor its Member countries.

2. Per capita income (GDP per person) can be broken down into labour productivity (GDP per hour worked) and labour utilisation (total hours worked per person).

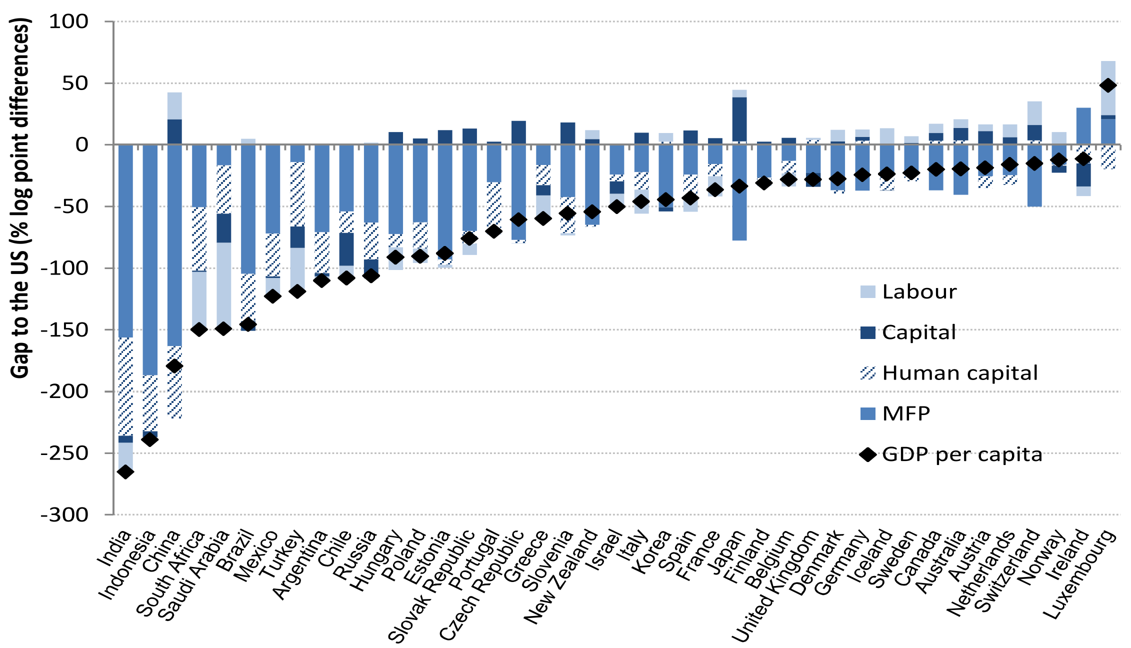
Figure 1. **Average annual GDP per capita growth in OECD countries, 2000-10**



Note: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Source: Johansson et al. (2012).

Figure 2. **Per capita income in OECD countries compared to the United States**

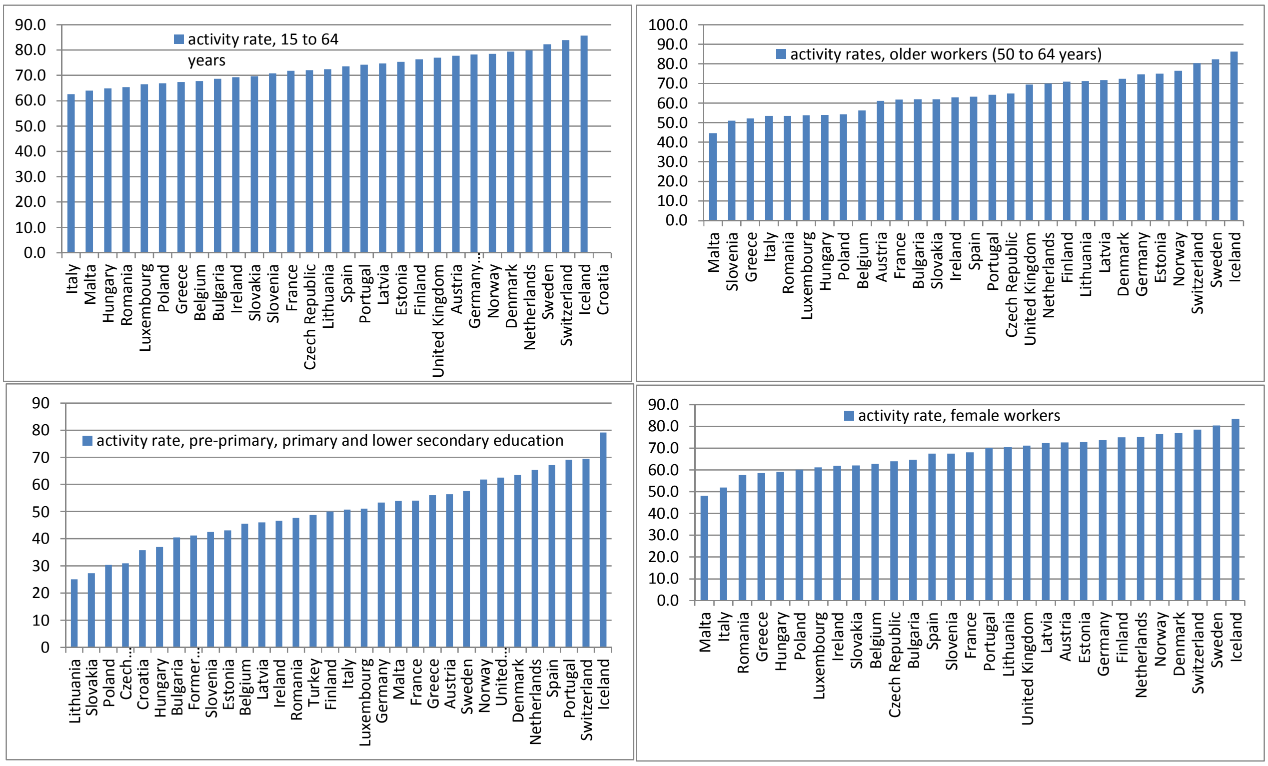


Note: as for Figure 1.

Source: Johansson et al. (2012).

Figure 3. **Activity rate in working-age population and specific groups in the European Union**

2012:Q3



Source: Eurostat.

the age of 50 to 6 years is active against four out of five in Iceland and Sweden. Even more striking is the fact that fewer than one-third of those with low educational attainment participates in the labour market, which compares with nearly 80% in Iceland and 70% in Switzerland. Female participation is also low in a European context, even though the absolute level of 60% is less striking.

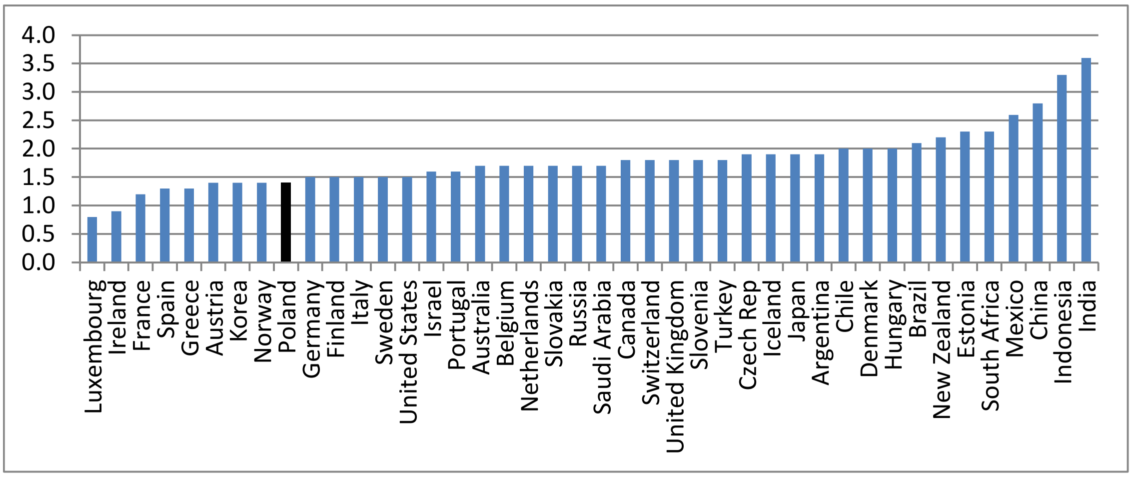
These low participation rates are a heritage of transition from central planning to a market economy: the collapse of heavy industry after the start of the economic transformation left behind a mass of low-skilled middle-aged men and women, who did not have the ability to update their human capital. Disability and early retirement pension schemes offered them an escape route to withdraw from the labour market. OECD data indicate that the effective retirement age in Poland is among the lowest in the OECD, especially for women, and that the gap between the effective and the official retirement age is substantial. In addition, public spending on incapacity benefits amounted to almost 3% of GDP in 2007, above the OECD average, but close to figures of fellow transition countries, indicating the large number of individuals involved.

Population ageing is a major challenge for growth

Recent OECD long-term projections suggest that Poland's growth model will face major challenges as the population ages owing to declines in fertility and overall gains in longevity (Johansson et al., 2012). These projections indicate that per capita income growth will be among the lowest over the decades to come (Figure 4). The share of the working-age population (15-64) in the total, currently above 70%, is projected to drop to below 55% by 2060. In parallel, the old-age dependency ratio measuring the share of the population older than 65 to working-age population (15-64) is expected to jump from around 20% in

2011 to close to 35% in 2030 and should exceed 60% in 2060. At unchanged policies, these developments should lead to one of the largest declines in labour force participation in the OECD over the next 50 years, by more than 10 percentage points among the population older than 15 years. They would only be slightly contained by gradual structural reforms in the baseline scenario, notably built under the assumption of further trend expansion in educational attainment, an indexation of the legal pensionable age to life expectancy and a convergence of comparatively stringent product market regulations to the average regulatory stance observed in the OECD. As a result, population ageing will be a major drag on trend growth, which should be mainly driven by efficiency improvements and, to a much smaller extent, improvements in human capital. More precisely, Poland's growth in GDP per capita is projected to fall in the baseline scenario from 4.4% between 1995 and 2011 to 2.6% over the next 20 years and to only 1.4% between 2030 and 2060. The catching-up should be slow: the gap in GDP per capita *vis-à-vis* the United States would shrink by about 20 percentage points over the next 50 years but still be as high as 70% in 2060.

Figure 4. **Average annual GDP per capita growth in OECD countries, 2030-60**



Note: as for Figure 1.

Source: Johansson et al. (2012).

Policy measures are needed to sustain Poland's high economic growth

Bold policies are needed to counteract the adverse effects of population ageing as we saw that per capita income growth will be sharply slowing down in Poland over the coming decades under the scenario of gradual policy changes. To head off such daunting developments, policymakers have to act more forcefully to boost labour productivity and labour resource utilisation.

Increasing labour resource utilisation

Poland's population ageing is projected to be one of the most pronounced in the OECD, and an increasing dependency ratio will reduce labour utilisation. Let us start by looking at ways how policies could counteract such developments in Poland.

The first avenue for policy action is to keep people longer at work by increasing the effective retirement age. Poland implemented, in a very well thought out manner, a comprehensive pension system reform in 1999: the first pillar based on notional accounts, and the accompanying fully-funded second pillar, both ensuring actuarial neutrality. Such a system offers people the choice to work longer and receive higher pension benefits or to retire earlier but at the expense of a lower pension. Because the calculation of pension benefits is related, in an automatic fashion, to life expectancy, longer lives would mean that people would need to work longer to get decent old-age pensions. Nevertheless, the legal retirement age serves as an important social benchmark and influences people's retirement decisions. Also, people may be short sighted and realise that they should have worked longer only when they receive the pension benefits. Hence, it is important for the government to increase the legal retirement age in line with or even beyond gains in life expectancy and to improve the population's financial education so that people understand they should work longer (OECD, 2012). The 2012 pension reform raised the legal retirement age to 67 both for men (from 65) and women (from 62) – even though some potentially generous early retirement possibilities were opened up to mitigate this increase (OECD, 2013). This reform was welcome but additional policy steps are needed to reduce the negative impact of declining labour utilisation on growth. But people will be able to work longer only if they age in a healthy manner. In order to improve the relatively poor health status of the Polish population (which can be partly explained by the country's level of economic development), OECD (2012) recommended among other things that the authorities: *i*) improve access to health care, *ii*) enhance hospital management, *iii*) carefully design new private health insurance and *iv*) develop a long-term-care strategy.

Policymakers could further increase participation rates by effectively closing channels of early retirement. In particular, the government should continue to further align, following the 2012 pension reform, the generous early retirement schemes of members of the uniformed services and eliminate those for judges and miners (OECD, 2013). An important driver of the low female activity rate at older ages are generous survivors' pension benefits. Women do not need to have a full career to benefit from an old-age pension, especially if their partners pass away earlier (which is likely given men's lower life expectancy). According to the OECD's social expenditure database, spending on survivors' benefits accounted for 2% of GDP in 2007, well above the OECD average of 1%. The costs of survivors' benefits should be internalised either via higher contribution rates imposed on the primary earner or through a lower pension benefit if the pension is to be passed on to the survivor partner. Internalising these costs would incentivise women to work longer. Female labour market participation is also limited by the fact that in 2008 the length of the post-maternity parental leave in Poland was almost three years and the highest in the entire OECD. This keeps mothers too long away from the labour market, especially in the case of consecutive childbearing, and thus permanently lowers female participation.

The dependency ratio will rise not only because people will live longer but also because Poland's fertility rate is about 1.4, well below the level needed to stabilise the population. Low fertility rates will determine the size of the working-age population for the coming decades. Yet, looking further ahead, policymakers should start to consider how to encourage childbearing. Empirical studies find that family policies that diminish the cost of raising children via a combination of financial and non-financial incentives, have a significant effect on fertility rates in the OECD (D'Addio and Mira D'Ercole, 2005; Luci and Thévenon, 2012). In Poland, financial incentives are not particularly generous. Also, the insufficient number of places in pre-school childcare makes it difficult to reconcile family life with work and discourages childbearing. But the insufficient provision of pre-school childcare also contributes to the low female participation rate as the opportunity cost of staying at home is low especially for low-income women. Therefore, the government would be well advised to come up with a coherent family policy framework and in particular to develop pre-school childcare infrastructure (OECD, 2013).

Persistently high unemployment rates are also an important factor of subdued labour utilisation. The unemployment rate is high for young people and the unskilled. Active labour market policies, including activation and retraining, are essential to get back people into jobs. Poland clearly has a deficit in this area. The taxation of labour income can also act as a drag on the demand for and the supply of labour. The cuts in personal income taxes and social security contributions decided in 2008 lowered the tax wedge relative to the OECD average but were partly offset by a rise in the disability pension contributions and the nominal freeze of the personal income tax schedule. In fact, the OECD has for a long time advocated changing the tax mix by shifting taxes from labour (and capital) to those that penalise growth less: green taxes and property taxes.

Boosting labour productivity

The government should consider reforming the tax system also because shifting the tax burden to less harmful taxes would spur productivity gains via capital deepening (more investment). Eliminating many tax expenditures and ensuring more neutrality across different asset classes would also contribute to a better allocation of productive resources and reduce administrative and tax-compliance costs. The preferential tax treatment and the generous health insurance system for farmers (KRUS) lead to resource misallocation and inefficiencies in the agricultural sector. Insufficient supply of private housing rentals in urban areas impedes workers' geographical mobility and thus efficient resource reallocation.

Another important aspect policymakers need to look into in Poland is product market regulation. Despite successive privatisation programmes launched in 2008, the State still plays an important role in the economy. There is indeed no economic reason why the government should be involved in potentially competitive segments of network industries, the financial sector, airport operators, and the mining and chemical industries. Less government involvement would improve allocative efficiency and thus boost productivity. But indirect government interference via complicated regulations also puts an unnecessary burden on doing business. According to government estimates, the costs of regulation for businesses amounts to 5% of GDP per year. Against this background, the authorities launched a programme to cut red tape and to simplify legislation governing the economy. Yet, according to the World Bank's Doing Business 2012 report, it takes a month to set up a business and almost a year to obtain construction permits, and it is very complicated to pay taxes (OECD, 2012). The government is aware of these difficulties but it should push ahead more firmly in these areas. It is welcome that it intends to liberalise a large number of professional services.

Competition in mining, electricity, gas and telecommunications is unsatisfactory. Beyond government disengagement from these sectors, an improved overall regulatory framework would enforce more competition (including in broadband internet), which in turn could help spur productivity. Financial deepening, essential for better access to credit, could be promoted via a consolidation of the fragmented landscape of co-operative banks and an improved legal framework for the use of collateral (OECD, 2012).

Network infrastructures are still not very well developed. Despite considerable efforts to expand the motorway and highway networks, to a large extent financed by EU funds, there is scope to improve the road network. Similarly, the railway network needs to be upgraded further. The World Bank's Doing Business 2012 argues that it is not easy for firms to get connected to the electricity network. This is partly so because of the poor state of the distribution network, which critically needs investment. Because of the relative underdevelopment of these networks, additional investment would most likely improve productivity.

Upgrading human capital is crucial for long-term productivity growth. Skill mismatches remain significant in the Polish economy, despite rising educational attainment. Against this background, the government recently announced that more emphasis will be put on hard sciences in tertiary education. The primary and secondary educational system has gained strength over time, reflected in improved PISA scores. The 2011 tertiary education reform aims to develop vocational education. Further improvement could be achieved by enhancing the adult training system and encouraging lifelong learning, increasing a feedback loop between the education system and the economy's needs. Raising the quality of the tertiary education system through reinforced quality assessment of higher education institutions and giving more weight to competition and transparency in the promotion of staff are needed as well (OECD, 2012; OECD, 2013).

Policies aimed at boosting productivity should encourage innovation to push out the technology frontier and/or, more importantly in Poland's nearer future, to close the gap to the global technology frontier. How smoothly technology adoption goes depends on the interplay between education, infrastructure and product and labour market regulation. Poland could rely more heavily on tax credits to encourage innovative activities. Research funds should be spent in a way to create critical mass and maximise spillover effects in academia and the economy. Giving more autonomy to universities in terms of budgeting and human resources would underpin the emergence of research centres. The government should also better integrate academia with businesses and create the necessary frameworks for an increased mobility of researchers between the private and public sectors (OECD, 2010).

Bibliography

D'Addio, C.A. and M. Mira d'Ercole (2005), "Trends and Determinants of Fertility Rates: The Role of Policies", *OECD Social, Employment and Migration Working Papers*, No 27, OECD Publishing.

Jarrett, P. (2012), "The long-term outlook for productivity and per capital income growth for Canada: a comparison with selected G-20 countries", *International Productivity Monitor*, No. 24, pp. 85-96.

Johansson, A., Y. Guillemette, F. Murtin, D. Turner, G. Nicoletti, C. de la Maisonneuve, P. Bagnoli, G. Bousquet and F. Spinelli (2012), "Long-term global growth scenarios", *OECD Economics Department Working Papers*, No. 1000, OECD Publishing.

Kierzenkowski, R, P. Ollivaud, F. Sédillot and Ph. Briard (2008), "Estimating a Supply Block for Poland", *OECD Economics Department Working Papers*, No. 601, OECD Publishing.

Luci, A. and O. Thévenon (2012), "The impact of family policy packages on fertility trends in developed countries", *Institut National d'Études Démographiques (INED) Working Papers*, No. 174.

OECD (2010), *Economic Surveys Poland 2010*, OECD Publishing.

OECD (2012), *Economic Surveys Poland 2012*, OECD Publishing.

OECD (2013), *Economic Policy Reforms: Going for Growth 2013*, OECD Publishing.

WORKING PAPERS

The full series of Economics Department Working Papers can be consulted at www.oecd.org/eco/workingpapers/

1053. *Reforming agriculture and promoting Japan's integration in the world economy*
(May 2013) by Randall S. Jones and Shingo Kimura

1052. *Inequality and poverty in the United States: public policies for inclusive growth*
(May 2013) by Oliver Denk, Robert Hagemann, Patrick Lenain and Valentin Somma

1051. *Fiscal federalism and its impact on economic activity, public investment and the performance of educational systems*
(May 2013) by Hansjörg Blöchliger, Balázs Égert and Kaja Fredriksen

1050. *Restoring Japan's fiscal sustainability*
(May 2013) by Randall S. Jones and Satoshi Urasawa

1049. *Measuring total factor productivity at the firm level using OECD-ORBIS*
(May 2013) by Peter Gal

1048. *A projection method for public health and long-term care expenditures*
by Christine de la Maisonneuve and Joaquim Oliveira Martins (forthcoming)

1047. *R&D, patenting and growth: the role of public policy*
(May 2013) by Ben Westmore

1046. *Knowledge-based capital, innovation and resource allocation*
(May 2013) by Dan Andrews and Chiara Criscuolo

1045. *Reforms for a Cleaner, Healthier Environment in China*
(April 2013) by Sam Hill

1044. *Making the tax system less distortive in Switzerland*
(April 2013) by Andrés Fuentes

1043. *The determinants of informality in Mexico's states*
(April 2013) by Sean M. Dougherty and Octavio Escobar

1042. *Legal reform, contract enforcement and firm size in Mexico*
(April 2013) by Sean M. Dougherty

1041. *Improving the economic situation of young people in France*
(April 2013) by Hervé Boulhol
Améliorer la situation économique des jeunes en France
(avril 2013) par Hervé Boulhol

1040. *Improving employment prospects for young workers in Spain*
(April 2013) by Anita Wölfl

1039. *Youth labour market performance in Spain and its determinants - a micro-level perspective*
(April 2013) by Juan J. Dolado, Marcel Jansen, Florentino Felgueroso, Andres Fuentes and Anita Wölfl

1038. *The efficiency and equity of the tax and transfer system in France*
(April 2013) by Balázs Égert
Efficacité et équité du système de prélèvements et de transferts en France
(avril 2013) par Balázs Égert

1037. *Income inequality and poverty in Colombia. Part 2. The redistributive impact of taxes and transfers*
(April 2013) by Isabelle Joumard and Juliana Londoño Vélez

1036. *Income inequality and poverty in Colombia. Part 1. The role of the labour market*
(April 2013) by Isabelle Joumard and Juliana Londoño Vélez

1035. *Policy options to durably resolve euro area imbalances*
(March 2013) by Yvan Guillemette and Dave Turner

1034. *Labour market, welfare reform and inequality in the United Kingdom*
(March 2013) by Christophe André, Clara Garcia, Giulia Giupponi and Jon Kristian Pareliussen

1033. *Work incentives and Universal Credit – reform of the benefit system in the United Kingdom*
(March 2013) by Jon Kristian Pareliussen

1032. *Strengthening social cohesion in Luxembourg: making efficiency and equity go hand in hand*
(March 2013) by Jean-Marc Fournier and Clara Garcia

1031. *The price of oil – Will it start rising again?*
(March 2013) by Jean-Marc Fournier, Isabell Koske, Isabelle Wanner and Vera Zipperer

1030. *The system of revenue sharing and fiscal transfers in China*
(February 2013) by Xiao Wang and Richard Herd

1029. *The declining competitiveness of French firms reflects a generalised supply-side problem*
(February 2013) by Hervé Boulhol and Patrizio Sicari

1028. *Do the overall level and dispersion of socio-economic background measures explain France's gap in PISA scores?*
(February 2013 by Hervé Boulhol and Patrizio Sicari

1027. *Labour market performance by age groups: a focus on France*
(February 2013) by Hervé Boulhol and Patrizio Sicari

1026. *Moving towards a single labour contract: pros, cons and mixed feelings*
(February 2013) by Nicolas Lepage-Saucier, Juliette Schleich and Etienne Wasmer

1025. *Boosting productivity in Australia*
(January 2013) by Vassiliki Koutsogeorgopoulou and Omar Barbiero