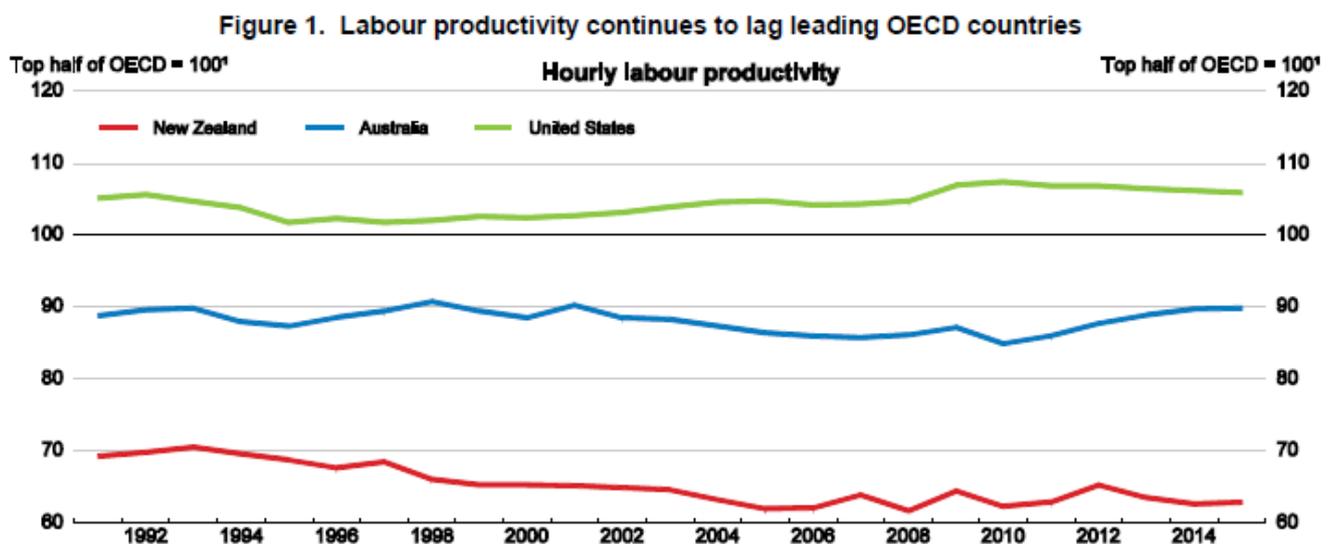


Lifting New Zealand's game on productivity

by Andrew Barker, New Zealand Desk, OECD Economics Department

Productivity growth will be the main driver of global economic growth and prosperity over the coming decades. For New Zealand, this represents both a challenge and an opportunity, as NZ productivity is below that of leading OECD countries (Figure 1). This problem is not new, and previous OECD work has shown that distance from markets is a substantial part of the explanation. The key question, considered in the 2017 [OECD Economic Survey of New Zealand](#), is what can be done to improve generally sound policy settings in New Zealand so as to boost productivity, in spite of the economic challenges posed by its remote location.



1. Population-weighted average for the top 17 OECD countries for labour productivity, calculated using 2010 purchasing power parity exchange rates.

Source: OECD (2017), Productivity database; OECD (2017), *Economic Policy Reforms: Going for Growth 2017*.

Overcoming distance barriers means that New Zealand needs to do everything possible to increase benefits from international connections. As a small country, it is reliant on foreign

direct investment to provide access to global supply chains and markets, promote local competition and drive technological, skills and managerial quality transfers. New Zealand's comprehensive foreign investment screening regime should be narrowed, while reducing compliance costs and increasing predictability for investors. Although New Zealand has few other barriers to trade, there would be benefits from cutting remaining tariffs, strengthening trade facilitation measures and improving recognition of foreign licenses to practice. Digitalisation offers increasing opportunities for trade that is not affected by distance, heightening the importance of continuing efforts to modernise information technology infrastructure.

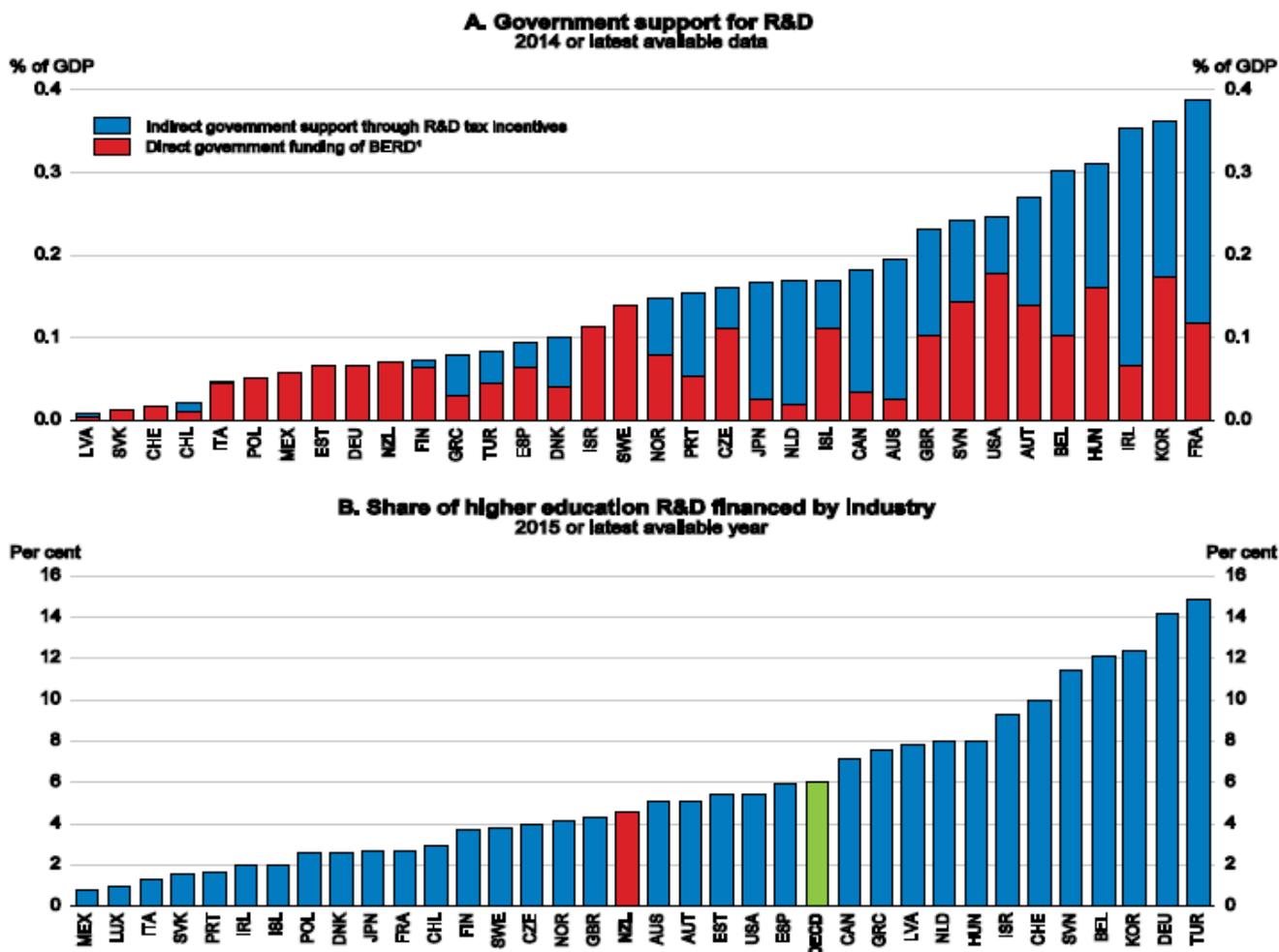
Facilitating international connections would also deliver benefits through increased competitive pressures, which can improve productivity through resource reallocation to the most productive firms, greater diffusion of existing technologies to laggards and increased incentives for innovation. Competition could also be improved by giving the Commerce Commission the power and resources to undertake market studies and through improving the efficiency of the insolvency regime.

Another key factor in New Zealand's poor productivity performance is a low rate of capital investment. Options to address low investment include decreasing the high effective corporate tax rate through lowering the statutory rate, and increasing national saving through reducing taxation of non-housing saving vehicles. Reforms to urban planning and infrastructure funding arrangements will be important to address the drag on productivity from [inflated house prices](#).

Finally, innovation is a key driver of productivity growth. Government support for R&D is low in New Zealand, and there is a low level of collaboration between firms and higher education and research institutions (Figure 2). Fiscal support for R&D should be increased, firm-level caps on R&D grants need to be removed, and support for successful collaboration

between research institutions and industry should be maintained or increased.

Figure 2. Government support for R&D is low, as is industry-university collaboration



1. Business enterprise expenditure on R&D.

Source: OECD (2017), R&D Tax Incentive Indicators, <http://oe.cd/rdtax> and Main Science and Technology Indicators, <http://oe.cd/msti>; Statistics New Zealand.

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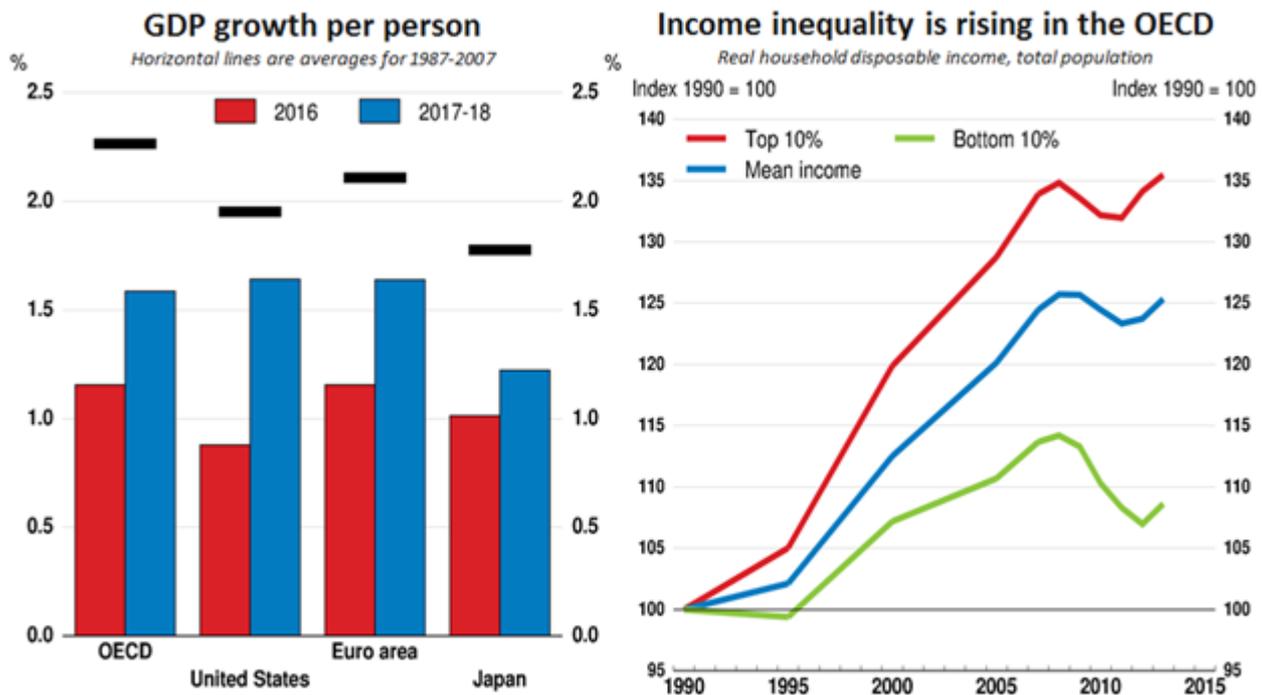
Global Economic Outlook: Better, but not good enough

By Catherine L. Mann, OECD Chief Economist and Head of Economics Department

Global growth is projected to rise modestly from 3% in 2016 to just over 3½ per cent by 2018 in our latest [Economic Outlook](#). The mood in the global economy has brightened during the past year, with confidence indicators and industrial production increasing, and investment and trade picking up from low levels. Growth is broad-based, including among major commodity producers.

There are now upside risks from investment to improve the quality of capital with more advanced technology, with rapid rises in demand for high-tech products since the second half of 2016. If this is sustained, it would improve cyclical conditions and support a revival of investment-intensive global value chains, boosting domestic demand and productivity.

The projected pick-up in growth is welcome as the global economy has been [stuck in a low-growth trap](#), but would still leave global growth below the historical average of 4% for the two decades prior to the crisis. In addition, when viewed in per capita terms, GDP growth for the OECD is even further from past norms and income inequality continues to rise. And while business and consumer confidence have generally picked up, these “soft” indicators have become less reliable in predicting “hard” activity, particularly for emerging economies.



Note: RHS is the unweighted average of 17 OECD countries.

Source: OECD June 2017 Economic Outlook database; and OECD Income Distribution database.

Employment growth has recovered relatively well and headline unemployment rates have decreased in most countries. However, along some dimensions, such as hours worked and part-time working, job quality is more precarious and underemployment remains high. Real wage growth is sluggish and has stagnated for most firms, and is associated with [widening productivity gaps to frontier firms](#), so there are weak foundations for robust consumption growth and widespread improvements in well-being.

Financial stability risks persist and [could derail the modest recovery](#). Policy and political uncertainties are high. Geopolitical shocks and trade protectionism could catalyse snap-backs in asset prices and realise downside risks. High and rising private credit growth for emerging economies, [particularly China](#), is a concern. Rapid increases in house prices in some advanced economies could lead to financial vulnerabilities. [Solving non-performing loans in Europe](#) would help to hasten the recovery.

Inflation in advanced economies is generally below central bank targets. After the global interest-rate cycle turned in

mid-2016, monetary policy is appropriately moving toward a more neutral stance in the United States, and Europe and Japan are using forward guidance. However, current market expectations imply a rising divergence in short-term interest rates between the major advanced economies in the coming years. This creates risk of sharp exchange rate movements, or other instabilities in financial markets.

In this environment, policy needs to promote inclusive growth and manage financial risks. Countries should [implement fiscal policy initiatives](#) that mitigate inequalities and provide long-run benefits, such as boosting education, child care, training and mobility. “High-multiplier” public investments in research and infrastructure would catalyse business activity to strengthen growth. An effective fiscal mix also improves the fiscal position and future output to boost debt sustainability in the longer term.

Each country has its own policy priorities to boost productivity, jobs and inclusiveness as set out in our [Going for Growth](#) report. Worryingly, the pace of reform has slowed in recent years and much more can be done to boost competition, skills and innovation. The benefits for inclusive growth can be strengthened through coherent policy packages which maximise synergies if implemented together, such as how active labour market policies do more to raise employment and share gains widely if pursued jointly with greater competition between firms.

The global cyclical upturn is not yet assured: the higher productivity and greater inclusiveness needed to improve well-being for all remain elusive. Policymakers cannot be complacent.

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Making the most of innovation in China

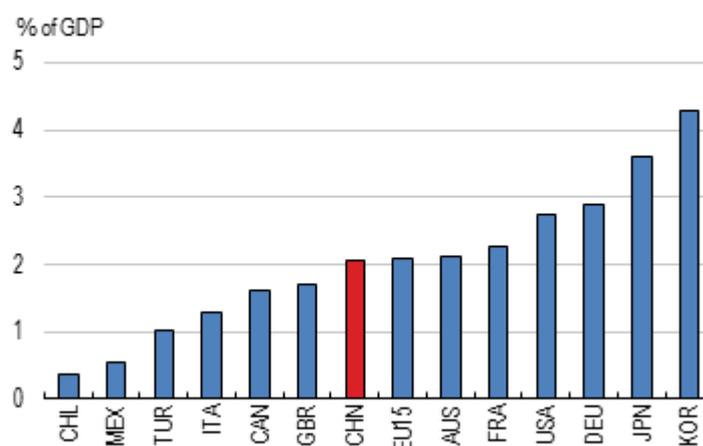
by Margit Molnar, Head of China Desk, OECD Economics Department

On several measures, China has caught up with OECD economies in the area of innovation.

On the input side, R&D spending as a percentage of GDP has reached 2% (Figure 1), on par with major European countries. This is more than in other middle-income countries such as Mexico, Turkey or Chile do, though still much less than in the leading innovators such as the US, Japan, or Korea.

Figure 1. R&D spending is higher than in a number of OECD countries

2014 or latest available data

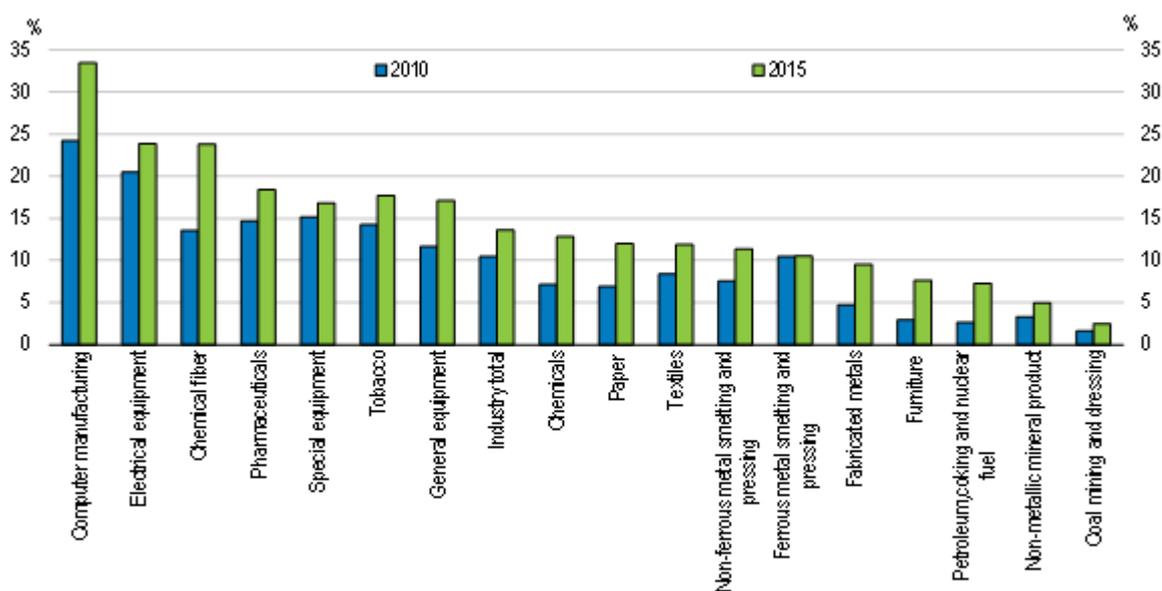


Source: OECD MSTI database.

On the output side, measured by the number of patents, China has become a global leader, surpassing the United States in 2015. In that year, China's patent filings exceeded one million – over a third of the world's total. Another

indicator, the share of new products, points in the same direction (Figure 2). The share of new products is high and increased markedly in several high-tech industries such as computer or electrical equipment manufacturing.

Figure 2. The share of new products is high in many high-tech industries



Note: New products need to be fundamentally different from existing ones in function, components or technology. They can be designated as new by the Ministry of Industry and Information Technology or, only for one year, by the producer. Industry classification follows the Chinese system.

Source: National Bureau of Statistics.

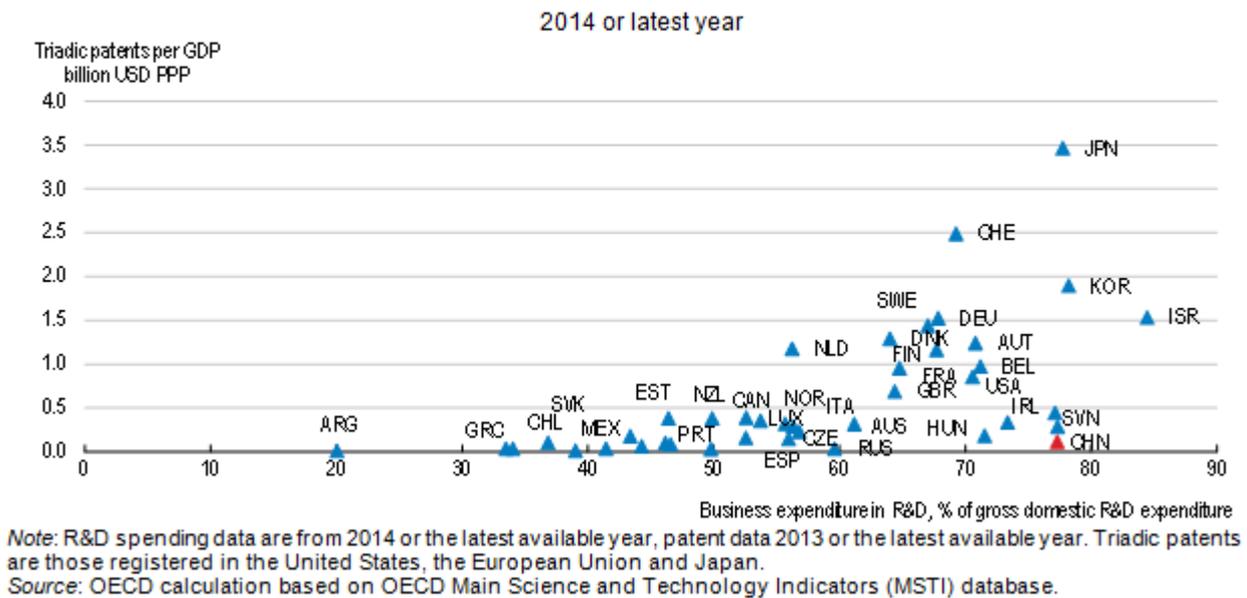
Thus, at first sight, things appear to be improving fast: increasing research inputs are coupled with increased innovation output.

When digging under the surface, however, it turns out that the elasticity of patenting with respect to R&D spending is small. On average, the impact on productivity of new patents has declined, though private firms appear to achieve greater productivity gains from their R&D efforts.

This largely reflects quality and relevance issues. Most Chinese patents are utility or design patents and only a smaller share are genuine inventions. And while China is registering an increasing number of patents in other countries, these are only a fraction of the total. On this measure, China lags behind most OECD and many emerging

economies (Figure 3).

Figure 3. Innovation outcomes are not on par with R&D spending by the business sector



As the [2015 OECD Economic Survey of China](#) pointed out, the utilisation rate of university patents is low at around 5% compared to 27% in Japan for example. In contrast, for firms it approaches nearly two-thirds, comparing well with other countries. A successful example of increasing utilisation is the applied laboratory for nanotechnology under the Chinese Academy of Sciences established in 2015.

Innovation and the diffusion of its benefits are hampered in China by limited collaboration across firms, as shown by the patent survey by the State Intellectual Property Office. In the Chinese ecosystem of innovation, vertical linkages or interactions with suppliers and customers are well established but horizontal linkages are more limited. Most R&D projects are carried out by the firm alone, collaborative projects with research institutions are rare and with other firms even scarcer. This silo effect is detrimental to potential spillovers and the exploitation of complementarities across firms.

Weak protection of intellectual property rights (IPR) has hampered innovation and patenting in China. Companies often do

not bother registering patents: two-thirds of them think that patent rights cannot effectively prevent others from copying their inventions. According to a country-wide representative survey of patent holders by the State Intellectual Property Office, 18% of patent owners have experienced a violation of their rights, but 37% of them did not take any measure in response. The problem is especially acute for micro-enterprises. Domestic firms are more likely not to respond than foreign-invested firms. Over half of the firms think that better protection by patent rights would effectively stimulate innovation at firm level and 87% say that IPR protection should be strengthened. In addition to IPR protection, most firms try to (i) reap the first-mover advantage by quickly marketing their invention, (ii) sign confidentiality agreements with staff or (iii) change products quickly so that competitors cannot catch up.

The [2017 OECD Economic Survey](#) recommends strengthening IPR protection by more systematically prosecuting violators and raising fines.

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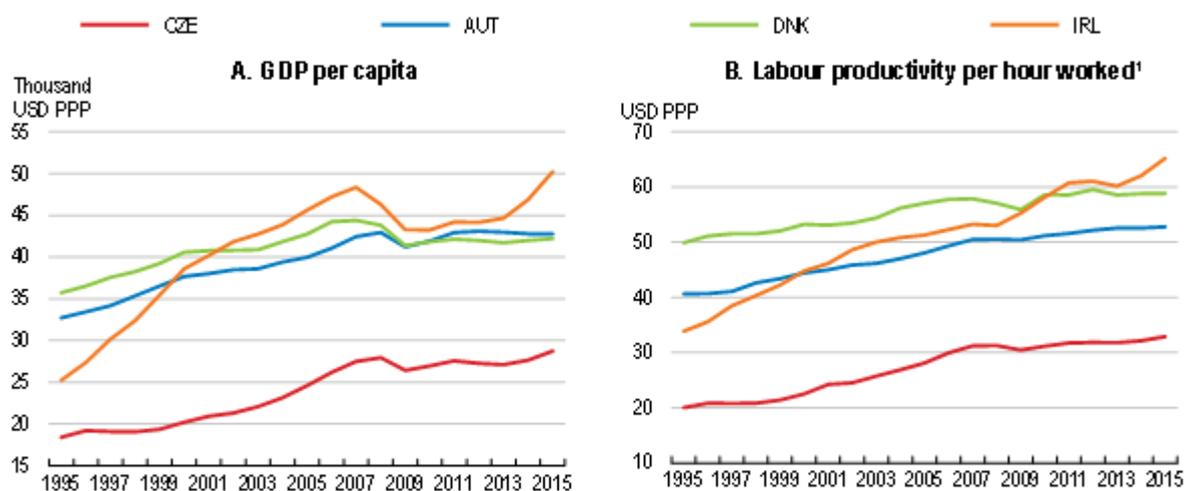
Leveraging R&D and innovation policies to foster productivity in Czech Republic

By Falilou Fall, Head of the Czech Republic Desk, Country Studies Branch, OECD Economics Department

Productivity catch-up along with deeper integration into the

global economy played a central role in the convergence of the Czech incomes toward OECD countries before the 2008 financial crisis. However, since then the convergence process has stalled. Labour productivity trends show a clear break in 2008 at the beginning of the crisis (Figure 1). The growth rate of labour productivity fell from 4.3% per annum in 2001-07 to 0.4% between 2008-14, and affected all sectors except finance and insurance. The strongest decrease was in manufacturing. As a result productivity is 21% below its pre-crisis trend, and potential productivity is 16% lower (OECD, 2016; Fall and Lewis (2016, forthcoming)). While cyclical developments are at play, the drop in productivity in all sectors indicates that the productivity shortfall is mainly structural. This suggests scope for improved structural policies to boost productivity in the Czech Republic.

Figure 1. Stalled convergence of the Czech Republic



1. 2015 data for the Czech Republic and Ireland are estimates.

Source: OECD Productivity database; OECD National Accounts database; OECD calculations.

Until 2008, inward foreign direct investment, international linkages of firms and credit availability had a significant impact on productivity growth. As the Czech economy is already one of the most integrated in global value chains, reviving the productivity catch-up process has to be domestically-driven. In particular, there is a need to boost productivity of Czech firms not affiliated to foreign firms and to

facilitate the expansion of SMEs and the creation of new firms (Adalet McGowan et al., 2015).

More effective R&D and innovation (RDI) policies are needed to foster domestically-driven productivity growth. So far, R&D and innovation performance has been low despite a noticeable increase in spending. The increase in RDI spending should be continued as it is a key element for upgrading the economy in the global value chains. The Czech Government has put in place programmes to encourage higher business R&D spending by intensifying collaboration between businesses and research institutions. However, direct government funding of business RDI is modest, representing 0.1% of GDP in 2013. More co-financing should be developed to incentivise firms to mobilise their own resources. Well designed and properly administered tax incentives (fiscal deductions) for RDI should also be used to complement direct support. However, a balance should be maintained between different types of government funding through grants, loans, co-financing, loan guarantees and tax provisions.

Furthermore, streamlining the administration and implementation of innovation policy would increase the effectiveness of the different programmes. The organisation and administration of RDI policies is too complex. The fragmentation of innovation policies seems to be partly driven by the specialisation of the different government bodies along with a limited set of financial instruments available to each. The respective role of the different stakeholders (ministries, agencies, research institutions, councils and businesses) should be further clarified as they all intervene in the same areas. Also, it is necessary to unify the design, assessment and coordination of implementation of research and development and innovation policies in a single institution.

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