Benoît Cœuré: Productivity and growth - innovation and diffusion

Introductory statement by Mr Benoît Cœuré, Member of the Executive Board of the European Central Bank, at the session "Revitalizing the Global Economy", World Economic Forum, Davos, 20 January 2017.

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The panel's main theme is the question of how can we boost productivity and economic growth in the long-term. This is a topic that matters for central banks. Long-term growth rates are important for interest-rate setting since they influence and define equilibrium real interest rates in the economy. And policymakers taking the question seriously will help dispel misplaced expectations that monetary policy can create sustainable long-term growth.

When it comes to economic growth, it is always useful to go back to the textbook and conduct simple growth accounting decompositions. By definition, growth in output per capita equals growth in labour productivity plus growth in hours worked per capita. In many advanced economies and in the euro area in particular, growth in hours worked per capita looks set to shrink, in the long run, due to adverse demographics and a falling working age population. Using OECD population projections and holding labour productivity constant, by 2050 the decline in output per head induced by ageing would be 14% in Germany, 16% in Italy and 22% in Spain.

A continuation of current rates of labour productivity growth in the euro area would just about offset that scenario. But this would mean running just to stand still. If we are to raise living standards within ageing societies, productivity growth must accelerate. And yet what we see today is sluggish labour productivity growth relative to twenty years ago in most advanced economies.

This is in part because so-called capital deepening has slowed – the amount of capital per worker – as investment has fallen during the crisis. But it also reflects weak trends in total factor productivity, which captures increases in efficiency from new technologies or more efficient business processes, and which is thought to be the main contributor to long-term economic growth.

Raising total factor productivity is about two main things: innovation and diffusion. The former is about the creation of new technologies at the global frontier, and the latter about their spread to other countries and non-frontier firms, that is, firms that are less productive than those at the frontier. To lift aggregate productivity both mechanisms need to be working – and we are not seeing that sufficiently in the euro area at the moment.

Regarding innovation or technology creation, we know there is a lively debate among economists about how much new technologies can add to productivity growth going forward ("techno-optimists vs "techno-pessimists"). But for now we do not observe a major slowdown in innovation: productivity growth in global frontier firms remains robust. And the performance of euro area firms at the frontier has been broadly comparable with that of other advanced economies in manufacturing in recent years.

Where the euro area is lagging behind is in services, where frontier firms are less than half as productive as their global peers. Why this is happening is complex, but seems in part to be a result of lower investment in human capital and in intangibles, such as R&D, which are key to push out the frontier. To give just one measure of differences in innovation, in absolute terms the US still submits more patents to the European Patent Office than does the euro area. Contrary to popular wisdom, the best way to improve our living standards may not be to "re-industrialise" Europe but rather to make services more productive.

So what can policymakers do? One thing that is clear is that government support for innovation

matters: in Europe differences in innovation capacity across countries are closely related to public spending on R&D, particularly in basic research.[1]

Hence such spending needs to be prioritised in national budgets and in the EU budget, and in particular in situations of fiscal consolidation. Spending on higher education is also key: the US spends about twice as much on tertiary education per pupil as we do in Europe (including private contributions).[2]

Yet the problem is not just innovation. Across all advanced economies, productivity growth in non-frontier firms has not been keeping pace with the leaders. In the euro area, non-frontier productivity has overall stagnated in manufacturing since the early 2000s, and has even declined in the services sector.[3]

And this is where diffusion comes in.

Put simply, markets are not setting the right incentives for non-frontier firms to invest in adopting, understanding and incorporating new technologies into their production process. For example: barriers for young, innovative firms to enter markets and expand domestically or internationally are too high; competitive pressures on incumbent firms are too low; and unproductive firms exit too rarely, preventing reallocation of resources to others. The aim of "structural reforms" in Europe should therefore be to raise business dynamism and productivity, not to cut wages below the levels consistent with productivity, in an elusive search for temporary gains in market shares.[4]

Only in this way can reforms be a positive- rather than a zero-sum game.

Different countries require different solutions. But there are clearly some common European factors, and coordination can make a difference. Most obvious is the need for a more ambitious single market agenda, and in particular for services. The Capital Markets Union project is also key as a facilitator of capital reallocation to more productive firms.

But we should also remember that deepening the single market can only happen within a stable legal framework that provides a level playing-field and stimulates competition – which is to say, the single market is not only about removing trade barriers, or even just a customs union, but about having common governance and common rule of law under the jurisdiction of the ECJ. It guarantees a secure framework for rule setting, regulatory enforcement and dispute settlement for citizens and businesses. Such legal certainty is crucial for investment decisions, and it in turn supports productivity and welfare.

Still, even if we are able to elicit such a creation and diffusion of new technologies, we know it will not solve all problems. Increasing automation, for example, might simply displace workers into lower productivity jobs, causing aggregate productivity to stagnate. And more worryingly, it might actually destroy jobs faster than it creates them. So it is clear that if we are serious about focusing on innovation and diffusion, we also have to be serious in thinking about redistribution.

That entails thinking about *ex ante* redistribution: making sure that the markets created by new technologies are efficient and firms are not capturing excessive rents at the expense of consumers. And it entails thinking about *ex post* redistribution, which requires efficient tax and social security systems, and about ways to manage globalisation such that both objectives are attainable, within countries and across them. In my view the sooner we start this discussion, the better. And there is no better place than Davos to begin.

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[1] *Veugelers,* R. (2016), "The European Union's Growing Innovation Divide", Bruegel Policy Contribution, Issue 2016/08, April 2016.

[2] EIB (2016), Restoring EU Competitiveness, January 2016.

[3] OECD (2015), The Future of Productivity, OECD, Paris, France.

[4] See Cœuré, B. (2014), "Structural reforms: learning the right lessons from the crisis", speech at the Bank of Latvia Economic Conference 2014, Riga, 17 October 2014.