ISSN-1831-4473

European Commission | Directorate-General for Economic and Financial Affairs

Issue 3 | June 2009

ECFIN Economic Brief

The financial crisis and potential growth: Policy challenges for Europe*

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Summary

The crisis has already led to a significant loss in production. Whilst considerable uncertainties prevail, this permanent loss could be of the order of 5% of GDP. We show that a large part of this loss which has already largely materialised is likely to be permanent if no action is taken. This would have major implications for Europe's welfare state, its public finances and for the aspirations of citizens with respect to their future standards of living. However, it does not necessarily have to turn out so negatively since history and economic analysis show us that the policy reaction matters greatly in determining the eventual outcome. In some past crisis episodes, policies have successfully prevented a loss in human capital and boosted productivity growth, which has often been the main driver of potential growth coming out of a crisis. There is a strong case for immediately developing an ambitious strategy targeting the key drivers of potential growth, whilst simultaneously preparing for an ageing society, bringing the public finances back onto a sustainable path and fighting climate change. This can be done by developing policies that avoid the mistakes of the past, boost employment and stimulate productivity. A key observation is that, as part of an overall strategy to strengthen the EU's knowledge base, an ambitious "green" innovation policy agenda could significantly contribute to growth. Such a policy would have to be co-ordinated at the European level and would need broad public support to succeed.

Introduction

The ongoing financial and economic crisis is taking its toll through an unprecedented drop in GDP – the Commission's spring forecast sets this loss at around 4% in 2009. Whilst financial market turbulence, credit shortages and higher unemployment will inevitably lead to a non-negligible loss of potential output, i.e of structural productive capacities, in the short run, the long-run impact on the potential output of the European economy is much less certain. Whilst acknowledging this uncertainty, this Economic Brief examines how the policy choices made now can determine the eventual outcome and recoup (some) of the losses.

Before looking at what measures will be required to deter such a loss in potential output it is useful, when considering long-run repercussions, to distinguish between the impact of the crisis on the level of potential output and its impact on long-run potential growth rates. There are 3 possible scenarios as illustrated in Graph 1: First, if potential growth rates eventually return to their pre-crisis path, then the only permanent effect of the crisis will be on the level of potential output. The size of this effect will depend on the amount of growth "lost" during the immediate crisis and the time needed for activity to converge towards its long term path – this is known as a "permanent level loss". Second, a more optimistic "full recovery" scenario is also theoretically feasible if "lost" growth is fully recouped in future years. Finally there is also a risk that potential growth rates in the post-crisis era will be permanently lower than their pre-crisis levels either as a direct consequence of the crisis (e.g. shift in risk aversion) or due to inappropriate policy responses, this is a "continuous widening loss". Failure to resolve the financial sector problems would almost certainly push the European Economy into this scenario. Notwithstanding the uncertainty surrounding future prospects, it is important to understand the channels through which the economic crisis can

* *European Commission, Directorate General for Economic and Financial Affairs (DG ECFIN).* This Brief extensively draws on the research presented in a recent DG ECFIN Occasional Paper on the "Impact of the current economic and financial crisis on potential output" (OP 49/2009). We are indebted to Marco Buti and numerous colleagues in the European Commission for useful comments, and to Gilles Mourre, Kieran McMorrow and Alexandr Hobza for their contribution to this paper. All remaining shortcomings are our own. The views and opinions expressed here are those of the authors only. and should not be attributed to the European Commission.

This paper exists in English only and can be downloaded from the website
http://ec.europa.eu/economy_finance/publications

ISBN 978-92-79-12847-9

impact potential output in level/growth terms, and start developing estimates of the broad orders of magnitude involved in order to ensure that the right policy choices are made. First and foremost, a better understanding can help in the formulation of a comprehensive policy response that mitigates the long-term output and welfare losses to the European economy: this is especially important in the EU as the period when economies need to rebound from the effects of the economic crisis coincides with the onset of the economic effects of population ageing. Secondly, an understanding is needed to ensure the appropriate design and timing for implementing exit strategies for monetary and fiscal policies. For example, overestimating the gap between potential and actual GDP could lead to unduly lax fiscal policies which, in turn, could trigger stagflationary pressures. Thirdly, the crisis will also affect the EU's capacity to meet its climate policy goals: while emissions will be reduced, lower levels of investment will slow the transition towards cleaner technologies in the energy system.

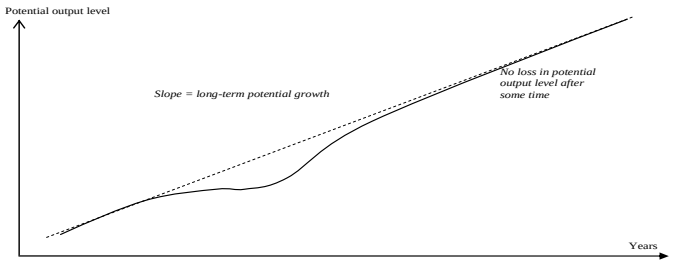
How can the current crisis affect potential output?

The crisis can have an adverse impact on potential output through its three main components: (i) labour input, measured in hours worked in the economy, (ii) capital stock which is affected by investment and (iii), Total Factor Productivity (TFP) which is usually taken as a proxy for technological progress.

The dramatic impact of the crisis on labour markets is the main preoccupation for many policy-makers. The longer-run implications for the EU's labour potential may however be relatively limited unless, of course, the downturn proves to be protracted or wrong policy choices are made at this juncture (see ECFIN Economic Brief No.1). Due to the frictions in the labour market and the long adjustment lags, the sharp increases in actual unemployment will bring about a temporary increase in structural unemployment which should come back to its original level when the industry reallocation of labour has been completed.

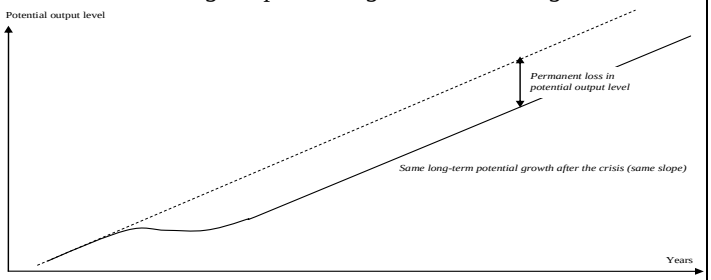
Graph 1. Crisis and potential output: three possible cases

Case n°1: "Full recovery" scenario



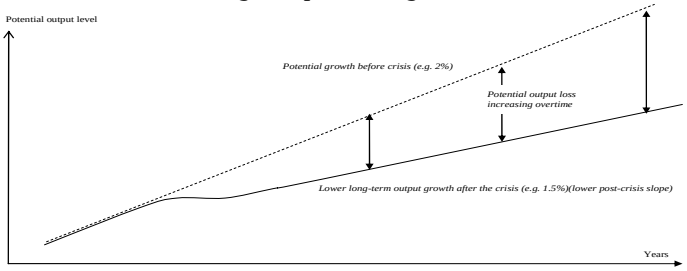
Case n°2: "Permanent loss in potential output level"

But no change in potential growth in the long-run



Case n°3: "Continuous widening loss"

Potential output loss in level increases over time due to lower long-run potential growth



However, a protracted recession may distort incentives to seek jobs and reduce the labour input by discouraging some workers from seeking a job. It could also reduce migration flows. High joblessness and long spells of unemployment may also cause a permanent destruction in human capital, provoking further losses in the level of potential output.

The largest long run impact of the crisis on potential output is likely to be felt through the investment channel. The crisis has brought about a sharp drop in investment levels (investment in the EU is estimated to drop by a cumulated total of almost 14% in 2009 and 2010) which, combined with an acceleration in the rate of obsolescence of some capital vintages due to a wave of bankruptcies or extensive economic restructuring, leads to a reduction in capital stock and will contribute to lowering potential growth rates in the short- to medium-run. The adverse implications of this can persist in the long-run if the cost of capital is permanently increased because of changes in attitudes towards risk amongst investors.

A slow process of industrial restructuring, either caused by credit constraints – due to delayed adjustments in the banking sector – or by entrenched structural rigidities, can also negatively affect the level and growth rate of TFP in the medium to long term by locking resources in (relatively) unproductive activities. The long-run TFP growth rate could also suffer because of a drop in innovative activities induced by the crisis. As R&D investments, one of the key drivers of innovation, typically behave pro-cyclically, a prolonged crisis could considerably slow down the accumulation and diffusion of knowledge. Investments in R&D may also suffer from the changes in attitudes towards risk, which as mentioned earlier, are presently leading to a tightening in credit conditions and to a rise in the cost of capital.

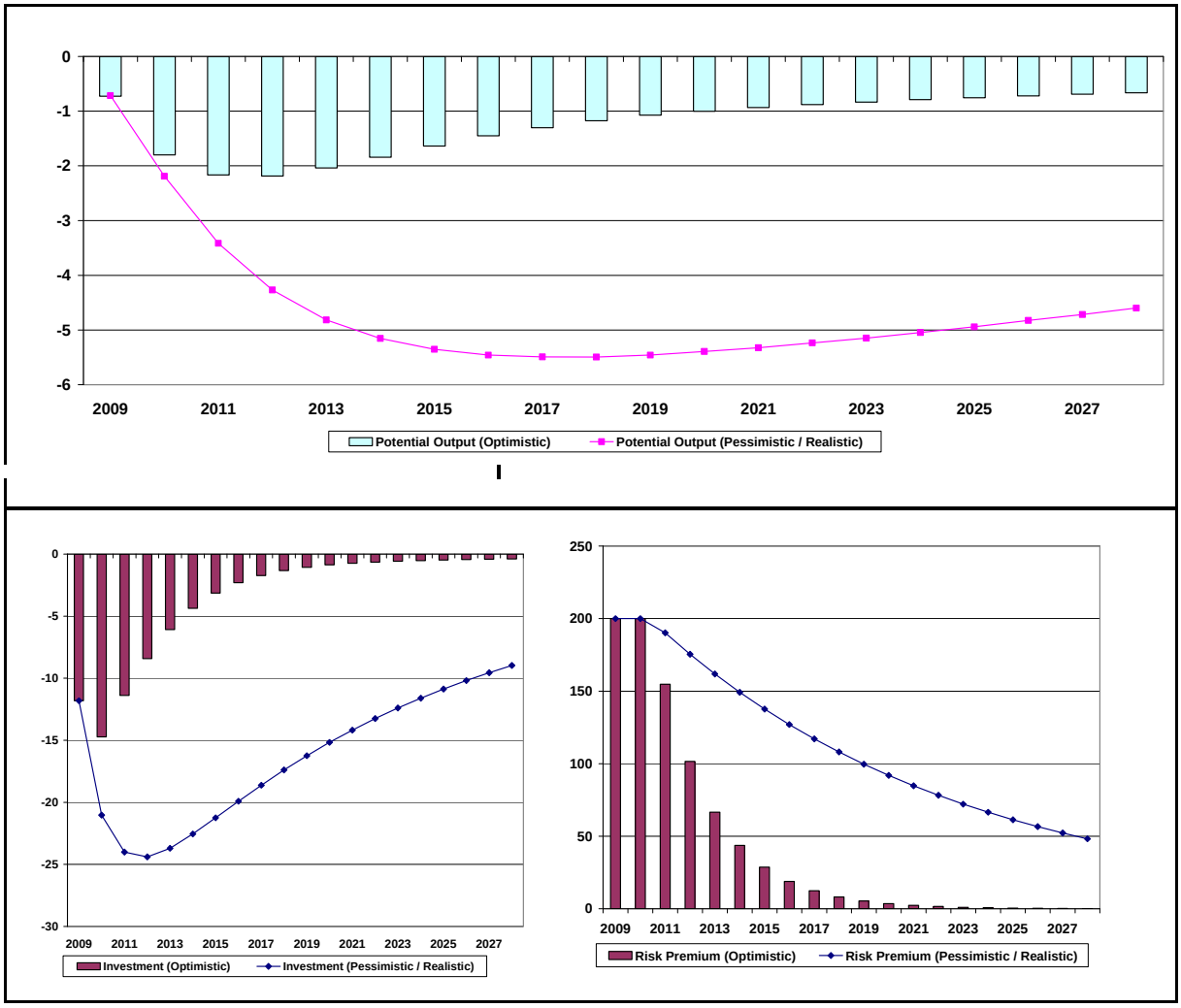
According to estimates of the short term impact produced by DG ECFIN, the severe economic crisis will lead to a sharp downward revision in potential growth rates. Against the backdrop of considerable technical and economic uncertainties, the potential growth rate of the euro area and that of Denmark, Sweden and the UK are expected to be cut in half in 2009-2010 compared with 2008, i.e. from a growth rate range of 1.3%-1.6% to 0.7%-0.8%. This viewpoint that the crisis will result in a halving of the euro area's potential growth rate is also shared by the OECD and the IMF. The pattern for the "new" Member States is broadly similar, although their potential growth rates remain much higher, reflecting a "catching-up" effect. Compared with 2008 and in addition to the contribution of adverse demographic trends (-0.2 p.p.), the fall in euro area potential growth in 2010 (-0.6 p.p.) is driven by the continuing increases in structural unemployment (-0.1 p.p.) and by the substantially reduced contribution from capital (-0.4 p.p.). Although TFP growth is expected to slightly recover, its contribution will remain below that recorded in the first half of the decade.

However, the effects in the medium term are more uncertain. Assuming unchanged policies, a model-based analysis using the Commission's QUEST III model (see Graph 2), to simulate the impact of the financial crisis, points to the possibility of a slow recovery in the EU's medium-term potential growth rate, as well as highlighting the risk of permanent growth rate effects over the longer run. Given the uncertainties involved, two alternative scenarios were undertaken to illustrate the possible directions which financial markets may take over the coming years. The more optimistic scenario is based on the expectation that the freezing up of capital markets which occurred in 2008 - 2009 will be relatively quickly unwound[1] whilst the more "realistic / pessimistic" scenario assumes tighter financing conditions in the long run. In terms of results, both scenarios point to long run negative level effects for potential output ranging from -1/2% ("optimistic" variant) to -4 ½ % ("realistic / pessimistic" variant), with the divergences driven by variations in the speed and strength of the recovery in investment, which in turn reflects the very different risk premia paths for the period in question. Both scenarios also point to permanent potential growth rate effects due to the negative impact of

[1] In the optimistic scenario, risk premia would revert to levels seen in the pre-crisis period (i.e. 2002-2007) over the medium term – it is worth pointing out that these were low by historical standards. In the "realistic/pessimistic" scenario, borrowing costs would be closer to those experienced in the EU in the 1990's and would consequently stay on average 1-1 ¼ % points higher over the long run (i.e. over the next 20 years), compared with the immediate pre-crisis period.

the higher borrowing costs on intangible investments (such as R&D) and consequently on TFP growth, with substantially greater effects under the more "pessimistic/realistic" scenario.

Graph 2. The impact of the crisis: a comparison of the "optimistic" and "pessimistic/ realistic" QUEST III modelling scenarios



In line with recent OECD and IMF estimates for potential growth over the next five years, policy development should be based on the "realistic/pessimistic" scenario, i.e. a loss in potential output of the order of 5% of GDP. This assumes that the financial sector problems are resolved, but that no further structural reforms are undertaken to increase potential output. Simplifying, our analysis suggests that, provided banks are adequately recapitalised and bank accounts appropriately sanitised, the most likely outcome of the crisis for the EU economy is the second scenario in Graph 1.

Such a loss in potential would have major implications for Europe's welfare state, its public finances and for the aspirations of citizens with respect to their future standards of living. It could lead to major economic and societal tensions – since Europe would not have experienced such low potential growth rates in several generations. Policies to restore potential output must therefore be a central priority to avoid the realisation of such a damaging scenario.

What can we learn from past crises?

Past episodes of financial and economic distress provide us with some useful insights about their impact on potential output. Examination of a series of major recessions (whether associated with a banking crisis or not) in the European countries does not provide a clear conclusion: it shows that their impact on long-term potential growth is mixed with broadly half of countries experiencing an increase in potential growth in the decade following the crisis. While deceleration in capital accumulation and reduced labour input had important impact on potential output in the short- to medium-run, their contributions generally did not differ substantially over a longer time period from the pre-crisis period. Hence, TFP growth emerges as the key factor explaining country differences in developments in potential growth around recessions.

But are financial crises, like the current one, worse than "ordinary" recessions? Probably: banking crises in Europe appear to lead to larger losses in terms of level of actual output although they do not seem to last longer than other periods of economic distress. Evidence from a large number of financial crises all around the world indicates that past episodes of financial distress were characterised by sizeable losses in output – at least twice as high as in a "ordinary" crisis – and in employment.[2] Moreover, besides a permanent negative effect on level of GDP, financial crisis can adversely affect long-term growth of output in some cases through its dampening effect on TFP growth. The impact of the current crisis may, moreover, be considerably worse: its global outreach and extraordinary strength make it different from most of the other, usually, local recessions.

One key lesson from these experiences is that policies matter greatly. For example, the deep recessions which started in 1991 in Sweden and Finland were relatively short lived and did not result in a reduction in potential output growth, despite the very slow adjustment in the NAIRU. This was largely thanks to a relatively prompt resolution of their respective banking problems and favourable exchange rate movements as well as significant restructuring of the economies. Sweden and Finland managed to reverse their economic fortunes and benefited from accelerated potential growth rates in the aftermath of the crises. The upturn in activity in these two countries was driven by TFP-enhancing restructuring and innovation policies, pursued by both governments. On the other hand, an insufficiently resolute policy reaction to the financial crisis, combined with mounting competitive pressures from emerging economies, contributed to the slowdown in long-run potential growth in Japan in the course of 1990s. The differences in the evolution of potential output in Japan, Finland and Sweden thus document the importance of decisive policy actions facilitating inter alia the process of restructuring and reallocation of resources within economies.

Policies to boost potential output in the years to come

The central lesson from the Great Depression and from Japan is that the first policy priority must be to ensure that the financial sector is reformed and recapitalised so that it can resume its intermediation function. Without this being achieved, years of slow growth are practically unavoidable as "zombie banks" struggle to survive without contributing to growth. This Brief does not address financial sector policies as such since these merit a full treatment in their own right..

[2] Reinhart, C.M. and K. Rogoff (2009), The Aftermath of Financial Crises, NBER Working Paper No. 14656, National Bureau of Economic Research.

However, the lessons from past experiences and from economic analysis indicate that a convincing policy agenda aimed at strengthening the supply-side of the economy needs to be drawn up and implemented rapidly. This paper consequently explores which policies could help achieve this. In other words, the analysis looks at policies which could help us move from the second to the first case in Graph 1.

Developing such a structural reform agenda will also require coherence with the need to address the other key long run challenges facing the European economy: demographic ageing, the fight against climate change and the need to prepare for a much more interdependent global economy. Policies aimed at promoting potential growth agenda will have to address these challenges simultaneously since Europe cannot afford the luxury of developing separate strategies for these "mega" policy tasks.

There are three final considerations that will need to be kept in mind. First, the crisis has undone some 20 years of fiscal consolidation in Europe. Consequently, the public finances will have to be put back on a sustainable path. This will also be essential in anchoring expectations and in avoiding the prospect of a ballooning public debt slowing down the recovery (e.g. through higher interest rates or increases in private savings to anticipate future higher taxes or reduced levels of public expenditure). Efficiency and prioritisation of public expenditure will, therefore, be key. Secondly, the challenges are common to all Member States and whilst circumstances differ across the EU, an important number of the policy measures can only be developed or framed at the EU level – either because of the required scale or in view of their impact on the internal market or other Community policies. Finally, undertaking deep structural reforms in times of crisis is very difficult. It will, therefore, be essential to build a consensus on the need for reform across the Union and to invest in this as a matter of priority. Developing a political momentum akin to the EU 1992 agenda will be vital. There is a clear challenge for the Union's long run structural reform agenda here (Lisbon post 2010).

In conclusion, while unprecedented demand side measures are – rightly - being undertaken today to fight the crisis, the structural and supply side policy response will have to be even more unprecedented – in its level of ambition, its comprehensiveness and its urgency.

Five priority areas for boosting potential growth, preparing for ageing and fighting climate change.

The development of policies to restore potential output should build on the lessons of past crises and adapt them to the present European context. This Economic Brief recommends that in the design of such an agenda emphasis should be given to five "priority areas" which economic history and analysis suggest could contribute significantly to restoring potential growth. The first is to avoid obvious mistakes that harm employment and productivity, the second to boost employment and the third, fourth and fifth to stimulate productivity growth through renewed investment. The latter is of particular importance in a world that has been hit by a synchronised global crisis in which the recovery will be less demand led than has often been the case in past crises.

1. Avoid the policy mistakes of past crises which damage employment and productivity

The pressures on governments to mitigate the short run effects of the crisis increases the risk that many of the policy mistakes observed in past crises could be repeated. Governments should resist protectionist actions or any measures which promote national interests at the expense of the proper functioning of the Single Market, especially measures which can severely harm potential output over the medium to long term. In addition, measures resulting

in a reduction in labour market participation rates, such as early retirement schemes, would significantly reduce the level of potential output. Finally, a prolonged crisis may undermine the commitment to sustainable fiscal policies, which may ultimately lead to higher taxes and to a limiting of the budgetary room for manoeuvre needed to accommodate future reform efforts. Similarly, pressures to defer current reform efforts aimed at stimulating productivity, labour market participation or promoting sound public finances should be defused. There are important planned reforms with respect to pensions, healthcare, long-term care systems, education and research which should be actively pursued and not mothballed as has happened in previous crises. In fact, decisions on reforms are now more urgent than ever. These measures are crucial for securing Europe's future economic strength and, if anything, they will need to be fortified going forward.

2. Increase labour market participation and worker employability as well as improve the overall functioning of the EU's labour market

Past crises have shown that labour markets can significantly affect potential growth by negatively impacting on human capital. Reforms to reverse such a trend are now essential due to the imminent shrinkage of the labour force as a result of demographic ageing and, to a lesser extent, the current recession, which is proving particularly harmful to young people and older workers. It is vital to ensure that young people who cannot enter the labour market at this juncture will not embark on a life of permanent benefit dependency and that dismissed older workers will be able to return to employment once the labour market situation improves. The following reforms are vital in this regard:

- Segmented labour markets, with high protection for insiders and very limited protection for workers on fixed-term contracts, have led to low structural employment rates, skyrocketing unemployment in the crisis and marginalisation of certain groups in society. Such structures are still prevalent in many Member States. They need to be reformed in line with the "flexisecurity" approach that shifts the emphasis to equipping workers to operate in more flexible labour markets.
- Tax and benefit system reforms are crucial in reducing benefit dependency by making work an economically attractive and rewarding option compared with welfare and by encouraging beneficiaries to actively seek work. A reduction in the disincentives to work and to hire, which are often embedded in tax and benefit systems, especially for the low-skilled, and a greater link with targeted active labour market policies will contribute to a structural improvement in the functioning of labour markets. By establishing a better link between the duration and, possibly, the generosity of unemployment systems on the one hand and the business cycle on the other, unemployment systems could give incentives to people that are more attuned to the business cycle as well as providing a stronger macro-economic "stabilisation function".
- Reforming disability and early retirement schemes and increasing the effective retirement age remain priorities for increasing the labour supply of older workers and for contributing to sustainable economic growth in the face of adverse demographic developments. This also helps ensure that retirement behaviour takes due account of future increases in life expectancy. Suitable working conditions are also needed, including more flexible working-time and work-organisation patterns, together with employment opportunities for an ageing workforce.

3. Europe's Single Market as an engine for restructuring in Europe

Crises tend to lead to a significant restructuring of economic activities, with industries that have grown in an unsustainable manner (e.g. construction and financial services in some Member States) tending to shrink and with new industries tending to emerge and expand. Adjustment within industries is of equal importance, with the strong pressures unleashed by a crisis creating a "survival of the fittest" business environment. These Schumpeterian effects are of crucial importance in boosting productivity and potential growth. Therefore, once the economic growth resumes, short term measures aimed at avoiding viable companies from failing in the depth of the crisis should be removed urgently.

In Europe, these effects play out in the Single Market where it will be essential to ensure that industries can restructure on a European scale, thereby benefiting from economies of scale and scope. Previous analysis by DG ECFIN, however, suggests that there is evidence of potentially significant market malfunctioning in important segments of the internal market which could inhibit the necessary adjustment.[3] Moreover, recent research[4] demonstrates that, compared with the US, more inefficient firms survive in the EU and that the growth of successful firms is much slower. During the past years, a lot of emphasis has been placed on facilitating the setting up of companies (i.e. "entry") and good progress has been achieved in this regard. Now more emphasis on facilitating "exits" and "churn" is essential. The vigorous implementation of competition policy will be very important in this respect.

There are two further important recommendations:

- Firstly, a careful, evidence based, assessment of obstacles (based on market monitoring tools) is required in key EU industries, coupled with a strong determination to remove such obstacles;

- Secondly, the implementation of the Services Directive by the end of 2009 will be fundamental in opening up a large and hitherto somewhat shielded chunk of the EU's economy. Directives give Member States latitude in implementation and it will, therefore, be particularly important to assess the economic effects on the ground, with a view to distilling best practices and promoting a high level of ambition going forward.

4. Reform Europe's knowledge triangle (education, R&D and innovation) and healthcare system

The evidence of past crises shows that reform measures aimed at ensuring a modernisation of the framework conditions pertinent to the EU's knowledge economy are essential in boosting (total factor) productivity. This will be particularly important since the analysis above shows that the crisis could permanently impair R&D due to changes in the financial system. A high level of educational attainment is associated with a productive, skilled and adaptable workforce and is a precondition for lifelong learning (and for higher labour market participation rates). Future productivity growth also depends on technological progress, which

[3] Ilzkovitz F., A. Dierx and N. Sousa (2008), "An analysis of the possible causes of product market malfunctioning in the EU: First results for manufacturing and service sectors". European Economy. Economic Papers 336.

[4] Bartelsman, E., J. Haltiwanger, and S. Scarpetta (2005), "Measuring and Analyzing Cross-country Differences in Firm Dynamics", Chapter in NBER book Producer Dynamics: New Evidence from Micro Data, Dunne, T. Jensen, J.B., and M.J. Roberts (eds.), http://www.nber.org/chapters/c0480.

in turn depends both on universities producing graduates capable of engaging in research and on governments, firms and universities investing in research and development. A key challenge here remains to better exploit the diversity of Europe's education and research area, by removing barriers, by stimulating the adoption of "best practices"; and allowing much more cross border mobility. Making the European Research Area a success will, therefore, be an essential pre-requisite.

Sustained productivity growth hinges on policies to stimulate Europe's R&D and innovation systems. There remains significant potential for further improvement in many Member States.[5] In particular, there appears to be a divide in the efficiency levels between old and new Member States, despite the fact that there is evidence that the new Member States are catching up. Analysis shows that a higher efficiency of R&D spending goes along with, not only, a strong knowledge base, but also with a high-tech specialisation of the economy, a strong level of investment in education, a high employment share in science and technology, and an effective degree of protection of intellectual property rights. It will, therefore, be important to adapt 3rd & 4th level educational programmes and the research infrastructure to the needs of science and industry whilst continuing to ensure a high level of primary and secondary level education.

Finally, there is considerable scope for making healthcare and long-term care systems more efficient and thereby raising productivity. Given that these industries represent some 8% of EU GDP and are highly dependent on public operating frameworks, effective policies could have significant macroeconomic effects. Better value for money in health care and reduced health inequalities can be achieved by strengthening primary care, focussing on prevention and health promotion and through better coordination and rational use of resources. In addition, smart reforms promoting preventative measures and specific health technologies can also contribute to stimulating labour supply by helping the population to stay healthy and productive for longer.

Increasing the long-run productive capacity of an economy does not come for free – it requires considerable investments in infrastructure, human capital, R&D and innovation. The tension between the achievement of these long-term growth objectives and addressing the pressing public finance constraints over the coming years may be relaxed by raising the efficiency and effectiveness of public spending and strengthening the role of the private sector in areas such as health, long term care, education, R&D and innovation.

5. Dealing with climate change: a step change in the development and deployment of "green" technologies

The Finnish and Swedish examples show that, in addition to strengthening the framework conditions of the "knowledge triangle", well designed and targeted innovation policies can play a key role in stimulating TFP growth and boosting investment coming out of a deep crisis. These economies re-oriented their specialisation patterns and built strong ICT producing industries that provided an engine for growth. This has also been the experience of many Asian Tiger economies in the 1950s and 1960s which developed basic industries through dedicated innovation programmes, even in the absence of historic comparative advantages.[6]

[5] Conte at al. (2009), "The efficiency of R&D spending and the institutional framework". European Economy. Occasional Paper, forthcoming.
[6] Chang Ha-Joon, (2005), "Kicking away the ladder: development strategy in historical perspective", Anthem Press, London.

One of the biggest challenges for the world economy is to fight climate change which in the long run means "decarbonising" our economies. The European Union has set ambitious targets for reducing greenhouse gas emissions by 2020, with a view to much more ambitious cuts by mid century (-80% of 1990 levels). Whilst there is a difficult negotiation ahead on the road to Copenhagen to set targets for developed countries for 2020, there is a much wider agreement about the strategic direction that needs to be taken. It is also clear from extensive analysis and modelling work that technology will have to play a major role in reaching such objectives (reference).

Many of these environmental technologies are beginning to mature, with a significant additional efficiency potential being available due to economies of scale and learning curve effects. A decisive push for the development of such technologies and their deployment through market mechanisms (in the industries covered by the EU's emission's trading system) in combination with standards and incentives (for households, buildings and transport) would lead to significant capital formation by businesses and households and would provide a boost to TFP. Clearly, such a technological push requires some basic decisions to be taken at the European level, with the internal market being the essential framework for engineering such a strategy, given the need to avoid fragmentation and to ensure overall effectiveness.

Developing such a strategy would require careful design - notably with regard to its institutional structure and the need to find the right balance between targeting specific technologies and avoiding a strategy aimed solely at picking "technological winners". Adaptation of existing plans and market experimentation will both be essential in ensuring a successful outcome.

Conclusion

The analysis presented in this Economic Brief suggests that potential output in the EU is set to fall as a result of the crisis by some 5% of GDP. This would have major implications for citizens and companies. Moreover, should bank balance sheets not be properly sanitised and banks not be appropriately recapitalised, then losses could become even larger. Similarly, if some of the policy mistakes of the past were repeated - e.g. recourse to early retirement schemes or protectionist measures - then potential growth would be further impaired. This shows that the policy measures we take today not only have an important impact in the short run and on the unwinding of short term crisis measures ("the exit strategy"), but can also affect economic well being for many years to come. In a sense, "the long run starts today".

The design of our economic policies, therefore, has to incorporate these different time perspectives simultaneously. This implies that the development of a potential growth agenda has become very urgent. Economic analysis and history show that well designed policies can significantly contribute to restoring potential growth rates. To achieve this, this Economic Brief suggests that policies should avoid the mistakes of the past, boost employment through labour market reforms and stimulate productivity and capital formation. A key observation in this respect is that an ambitious "green" innovation policy would help with fighting climate change, but could also boost (Total Factor) productivity growth.

To conclude, a determined and well communicated effort to address the biggest challenges facing Europe's policy makers, in an integrated manner, could yield rich dividends – not just in terms of potential growth - but also in rallying the required public support behind the necessary policies.