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Structural Reforms and Growth Potential in the European Union

Summary: Following the onset of the financial and economic crisis, the latent and gradual decline of growth potential in the European Union turned into an overt growth crisis. However, this crisis can also exert a cleansing effect and release resources for activities of higher efficiency. A core element of the strategy focusing on a turnaround to growth – by means of structural reforms designed to improve the functioning of the market and strengthen the growth potential – lies in boosting a faster increase in productivity. Concurrently with more efficient resource utilisation, the principal objective is to raise the employment rate in a sustainable fashion. Underlying as a central factor the structural reforms supporting the growth potential is the need for a better functioning internal market and an improved business environment. All this requires profound reforms in product and service markets as well as resource markets, primarily the labour market and money market. Reforms promoting knowledge and innovation are closely connected with this and are of the same significance.

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Starting in the 1990s, the EU15's severe structural productivity problems (predominantly the significant deceleration in total factor productivity) and inadequate adaptation to the process of globalisation led to a persisting and sharp drop in the potential growth rate and undermined the growth potential.[1] This trend was primarily characterised by a productivity gap relative to the world's key technology leaders, the main determinant of which, in turn, was Europe's post-war convergence in growth driven by technological adaptation and imitation, coupled with the system's innovation underperformance (see in detail in Halmai, 2015). What was for a long time a latent and gradual erosion of growth potential turned into a manifest growth crisis at the onset of financial and economic recession.

The pre-crisis (and convergence) model is not sustainable in the new Member States either, and would not assist recovery (Elekes – Halmai, 2013). In the absence of a sweeping turnaround to boost growth, the rate of growth cannot even approach the pre-crisis level.

The latent and then overt growth crisis has shaken the European convergence mechanism. The entire European model is facing an extraordinary challenge: in the absence of a convergence mechanism, the uniform mechanism of integration can become dysfunctional. The rebirth of convergence is both a challenge to and a precondition of European renewal and reform.

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The unfavourable investment environment increases the level of capital outflow and facilitates a sharp rise in the imports of goods and services. A great degree of external openness continues to prevail, but in the past one and a half to two decades the competitiveness of certain global Member States has shown a downward trend. In the global system of capital flows, Europe increasingly becomes a capital exporter, which – while having beneficial economic effects – hinders employment and the growth potential.[2] All these problems, the imbalances of public finances and a need for sustainable public finances increasingly generate conflicts with social and environmental responsibility and the characteristics of the European model of solidarity. Finally, the inadequate level of European governance thwarts European efforts to address the challenges of the growth model.

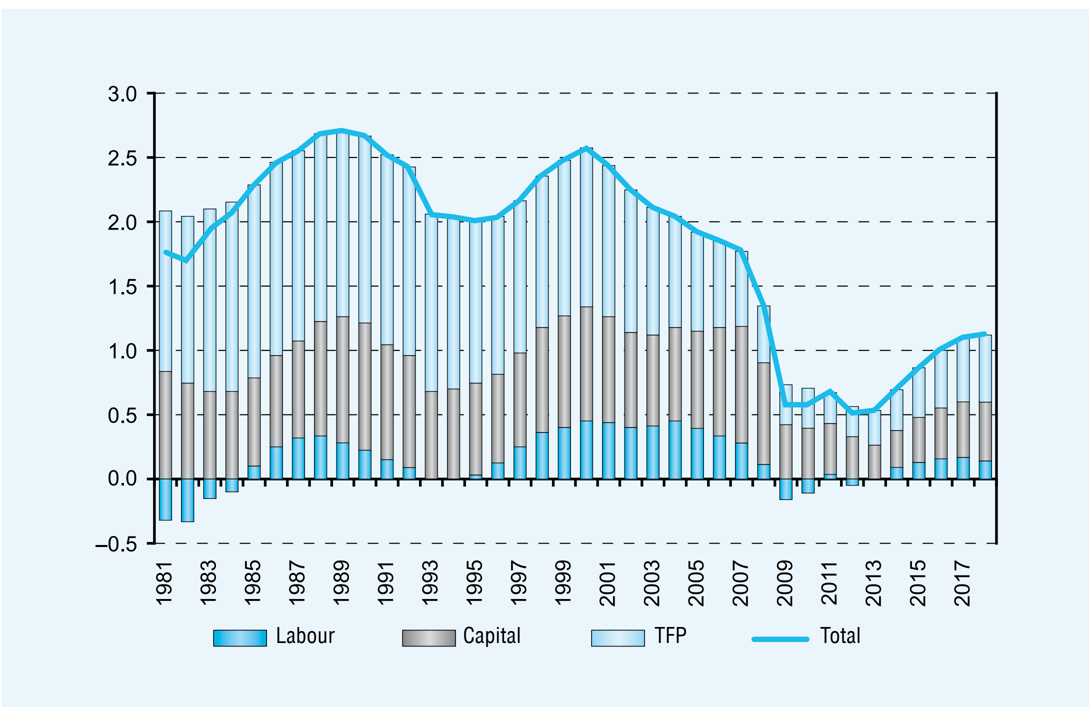
On the other hand, the crisis can also have a cleansing effect and release resources for activities of higher efficiency. Thus the crisis also creates new opportunities. It can facilitate wider and deeper changes than previously envisaged. These fundamental challenges, along with structural problems and the effects of the recent crisis call for a new medium-term narrative for growth.

GROWTH CRISIS AND SLOW AND UNEVEN RECOVERY IN THE EU

The EU's growth performance in the past decade signals structural weaknesses, market bias and bottlenecks. (*Figure 1* summarises the performance of the EU15's growth model operating in recent decades).[3] According to

Figure 1

THE GROWTH MODEL OF THE EU15



Note: Changes in potential growth and the impact of individual factors as a percentage of potential output
Source: author's own calculations and editing

standard growth accounting, in pre-crisis years (between 2001 and 2007) the main driver of European growth was increased labour productivity. Improved labour utilisation and the increase in working age population accounted for one quarter of the economic growth. Potential growth in the EU27 was particularly impaired by the decline in youth participation in the labour force and by the decreasing number of hours worked per employee (Halmai, 2014, pp. 193–194). In the latest crisis, a sharp decrease in capacity utilisation entailed rising unemployment and a significant downward shift in total factor productivity *(see Figure 1).*

The economic and financial crisis caused a sharp decline in the level of potential output. According to the preliminary estimate of the European Commission (2009), the EU's potential output losses resulting from the financial and economic crisis would have amounted to approximately 4 per cent in the medium term. At the same time, the cumulative level effect – taking the average potential growth in the period of 2000–2007 as a basis – is currently over 10 per cent, i.e. the EU27's potential output is currently more than 10 per cent lower than what it would be in the case of the average dynamics of the pre-crisis eight-year period.[4] Although economic recovery has begun, simulations suggest that this loss (i.e. lower potential GDP) has a lasting impact.

Economic recovery – as has been confirmed by earlier experience – remains low and uneven. Factors impeding growth are as follows:

- deleveraging and fiscal consolidation,
- higher-than-earlier risk premiums,
- perpetuated labour market inadequacies.

Looking at potential growth in the EU27 from the supply side, it is particularly lower labour utilisation and more moderate capital accumulation that are expected to have an adverse impact compared to the pre-crisis period. In the absence of substantive policy changes, the EU27 average for annual potential growth will not exceed 1–1.2 per cent for the rest of the decade.

The crisis has an adverse impact on capital accumulation. Investment activity largely depends on international and domestic demand outlooks and on the cost of capital. At the same time, the negative impact of diminishing capital accumulation on potential growth will be exacerbated further by the fact that economic restructuring increases capital impairment and entails the depreciation of capital assets of certain vintages. The crisis affects total factor productivity through the trends of its long term drivers, i.e. physical investment, R&D and innovation. For example, investments will be impaired if economic recovery is only moderate, or risk-related behaviours change. The latter entails higher risk premiums and tightened lending conditions, i.e. higher capital costs. Since private R&D investments are strongly procyclical, the crisis may result in a slower rate of technological progress. As a result of delayed adjustment by the banking sector, industrial restructuring can be hindered by limited access to credit and by entrenched structural rigidities. All this – as resources remain in less productive areas – may decelerate the growth rate of total factor productivity.

In respect of labour utilisation, the crisis exerts its impact through the following factors: a decrease in the average number of hours worked; a falling participation rate; and higher structural unemployment[5] (NAWRU). Past experience suggests that an increase in NAWRU will be perpetuated during and after the crisis. Risk-related behavioural changes may lead to higher capital costs. Since the need for the latter – i.e. to offset higher-than-earlier capital costs – makes companies raise their mark-ups, a perpetuated increase in NAWRU may follow. Furthermore, long-term unemployment leads to the continuous deterioration of human capital causing an irreversible growth in NAWRU. (This is known as the "hysteresis effect"). All these factors will cause losses in potential output in the medium term.

In the period of 2010–2014, average annual potential growth in the EU27 was 0.7 per cent, a rather moderate rate. In the euro area, these dynamics were even more unfavourable. Labour utilisation (as a result of a significant rise in NAWRU, falling average hours worked per employee and the shrinking working age population) and capital accumulation both show an unfavourable trend, i.e. they result in a far lower potential growth level than before the crisis. At the same time, the growth rate of the total productivity factor is low, converging during recovery to the low pre-crisis dynamics (which were much more moderate than at the start of the decade or even at the end of the 1990s).

Since following the recent crisis falling employment and the decelerating dynamics of productivity are non-cyclical phenomena, long-term (secular) stagnation will remain a significant risk. (Cf. Teulings and Baldwin, 2014; Roeger, 2014; Eichengreen, 2015). Potential growth trends are affected particularly adversely by the low level of capital accumulation.[6] At the same time, recession in the euro area had a dual nature: the financial crisis was followed by a sovereign debt crisis. This second stage of recession particularly underscored the need to create a supranational financial stability mechanism and mitigate powerful fragmentation forces.

Similarly, the extension of the analysis until 2020 indicates low potential growth rates. These dynamics are significantly lower than the average potential growth rate in EU countries over the past two decades, and are far worse than the corresponding indicators of the United States. The findings of the extended analysis are based on the following. At the start of the crisis, low labour utilisation was typical, which was followed by aging-related adverse trends in labour supply during the rest of the decade. In addition, the growth rate of labour productivity is low across the EU27. (At barely 1.2 per cent per annum, it is particularly slow in the euro area). At the same time, in individual Member States or in individual groups of Member States substantially different trends can also develop.

Consequently, the crisis and the ensuing contradictory recovery process exert a significant impact on future growth prospects in the EU. Experience from past economic and financial crises has demonstrated the great importance of economic policy responses. For example, the deep recession in Sweden and Finland in 1991 was much more short-lived and did not result in lower potential growth.

This can be primarily attributed to a major structural change in these economies. Thus, the crisis also creates new opportunities for more profound changes. At the same time, as a case in counterpoint, insufficiently determined responses to the financial crisis combined with mounting competitive pressure from emerging economies greatly contributed to the slowdown of potential growth in Japan during the 1990s.

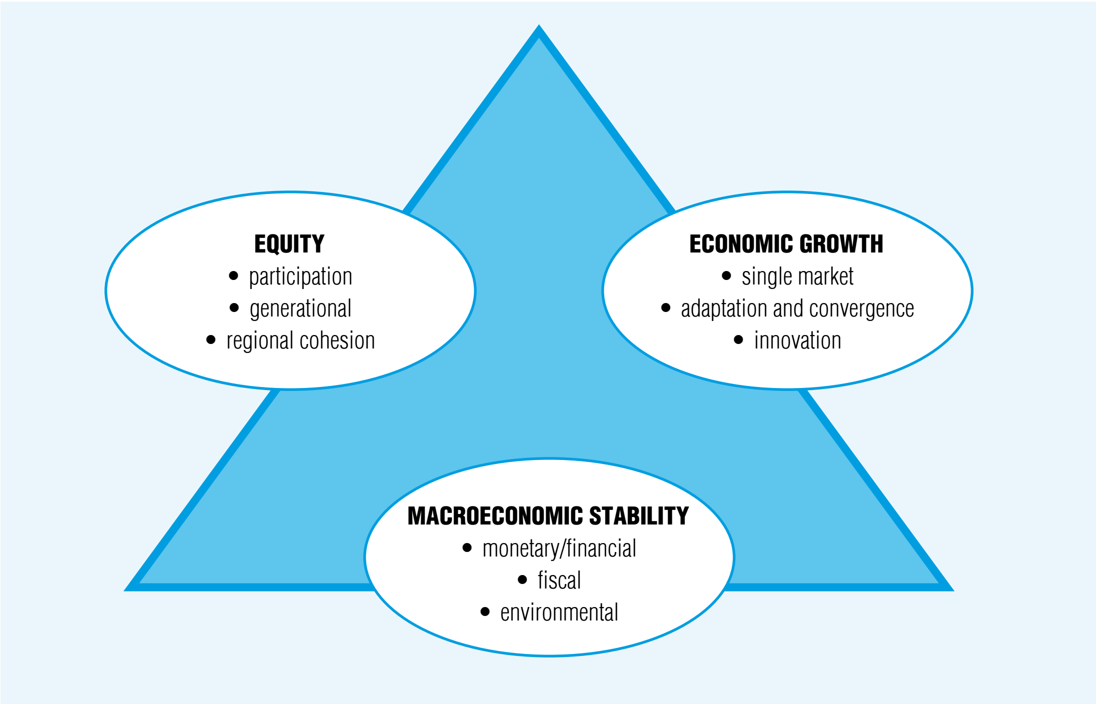
THE NEED FOR A TURNAROUND AND A NEW NARRATIVE FOR GROWTH IN EUROPE

Seeking an answer to the question of how to restore the triangle of Europe's economic prosperity – economic growth, stability and equity – in open and democratic societies provides a useful framework both for analytical and strategic thinking *(see Figure 2)*.

Growth is a fundamental determinant of wealth. However, its stability, sustainability and the wide and equitable distribution of its results are equally important in society. Mac-

Figure 2

THE TRIANGLE OF EUROPEAN PROSPERITY



Source: Pichelmann (2013)

roeconomic stability is not only essential in terms of smoothing out short-term cyclical consumption, but also safeguards against systemic crises that jeopardise growth potential. The preservation of macroeconomic stability is a fundamental requirement, even with the temporary sacrifice of income growth. Equity considerations are also inseparable, as the growth process cannot enjoy sustained democratic support if its benefits are only enjoyed by a limited, privileged group.

Despite the problems mentioned above, the European Union as a whole has been relatively successful in the global competition, for example, in comparison to the United States or Japan. It is well-positioned in the value chain as the world's largest exporter, thanks at least to deeper integration between EU economies, especially with the inclusion of Central and Eastern European economies.

However, at present Europe faces serious challenges as it attempts to lay renewed and sustainable foundations for the convergence and integration mechanism. Europe must perform better in order to take full advantage of its innovation potential. The adverse trends of potential growth threaten with Europe' falling behind. Weaknesses and disparities between Member States, especially in broadly interpreted Mediterranean members, weigh on the growth potential. Attempts to dynamise the European economy are made amid slow and uneven recovery, ongoing adjustment and inevitable deleveraging in both the private and public sectors.

The rebirth of the European growth potential and growth model will only be possible by means of structural reforms that profoundly transform the modus operandi of Europe's economy and society while supporting potential growth.

Countries at the cutting edge of knowledge-based technologies need innovation to grow and to raise living standards. Economic competition, post-graduate courses at leading universities and R&D investments (especially private investments) have a key role to play in all this. For these factors are crucially important in closing the gap between Europe and its global competitors. Tight budgetary constraints and higher risk premiums do not make the achievement of these goals any easier.

Sustainability is conditional upon socially inclusive growth and the wider participation of citizens in society, especially in the world of work. Intergenerational integrity and equity are essential for future-oriented investments and for building much-needed confidence. The appropriate planning and sequence of reforms are important factors in the fair distribution of burdens, the social and political acceptance of the reforms, as well as their implementation. Harmonising efficiency and equity is essential when implementing fiscal consolidation efforts aimed at transforming tax and welfare systems and improving the cost-effectiveness of public services. The presumed trade-off between efficiency and equity is sometimes exaggerated. Inefficient welfare and social protection requirements make little difference in respect of equity.

On the other hand, the experience of many European countries demonstrates that collective social security systems, if designed and managed well, can be at least as effective from a welfare perspective as individual market-based systems (Buti and Pichelmann, 2013). In all these cases, a thoughtful choice must be made. It is normally the relationship between growth, structural reform, and the distribution of income and wealth that must be thoroughly considered and, in certain cases, re-regulated.

Europe must respond to fundamental challenges if it is to step on the path of sustainable growth. At the same time, Europe must make sure not to take a regressive step in international economic integration and ignore risks arising from global imbalances.

FOCUS ON STRUCTURAL REFORMS

In spite of the first signs of recovery, there is no indication of the reversal of adverse growth and productivity trends in Europe (Figure 1). The unfavourable trends in productivity are characteristic not only of service but also of productive sectors. Industrial sectors in most European countries have started to move towards recovery. However, this is not enough for an overall productivity turnaround.

Productivity will remain the critical point of Europe's growth performance. The decisive structural role of total factor productivity is to be underlined. Demographic factors and investments have an equally adverse effect on growth potential. The key to a turnaround in growth extending to the entire economy lies in the growth of service productivity.

When applying a global supply chain type of analysis in respect of the supply side, it can be seen that production directly for the global market accounts for one quarter of employment and half of labour productivity growth in Europe (Van Ark et al., 2013). The manufacturing of industrial goods is critical in this regard. However, contribution to the global supply chain in market services has increased in many Member States in terms of both employment and productivity.

According to *Foster, Stehrer* and *Timmer* (2013), in line with the general trend, the EU has become more integrated into the global supply chain. Currently, 15 per cent of the EU's GDP contributes directly or indirectly to satisfying global demand in other regions of the world. This proportion has increased by approximately 5 per cent in the past 15 years.

A similar but less significant trend can be observed in employment: nearly 12 per cent[7] of vacancies depend on demand in other regions of the world. The importance of emerging economies, including China, is growing in this respect. As the importance of foreign markets in EU exports increases, so does the significance of imports in respect of utilised inputs. Inputs and intermediary products are increasingly manufactured by other countries: other Member States or third countries, as manufacturers of final goods. Expressed in terms of the common metric of vertical specialisation, 15 per cent of total EU exports to third countries is generated in other countries. This rate has grown by approximately 7 per cent since 1995. Even in the current period, the surplus of the EU's foreign trade balance is 1.5–2 per cent of GDP. This is an indication that European market actors have managed the period of intensifying globalisation fairly well (despite the severe repercussions of the financial and economic crisis).

Thus, overall, it appears that the European Union has been competitive in recent years' global market competition. For the most part, this was due to a deeper integration between EU economies. As a result of trade conditions and the globalisation of production, this integration has become visibly institutionalised and it functions accordingly. The general success of the EU as a whole and of its individual Member States conceals significant divergences across the European economies. As early as the mid-1990s, there were great disparities in respect of the external vulnerability of individual Member States, external and internal EU markets, and the structure of resources. However, this model has exacerbated in the past two decades. Only a few Member States (Germany, Austria, Ireland, Luxembourg and certain Central and Eastern European countries) have been successful with regard to their export performance, as calculated in terms of value added. Other countries have only managed to maintain or slightly improve their positions. That may be explained by the initial model of specialisation: internationalisation was driven primarily by a number of high-tech sectors (e.g. vehicle and electronic industries) through successful innovation, productivity performance and moderate wage policies. In these industries, the integration of Central and Eastern European countries into the production network of advanced Member States played an important role. While this improved the international competitiveness of some countries, in certain cases, it has exacerbated structural disparities between EU economies.

Macroeconomic policy efforts should continue to focus on rebalancing, even if sustained cooperative strategies cannot be considered inherently guaranteed. Applying a series of simulations with the NIESR global model (NIGEM)[8], *Fic* and *Orazgani* (2013) have examined persisting imbalances and different adjustment scenarios at the global and euro area levels. Their findings have revealed that coordinated policy actions can indeed yield high-quality results. At the same time they also pointed out that there is no "silver bullet" that would call for an appropriately calibrated policy mix in countries and world regions with either surpluses or deficits. In this context, a fully operable financial system supported by a comprehensive bank union is crucially important for the euro area. "Downhill" capital flows are indeed an essential factor of convergence. However, in order to maintain them, the risks of recovery and downturn must be managed better than before. The absence of capital flows may lead to "bad balances" characterised by weak growth and high and permanent real income gaps. Increased competitiveness, an improved business environment and comprehensive public sector reforms are essential prerequisites of the lasting adjustment of external imbalances and the restart of downhill capital flows, investment and growth.

Van Ark et al. (2013) performed a detailed analysis of the differential productivity performance of individual European countries. The analysis identified four types of European economies as follows:

- integrated value chain (Germany, Austria and a large part of Central-Eastern Europe);
- "inward lookers" (Mediterranean countries including France);
- "global niche players" (mostly smaller economies in Northwest Europe);
- deindustrialised model (basically in the United Kingdom).

Van Ark et al. (2013) describe four possible scenarios concerning possible European trends in 10 to 12 years. The analysis used as a basis the strengthening of supply side capabilities, including productivity, innovation and global demand for goods and services, all being determinants of the European Union's future situation. *Figure 3* shows that the scenario marked 1A (Global strengths) would be the most dynamic solution for renewing the European growth model and for consolidating the European growth potential. Scenario 2A ("Stuck

Figure 3

EUROPEAN GROWTH SCENARIOS

1. ROBUST GLOBAL DEMAND

B. SHRINKING CAPABILITIES

1.B Lost opportunities

The EU27 is not able to take full advantage of global growth since markets remain fragmented for external production.

The GDP growth trend is barely 1 per cent.*

Divergence between individual country groups, subject to taking advantage of robust global demand.

1.A Global strengths

The EU27 develops as an integrated market taking advantage of the competitiveness of economies.

The GDP growth trend is 2 per cent or higher.*

Convergence among countries; they generate a surplus from integration.

2.B Double loss

The EU27 is unable to develop contrary to the trend of slow global growth and to strengthen the EU's internal performance significantly.

The trend of GDP growth drops below 1 per cent.*

Proliferation of low productivity characteristics even in the strongest economies of EU27.

2.A "Stuck in the middle"

(Stuck in the middle)

The EU strongly goes against the trend of decelerating global growth and improves the EU's internal performance.

The GDP growth trend is approx. 1–1.5 per cent.*

Internal differences in growth performance depend on performances achieved in the single market.

A. STRENGTHENING CAPABILITIES

2. MODERATE GLOBAL DEMAND

Note: *EU27 average

Source: Van Ark et al. (2013)

in the middle") would promote the renewal of the European growth potential in a more moderate global demand framework than would Scenario 1A. By contrast, Scenarios 1B (Lost opportunities) and even more so, 2B (Double loss) predict dangerous trajectories.

Van Ark et al. summarised possible growth impacts on the basis of supply and demand characteristics. These scenarios, as is indicated by the authors, provide only a framework for observing opportunities and discussing necessary policy measures. However, as is shown in *Figure 4*, each scenario can impact the abovementioned four groups of Member States in widely different ways. As can be seen in respect of the entire EU, even the most favourable trajectory would fail to dynamise the inward-focused Mediterranean countries if the current conditions persisted, while the most adverse consequences of more unfavourable trajectories would hit them the hardest. The rebirth of recovery-driven growth demands further efforts. At the same time, the most competitive Member States

Figure 4

POSSIBLE GROWTH PERFORMANCES

SCENARIO / COUNTRY GROUP	1.A Global strengths (strong global demand; strong capabilities)	2.A "Stuck in the middle" (weak global demand; strong capabilities)	2.B Double loss (weak global demand; weak capabilities)	1.B Lost opportunities (strong global demand; weak opportunities)
Integrated value chain (DE and certain EU10 countries)	+ + +	+ +	+	+ +
"Inward lookers" (Mediterranean countries)	0	–	– – –	– –
"Global niche players"* (small new EU countries)	+ +	+	–	+
"Deindustrialisation" model (UK)	+	0	– –	–

Note: *„Global Niche Players"

Source: Van Ark et al. (2013)

could develop further even if less favourable trajectories prevailed.

The analysis performed by *Bartelsman* (2013) using the corporate perspectives of ICT, reallocation and productivity as a starting point, would increase the likelihood of a high productivity growth scenario. The starting point assumes that under new conditions knowledge-based capital investments, including intangible investments, fall into place. Technologies in the advanced stage of development can, if favourable conditions exist, push the cutting edge of productivity even further. Bartelsman posits that Moore's law[9] and the development of ICT create an opportunity to increase labour productivity by 2.5 per cent annually in the next 20 to 30 years. Leveraging this potential demands that stimulation of the wider application of ICT is intensified and that the productivity of less productive innovative companies applying such technology is increased.

The processes of flexible resource reallocation are also critical, as are structural reforms promoting the same. They are indispensable for the widespread diffusion of new technologies. Labour market challenges of reallocation are extremely important and so are stimulation of learning and considerations related to wage differentials. As a main characteristic of existing and foreseeable technologies, the high permanent costs of creation and low marginal costs of use can cause higher wage fluctuations and further distortions of distribution. According to Bartelsman, public services (such as health insurance and education) and their reform cannot only directly increase aggregated productivity but can also absorb employees made redundant in other sectors.

This analysis is complemented by the reasoning of *Czernitzki* and *Toivanen* (2013). The authors analysed the relationship between R&D, productivity and innovation policies with a view to reducing the gap between optimum levels for society and private R&D. Since innovation policy can have a displacement effect, they have tested it empirically based on Belgian and German corporate data to see whether R&D subsidies stimulate private investments. The authors found that innovation subsidies have positive additional efficiency. There appears to be a positive correlation between past innovation experience and investment intensity. The studies demonstrated that companies characterised by lower labour productivity are willing to implement larger investments. In other words, these companies can benefit more from subsidies than companies at the technological cutting edge. At the same time, the existence of subsidised R&D projects with a convergence effect can also push forward the technological cutting edge in the economy.

The key element of a strategy focusing on a growth turnaround lies in stimulating faster productivity growth by means of structural reforms improving the functioning of the market and strengthening the growth potential. Concurrently with the more efficient use of resources, the basic goal is to increase the employment rate in a sustainable fashion.

"GREEN" AND EQUITABLE GROWTH AND SHARED PROSPERITY

Environmental requirements and restrictions are often seen as obstacles to growth and as competitive disadvantages for European companies in the global competition. At the same time, there is growing global interest in "green" sustainable growth potential and in overcoming damage to the environment. Companies across the European Union have already made considerable progress in manufacturing clean and more efficient technologies, products and services. For example, EU companies have implemented two thirds of foreign direct investment worldwide in the field of renewable energy during the period of 2007–2011 (Halmai, 2014, p. 289) At the same time, in this market global competition intensifies, especially from certain emerging economies. Linking high environmental requirements and competitiveness is possible and the European economy could significantly expand in the field of green technologies.

The perpetuation of structural productivity differences between certain Member States needs to be addressed by means of determined structural reforms. They would be of high significance in both export-driven and "non-tradeables" sectors in terms of creating the structural conditions of convergence.[10] In this field – due to the sovereign debt crisis and the need for fiscal consolidation – progress is only possible over a longer horizon. However, the deep north-south divide in earnings would have grave social and economic implications. Wide-ranging structural reforms and the complete implementation of a bank union offer an opportunity to revitalise capital flows within the EU and to avoid former misallocations. At the same time, European solidarity can continue to play an important role in structural and cohesion policies.

Europe is undergoing a period of unprecedented fiscal consolidation and structural economic policy reforms. However, in the absence of the necessary social balance, certain reforms introduced during the financial market stress will lose their viability in the long run. Therefore, it is particularly important to answer the question of how further efficiency-improving reforms can be supplemented with other necessary measures ensuring social balance, and how could the European Union provide better incentives to Member States to implement reforms producing a more balanced distribution. *Grüner* (2013) studied the distribution consequences of European fiscal and structural reforms, and worked out a number of recommendations about how they should be combined to ensure their more favourable social acceptance in the long run. His recommendations also cover how the structuring of positive and negative incentives can be geared toward fiscal consolidation and fiscal reforms in the long run, creating a balance among the distribution consequences of structural reforms.

Buti and *Pichelmann* (2013) stress that social expenditures do not merely create a burden. Integrity and fairness also foster trust and social cohesion, thereby promoting a positive behaviour in respect of openness, innovation, adaptability and change.[11] *"It would also be a mistake to overlook the significant changes welfare and social models have undergone over the past two decades, starting to move away from passive social protection to capacitating and activating social support systems. In that way, and provided that reforms continue, they can be an asset in the competitive challenge, not an obstacle to growth and prosperity"* (Buti and Pichelmann, 2013 p. 6). Certain countries hit hard by the crisis will inevitably have to renew their social models on the basis of financial sustainability and equity.

Europe is in need of bold political actions[12] for recovery and for creating the conditions of sustainable growth. They include regulatory reforms of financial integration and stability; a complete bank union; consistent fiscal policies ensuring the reduction of structural deficit in the medium term; a productivity strategy driven by comprehensive and deeply penetrating structural reforms; the concurrent expansion of competitiveness and employment and, in vulnerable countries, a growing share of the tradeables sectors. In other words, there is a need for European, EU-level coordinated structural reforms and the implementation of a growth agenda. The overall objective of all these efforts is to ensure equitable growth and shared prosperity.[13]

RESTORING GROWTH POTENTIAL: THE ROLE OF PRODUCT AND LABOUR MARKET REFORMS

Since economic recovery after the financial crisis has been slow and uneven, the dismantling of obstacles to growth is critical, as are the stimulation of adaptability and the implementation of structural reforms promoting growth. At this juncture, it needs to be underlined that structural reforms today are often (maybe most often) are referred to as reforms categorised under fiscal consolidation. In the current period, these reforms are designed primarily to reduce the burden on public finances and tighten the parameters of transfer systems. Their necessity can hardly be disputed. However, austerity agendas impose a burden on a large part of society and are often viewed as a loss of acquired rights. The delay of certain reforms can also play a role in this. If reformed in time, transfer systems can cause less pain and offer more opportunities for the implementation of gradual changes. In point of fact, long-term reforms can even create an increased burden on the public purse initially. It may take a long time to achieve a more sustainable growth path and more favourable trends in public finances, but in terms of social costs and legitimacy, well-timed and balanced reforms may be easier to endure. When long overdue reforms aimed at fiscal consolidation are implemented in periods of severe macroeconomic imbalances, there may be an increased need for maximising short-term savings at the expense of long-term considerations. (A special trade-off can occur, whereby tensions are put off to a later period for future governments). Reforms containing restrictions and austerity measures and aimed at – in many ways forced – fiscal consolidation can lead to reform fatigue in Member States (e.g. Mediterranean and the Central and Eastern European countries) struggling with fundamental structural difficulties. Therefore, it must be stressed that the other type of structural reforms comprise reforms that support the growth potential. (At the same time, reforms targeting fiscal consolidation – provided that they bring about sustainable changes benefiting the growth potential – can also be regarded as growth supporting reforms).[14]

The impact of these reforms typically takes hold in the medium and long run. Reforms tend to entail a relatively long delay in implementation due to administrative, institutional or policy-making constraints. Often, the effects of the reforms trickle into the real economy only gradually; indeed, it may take years to achieve the new perpetuated state. In the short run, these reforms can even have negative impacts on economic activity due to the adaptation costs of resource allocation. Certain growth stimulating reforms may require ex ante budgetary spending.

At the same time, certain structural reforms may have positive macroeconomic effects over the short term. Structural reforms may promote favourable future growth prospects and contribute to the inescapable fiscal consolidation. The magnitude of these effects is closely related to the credibility of reform decisions and the ability of Member States to speed up their reform agenda in consideration of possible implementation delays.

According to the simulations performed, structural reforms may give rise to significant potential advantages. Euro area GDP would exceed its current level by 6 per cent in ten years if the gap between the cutting edge and the rest of the countries was halved by simultaneous comprehensive reforms (Roeger et al., 2013; Varga – int'Veld, 2013). This simulation appears neither too ambitious nor unrealistic. A greater degree of gap closure would have a proportionally larger impact.

Structural reforms can increase growth performance (especially if the innovation potential is unleashed). At the same time, in the current period their capacity in respect of supporting recovery is rather uncertain: as certain reforms can have short-term budgetary or adaptation cost implications, due to probable delays and political and institutional reasons, their effects can spread to the real economy only gradually. Empirical evidence suggests that certain structural reforms can also have a positive impact on economic activities – if they are applied without unnecessary delay, it is possible to offset the unavoidable short-term negative impacts arising from their implementation.

It has to be taken into account that the analysis covers the potential effects of structural reforms. The analysis is based on the latest available indicators. However, the impact of the measures taken in recent years is not, or only partially reflected in the indicators concerned. The implementation of structural reforms may be slower than assumed in the model. In this case, the effects will be more moderate than expected. In the current economic environment, the effects of public and private balance sheet adjustments are strongly perceived. Lending conditions are tight and restricted. As a consequence of these funding constraints, the short-term impact may be lower than assumed. However, growth impacts are significant and may contribute to recovery. The effects on output and employment can be measured primarily in the medium and long term.

Reforms stimulating product markets and competitiveness may result in a significant output surplus. However, these effects will be perceived only gradually. Increasing R&D subsidies in the short term might even reduce output. However, their long-term impact is significant. Certain labour market reforms will also yield results in the medium or long term (especially reforms designed to increase the participation rate of women and older workers). However, these programmes will also create a burden on the budget in the short term. At the same time, reforms designed to increase the labour market participation of older workers can generate considerable budgetary savings. Therefore, reforms affecting the tax structure (by shifting the burden from work to consumption) can be quickly implemented and contribute to increasing employment and output.

The positive trickle-down effect of structural reforms can affect output and employment as well. The impact on supply will increase imports and promote the growth of trading partners. (Although the latter is in part offset by the competitiveness effect). The effects on foreign trade will be relatively moderate and partly negative as well (with the supply effect being stronger than the competitiveness effect). Structural reforms in public finances may generate significant improvement. There will be a measurable decline in the debt-to-GDP ratio in the medium and long term. This can facilitate further consolidation measures and contribute to the sustainable financing of public debt. These positive cascading effects and budgetary impacts can augment the incentive for implementing structural reforms. (In the system of the European Semester, country-specific recommendations serve a similar function). All these factors can be indicative of the potential advantages of policy coordination and the possible incremental effects of the integrated and simultaneous implementation of reforms.

Underlying as a central factor the structural reforms supporting the growth potential is the need for a better functioning internal market and an improved business environment. As a result, market distortions can be eased, investment and innovation opportunities improved, and the EU's competitiveness strengthened. All this requires fundamental reforms in product and services markets as well as resource markets, in particular, the labour market and the money market. Reforms promoting knowledge and innovation are closely linked to these factors and are of similar significance.[15]

The penetrating implementation of these reforms can create chances for a growth turnaround in Europe. These reforms offer the prospect of the renewal of the European growth model and a better adjustment to the challenges of globalisation. In the implementation of structural reforms supporting growth, social conditions determined by institutional, cultural and historical factors in individual Member States – which are collectively described by *M. Abramowitz* as "social capability" – are particularly important elements.

Europe is in need of bold political actions for recovery and for creating the conditions of sustainable growth. Structural reforms coordinated at the EU level and a growth agenda based on these reforms are necessities.[16] Only solutions that give priority to economic rationality, international competitiveness and the knowledge-based economy can yield long-term success. All these efforts can generally be aimed at equitable growth and shared prosperity. While the main directions of action can be outlined, their extensive and comprehensive review requires further scientific and public debate on the future of the European model.

Notes

[1] For a growth accounting-based analysis of potential growth dynamics in the period of 1981–2013 and projections until 2018, see *Halmai* (2014). The quantitative basis of the conclusions concerning the growth potential is presented in the paper cited above. The EU15 is the group of EU Member States before 2004. Among the current Member States, adequately reliable growth accounting data are only available for Croatia. For this reason, the EU27 grouping is applied.

[2] According to Eurostat data, the balance of the EU27's foreign direct investment (FDI) (i.e. investments linked to the rest of the world outside the EU) has stood at around EUR 120–180 billion per annum in recent years, except for the worst period of the crisis. In other words, this was the amount by which FDI outflows from the EU27 exceeded FDI inflows. At the same time, levels of capital intensity and marginal product differ widely within the EU. In an inspiring investment climate this net capital outflow would – as is logically assumed – be lower, while investments and potential growth within the EU would be higher. (It should be noted that investment rates in the United States have exceeded those in the EU15 countries in every year since 1992).

[3] In what follows the source of data in this paper is the author's own calculations made on the basis of the EPC Output Gap Working Group's database.

[4] Author's own calculations. It is to be noted that during the years immediately preceding the crisis, the rate of potential growth – during the period of latent erosion – already slowed compared to the referenced period. Thus, if the period immediately preceding the crisis is taken as a baseline, the level effect is more moderate than that explained above.

[5] NAWRU: Non-Accelerating Wage Rate of Unemployment.

[6] The latest work of Báger (2015) provides a detailed analysis of domestic accumulation processes.

[7] In European employment, which is directly dependent on global demand, the number of vacan-

cies requiring higher and secondary qualifications has increased Buti – Pichelmann (2013).

[8] NIESR: National Institute of Economic and Social Research London; NIGEM: National Institute of Global Economic Model

[9] Moore's law is so referred to based on the experiential observation in technological development, whereby the complexity of integrated circuits – when taking into account the lowest-price component – doubles at approximately every 18 months.

[10] The issue at hand is linked to productivity and is of primary importance in respect of cohesion and equity.

[11] An important case in point can be mobility opportunities and the wide-ranging opportunity to attend high-quality education and training, which can improve the ability to succeed in the world of work, create an opportunity for meaningful engagement in community life and foster inter-generational fairness.

[12] Among them, the renewal of the institutional system of European integration and the establishment of governance across the "entire" economic union are issues of particular significance, the discussion of which goes beyond the scope of this paper (Halmai, 2013).

[13] These considerations are also analysed thoroughly and placed in context in the latest work of *Csaba* (2014). The high-quality agenda described in the study and the ambition to work out European economics has been an inspiration and help in writing this paper.

[14] In other words, we dispute the automatic identification of coercive restrictions with reforms, and hence the discrediting of the latter.

[15] Exploring the exact impact mechanism of these reforms will require further research with special regard to widely differing conditions prevailing in individual Member States.

[16] Naturally, Member States play a key role in this coordinated reform policy. Without their interest and commitment, the European reform policy will inevitably fail. At the same time, the divergent "social capabilities" of Member States also underscore the role and responsibility of all European Union Member States.

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