

Promoting sustainable and inclusive growth and convergence in the European Union

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Executive summary

THE EUROPEAN UNION can look ahead at the next five years from a good economic position. Employment is comparatively high, the recovery has been uninterrupted for several years and income inequality remains less pronounced than elsewhere in the world. But the EU faces nevertheless formidable economic challenges. In the short-term, there is the potential for strong macroeconomic weakening, resulting partly from uncertainty generated by the global trade conflict. The EU also has a long-term growth and productivity weakness. Finally, the EU, especially the euro area, suffers from a lack of convergence and its social cohesion is threatened.

THE EU MUST put together a European growth strategy that focuses on innovation while addressing climate change and improving social cohesion. Growth requires investment, research and innovation. While the current debate on industrial policy is welcome, the EU should be careful to maintain, or even improve, the conditions for growth in Europe and must avoid falling into the protectionism trap. To achieve its climate goals, the EU must ensure that its consumption and its production become greenhouse-gas emission neutral by 2050 or earlier, implying a massive transformation of all economic activities. This will pose major economic and social challenges. Distributional concerns will therefore have to figure prominently in this transformation. More generally, the benefits of growth need to be distributed more fairly in our societies. While social policy is and should remain a national responsibility, the EU needs to ensure that the single market, a key asset to promote growth and economic well-being, does not undermine the ability of countries to raise taxes on capital income, wealth and inheritance. A rising tax burden on the working middle class might have already become incompatible with Europe's social market economy.

CONVERGENCE IN THE EU and in the euro area is a necessity: the European growth strategy cannot be blind to sustained regional growth differences. An EU in which economic growth does not spread through all of its major regions will be politically challenged. The paradox is that many of the policy instruments to address this problem remain in the hands of national policymakers, even though the way they use them has significant implications for the rest of the EU. The EU supports convergence through its budget and technical support but the fundamentals of this paradox remain. In the euro area, further measures are needed to address some of the systemic causes of divergence. In particular, it is imperative to complete banking union and for capital markets to become more integrated, since a well-functioning financial system is fundamental for growth. A euro-area safe asset would bring benefits but is difficult to establish. EU fiscal rules need to be reformed to improve the macroeconomic management of the euro area. A euro-area budget and more responsive national fiscal policies are important tools to better respond to cyclical downturns. Finally, the relationship between the euro area and non-euro area countries needs to be addressed.

1 Introduction

For a little over a decade, the EU's economic agenda has been about managing the fallout from the financial crisis. While major progress has been made, banking union remains incomplete and fragilities remain. The macro-financial agenda should therefore remain a priority for the next five years. But finance ministers must also devote more of their collective (at ECOFIN level) and individual (at national level) attention to sustainable and inclusive growth and economic convergence.

The EU needs to focus on its growth and productivity dynamics in a way that enhances convergence within and between countries, and ensures long-term sustainability and equity within societies. This challenge requires a strategy based on coherent macroeconomic, fiscal, financial and structural policies. The need for this strategy has become more pressing for three reasons.

First, in the last decade, the world did not stop turning while the EU and other advanced economies dealt with their financial problems. China and other emerging countries have continued their forward march, the digital revolution has become more widespread, the issues of ageing populations in Europe and migration have become more pressing and it has become more urgent to deal with the dangers of climate change.

Second, the crisis has made it more challenging to adapt our economic and social structures. Two issues stand out. The crisis did not affect all EU countries, regions or groups of citizens equally. The least-prepared and least-equipped – and therefore the most vulnerable – were hit hardest. At the same time, the crisis has led to markets doubting debt sustainability, which has reduced the ability of governments to respond to the increasing demands of citizens to deal with the consequences of this inexorable transformation. Intra-EU migration of affected citizens has been one welcome response, but it has created difficulties in countries that have seen their human capital diminish. A rising demand for public protection and funds, combined with the decreasing ability of governments to supply them (in a period in which there is an increasing shift of taxation towards labour), has contributed to a loss of trust of citizens in national governments in many countries and in the EU.

Third, continuing financial fragilities threaten sustainable economic growth. High sovereign risk premia combined with low inflation translate into high real interest rates, hampering convergence. Sovereign and banking risks remain highly intertwined. And while bank balance sheets have strengthened, years of malfunctioning credit supply and the absence of deeper capital markets have led to underinvestment. This has resulted in aging capital stocks and weakening of industries in some countries. At the same time, as monetary policy is more constrained because of low interest rates, fiscal stabilisation policies have become more important for managing future downturns. The euro area looks ill-prepared for the next recession, which could put a dent in the EU's real economic growth potential.

A number of broader challenges make it difficult to define the next growth and convergence agenda. **First**, the shift of global dominance towards bipolar system of the US and China has raised the risk of greater national protectionism, stalling globalisation. The EU has not yet fully defined its strategy in relation to this situation¹. US government action poses an imminent danger to the global multilateral system on which the EU depends, while the clear role that the Chinese state plays in the domestic economy has disturbed the global level playing field. The EU is challenged by the need to keep to the principle of openness while protecting itself from the disadvantages the US and Chinese practices could generate. **Second**, the digital transformation has made the measurement and sources of new productivity difficult to identify and pin down. Policy will to a certain extent have to navigate blind as we seek to understand issues including the role of intangible capital, how to tax digital services, fintech and its implications and the sharing economy. **Third**, while the EU had always been about

¹ Dadush and Wolff (2019) propose a strategy for trade policy.

convergence, we now observe divergence in economic outcomes and in quality of institutions. Trust in national governments and in the EU remains low, rendering effective action more difficult.

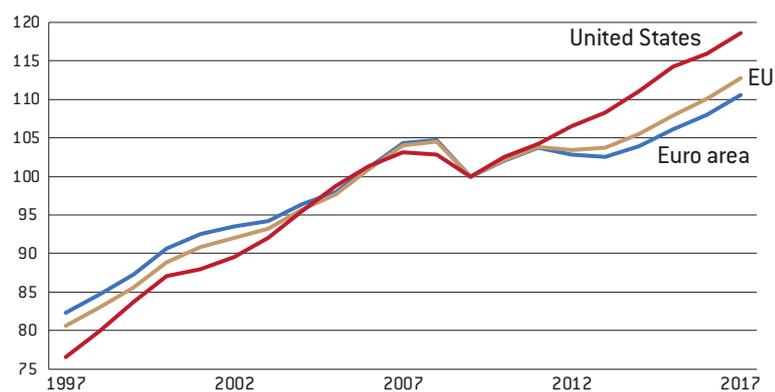
The next section reviews the EU's economic situation ten years after the financial crisis. Section 3 sets out the concrete challenges and puts forward policy recommendations to boost inclusive and sustainable growth and convergence. The last section concludes.

2 A decade after the financial crisis: where does the EU stand?

The EU's new political cycle will start from a good overall economic situation. In particular, employment rates are at an all-time high with 227.6 million people in the EU working, an employment rate of 67.7 percent (2017 data). The unemployment rate has fallen from 10.9 percent in 2013 to 6.9 percent in 2018. GDP per capita now exceeds pre-crisis levels. Meanwhile, EU income inequality has been falling for decades thanks to convergence across the bloc and reductions in inequality within some countries (Darvas, 2018). Nevertheless, complacency would be dangerous because the EU faces a number of significant challenges, including the fact that the relatively poor in parts of Southern Europe have suffered particularly strongly from the crisis.

The EU and in particular the euro area have not recovered from the deep economic crisis compared to global competitors. Euro-area average annual GDP growth since 2014 has been 1.9 percent, while that of the United States has been 2.3 percent. Figure 1 shows the long-lasting effects of the double-dip recession in the euro area, where the growth rate has lagged behind the EU average, though the euro-area average conceals significant variations. The bulk of the lagging euro-area performance is attributable to Italy and Spain. Meanwhile, central and eastern European countries' growth rates have exceeded the EU average.

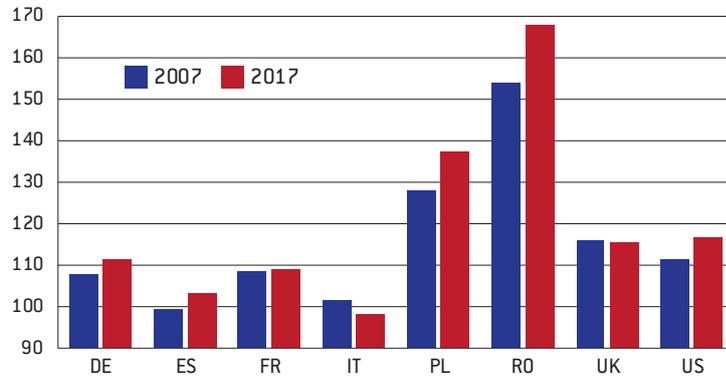
Figure 1: GDP growth, 2009 level=100



Source: Bruegel based on World Bank.

A particularly worrying question mark hangs over the long-term productivity growth of the EU and of key member states. Figure 2 shows the total-factor productivity (TFP) performance of the six largest EU countries, Romania and the US. TFP growth in the EU has lagged the US and China in the last 20 years. Figure 2 also shows significant differences between the largest EU countries².

Figure 2: Total factor productivity, 1997 level=100

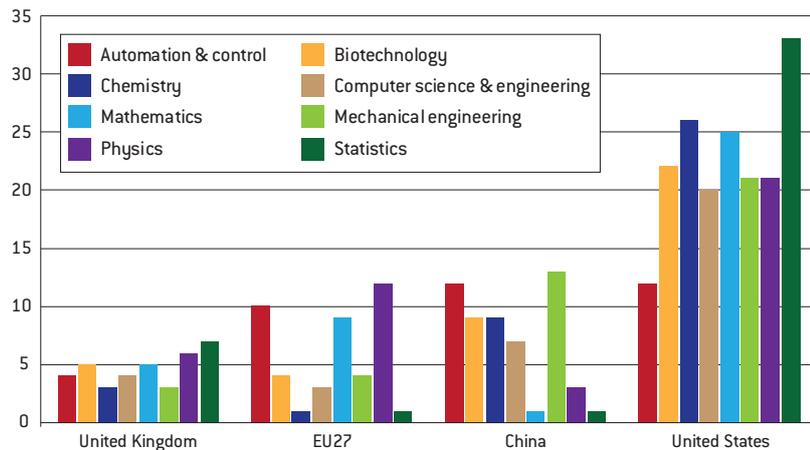


Source: Bruegel based on AMECO.

There are many factors behind weak productivity performance. Productivity growth ultimately depends on the capacity to innovate and to improve business processes. Strikingly, among the **world's top 20 technology firms**, none are from the EU, while 11 are from the US and 9 from China. More broadly, among the top 50 **Fortune 500 global companies**, only 10 firms are from the EU, compared to 21 firms from the US and 11 from China.

Meanwhile, the EU and in particular continental Europe are falling back in university performance. Figure 3 shows the number of universities among the world's top 50 in different fields that are located in the EU27, the UK, China and the US. If one enlarges the list to the top 100 universities, the picture improves significantly for the EU³. In terms of research spending, the EU spent 1.93 percent of GDP in 2016, compared to 2.11 percent in China, 2.74 percent in the US and 3.14 percent in Japan. In terms of technological leadership, the EU is lagging in particular in digital technologies, while in biotechnology the EU is doing comparatively well.

Figure 3: Number of universities among top 50 according to field



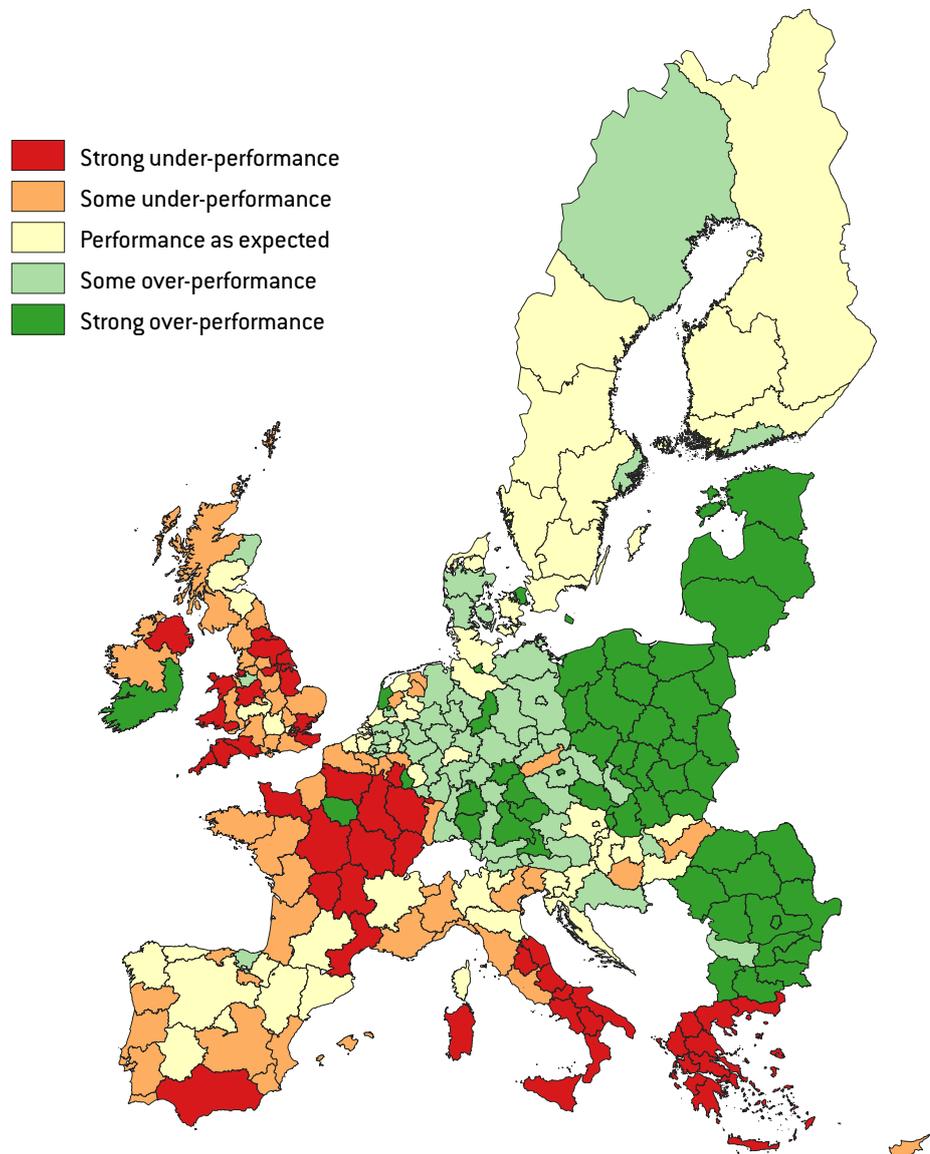
Source: Bruegel based on Shanghai Ranking.

² See Figure 10 in the annex for data for all EU countries.

³ Among the 100 best universities, 19 are from the EU27 and eight from the UK.

Importantly, economic performance across the EU has been unequal. Broadly speaking, the central and eastern European member states have converged significantly during the last 15 years while the south of Europe and parts of France have not satisfactorily converged or have even diverged relative to the richest regions. Figure 4 shows regional convergence performance from 2003 to 2017. The picture reveals differences in the performance of cities and the countryside – with cities doing relatively well. The European Bank for Reconstruction and Development (EBRD, 2017) has highlighted that a large part of the income convergence in central and eastern Europe accrued to the richer segments of the population, raising the prospect of “convergence for the rich”. The divergences across the EU are also strongly visible in employment rates. For example, the employment rate in Germany is 75 percent, while in France it is 65 percent and in Italy 58 percent. These substantial and lasting differences are bound to create further tensions.

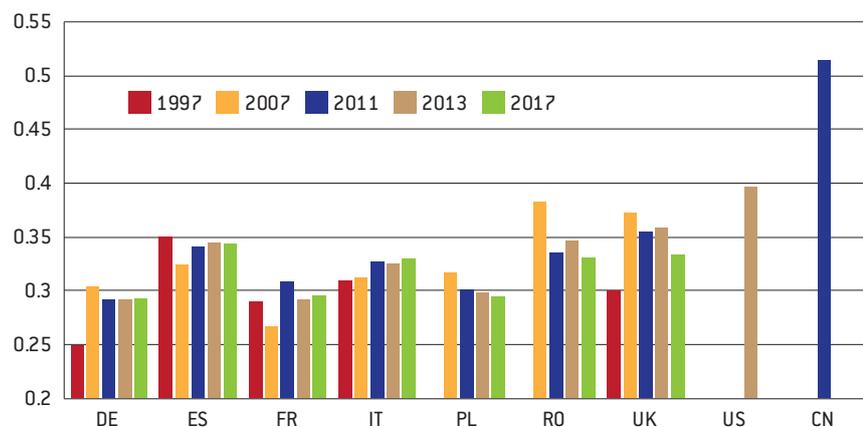
Figure 4: 2003-17 GDP per capita convergence, NUTS-2 regions, divided by quintile



Source: Bruegel. Note: The colour coding indicates each region's positive or negative deviation from its expected growth rate.

Income inequality has not increased substantially in the last decade, but social tensions are real. The average Gini coefficient of disposable income in the EU has only slightly increased from 0.306 to 0.307 and is well below that of the US (0.391, 2016 data) and the UK (0.333), let alone China (Figure 5). But it would be a mistake to lose sight of the fact that the transformation of our economies creates and will continue to create social and societal tensions. Inequality numbers tend to be higher than the EU average in the south of Europe (Figure 14 in the annex). Lack of social mobility is an important factor. Social mobility across generations is often limited and is not improving, even though there are significant differences in different EU countries. In sum, the transformation associated with globalisation and the digital revolution produces clear winners and losers, including the young and highly-educated versus the old with low education, and inhabitants of large cities versus others. These divisions correlate strongly with votes for non-traditional parties and with a lack of trust in national and EU institutions.

Figure 5: Gini coefficient



Source: Bruegel based on Eurostat and OECD.

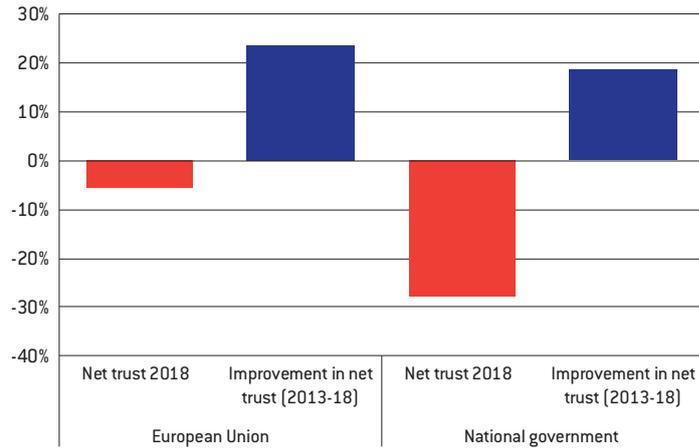
Trust in national governments and EU institutions has increased but is still negative. Net trust (ie the difference between people who trust and those who don't) in the EU is negative but net trust in national governments is on average even more negative (Figure 6). And while there has been a substantial improvement since 2013, the numbers are still negative. In some southern European countries, high degrees of mistrust in national governments go hand in hand with low quality of institutions⁴.

The challenge posed by anthropogenic global warming remains substantial. Global greenhouse gas (GHG) emissions related to human activity continue to increase very substantially globally. The EU has managed to somewhat reduce its emissions but the global trend is upwards. More positively, the intensity of GHG emissions per unit of GDP is falling. The EU is presently discussing the idea of reducing its net emissions to zero by 2050, which will have transformational effects on the EU economy and society at large.

The starting point for the next five years is therefore a mixed one. On the one hand there are clear improvements in the labour markets and there is a visible growth recovery. On the other hand, however, there are substantial real economic divergences in the euro area, social challenges, a lack of convergence for the poorer parts of society in the East and South of Europe and a continued lack of trust in governments and the EU. If one adds to that polarisation in politics, migration flows and the global tendency for introversion, these improvements in economic outcomes operate in a rather difficult environment.

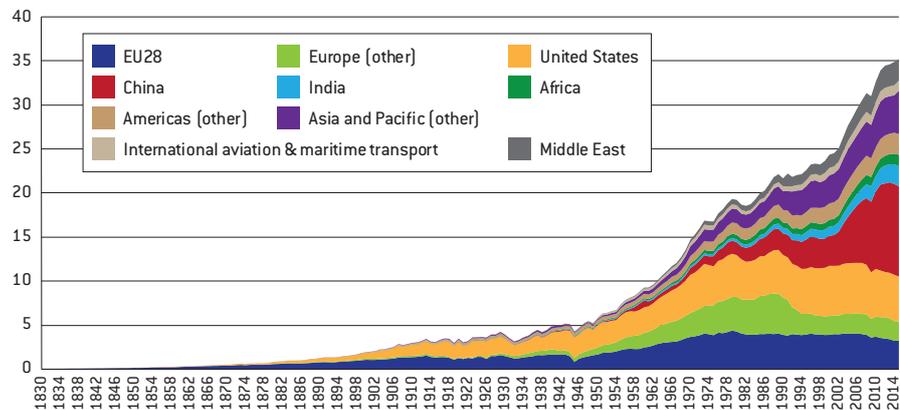
⁴ As measured, for example, by World Bank surveys; see Table 1 in the annex. Trust figures are from Eurobarometer (see Figure 6).

Figure 6: Trust in institutions at EU28 level



Source: Bruegel based on Eurobarometer. Note: Net trust calculated as the difference between respondents that “tend to trust” and those who “tend not to trust”.

Figure 7: Annual CO2 emissions by world region



Source: Carbon Dioxide Information Analysis Center. Note: Annual carbon dioxide (CO2) emissions measured in billion tonnes (Gt) per year. Emissions data have been converted from units of carbon to carbon dioxide (CO2) using a conversion factor of 3.67. Regions denoted ‘other’ are given as regional totals minus emissions from the EU28, USA, China and India.

3 Priorities for the next five years

3.1 A sustainable and inclusive growth agenda

The EU has a productivity growth problem. If we leave the catching-up countries of central and eastern Europe aside, from 2001 to 2007, hourly productivity grew at an annual average rate of 2.1 percent in the US, but barely 1 percent in the equally mature euro area. The gap between the euro area and the US was much less between 2008 and 2017, but that is only because productivity growth slowed on both sides of the Atlantic: to 1 percent in the US and to 0.8 percent in the euro area.

Increasing productivity growth is urgent for two reasons: maintaining living standards and geopolitics. Productivity growth is fundamental to the maintenance of living standards, including for those retirement age whose share in the population is increasing. The second reason is geopolitical. The EU is falling visibly behind the US and China in a number of technologies that are crucial not only from an economic viewpoint, but also from a geopolit-

The EU has gradually been able to close its investment shortage since the financial crisis, But the capital stock is still below what it could have been.

ical perspective. Europe has a distinct socio-economic model compared to both the US and China, and needs to be able to preserve its specific values. Doing so does not mean that the EU should turn protectionist against either. This would be counter-productive. But it means that the EU needs to be more autonomous vis-à-vis these two partners by strengthening its own economic and technological capability capabilities and becoming more innovative and economically vibrant. The EU cannot be just a large single market; but being a large integrated single market is a necessary condition if it wants to be a global economic and geopolitical player, alongside the US, China and others. This is all the more important at a time when the global trading system is under attack and barriers to trade might increase. As a very open economy, the EU and its companies are heavily exposed to global markets and therefore vulnerable.

A focus on productivity is fundamental to increase growth. The EU has gradually been able to close its investment shortage since the financial crisis (see Figure 14 in the annex). But the capital stock is still below what it could have been without the major financial crisis and a double-dip recession. Since capital is a complement to labour, labour productivity and wages can suffer from weak investment. To increase growth, we consider it important to continue to invest in public infrastructure, including digital infrastructure and other public goods. To promote private investment, the framework conditions at the national level are crucial. At the EU level, the key to unlocking private investment is a deep and integrated single market that offers size and scaling. To address the problem of low-productivity growth, innovation is of vital importance. It requires the right regulatory framework and sufficient public investment to unleash private-sector R&D.

We propose three policy levers as the basis for an industrial policy strategy to boost productivity growth: the right regulatory framework, public money for R&D and basic research and public procurement. We have documented in section 2 (Figure 3) the position of Europe's universities in global rankings – a topic that needs attention to fix the comparative weakness in R&D⁵. When it comes to the regulatory framework, the issues become very granular and country-specific. Finally, we think that public procurement is an underrated tool. Government procurement in the EU is estimated to be worth some 16% of GDP and is thus a macroeconomically relevant part of aggregate demand. Public decisions on what kind of products to buy shape supply. A clear example is how a public decision to buy zero-emission vehicles would provide immediate and strong incentives to suppliers.

Relaxing competition policy to encourage scale at global level is not necessarily conducive to growth. One of the strengths of the EU is its independent competition authority: the EU has relatively low mark-ups – a concrete benefit for consumers and also an antidote against inequality. More broadly, the effectiveness of the EU's competition policy is globally recognised. Relaxing current policies to encourage the creation of large European champions might lead to higher domestic prices, with negative effects on consumers, while the benefits in terms of growth might be rather limited. In fact, tough competition typically spurs innovation. Moreover, relaxing competition rules tends to favour incumbents at the expense of new firms⁶. We are also sceptical when it comes to direct subsidisation of specific large firms. But there might be a case for support when these firms compete in third countries with subsidised firms from other jurisdictions. Ideally, however, this issue should be addressed through improvements to the WTO rules on subsidisation and in their implementation.

A clear view of which sectors will drive future innovation should guide the industrial policy measures of governments and the EU. The EU needs to prioritise certain technologies because it is impossible to fund basic research on everything. The EU's template in this

5 Many factors play a role when it comes to the quality of universities, including autonomy of decision making, budget, ability to attract global talent and broader framework conditions.

6 A separate discussion concerns the screening of foreign direct investments to protect strategic sectors and key public infrastructure. While these measures reduce competition and the free flow of capital, they are warranted if clear geostrategic concerns are at stake.

respect should not be China, which has a too different economic and political system but the United States. Three US federal institutions (Defense Advanced Research Projects Agency, National Institutes of Health and National Science Foundation) have played, and continue to play, crucial roles in pushing forward the frontier of knowledge, and enabling private-sector R&D in key areas. These three institutions, which in 2018 had a combined budget of \$37 billion (\$26 billion for NIH, \$8 billion for NSF and \$3 billion for DARPA), often work separately but sometime together (and with others), as in the BRAIN initiative (innovative neuro-technologies)⁷. The EU budget, through Horizon 2020, already devotes sizeable amounts of public money to fund innovative initiatives (roughly €10 billion in 2018), but the amounts are still comparatively too small, and the money could be spend more effectively.

A new European growth agenda needs to address climate change ('green growth') while ensuring social cohesion. Cohesion and fighting climate change are two of the EU's fundamental values. Growth must be pursued in support of these values, not despite them. We should make no mistake: the challenge is huge if the EU really wants, as it must, to do more than pay lip service to the commitments. Designing and implementing a growth strategy is bound to be opposed by two groups of citizens who have become very vocal and very disgruntled with the EU growth model. One group objects on the basis that the fruits of growth have become very unevenly distributed and that traditional policies aiming at increasing growth will further exacerbate the distributional problems. Although they may get some benefits from these policies, they are ready to block them because they judge that the benefits for them are too small compared to the benefits accruing to a small minority. Another group objects that increasing growth will further add greenhouse gas emissions and render impossible the goal of net-zero emissions by 2050, to which many EU governments are in principle committed. Together, these two groups (which sometime partly overlap and sometime are in deep disagreement) form a significant proportion of the EU electorate, at least in the more mature and richer countries.

Creating the right environment for green innovation should be seen as the quintessential EU public good. Pushing forward growth and innovation should not be done at the expense of the global climate. The EU is already politically committed to reducing greenhouse gas emissions in line with the Paris Agreement. Certain sectors lag behind in their efforts to reduce their impact on the climate, in particular the transport sector (Tagliapietra and Zachmann, 2018). Industrial policy can be supportive of decarbonisation but regulatory and price measures will also need to be toughened. Ultimately, we consider a carbon tax on emissions in all sectors as an indispensable price mechanism that should drive private innovation into reducing emissions⁸.

Regulation on sustainable finance is a further lever the EU has to manage climate risks. The financing of growth should be aligned to the principle of sustainability. Equally importantly, such rules can potentially help reduce financial risks.

The climate change strategy will need to address distributional concerns. Fostering green growth through regulatory measures like carbon taxes, will inevitably have adverse distributional consequences for low and middle-income households, which are likely to be hit twice by increased energy prices: first, through the increase in heating and transportation costs, especially if they live outside the main cities, and second, because their jobs are more likely to be in carbon-intensive activities, and therefore at risk of disappearing in the event of a significant carbon tax (Zachmann *et al*, 2019). These distributional effects can and should, however, be offset. For example, the carbon tax proceeds could be redistributed to reduce the burden on low-income households. Moreover, public funding of innovation will accelerate the emergence of new technologies, which will not only create new activities but also cut the cost of clean energy.

7 According to its website, this initiative “*is part of an ambitious, public-private collaborative effort aimed at developing new experimental tools that will revolutionize our understanding of the brain*”. See <https://www.braininitiative.org>.

8 The current emission trading system (ETS) only covers some sectors.

Pushing forward growth and innovation should not be done at the expense of the global climate; industrial policy can be supportive of decarbonisation but regulatory and price measures will also need to be toughened.

The EU's climate strategy also needs to have a global perspective. Global greenhouse gas emissions continue to rise quite dramatically, in particular driven by emerging economies. Because of their lower income levels these economies still tend to have lower emissions *per capita*. And while the emissions-intensity of global GDP is falling, global emissions continue to rise. In that context, we consider three policies as central. First, the EU should continue and redouble its efforts to support emerging economies in basing their economic models on green growth. Financial and technological support for green infrastructure is good climate policy⁹ and it can also create economic opportunities for leading green EU companies. Second, the EU, like other industrialised economies, has increased the carbon intensity of its imports. In other words, while the EU managed to reduce emissions in production, the EU's consumption of GHG has fallen less. If the EU intensifies its efforts to decarbonise its economy, it needs to ensure that it equally decarbonises its consumption and it needs to prevent a simple shift of emissions¹⁰. Finally, given that global GHG emissions continue to grow so rapidly, scientists increasingly talk of the Anthropocene – a geological period in which human activity is the dominant force shaping the Earth's ecosystem, including through global warming. If that view, which is still not universally accepted, is correct, then research in the EU and elsewhere should much more broadly study how to manage the fallout from global warming and how to possibly reduce climate change by other means¹¹.

The EU growth strategy needs to put social cohesion front and centre. Saying that cohesion policy needs to be an intrinsic part of the new European growth strategy does not imply, however, that cohesion policy should be moved from the national to the EU level. Although the EU budget makes a significant contribution to help low-income regions, social cohesion is clearly a responsibility of the national level and should remain at this level. This does not mean, however, that there is no need for any form of coordination between EU countries. Two EU instruments exist in this area. The first is the European Social Fund, a part of the EU budget, with annual funding of more than €10 billion, which deserves more serious impact evaluation than currently exists. The second instrument is the European Pillar of Social Rights (EPSR), agreed by EU and national leaders at the Social Summit for Fair Jobs and Growth held in Gothenburg in November 2017, and the annual Social Scoreboard which monitors the performance of EU countries under the EPSR. Both instruments are useful EU contributions to the new European growth strategy that we propose.

The EU should devote significant efforts to combatting tax evasion and fraud and should support a fair distribution of the tax burden. Social policies are national policies, but the single market makes it easier for large companies and private wealth to reduce effective taxation. As a result, in the advanced world, marginal and effective tax rates on wealth, inheritance and corporate income have tended to fall substantially. The effective burden of taxation has therefore tended to shift to labour income and to value-added taxation. Various initiatives have been advanced in recent years to ensure that EU member states can more effectively tax all sources of income. We consider that this will remain of high importance in the near future. An increasing tax burden on the working middle class would be incompatible with the promises of Europe's social market economy.

3.2 Addressing euro-area and EU divergences

Beyond growth, the issue of economic convergence in the EU is of equally vital importance. The EU treaty clearly states that one of the EU's goals is *"to achieve the convergence of their economies"* and to reduce *"the differences existing between the various regions"* of the EU. The discussion in Section 2 showed that, during the past 15 years, this goal of convergence between EU countries and between regions has been met for some countries and regions, but not for others.

9 The EU's commitments are summarised here: https://ec.europa.eu/clima/policies/international/finance_en

10 See Horn and Sapir (2013) for an early discussion on some key ideas how to do so.

11 Research is needed on carbon capture technologies and on what geoengineering would imply.

There are substantial differences between EU members in terms of institutional quality; the observed backsliding in some countries is a call to improve institutions.

We observe convergence in eastern European members but see regression in some countries in the south. Nearly all the countries that joined the EU in or after 2004 have enjoyed a great deal of convergence, with their GDP *per capita* growing much faster than in the rest of the EU. This is certainly one of the great successes of the EU that can be ascribed both to the functioning of the EU single market and to the EU budget, which devotes substantial resources to cohesion policy. The situation in the rest of the EU, and especially for the countries of the euro area, is far less satisfactory. Here, there has been a divergence between the north and the south, or at least substantial parts thereof.

The lack of convergence is problematic for a number of reasons. First, economic convergence has always been an EU political promise; the euro was, rightly or wrongly, seen as a way to accelerate convergence. Failing to deliver will continue to drive political unhappiness. Second, low growth makes it more difficult to keep public debt sustainable (all else being equal). In our view, it would be a mistake for major parts of the euro area to be left behind. Even in federal states such as the US, a lack of convergence in some parts has been correlated with significant political disruption. In a currency area of sovereign states, disruption will be even more difficult to manage. A lack of convergence also renders countries more receptive to the political promises of third countries – thereby affecting the EU’s ability to speak with one voice on global economic, political and geostrategic questions.

The recent divergence within the euro area between the north and parts of the south can be ascribed, in our view, to domestic factors and to factors that relate to the workings of the euro area.

Quality of institutions is one of the domestic ‘fundamentals’ on which to build. Among the domestic factors that influence the different, and divergent, growth performance of euro-area countries, is the quality of institutions. Governance structures and institutional quality are known to go hand-in-hand with good and sustainable economic outcomes (Acemoglu and Robinson, 2012; Acemoglu *et al*, 2005). There are substantial differences between EU members in terms of institutional quality¹². The observed backsliding in some countries is a call to improve institutions (Lagarde, 2018) to promote sustainable economic outcomes for the countries themselves and for the whole EU.

The quality of governance is a responsibility of individual EU countries but a concern for all EU countries. One country’s poor performance, and not just in economic terms, affects the situations of others. This is especially true for countries that share a common currency because the spillovers are greater. But within the EU and even inside the euro area, institutional quality is regarded as a purely domestic political matter, with little coordination. This is a contradiction in the functioning of the EU, and in particular the euro area: institutional quality is a collective concern but a national responsibility. Could this contradiction be resolved? Even though improving institutional quality is, above all, a job for national politics, the EU could and should support such endeavours more than currently. Such reforms would also help reinforce trust among EU members. In our view, the euro-area budget, which is currently under discussion, could also be used as a tool to support improvements in institutional quality in countries where it is unsatisfactory. The EU should, in any case, review its approach to promoting good governance¹³.

Divergence in real interest rates is another factor that accounts for lack of convergence and that reflects systemic euro-area issues. Real interest rate differentials in the euro area are determined by two factors: nominal interest rate spreads and differences in inflation rates partly resulting from past inflation divergences. The average real interest rate differential between Germany and Italy has been 2.3 percent for the last seven years. Since financing costs for companies and individuals still correlate strongly with government bond yields, these differentials matter for the economic performance of countries. Higher real interest

12 Demertzis and Gonzalves Raposo (2018) provide a summary of six World Bank governance indicators for all EU countries since 1996 and argue that the EU needs to increase its monitoring of institutional quality.

13 See Mungiu-Pippidi (forthcoming).

rates mean lower investment and an aging capital stock. These, in turn, negatively affect economic growth.

Fiscal policy in the euro area is rightly constrained by spreads but affects macroeconomic policy. The euro area's fiscal stance has been shown as inadequate in a number of instances. Inadequate cyclical responses have long-term implications because there are significant hysteresis effects – growth potential suffers (Ball, 2014). Fiscal policy plays a particularly important role in macroeconomic management when interest rates are low. In fact, when the long-term interest rate is close to zero, the effectiveness of monetary policy is more limited. But the euro area faces a paradox when it comes to fiscal policy. Spreads are welcome as a way to ensure fiscal discipline – they are even indispensable in a monetary union in which fiscal decision-making remains national. But spreads also tend to increase in recessions, making counter-cyclical fiscal responses more difficult in the weaker parts of the euro area. This, combined with a reluctance to use fiscal policy in stronger parts of the euro area, leads to an inadequate fiscal stance that renders the euro area's economic performance suboptimal. This has particularly lasting negative consequences for the weaker parts of the monetary union.

We consider four policy initiatives to be fundamental:

First, the European growth strategy cannot be blind to country-level growth differentials. Above all, the EU needs to build on its strength and create growth and productivity, but if significant parts of the EU feel they are losing out, political and fiscal tensions will rise. EU member states will therefore have to increase their efforts to become attractive destinations for new investment. This includes making it easier to start new business, reviewing insolvency legislation and improving the functioning of justice systems. But it will also be important to use some of the industrial policy tools at the EU level to support growth in some weaker parts of the EU. Structural Funds are crucial in that regard, and they could partly be used to support reform. But one should also debate new ideas¹⁴. Overall, the EU's structural reform agenda therefore remains of fundamental importance and needs to focus on growth and innovation.

EU budget reform remains a fundamental priority to underpin better (regional) growth performance. One of the first challenges for the incoming EU leadership will be to pass the EU budget. Darvas and Wolff (2018) summarised the evidence and argued that the common agricultural policy takes too large a share of total spending and is also ineffective in achieving its stated goals. The evidence on the effectiveness of cohesion policy, however, is mixed. A recent study by Darvas *et al* (2019) showed that greater economic value is generated when projects are longer in duration, better focused, span different regions, involve a wider set of private organisations and are administered nationally rather than locally or regionally. Public-sector capacity to manage funds well is also crucial¹⁵. The **euro-area budget** envisaged in the Euro Summit declaration of December 2018¹⁶, which will be part of the EU budget, will focus on convergence and competitiveness. It will also be open to ERM II countries. This is a welcome development but for it to be effective, instrument design is crucial. There are also important questions of governance: since the euro-area instrument would be part of the EU budget, decision-making processes are likely to be long and complex, possibly reducing its effectiveness. Moreover, it could create tensions between euro-area and non-euro area members. We believe that non-euro area members should be consulted on fundamental questions

14 For example, the EU could consider a major initiative to create a globally-recognised university in Europe's south and link the initial funding decision to clear deliverables in terms of good governance. German former MEP Herbert Reul proposed one such initiative.

15 The study also shows that the Cohesion Fund, compared to social or regional development funds, tends to generate greater economic value. It is understandable that these latter funds serve different purposes than a strict economic purpose, including environmental protection and social inclusion. However, since the Commission's proposal for the next multiannual financial framework has recommended a drastic drop in the Cohesion Fund's share (of the order of 37 percent), it is important to consider carefully the balance of objectives that these funds serve and the results they deliver.

16 <https://www.consilium.europa.eu/media/37563/20181214-euro-summit-statement.pdf>.

Banking union has made significant progress but banking, sovereign and, more broadly, national risks remain highly intertwined. This is undesirable for a number of reasons.

of design because they might eventually make use of this instrument when they join the euro area. However, actual decision making on a euro-area instrument should remain a euro-area competence, if allowed by the treaty. Beyond the parts of the EU budget aimed at strengthening convergence, particular emphasis should be put on budget items that support growth and innovation.

Second, banking union should be completed to improve funding conditions across the EU. Banking union has made significant progress but banking, sovereign and, more broadly, national risks remain highly intertwined. This is undesirable for a number of reasons. First, the weakness of the sovereign results in higher funding costs for companies and households. As we have noted, the lasting (real) interest rate differentials in the euro area add to regional economic divergence. Second, in the event of a sovereign debt crisis, the financial system will be very strongly affected. We therefore continue to concur with the June 2012 declaration of the European Council that it remains imperative to break the vicious circle between banks and sovereigns. To achieve that goal, reducing the exposure of banks to national sovereign debt is as necessary as internationalising banks to reduce their exposure to national economies. Obstacles to cross-border bank mergers should be removed. It is equally necessary to introduce a true European deposit insurance scheme that would ensure that deposits enjoy the same level of guarantee¹⁷.

Creating a true European safe asset would offer benefits but its creation is a fundamental challenge. The extent to which the financial system needs a European safe asset – an asset that will not be affected by debt restructuring and is thus a safe haven even in times of distress – is debated. More controversially, there is an open debate about whether a European safe liability needs to be created to allow governments to fund even at times of stress. We consider it necessary to delink banks from sovereigns and national economies by limiting sovereign debt exposure, internationalising banks¹⁸ and creating a European deposit insurance scheme. A European safe asset would be a desirable addition to the stability of the financial system and the cohesion of the euro area. As such, and if created with significant volume, it would also strengthen the international role of the euro and make the EU a more attractive financial centre. But there are major obstacles to its creation. The EU has spent significant time debating technical solutions such as synthetic assets (ESBies (Brunnermeier *et al*, 2017), SBBS). These ideas are widely rejected by financial market participants and by debt management agencies and are unlikely to work well, in particular because they lack a sovereign issuer and could face significant liquidity issues. E-bonds look like a more promising idea but they also give rise to fundamental questions about whether they would work as intended¹⁹. More fundamentally, technical solutions ignore the core issue: what makes a financial asset safe is the strength and stability of its underlying economy and of its political system and the support the political system gives to the issuer of debt. In any case, at a minimum, the euro area needs to continue supporting the European Central Bank's outright monetary transactions (OMT) as a necessary tool to prevent self-fulfilling sovereign debt crises.

Third, integrating and deepening capital markets in the EU remains important. The Capital Markets Union project has overall been a disappointment. The aim of creating deep and integrated capital markets in the EU has so far not been achieved. In Sapir *et al* (2018) we argued that one key topic is insufficient supervisory integration – an issue that still remains to be addressed. Other important unresolved parts of the project include insolvency legislation, corporate governance and integration of the market for pension products. In the next

17 For a detailed discussion, see Wolff (2016).

18 See, for example, Sapir and Wolff (2013).

19 See Leandro and Zettelmeyer (2018). In our view, E-bonds have many desirable properties, including that they are issued by a true euro-area institution. But they raise the questions of whether the necessary contractual arrangements and seniority would be respected by all sovereigns and would be enforceable, and whether marginal funding costs would either become so expensive that fiscal stabilisation policy becomes severely constrained at the margin or whether, on the contrary, marginal funding would come down as rollover risks fall. The euro area should evaluate whether E-bonds would work as intended.

five years, these objectives should continue to be pursued but there is also scope for new and fresh thinking. For example, post-Brexit, it will be even more important than currently to integrate and connect the separate European financial centres. Modern technology, such as blockchain, could be an innovative and promising avenue to pursue. And if it is impossible to make progress on the harmonisation of the legal bases underlying financial contracts traded on the blockchain, one might want to consider a new idea, such as a twenty-eighth regime for blockchain. Another important area is the level playing field at a time of digital transformation. For example, data portability rights and obligations should be comparable for companies that provide the same service. In any case, the EU of 27 member states should have the ambition to develop a competitive and integrated capital market – to improve funding conditions on the continent and to have the financial depth to strengthen financial sovereignty²⁰.

Fourth, the fiscal rules need to be reformed. Pro-cyclical fiscal tightening in 2011-12 was one reason for the double-dip recession in Europe, raising questions about the effectiveness of the EU's fiscal framework in achieving its two main objectives: public debt sustainability and fiscal stabilisation. In theory, the current EU fiscal rules, with cyclically-adjusted targets, flexibility clauses and the option to enter an excessive deficit procedure, allow for large-scale fiscal stabilisation during a recession. However, implementation of the rules is hindered by the badly-measured structural balance indicator and incorrect forecasts, leading to erroneous policy recommendations. The large number of flexibility clauses makes the system opaque. The current inefficient European fiscal framework should be replaced with a system based on rules that are more conducive to the two objectives, more transparent, easier to implement and which have greater potential to be complied with. Claeys *et al* (2016) proposed elimination of the structural balance rules and introduction of a modified public expenditure rule with debt-correction feedback. Overall, policymakers throughout Europe should be prepared to use fiscal policy more actively during recessions. More broadly, EU fiscal rules and their implementation by the European institutions should support countercyclical fiscal policy during recessions.

When it comes to the EU and euro-area budget, to the reform and implementation of fiscal rules and to banking union, careful consideration needs to be given to the interests and views of euro and non-euro area countries. EU countries (except Denmark and the UK) are obliged by the EU treaties to eventually join the euro. However, when they made that commitment, the euro institutional set-up looked substantially different from now. In our view, they should therefore be involved when it comes to the design of new euro-area institutions – after all, they are already part of the club.

Finally, a word about intra-EU migration and EU convergence/divergence. The countries of central and eastern Europe and of southern Europe have witnessed significant outflows of workers in the last 15 years. Conversely, countries in the north and west of Europe have received major inflows. Since migrants are typically young and relatively skilled, they constitute a loss for the sending countries, which have spent public money on their education and training, and a gain for the receiving countries, where they pay social security and income taxes and fill important gaps in the labour market. Migration is also beneficial to the migrants themselves, who see their incomes increase and their opportunities improved.

Labour outflows from central and eastern Europe and parts of southern Europe have had significant effects on economies. Despite these outflows, the growth and convergence of central and eastern European countries continued. This does not mean, however, that net emigration has had no negative impact on these countries, in particular on Bulgaria, Lithuania, Poland and Romania, where net outflows have been significant. Some of the costs have been identified in IMF research (see Atoyán *et al*, 2016), which rather suggests that convergence forces were stronger than the dampening effect of emigration. In contrast, in parts of southern Europe, net emigration, especially of skilled young people, has further added to weak growth and is part of the story of low convergence or even divergence.

²⁰ See also Draghi (2019) and Coeuré (2019).

Net emigration contributes to the aging of societies. An additional negative impact of net emigration for southern and central and eastern European countries is likely to arise from the increased average age of the remaining population, emigrants tending to be young. This could be a relatively important negative factor in both regions because they both have low natural demographic trends. These trends are partly compensated for by net inflows of migrants from outside the EU to both regions, but this is not necessarily a panacea, in part because extra-EU migrants to these countries tend to be less-skilled than intra-EU migrants.

4 Conclusions

The EU starts the next five years from an overall relatively good economic basis, but there can be no doubt that the EU faces formidable economic challenges.

First, in the short term, the EU faces a potentially strong macroeconomic weakening. The European Central Bank has emphasised the severe risks²¹. In particular, the global trade conflict, geopolitical uncertainty more broadly and Brexit create uncertainty that is harmful for short-term economic prospects. In addition, in parts the EU economy still has weaknesses. It remains unclear how well the EU will weather the next recession.

Second, the EU has a long-term growth and productivity weakness, and faces challenges in terms of investment and innovation.

Third, the EU, and in particular the euro area, suffers from a lack of convergence. The economies of some southern European countries in particular perform weakly and exhibit weak structural indicators, including on the quality of their institutions. In parts of the EU, social cohesion is lacking.

The EU must come up with a European growth strategy that focuses on innovation while addressing climate change and improving social cohesion. Growth requires investment, research and innovation. The current debate on competition policy and industrial policy, while welcome, should be mindful of maintaining, or even improving, the conditions for growth in Europe. To achieve its climate goals, the EU needs to ensure that its consumption and production becomes emissions-neutral by 2050 or earlier. This implies a massive transformation of all economic activities and will pose a major economic and social challenge to our societies. Distributional concerns will have to figure prominently in this transformation. More generally, the benefits of growth need to be distributed more fairly. While social policy is and should remain a national responsibility, the EU needs to ensure that the single market, one of its key assets to promote growth and economic wellbeing, does not undermine the ability of countries to raise taxes on capital income, wealth and inheritance. A rising tax burden on the working middle class might have already become incompatible with Europe's social market economy.

Convergence in the EU and the euro area is a necessity. The European growth strategy cannot be blind to regional growth differences. An EU in which economic growth and wealth creation does not spread through all of its major regions will be politically challenged and is undesirable. The paradox is that most of the policy instruments to address this problem remain in the hands of national policymakers – though there are significant implications from their actions for the rest of the EU. While the EU can and does support convergence through its budget and support for structural reform, the fundamentals of this paradox remain. Within the euro area, decisions have already been taken that can better address some of the systemic causes of divergence. These decisions should be built on. In particular, it is imperative that banking union is completed, capital markets become more integrated. An integrated and

21 See press conference of 7 March (<https://www.ecb.europa.eu/press/pressconf/2019/html/ecb.is190307~~de1fd0b0.en.html>).

well-functioning banking and capital market is crucial for the financing of innovation, boosting growth and reducing regional divergence. Moreover, EU fiscal rules need to be reformed to improve the macroeconomic management of the euro area and to incentivise investment. The euro-area budget will contribute to investment and should become supportive of macroeconomic management.

EU/euro area-level reforms have implications for the relationship in terms of governance between non-euro area and euro-area countries. When it comes to the euro-area budget, banking union or fiscal rules, non-euro area countries should be involved in the design of reforms. After all, the treaty requires that they eventually join the euro area and they should therefore have a say over how the club should be governed.

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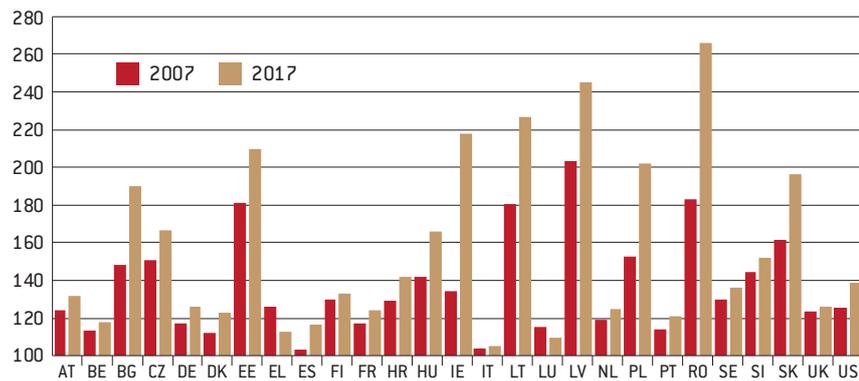
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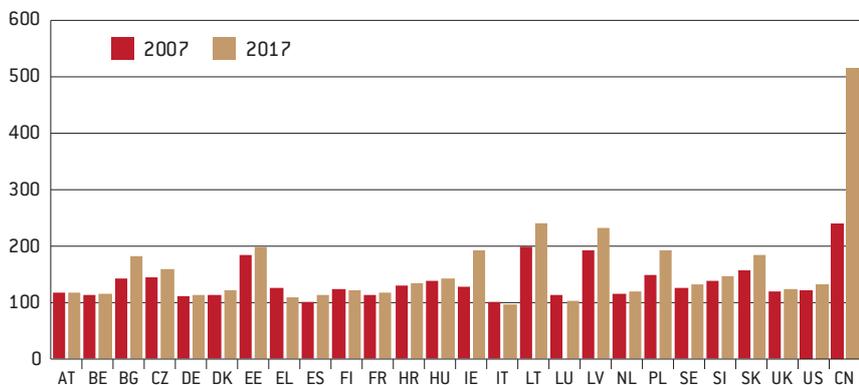
Annex

Figure 8: GDP per hour worked, 1997 level=100



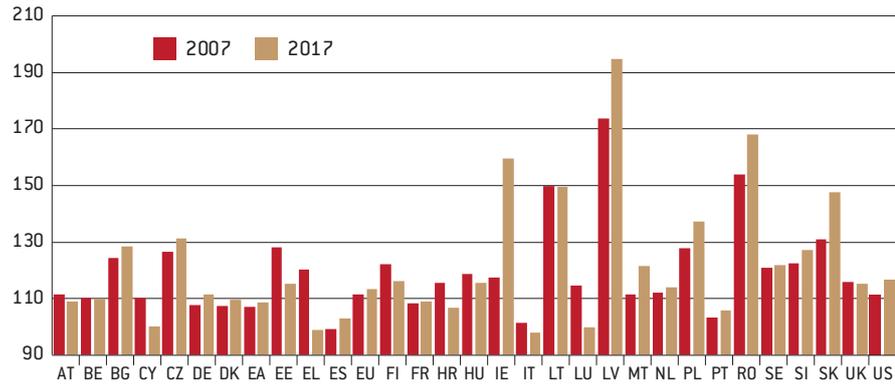
Source: Bruegel based on OECD. Croatia data missing for 2017, 2016 value used instead. Data not available for Malta and Cyprus.

Figure 9: GDP per person employed, 1997 level=100



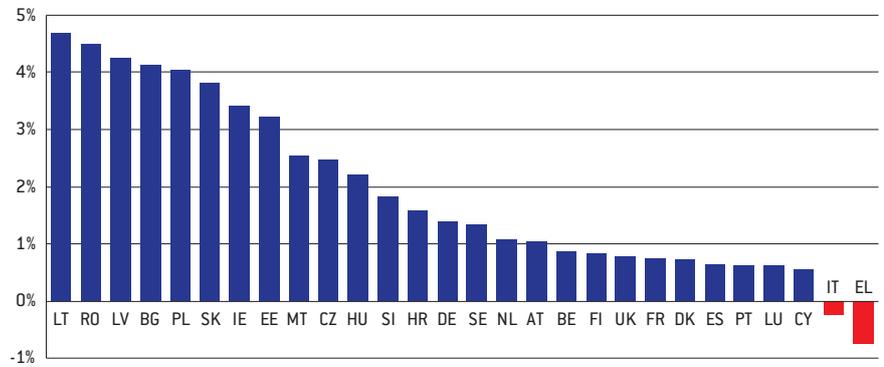
Source: Bruegel based on OECD. Note: data not available for Bulgaria, Croatia, Romania, Malta and Cyprus.

Figure 10: Total factor productivity, 1997 level=100



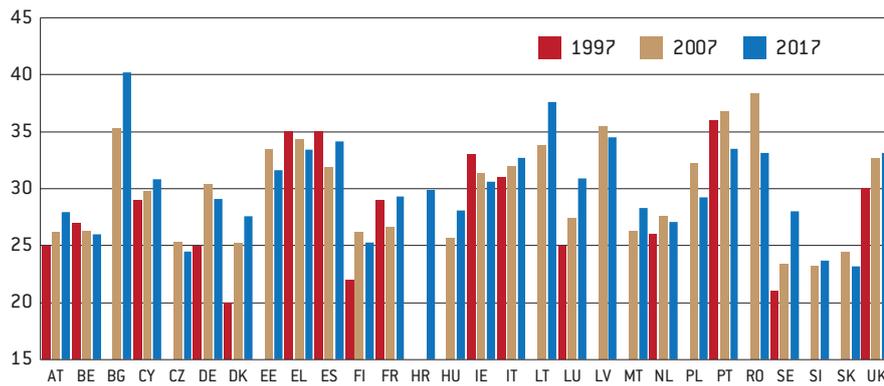
Source: Bruegel based on AMECO.

Figure 11: GDP per capita growth 2003-2018, annualised rate



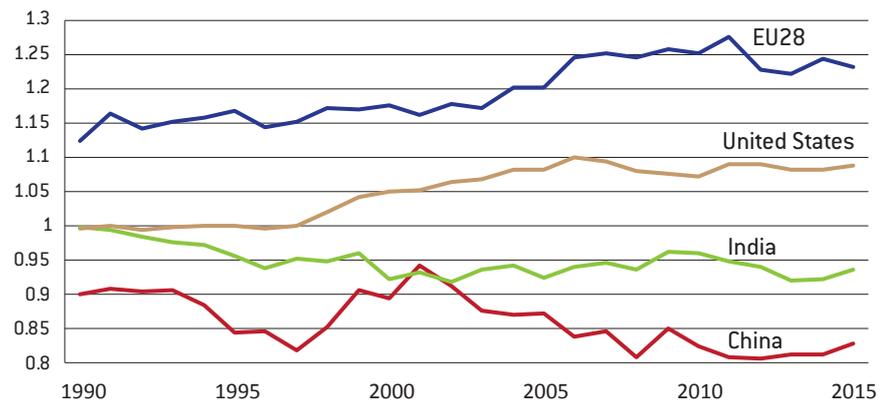
Source: Eurostat. Note: GDP expressed in euro per capita, chain linked volumes (2010).

Figure 12: Gini index



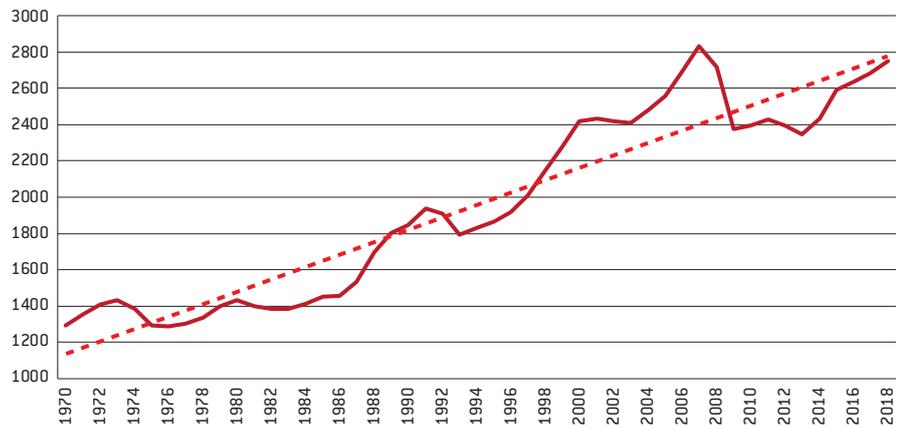
Source: Eurostat.

Figure 13: Consumption-based CO2 emissions over production-based CO2 emissions



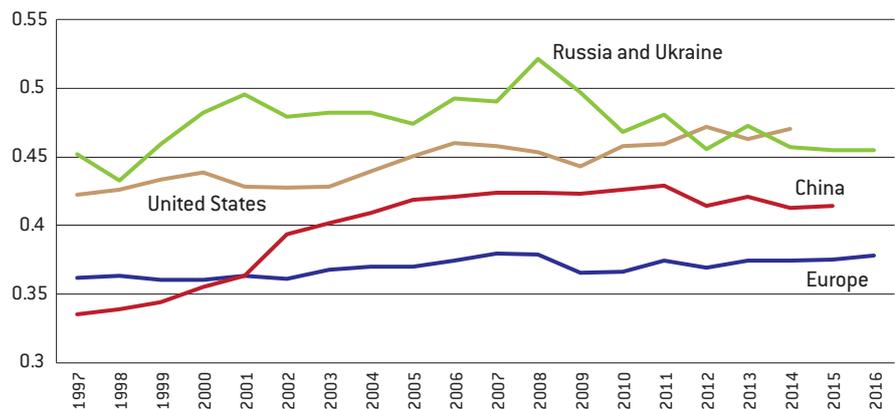
Source: Le Quéré *et al* (2017). Note: Annual production-based and consumption-based carbon dioxide (CO₂) emissions, measured in million tonnes per year. Consumption-based emissions are those adjusted for trade (production-based emissions minus exports, plus imports). If a country's consumption-based emissions are higher than its production emissions it is a net importer of carbon dioxide.

Figure 14: Gross fixed capital formation in billion euros, EU15



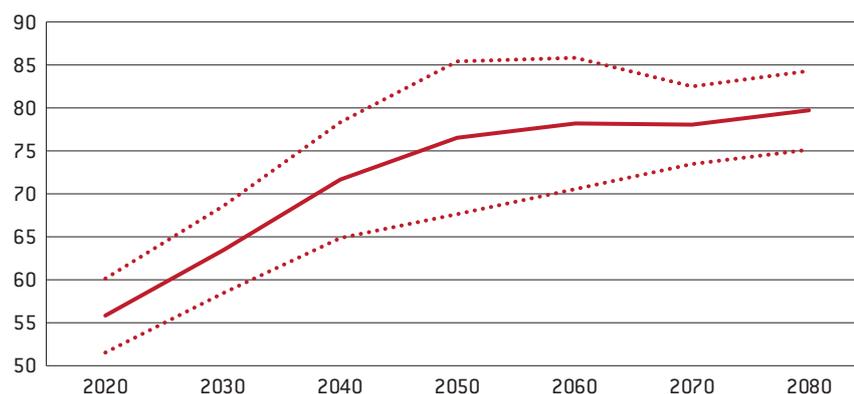
Source: Bruegel based on AMECO.

Figure 15: Top 10% pre-tax income share



Source: World Inequality Database.

Figure 16: EU-28 age dependency ratio projections



Source: Eurostat. Note: Dashed lines indicate the standard deviation across individual countries' projections.

Table 1: Trust in institutions at EU-28 level

	Net trust in EU (2018)	Improvement (2018-2013)	Net trust in nat'l govt. (2018)	Improvement (2018-2013)
Austria	-7.6%	12.3%	7.9%	2.0%
Belgium	-1.7%	1.7%	-19.6%	-11.9%
Cyprus	-17.1%	52.8%	0.6%	40.8%
Estonia	27.1%	23.1%	9.5%	35.3%
Finland	18.9%	31.6%	-0.6%	-11.7%
France	-21.0%	2.2%	-32.1%	17.2%
Germany	7.6%	39.6%	12.6%	19.4%
Greece	-41.2%	20.7%	-75.0%	5.2%
Ireland	19.7%	52.0%	-3.1%	56.6%
Italy	-14.4%	21.8%	-62.3%	8.7%
Latvia	13.0%	27.6%	-36.3%	19.8%
Lithuania	47.7%	34.3%	-39.6%	2.3%
Luxembourg	25.8%	35.7%	53.4%	26.6%
Malta	22.8%	-1.6%	14.2%	-20.6%
Netherlands	8.8%	30.2%	36.1%	45.3%
Portugal	21.2%	67.3%	11.2%	89.0%
Slovenia	-5.2%	23.2%	-58.3%	18.6%
Slovakia	-1.3%	3.8%	-50.7%	-8.9%
Spain	-7.5%	50.1%	-64.2%	19.2%
Hungary	-5.8%	-6.5%	-3.1%	31.7%
Poland	4.8%	17.0%	-36.5%	32.0%
Romania	11.1%	9.3%	-56.3%	-13.7%
Croatia	-4.5%	10.5%	-66.4%	-6.3%
Bulgaria	27.6%	0.9%	-35.0%	19.4%
Czechia	-19.7%	4.9%	-40.7%	32.1%
Denmark	25.0%	18.5%	-0.3%	27.7%
Sweden	11.2%	35.6%	23.8%	2.5%
UK	-27.2%	21.1%	-33.1%	20.0%

Source: Bruegel based on Eurobarometer. Note: Net trust calculated as the difference between respondents that "tend to trust" and those who "tend not to trust".

Table 2: Net migration inflows (in thousands)

Country	Total cumulative net inflows 2008-17	Cumulative net inflows intra-EU 2013-17	Cumulative net inflows intra-EU (20-34 age group) 2013-17
Belgium	339*	-22	10
Bulgaria	-25*	-102	-45
Czechia	77	-14	n.a.
Denmark	172	3	-2
Germany	3,791	1,016	492
Estonia	-5	-29	-11
Ireland	-32	-45	n.a.
Greece	-195	-183	n.a.
Spain	3	-464	-136
France	513	-108	n.a.
Croatia	-92	-93	-35
Italy	2,532	-125	-50
Cyprus	31*	-0.1	n.a.
Latvia	-178	-68	-35
Lithuania	-295	-155	-85
Luxembourg	96	19	n.a.
Hungary	155	-99	-62
Malta	59	15	n.a.
Netherlands	277*	-13	18
Austria	459	134	n.a.
Poland	-450*	-728	-268
Portugal	-113	-115	n.a.
Romania	-615	-879	n.a.
Slovenia	35	-30	n.a.
Slovakia	21*	7	164
Finland	156	-13	-8
Sweden	701	34	24
UK	2,393	454	n.a.

Source: Bruegel based on Eurostat. Note: For some countries, cumulative flows are calculated on a shorter period of time due to missing data. Belgium: 2010-17. Bulgaria: 2012-17. Cyprus: 2009-17. Netherlands: 2012-17. Poland: 2009-17. Slovakia: 2011-17.