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IAGS

2018

REPAIR THE ROOF WHEN THE SUN IS SHINING









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The authors are

Georg Feigl, Markus Marterbauer, Julia Hofmann, Matthias Schnetzer, Sepp Zuckerstätter (**AKW**)

Jon Nielsen (ECLM)

Andrew Watt (IMK)

Christophe Blot, Jérôme Creel, Jan Jörss, Cédric Oppé, Francesco Saraceno, Bruno Ducoudré, Guillaume Allègre, Hélène Périvier, Sébastien Villemot, Raul Sampognaro, Xavier Timbeau (**OFCE**)

Coordination by Xavier Timbeau (OFCE).

iAGS Contacts

Scientific: economics@iags-project.org

Press: press@iags-project.org

http://www.iags-project.org

REPAIR THE ROOF WHEN THE SUN IS SHINING iAGS 2018

Executive summary
Chapter 1 Europe's current economic situation
Chapter 2 Unemployment and inequality47
Chapter 3 Reforming EMU economic governance: what ways forward?95
References135
Index Figures, Tables, Box, Country abbreviation list

EXECUTIVE SUMMARY

"Moreover—pleasant as it may be to bask in the warmth of recovery—let us not forget that we have suffered three recessions in the last 7 years. The time to repair the roof is when the sun is shining—by filling three basic gaps in our anti-recession protection. We need..."

John F. Kennedy (Annual Message to the Congress on the State of the Union, January 11, 1962)

Broad-based recovery (but still dependent on policy support)

The European economy is now on a quite robust growth path, with unemployment decreasing. The ongoing recovery is driven by domestic demand, signaling that more jobs and the return of confidence underpin a solid growth scenario. Economic growth is forecast to accelerate in the EU in 2017 (2.4% after 1.9% in 2016) and remain robust in 2018 (2.0%) and 2019 (1.8%). Particularly noteworthy is that growth has broadened beyond Germany, and the whole Euro Area is benefitting from the improved performance of France, the Netherlands and other European countries including those hardest hit by the crisis. The pace of growth is being reflected in substantial job creation. More than a million jobs have been created on average in each of the first two quarters of 2017, mainly in the business sector. In September 2017, in the EU the unemployment rate stands at 7.5 and in the EA at 8.9.

The United Kingdom is a notable exception to the current trajectory of Europe's economies as the consequences of *Brexit* are becoming apparent. While the most pessimistic scenarios envisaged before the referendum on 23 June 2016 have not come to pass, living standards are falling and growth and investment have suffered a slowdown.

While recent developments have been positive, the effects of the crisis have still not been re-absorbed. In particular, the unemployment rate in many countries remains above pre-crisis levels and both headline and core inflation in the euro area remain below the target set by the ECB. Underlying inflation (1.1% in euro area on Q3 2017) has shown little sign of picking

up in the main European countries (with the exception of the United Kingdom due to the marked depreciation of the pound).

Lagged effects of austerity alongside reforms implemented by many European countries to reduce labour costs maintain strong disinflationary pressure and impede a broad participation in productivity gains. The bargaining power of employees remains diminished, which in turn dampens wage growth. As wages are still the main source of mass income, the gains of growth are in many countries not broadly distributed. To allow all citizens to take part of the growing economy and to sustain growth, nominal wages should grow in line with the golden rule (the sum of productivity growth and the inflation target of the ECB) over the medium run in the Euro Area as a whole.

It is important to recognize that the economic upturn has been conditional on extremely expansionary, unconventional monetary policy. With the improvement of the economic scenario, the policy-mix will need to be normalized. This normalization must be gradual, however, leaving the monetary policy stance expansionary.

Fiscal policy is expected to remain broadly neutral in the European Union as a whole. In the euro area, the phase of widespread and severe consolidation has ended, and the aggregate fiscal stance was even slightly expansionary in 2016 and 2017 (0.2 point per year). In 2018, the aggregate fiscal policy will support growth by 0.2 point in the euro area but in 2019 the contribution to growth will be zero.

While the symptoms of the economic recovery are visible today, it is noteworthy that the pace of the recovery remains weak in a historical perspective. The deterioration of demand and supply factors point to the risk of a secular stagnation scenario. The excessive indebtedness of private agents before the recession, and of public agents since 2010 push them to deleverage and reduce their spending, leading to a durable low-demand equilibrium. The current deflationary pressures exerted by the adjustment hold back deleveraging. Moreover, the decline in investment since the onset of the crisis has reduced the pace of accumulation but also the diffusion of technical progress, reducing the growth potential of European economy and creating new risks for the future.

The post-war period shows that full employment, stable growth, financial stability and debt reduction can be achieved so long as a comprehensive approach is adopted. The lowering of the growth potential with the risk of a new equilibrium with a higher level of unemployment makes it essential that

economic policies at the European level not only are aimed at supporting the recovery, but also to stimulate nominal and real growth in the future. This means policies to support investment—including public investment—and the continuation of an expansionary monetary policy, needed to push up inflation and facilitate the deleveraging of private agents and States. It must be accompanied by appropriate regulations and greater control of the financial sphere to counter financial instability.

The EA on aggregate has moved into a large trade surplus. This may not be sustainable, since it creates pressures for euro appreciation that can jeopardize the ongoing recovery. Unlike before the crisis, the imbalance is clearly concentrated in surplus countries. If there is no further nominal readjustment, the net international investment position, *i.e.* the foreign assets accumulated, of Germany and the Netherlands would be close to 200% of their respective GDP, while deficit countries (except Greece) would arrive at a level compatible with the threshold stipulated in the Macroeconomic Imbalance Procedure.

Even if the situation has improved substantially since the crisis, it appears that there are still significant nominal imbalances within the EA. Nominal competitive imbalances peaked in 2007 and substantially diminished until 2013. Deficit countries reduced dramatically their nominal overvaluation, while surplus countries diminished their nominal undervaluation more modestly. France and Finland do not follow the reconvergence pattern. Labour costs developments have been broadly consistent with the resorption of nominal imbalances but other important factors, like profit margin, product tax rates, or non-price competitiveness have sometimes worked in a contrary sense.

Nominal convergence remains an important issue that should be addressed by appropriate policies, beginning with surplus countries. Given an overall undershooting of the inflation target, higher inflation is needed in surplus countries in order to reduce nominal imbalances without pushing the deficit countries into deflation. Possible tools—alongside national fiscal policy more clearly oriented towards keeping output close to potential in both surplus and deficit countries—include a coordination of national wage policies over the long-term, a generalization of minimum wages in all countries, a better regulation of posted workers to avoid unfair competition, mandatory periodic wage negotiations at the branch level, the coordination of fiscal devaluations (*i.e.* tax shifting from social security contributions to VAT), and in particular fiscal revaluations in surplus countries.

The increase of public debt is one of the main legacies of the crisis, in 2016 it stands at 87% of GDP in the EU. While it is currently declining, long-run simulations suggest that without further consolidation, public debt will not be able to reach the 60% target by 2035 in some countries. This is particularly true in France, Italy, Spain, Belgium, and Portugal which, given our assumptions about potential output and interest rates, would have to implement additional fiscal efforts to be able to comply with the debt rule. Meanwhile, in a "no-policy change scenario" Germany and the Netherlands would outperform the target and thus have fiscal space available.

The structural adjustment required to bring back public debt to its target would weigh on other macroeconomic objectives: high unemployment and deflationary tensions will be more persistent. To choose the appropriate fiscal stance it is necessary to take into account the different trade-offs. Countries should not engage in exaggerated fiscal consolidation. Growth has accelerated, but economies have not yet recovered from the crisis, and almost all countries- except Germany, Netherlands and Ireland- still have negative output gap. Complying with the debt target would reduce growth in the euro area as a whole and heterogeneity would increase: growth would deteriorate in countries, which have already suffered from the double dip recession while countries with fiscal space are already those in which the unemployment rate has recovered to or even below pre-crises levels. In 2018, all EA countries will have a deficit lower than 3% and will be subject to the rules of the preventive, rather than the corrective, arm of the SGP. If member states only comply with the achievement of their respective medium-term objective (MTO), public debt would decrease substantially in all member states. However, MTO are illadapted for countries with an initial low-level of public debt: their public debt fails to stabilize and depart substantially from the 60% to reach very low levels.

Social crisis is still unresolved

Europe is entering an upswing with unemployment rates slowly approaching their pre-crisis levels although there are big differences between countries and labour market groups. The unemployment rate is down to 7.5% in the European Union and 8.9% in the euro area. At the current speed of reduction it will take 6 quarters in the European Union and 7.5 quarters in the euro area to reach their respective 2007Q3 unemployment level. Some social groups have seen a slower recovery of unemployment rates than others. This includes young workers and workers with low education levels. The unemployment gaps of these groups are still far from their pre-crisis levels.

However, the improvement of the overall employment numbers has not been extended to all countries and all social groups and are not followed by improvements in terms of income equality and poverty reduction. Thus, inequality is still rising and, despite progress in 2015, the number of people earning below the 2008 poverty threshold has increased since 2008. The high unemployment rates during the crisis may have worsened the bargaining power of workers. In addition, production technologies and international trade relations have shifted in a way which disproportionally advantage owners of physical capital and the highly educated.

The decline in unemployment would be expected to reduce inequalities, but since 2013 it does not translate into a parallel decline in the indicators of income inequality. The rise in inequality of living standards in the euro area is entirely due to the increase in inequalities before transfers. While employment rises in Europe, there is also an increase in low-paid jobs. The increasing share of workers at risk of poverty is strongest for part-time workers but is seen also for full-time workers.

If economic growth and job creation will not spontaneously reduce inequalities and poverty, a comprehensive strategy, including reforms in labour markets, taxation and social insurance is needed to improve social well-being. This strategy should tie in the strong—so that they shoulder a fairer share of the efforts needed to promote social cohesion. This can be done by increasing the top rate of income tax and reversing the trend of falling capital income taxation, through more effective corporate taxation, tax evasion prevention, and wealth and inheritance taxation. Moreover, the strategy should strengthen the middle to reduce feelings of insecurity. Measures include reversing the erosion of collective bargaining, and increasing the provision of public goods and social transfers notably supporting children and families. Last but not the least it should reduce poverty at the bottom, as poverty is arguably the most concerning aspect of inequality. It is fundamental to upskill persons with low education levels, fix minimum wages and minimum income schemes at decent levels, reduce labour market precarity and expand active reintegration policies.

Gender equality objective requires to integrate different dimensions of European policies and focus on all the dimensions of employment: female employment rate, working time and hourly wage. This objective requires a combination of quantitative and qualitative components to insure women's emancipation and gender equality in the European labour market. This demands a strong commitment of European Institutions to put gender back in the core of the European Employment Strategy. The strategy based on the

overall employment rate leads some countries to increase part-time jobs for women and this increases inequalities in terms of economics resources.

A growth-oriented economic policy is necessary but not sufficient to obtain social progress and individual well-being. Policy makers need to aim instead at a broader set of economic, social and environmental targets. A good society should reach a fairly distributed material well-being, full employment and good jobs, quality of life and ecological sustainability.

The sun is shining, time to fix the roof

The governance of economic policies in the euro area is certainly far from optimal. Serious structural problems remain, only partly concealed by the cyclical recovery. The work of iAGS for five years can testify to this. The EU's inability to ensure convergence among its member states and the difficulty of providing European public goods question the sustainability of the European project. Two questions are therefore crucial for the continuation of the EU project: are there alternatives to the current organization of European policies that bring sustainable increases in well-being and upward convergence, and can they be effectively applied?

Two fundamental views coexist, which have a contrasting philosophy and endorse quite different tools, even while sharing some principles. The first view, that we call "Maastricht 2.0", focuses on the prerequisite for any further steps in European integration, which is seen as compliance with agreed rules. Key is the need to align rights and responsibilities and the approach places faith in market discipline to improve competitiveness and reduce public indebtedness. The second view, that we call "Integrationist", highlights the requirements of solidarity and risk-sharing between the EU Member States. As such, this view promotes integrationist measures such as the creation of a Eurozone budget, funding for more common European public goods, and social and tax harmonization.

There is a significant risk that reforms in the direction of a "Maastricht 2.0" will destabilize rather than stabilize the monetary union. By deprivileging sovereign bonds and creating pathways for sovereign default, it puts countries effectively back into a situation resembling that in the previous European Monetary System (EMS): even in good times, countries whose currencies and sovereign bonds are perceived as weak would pay an interest premium over "hard-currency" countries, it would just reflect the probability of default rather than depreciation. The job of imposing discipline on national economies on a

day-to-day basis is left primarily to the financial markets, that is to that institution that the global crisis, at the latest, revealed to be incapable of providing measured assessments of credit-worthiness. Negative (positive) shifts in sentiment would have cumulative-causation effects by raising (lowering) borrowing costs. The "Maastricht 2.0" proposal would in reality achieve the exact opposite of its stated intention of creating stability, making the euro area an economic area in which sudden crisis can appear at any time for the smallest real-economic reason and even, ultimately, from an entirely spurious shift in financial market sentiment.

There exist a wide range of proposals that are in accordance with an "integrationist" view that risk-sharing and policy coordination in the euro area must be intensified. Most proponents are largely agreed on the need to build a budgetary capacity at European level. There is a lot of uncertainty and discussion about the form this capability should take, though. Should the focus be on cyclical stabilization in the presence of asymmetric shocks and divergence or rather on providing European public goods? Should an EU (or EMU) level budgetary capacity should have its own resources, and if so how should they be financed?

As an alternative or supplement cross-border automatic stabilisers have been proposed. A European unemployment insurance can be designed in various ways but also faces trade-offs with respect to different objectives (stabilisation, budget neutrality). Stabilisation effects could be non-negligible, while technical problems of implementation within and between the countries need to be addressed. National stabilisers could also be bolstered by introducing common minimum standards for national unemployment insurance systems.

Responsibility for supplying European public goods could be part of the remit of a European finance "Minister". Some public goods should be more easily delivered at the "federal" level. This is the case, for example, of transnational public investments but also of migration and refugees' policies at European level, whose management and costs rely mostly on a few countries. A streamlined and centralized supply of European public goods would boost growth and increase productivity; especially if one thinks of the important investment, and economies of scale related to the energy transition. If such public goods were financed via a European tax based on corporation tax, European level public goods could be provided while exerting a certain countercyclical effect.

Regarding reforms in specific policy areas, the iAGS recommends: the adoption of a Eurozone budget under the responsibility of a Minister of Finance for the Eurozone. The primary objective of the budget would be to fund European public goods and give the necessary impetus for a long-term growth process in the Eurozone. Meanwhile, the application of a golden rule of public finance at the domestic level would incentivize public investment in the Member States.

iAGS recommends the pursuit of ECB's unconventional monetary policies and modifications in their implementation. Rather than applying its capital key to allocate the domestic purchases of assets, hence at the benefit of the largest countries in the Eurozone, the ECB could target countries with lower growth than the Eurozone average and allocate its purchases to these countries (e.g. Italy) hence implementing some fine-tuning.

On banking union, a strengthening of the third pillar of the Banking Union—i.e. a common deposit insurance—should be implemented but should be preceded by successful structural reform of the entire financial sector. Securitisation under capital markets union raises stability risks. Instead it is necessary to regulate the shadow banking system and to introduce a financial transaction tax to decrease speculative activities

Achieving policy coordination and upward convergence is no easy task given political realities. If agreement cannot be reached on ambitious risk sharing mechanisms, which would imply constraints on national policymaking, an intensification of softer forms of coordination may be the only way forward. One way to do this would be to seek greater commitment to the Broad Economic Policy Guidelines by strengthening supporting institutions. Macroeconomic policy convergence boards (modelled on the EU level Fiscal Board and the national level Productivity Boards) and extensions of the existing EU Macroeconomic Dialogue to both the Euro Area and the national level could be established; their focus should be the interaction between monetary, fiscal and "incomes" (i.e. nominal wage and profit developments) policies, rather than narrow fiscal issues. The goal is to ensure that the "ownership" of national actors for the country-specific macroeconomic policy needs identified in this inclusive and consultative process is substantially greater than at present, while improving consistency across countries. Recommendations feed into the BEPGs which are, in principle at least, a hard form of coordination and where the EU Commission and the Council play their role, as per the existing rules

EUROPE'S CURRENT ECONOMIC SITUATION

he European economy as a whole is on a path of robust growth with low inflation, as are a growing number of countries. Many signals have turned green, indicating the gradual narrowing of output gaps and the decrease in growth imbalances in the euro area. The current growth momentum leads to a decline in the unemployment rate throughout the euro area; unemployment remains high in a number of countries, though. The main deviation from this scenario concerns the consequences of Brexit. The British economy is slowing down, and will continue to do so. This will nevertheless have only a limited impact on Europe's other economies. In effect, growth has been gaining momentum and is now drawing not only on the support of monetary policy but also on internal dynamics. Beyond, the cyclical on-going recovery, the issue of long-term growth is also raised as most recent estimates of potential growth point to a risk of decrease. Besides, the current fiscal rules also impose to reduce public debt in the long term raising a risk of a new episode of fiscal consolidation, that would weigh down on growth and slow down the on-going recovery.

1.1. The growth momentum

The world economic situation has improved in the first half of 2017. Year on year, the weighted average growth of the world's major economies rose from 2.6% to 3.2% between the third quarter of 2016 and the second quarter of 2017. This acceleration applies to the European Union as well, with the exception of the United Kingdom. In the euro area, the year-on-year increase in GDP in the second quarter reached 2.3%, the best performance since the first quarter of 2011.

a) A more balanced growth?

Particularly noteworthy is that Germany is no longer the only growth engine, as the whole of the area is benefitting from the improved performance of France, the Netherlands and other European countries (Figure 1). The recovery therefore now seems to be general, including in the countries that were hit hardest by the sovereign debt crisis. Greece seems to have exit the recession and that growth is accelerating in Portugal. Spain's GDP has just exceeded the peak that it hit in the second quarter of 2008, and while its year-on-year growth rate has fallen, this reflects a slowdown in the catch-up phase. Despite all this, the imbalances inherited from the crisis have not been entirely absorbed, and the ones before have not been completely resolved. In particular, the unemployment rate in many countries remains higher than before the crisis.

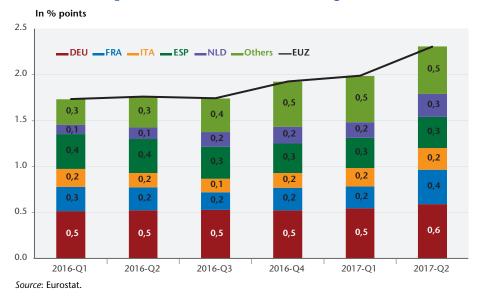


Figure 1. Contribution to the euro area's growth

The United Kingdom is a notable exception to the current state of Europe's economies. Growth is on the skids, and slipped from 2.1% at the end of 2015 to 1.7% at the end of 2016 and 1.5% in the second quarter of 2017. The most pessimistic scenarios envisaged before the referendum on 23 June 2016 have not come to pass, as economic policy was adjusted to avoid a sharper slowdown. The Bank of England had quickly cut its key rate and revived its quantitative easing programme, while the government has implemented a less restrictive budgetary policy than had been planned prior to the vote. It never-

theless remains true that the consequences of Brexit are becoming apparent, and indicate the need for a downward revision of growth for 2017 and 2018. In addition, there is still real uncertainty about the outcome of negotiations between the UK and the EU27. With inflation rising due to depreciation of the pound, the Bank of England felt obliged to raise rates in early November.

Growth is being driven mainly by domestic demand, which has contributed 1.7 points to the growth—including a one-point contribution by private consumption – out of the 2.3% year-on-year growth in the second quarter. Household consumption has been stable during the first two quarters of 2017, up by 0.4% and 0.5% respectively, despite a slowdown in households' real disposable income. It has risen by more than 0.8% in Germany, Spain and the Netherlands. For the year 2016 as a whole, household purchasing power benefited from both an increase in employee remuneration (up 2.9% in nominal terms versus 2.5% in 2015 and 2.1% in 2014) and a fall in energy prices. This boost faded in the beginning of 2017 as inflation rose, from 0% at the start of 2016 to 1.5% in the second quarter of 2017, reducing household purchasing power even while nominal earnings were still growing. A fall in the savings rate from 12.3% in second quarter 2016 to 12% in first quarter 2017 helped to maintain households' level of consumption.

Despite a rebound in Germany in the first quarter of 2017 and dynamic growth rates in France and Spain, investment declined (0.2%) in the first quarter in the euro area, due both to Italy but especially to the strong downturn in Ireland, a fall that was offset in the second quarter of 2017, which also helped contribute to the rebound observed in the euro area as a whole. As for the components of all this, Spain and Germany stand out for their particularly high levels of household investment. This has been stimulated by favourable financial conditions and by a rebound benefiting both from these positive financial conditions as well as from the continuing upturn in the Spanish property market following the lengthy and steep contraction, which began in 2007 and was completed in late 2013. During that period, investment in Spanish housing fell from 10.6% of GDP to 5%. Since then it has picked up to 5.6%.

Over this same period, external trade continued to make a positive contribution to growth in the euro area (0.4 point), despite the recent strengthening of the

Irish statistics on investment exhibits strong volatility and sharp increases or decreases are often followed by reverse movements the quarter after. Despite the low weight of Ireland in the Euro area GDP, such change in the investment growth has some impact on the aggregate investment.

euro. In the euro area, there has also been a rebalancing of the sources of German growth, since external trade is no longer the main engine driving growth. Between 2000 and 2007, it contributed 0.9 point to average annual growth (Table 1). This contribution fell to 0.2 point between 2014 and 2016, compared with 1.8 point for domestic demand. It is nevertheless still true that Germany's trade surplus is at a record level: a total of 260 billion euros over the last four quarters, or more than 8% of GDP. ² In Spain current growth is still driven mainly by domestic demand, even though trade no longer makes a

Table 1. Contribution to growth

%.	in	points

•	2000-2007	2008-2013	2014-2016
Euro area	2.2	-0.3	1.7
ID excl stocks	2.0	-0.6	1.7
External trade	0.2	0.5	-0.1
Stocks	0.1	-0.1	0.1
Germany	1.6	0.7	1.8
ID excl stocks	0.7	0.8	1.8
External trade	0.9	0.1	0.2
Stocks	0.0	-0.2	-0.2
France	2.1	0.3	1.0
ID excl stocks	2.4	0.5	1.3
External trade	-0.3	-0.1	-0.6
Stocks	0.1	-0.1	+0.3
Italy	1.5	-1.5	0.6
ID excl stocks	1.5	-1.9	0.7
External trade	-0.1	0.6	-0.2
Stocks	0.0	-0.1	0.2
Spain	3.8	-1.3	2.6
ID excl stocks	4.6	-3.0	2.5
External trade	-0.7	1.7	0.0
Stocks	0.0	0.1	0.1

Note: ID stands for infernal demand.

Source: Eurostat.

^{2.} Representing 2.4% of the euro area GDP.

negative contribution. This latter was in fact zero for the 2014-2016 period, whereas it was -0.7 point between 2000 and 2007. In the recent period, France seems to be perpetually penalized by its external trade, which is undercutting growth even more than it did between 2000 and 2007 (-0.6 point against 0.3 point).

Finally, in the United Kingdom, household consumption has ground to a standstill, despite a fall in the savings rate, following the vote in favour of Brexit. For the moment, the depreciation of the pound has not resulted in a positive impact on external trade. One possibility could be that the negative effect of Brexit on investment would also weigh down on exports as external demand try to switch to a more secured supplier outside of the United Kingdom and potentially inside the European union.

b) The environment remains favourable

This favourable scenario is expected to continue in 2018 and 2019 (Table 2). A normalization of monetary policy is likely in the 2018 period in the euro area and the United Kingdom. This phase would however be very gradual, conducted according to a schedule much like the one implemented by the US Federal Reserve from 2014. The orientation of monetary policy will therefore remain expansionary in the whole of the European Union.

Fiscal policy should remain broadly neutral in the European Union. In the United Kingdom, the Government of Theresa May has turned away from its initial objectives of reducing the budgetary deficit in 2017. The adjustment will be attenuated but also spread out, since the UK's fiscal impulse will be contractionary (-0.4 point) in 2018 and 2019. In the euro area, the widespread consolidation phase has ended, and the aggregate fiscal stance was even slightly expansionary in 2016 and 2017 (0.2 point per year). In 2017 the fiscal boost is particularly strong in Germany (0.4 point), in the Netherlands (0.2 point) but also in Portugal. This will be the logic in 2018 and 2019 as well, with fiscal policy remaining expansionary in Germany and in the Netherlands and becoming favourable in Belgium and Austria (Table 3). France and Spain will however implement restrictive policies to keep their nominal deficit under 3 % of GDP to close the Excessive Deficit Procedure in progress. In those countries we are nevertheless far from the kind of adjustments seen in the euro area between 2010 and 2014.

Table 2. Growth forecast in the European Union

Rate of growth, in %

	GDP (volume)				
	2016	2017	2018	2019	
DEU	1.9	2.3	2.2	1.8	
FRA	1.1	1.8	1.7	1.9	
ITA	1.0	1.5	1.1	0.9	
ESP	3.2	3.1	2.8	2.4	
NLD	2.1	3.2	2.2	1.8	
BEL	1.2	1.7	1.7	1.7	
FIN	1.9	3.0	2.1	1.7	
AUT	1.5	2.8	2.8	2.2	
PRT	1.4	2.6	2.0	1.8	
GRC	0.0	1.0	2.5	2.5	
IRL ¹	5.1	4.2	3.5	3.0	
Other Euro area ²	2.8	3.8	3.1	3.2	
EUZ	1.8	2.3	2.0	1.8	
GBR	1.8	1.4	1.0	1.2	
SWE	3.1	3.0	2.7	2.3	
DNK	1.7	2.3	2.0	2.0	
Other member states ³	3.0	4.4	3.4	3.0	
EU-28	1.9	2.4	2.0	1.8	

^{1.} Following the upwards revision of financial assets included in the Irish national accounts, the growth of Ireland's GDP was revised in July 2016 from +7.8% to +26.3%. For greater detail, see http://www.cso.ie/en/media/csoie/ newsevents/documents/pr_GDPexplanatorynote.pdf

^{2.} Luxembourg, Slovenia, Slovakia, Malta, Cyprus, Estonia, Lithuania and Latvia.

^{3.} Poland, Czech Republic, Hungary, Bulgaria, Romania and Croatia. *Sources*: Eurostat, National Accounting, iAGS forecast.

Table 3. Discretionary fiscal impulse (point of GDP)

	2017	2018	2019	
AUT	+0.2	+0.4	-0.2	
BEL	-0.5	+0.2	-0.1	
CYP	+0.8	+0.6	+0.2	
EST	+0.6	+0.4	0.0	
FIN	0.0	-0.3	-0.6	
FRA	-0.1	0.0	-0.3	
DEU	+0.4	+0.4	+0.1	
GRC	+0.9	-1.8	0.0	
IRL	+0.3	+0.2	-0.2	
ITA	+0.2	0.0	-0.2	
LVA	+1.2	+0.2	-0.1	
LTU	+0.9	+0.2	0.0	
LUX	+1.4	+0.3	0.0	
MLT	+0.5	+0.6	-0.1	
NLD	+0.2	+0.8	+0.2	
PRT	+1.2	+1.3	0.0	
SVK	0.0	-0.3	-0.6	
SVN	+0.5	+0.7	0.0	
ESP	-0.1	0.0	-0.2	
EUZ	+0.2	+0.2	+0.2	

Note: ID stands for internal demand. Source: Ameco and iAGS computation.

To judge the impact of the fiscal policy on growth, it is necessary to take into account the detail of the instruments used by governments and the timing of their implementation (see Box 1). In 2018, the aggregate fiscal policy will support growth by 0.2 point in the euro area. The closure of the output gap observed in the monetary union reduce the size of the multipliers associated with contemporaneous fiscal impulse but the impact of past tax cuts and the fading of the impact of past consolidation supports growth. This logic will remain in 2019: fiscal policy impact will be null while the discretionary fiscal impulse will be slightly restrictive (-0.1 point) if Member States implement the policies announced in their Stability Programmes.

Box 1. The impact of aggregate fiscal policy on growth in the euro area

After the phase of synchronized fiscal consolidation observed between 2011 and 2015 that held back growth in the euro area, the aggregate fiscal policy became slightly expansionary in 2016 and in 2017. Fiscal policy will remain expansionary in 2018 and will once again become slightly restrictive in 2019. This assessment is consensual among ECFIN, the IMF and the OECD for 2018 (Table 4).³

Table 4. Euro area Aggregate Fiscal Stance

In potential GDP points

	2016	2017	2018	2019				
Discretionary Fiscal Effort (bottom-up approach)								
iAGS	-0.2	-0.2	-0.2	0.1				
Change in primary structural balance (top-down approach)								
iAGS	-0.2	-0.2	-0.2	0.0				
ECFIN, October 2017	-0.2	-0.2	-0.2	_				
IMF, October 2017	0.0	-0.3	-0.1	_				
OECD, June 2017	-0.1	-0.2	-0.3	_				

Source: ECFIN (Autumn Forecast), IMF (World Economic Outlook), OECD (Economic Outlook).

However, a decrease of the (primary) structural balance or the discretional fiscal effort are not enough to ensure that budgetary policy will support growth. Economic theory shows that the impact of fiscal policy on output depends on the rigidity of prices, the cyclical position of the economy, the spill-overs from other countries or the constraints imposed by other actors, like the monetary authority.

It is consensual to say that an expansionary budgetary shock of 1 GDP point leads to a rise of GDP during the first year after the policy shift. However, empirical estimates diverge about the long term impact of fiscal policy. For example, Leeper, Traum et Walker (2017) show that in the US, a fiscal impulse has no impact on the GDP-level 10 years after the policy shock if monetary policy is unconstrained. However, the impact may be significant if the monetary authority is constrained (for example, by the ZLB). However, it is not only important to assess about the current impact of fiscal policy but of the dynamic impact of past choices. The dynamic of multipliers is dependent on

The differences in the aggregate fiscal stance may arise either from different assessment about fiscal policy either from potential growth estimates. However, between 2015 and 2017 the analysis converge among all the institutions.

the macroeconomic context which is summarized by the output gap. The effects of budgetary shocks on GDP is larger and has more lasting effects when the slack is bigger.

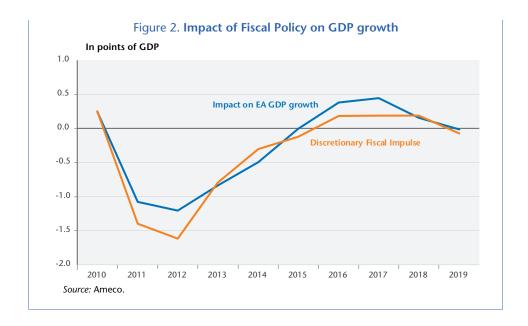
In order to measure the macroeconomic impact of fiscal policy, using the most recent theoretical advances, we should take into account: (i) the instruments used by governments and (ii) the cyclical position that determines the multipliers associated with each instrument. We disentangle the macro fiscal impulse among 3 instruments: primary expenses excluding public investment, public investment and taxes. The two later cumulate a short term impact on demand and a long term supply impact (through incentives to work, to invest or through a productivity channel for public capital). The multiplier associated with primary expenditures is in general superior to 1 at the short term and converges to 0 at a pace dependent of the macroeconomic slack. A tax cut has a lower impact on demand than primary expense on the short run but has a long term impact on the supply side. Finally, public investment has a direct and big impact on demand at the short run and also improves GDP in the long term as public and private capital are complementary. The impact of fiscal policy on GDP is computed using the following formula:

GDP
$$Impact_t = \sum_{i \in g, t, i} \sum_{k=0}^{10} m_{i,t-k}(OG_t) \times FI_{i;t-k}$$

Where i represents the policy instrument, $m_{i,t-k}$ (OG_t) the multiplier (dependent on the output gap of time t) associated with the fiscal impulse realized in t-k with the instrument i.

Using the decomposition of fiscal policy and the timing of the implementation of the different instruments, we find that fiscal policy supports growth by 0.4 point in 2017. Between 2015 and 2017, the impact of fiscal policy on growth is higher than the fiscal impulse (Figure 2). This can be explained by the delayed impact of past tax cuts in several countries, but also with the fading of the impact of past consolidation on output. This suggests that the dynamic of multipliers⁴ has been supporting growth during this period. This is particularly true in Spain, France, Ireland and Belgium. In 2018 and 2019, the contribution of fiscal policy to growth will be more in line with the contemporaneous fiscal impulse. This can be explained by the closure of the output gaps, leading to lower multipliers that decrease faster, and with the lower magnitude of fiscal impulses implemented recently. The contribution of fiscal policy to growth is expected to 0.2 point 2018 and 0.0 point in 2019.

i.e. the drop of multipliers associated with past consolidation and the rise of multipliers of past tax cuts.



Besides, some previously favourable factors have nevertheless turned negative and will hit growth. For the euro area countries, this is the case of both oil and the euro. The hike in oil prices will however be moderate. All else being equal, this will result in a decline in the purchasing power of household disposable income, which will cut growth by 0.1 point. For the euro area countries, support from the external value of the euro ended with the currency's recent appreciation. After having reached a low point of 1.05 dollars for a euro in April 2017, the European currency has entered a new phase of appreciation, which is linked to the following: an improvement in the outlook for the euro area's growth; a normalization of the US monetary policy that is less rapid than the markets initially expected; and an increase in the euro area's current account balance. In 2018 and 2019, we continue to forecast the stabilization of the euro-dollar exchange rate at 1.2, while the cumulative effect of the euro's appreciation and of variations in export prices in the different countries for the two years will come to 0.2 point in Germany, 0.3 point in France, 0.4 point in Italy and 0.3 point in Spain. In addition, this impact could be partially offset by more favourable developments in world trade than what took place in 2015 and 2016. Recent statistics on world imports indeed suggest a brighter outlook and a rebound in trade.

In the United Kingdom, the effect of the decline in the pound sterling following on the heels of the vote for Brexit is taken into account in the impact of the Brexit shock. This depreciation will positively affect foreign trade, but will also result in an increase in imported inflation, thereby reducing the purchasing power of British households and therefore their consumption.

c) A job-rich growth?

The pace of growth is being reflected in job creation and the continued reduction of the unemployment rate, which came to 7.7% in the EU, *i.e.* a percentage point less than the level in the first quarter of 2008. In the European Union as a whole, more than a million jobs have been created on average in each of the first two quarters of 2017, mainly in the market services sector (Figure 3).

As for the euro area, the decline came to 0.9 point in a year, with most countries showing an improvement. Between the second quarter of 2016 and the second quarter of 2017, the fall in unemployment exceeded two points in Spain and the Netherlands. The fall was more moderate in France and Italy (on the order of 0.5 point) and marginal in Germany, where the unemployment rate is at a historically low level supported by weak population growth until 2015. For the euro area as a whole, more than 600,000 jobs were created during the first two quarters of 2017, a level not observed since the first quarter of 2008. In the United Kingdom, unemployment is below its pre-crisis level, and it has continued to fall despite the slowdown in growth. Over a year, since the second quarter of 2016, the unemployment rate fell by 0.5 point and the employment rate rose by 0.5 point.

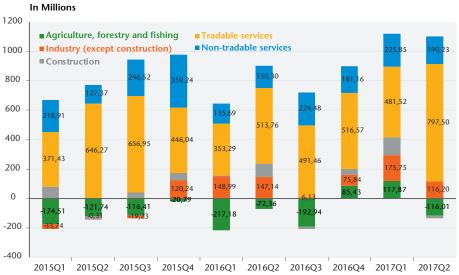


Figure 3. Job creation by sector in the EU

Source: Eurostat.

It should be added that the reduction in unemployment has also resulted from more job-rich growth. Since the crisis, the average growth in the euro area in hourly or per capita productivity has been lower than that what was observed between the mid-1990s and 2007. On average, the rate of growth year-on-year in hourly productivity came to 1.3%, compared with just 0.8% on average since the beginning of 2013. This slowdown in productivity growth is certainly helping to bring down the unemployment rate, but it also suggests a decline of potential growth and therefore of the actual growth of the industrialized countries once the output gaps will have been closed. Finally, the improvement of the employment situation has not necessarily been accompanied by a rise in wages so that despite a lower unemployment rate, weak inflation is still an issue in the euro area.

1.2. The logic of weak inflation

Though growth is accelerating in the euro area, inflation is still moderate. The recent rise has been reversed suggesting persistence of the economic slack. These trends also reflect the difficulty the central banks are encountering in meeting the 2 percent target for inflation, despite the implementation of a range of measures designed to boost activity and anchor inflationary expectations to the target. However, the price and wage dynamic may have also been influenced by changes in nominal unit labour costs and the adjustment of nominal imbalances among euro area countries.

a) Inflation remains low

In the third quarter of 2017, the inflation rate in the euro area remained below the target set by the European Central Bank (ECB). While a renewed rise has been observed since the low point reached in the second quarter of 2016, this reflected the volatility of the price index for energy. Underlying inflation, which excludes more volatile sub-indices such as food and energy prices, has shown little sign of picking up in the main European countries, with the exception of the United Kingdom (Figure 4). In the euro area, it came to 1.1% in third quarter 2017. In the UK, overall inflation was close to 3% in August 2017, and underlying inflation stood at 2.4% in the second quarter of 2017, a sharp rise since April 2016. This is in line with the depreciation of the value of the pound sterling, which is being reflected in higher prices for imported goods.

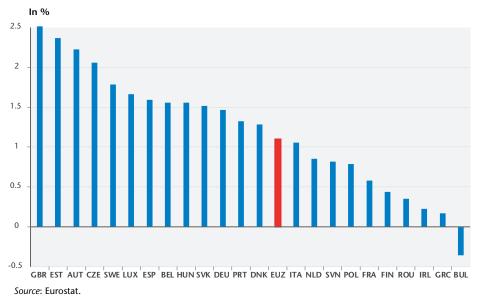


Figure 4. Core inflation in the main countries in the third quarter of 2017

The absence of inflationary pressure in the euro area is consistent with a high level of unemployment. Nevertheless, it is clear that even in countries where unemployment is below its pre-crisis level, inflation is still moderate, which could result from more structural factors, in particular the reduction of employee bargaining power. Besides, the unemployment figures may understate the degree of underemployment, so that wage increases have been quite low. A focus on the dynamic of nominal unit labour costs would therefore provide some insights on some of the determinants of the inflation rate.

b) Recent development of unit labour costs

Showing the changes in unit labour costs (ULC) since the beginning of the crisis in some euro area countries helps to take account of developments in competitiveness between the countries of the euro area (Figure 5) and may provide insights on the price dynamic. The changes are also compared to the "golden rule of wages", *i.e.* a hypothetical trajectory of ULC rising by 1.9% per year; given constant profit margins and prices, an increase in the ULC at this rate would ensure that the ECB's inflation target (below but close to 2%) is reached in the medium run.⁵ The path of ULC in the euro area is the result of a downward pressure on labour costs. While these adjustments can help reduce the

current account imbalances that arose in the 2000s, they also weigh down the domestic demand and risk fuelling a deflation spiral.

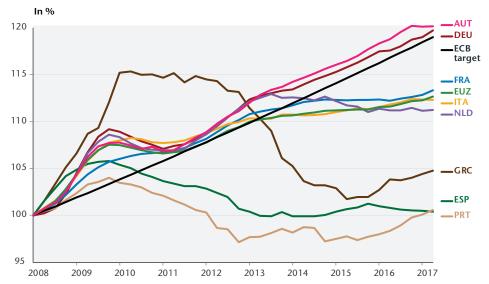


Figure 5. Nominal ULC in the euro area and the golden rule for wages

Note: The "ECB target" is a reference value where nominal ULC would grow according to the ECB inflation target plus the path of medium-term productivity for the euro area as a whole. *Source*: Eurostat.

The reforms implemented recently by many European countries to promote competitiveness by reducing unit labour costs or introducing greater flexibility into the labour market could also strengthen these mechanisms and maintain strong disinflationary pressure in the euro area (see Box 2). The changes in the ULC of different countries are broadly consistent with the history of structural reforms. The three programme countries (Greece, Spain, Portugal) have made major efforts, both in absolute terms (between 15 and 20 points under the golden rule during the period) and relative to other countries. The countries outside the adjustment programme that undertook structural reforms (France, Italy, the Netherlands) are about 8 points below the target over the period. Finally, Germany increased its ULC with respect to the preceding countries, mainly from 2014, even slightly exceeding the golden rule.

^{5.} See iAGS (2017) and Watt (2007) for insights on the Golden rule for wages.

Box 2. Structural reforms in the euro area and unit

The 2007-2008 financial crisis revealed certain factors generating internal divergences within the euro area which had been hidden in the first years of the euro. In particular, in the absence of any possibility of adjusting exchange rates, nominal divergence, *i.e.* the gap in inflation and wage growth rates between countries sharing the same monetary unit has become a central element in the debate. This nominal divergence is accused of being, at least in part, at the origin of both the current account imbalances, and the crisis of the euro area, in so far as these imbalances have as a counterpart financial imbalances, with significant flows of private capital from the north to the south. The sudden halt of these flows in 2008 destabilized the banks of the southern European countries. They were replaced by flows of public capital as part of macroeconomic adjustment programmes, with however a number of conditionalities, including the implementation of structural reforms aimed at lowering labour costs.

The countries subject to these programmes (Greece, Spain, Portugal, Ireland) thus implemented labour market reforms aimed at boosting their competitiveness vis-a-vis their partners both inside the euro area and outside it. These structural reforms took several forms, including: the relaxation of rules on individual and collective redundancies; the decentralization of collective bargaining over wages and working time at the level of industry branches and even of companies; and tightening the conditions on compensation during periods of unemployment.

Labour market reforms were not, however, limited to countries under adjustment programmes. This was because, first, other countries were also facing problems with external competitiveness, and second, reducing the cost of labour is also seen as a way to bring down unemployment, independently of external constraints; the underlying idea is that wages are too rigid and too high to achieve a balance on the labour market. The European Commission in particular became an advocate for these reforms in all the EU countries. France and Italy also implemented reforms similar to those in the programme countries, even though they were not suffering the same institutional and macroeconomic constraints.

Only Germany stood out in this landscape, in the sense that it seems to be going against the general trend in the euro area. In practice, wage costs there had been slashed in the period preceding the crisis (partly due to the Hartz laws, but especially as an agreed outcome of the German model of collective bargaining between the social partners in which the State plays a limited role). During this period, wage growth has been low weighing down domestic demand. Since the onset of the crisis in 2008, the trend has been reversed, in particular with the establishment of the federal minimum wage that came into force in 2015.

Labour market reforms are far from being the only determinant of the ULC, as these are also affected by the economic cycle, through two mechanisms: on the one hand via the Phillips curve, i.e. the inverse relationship between unemployment and wage inflation; and on the other hand via the productivity cycle, specifically labour hoarding at the beginning of the recessionary phase. In particular, the widespread increase in ULC between 2008 and 2010 (particularly in Greece) was due largely to a fall in productivity, in the context of a strong decline in production that was not immediately translated into redundancies. The impact of the level of unemployment is also evident: in Germany, the historically low level limits deflationary pressures, while in Spain and Greece mass unemployment which was created by austerity policies had the expected effect of fuelling deflationary tendencies.

In spite of these reservations, it is therefore likely that the structural reforms played a role in terms of the cost of labour and subdued imports, and that they have contributed to reducing current account imbalances between euro area countries since 2008. More importantly, these policies also bear a generalized deflationary risk (in addition to their negative social impact) as countries have engaged in race to the bottom. If some countries, have benefited from improved competitiveness, such a generalized strategy in the euro area have contributed to weaken wage dynamic and trigger a movement of global disinflation in the euro area. Indeed, we can see that from 2013 ULC in the euro area have departed significantly from the ECB target, even if during more recent quarters some acceleration has been observed. The reason is simple: since competitiveness is a relative concept, the goal of nominal re-convergence in the euro area cannot be achieved if wage moderation is being carried out by every country; all that will come about is a generalized deflation, making everyone a loser.⁶ It is therefore necessary that some countries, Germany above all, accept wage inflation that is significantly above the 2 percent target so that the others can adjust without falling into deflation. This is the main reason why the ECB has experienced for such a long time difficulty in pushing inflation back to its target. In principle the Macroeconomic Imbalance Procedure should put pressure on countries posting persistent surpluses to take steps to reduce them by expanding domestic demand and raising prices and wages; mild criticisms of, in particular, Germany by the EU Commission within the framework of the MIP have not led to a meaningful shift in policy, however.

This issue was already raised in previous iAGS reports and some propositions were made to promote better coordination of minimum wage policies and to make the MIP more symmetric. See iAGS (2014), (2016) et (2017) for instance.

c) Did nominal imbalances decrease in the euro area?

The evolution of nominal imbalances within the euro area, can be performed using a "fundamental equilibrium exchange rate" methodology. The idea is to compute the adjustment of the general price level in every euro area economy that would be compatible with both an internal equilibrium (the full utilization of production factors, both labour and capital) and an external equilibrium (a current account deficit small enough to limit foreign debt accumulation—or conversely a surplus that does not lead to an excessive accumulation of foreign assets). The computation also depends on the sensitivity of imports and exports to price movements of domestic and foreign exporters. Figure 6 shows the nominal adjustments that we estimate were necessary in both 2007 and 2016, computed relatively to the EA average.

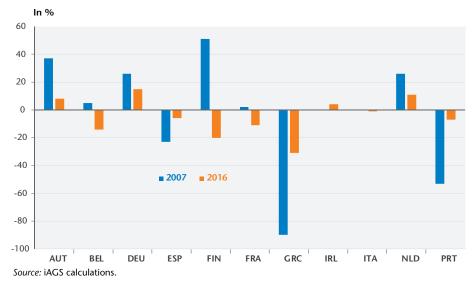


Figure 6. Nominal adjustments needed with respect to EA average

See iAGS 2015 for a complete description of the methodology. The price elasticities have been updated for the four largest euro area countries.

^{8.} We do not consider here the external imbalances of the EA as a whole relatively to the rest of the world. Yet, today, the euro is undervalued, given the large trade surplus of the area. A real appreciation is therefore needed to go back to equilibrium, and that can be obtained either through a nominal appreciation or through price increases within the euro area. The latter solution would be preferable, in order to avoid a deflationary spiral, and in that case price increases should be much more important in Germany than in Southern countries.

Despite a few short-term oscillations due to instability in the underlying current account data, the indicator is broadly consistent over time, and delivers a story that is consistent with well-known developments in the euro area.

We also computed in Figure 7 an aggregate indicator of nominal disadjustments within the EA, which is essentially the GDP-weighted cross-country standard deviation of the per-country adjustment needs given in Figure 6. We also report the contribution of each country to this indicator. This gives a measure of the heterogeneity among EA countries, while at the same time pointing to the countries that contribute the most to this heterogeneity.

60 ■AUT ■BEL ■DEU ■ESP ■GRC ■IRL ■ITA ■NLD ■PRT 50 40 30 20 10 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 Source: iAGS calculations.

Figure 7. Indicator of intra-EA nominal disadjustments, with per-country contributions

The picture that emerges from these calculations is that nominal disadjustments within the EA have reached a peak in 2007, just before the crisis broke out, then substantially diminished until 2013, and have remained rather constant since. The story is dominated by Greece, despite its small weight in the indicator, because the quadratic nature of the calculation magnifies its very large overvaluation just before and after the financial crisis. But other southern countries like Spain, Italy and Portugal also dramatically reduced their nominal overvaluation, and nowadays contribute for little in our heterogeneity indicator. Conversely Germany, Austria and the Netherlands diminished their nominal undervaluation, but at the same time Germany is now the main contributor to the

heterogeneity index, reflecting the asymmetric nature of the adjustment that took place. Italy remains at a rather well-balanced position. There are however two countries which do not follow the reconvergence pattern and for which the euro is becoming increasingly overvalued, namely France and Finland. The contribution of France to the heterogeneity index has substantially increased over the last years; a possible interpretation is that the import restrains made by southern countries by cutting wages (besides the effect of their especially heavy credit-constraining banking crisis), combined with weak import growth of important trading partners like Germany, have created a potential export problem for France, that was not apparent before. Measures taken by France in the last few years to improve the current account balance have so far failed to produce their effects. However, a better way of readjustment would be the EA as a whole to follow the golden-wage-rule, as this is the only way to decrease the global imbalances caused by exaggerated EA current account surpluses and the social imbalance of still high unemployment levels in Europe.

Comparing Figure 6 to Figure 5, it appears that the story told by ULC developments is broadly consistent with the resorption of nominal imbalances that we have observed since 2008. Above-average labor costs increases in Germany, below-average increases in Spain, Portugal and Greece, and close-to-the-average evolution in France and Italy are all consistent with the picture that is displayed in Figure 6.

This analysis is supported by a cross-country analysis of the relation between current accounts and ULC variations since 2008, as shown by Figure 8. Of course, a causal interpretation of this graph is not warranted. In addition to the price competitiveness channel (exports being stimulated by lower ULC, and conversely imports stimulated by higher ULC through substitution effects), there is another causality concerning imports: austerity policies in deficit countries have simultaneously depressed wages and imports, via a decrease of domestic demand. It is quite plausible that the latter effect is dominant.

If we look at the source of the effect (Figure 9), we can see that the correlation between ULC and current account developments seems more affected by imports (through the final demand channel), the competitiveness channel through exports is also playing a role.

16 GRC 14 Current account variation (percentage points of GDP) 12 10 PRT 8 6 ITA 4 NLD 2 DEU 0 **♦** FRA $R^2 = 0,7954$ -2 AUT -4 0 10 20 5 15 ULC variation (%)

Figure 8. Nominal ULC and current accounts between 2008Q1 and 2017Q2

Sources: Eurostat, iAGS calculations.

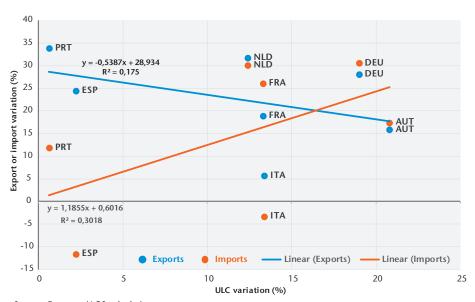


Figure 9. Nominal ULC, exports and imports (in volume), 2008-2017

Sources: Eurostat, iAGS calculations.

There are however countries that do not fit well into this story, in particular the Netherlands, which had ULC increases close to those of France and Italy, but underwent a massive surge in exports; this pattern may be due to the weight of re-exportations in the external trade of Netherlands, which makes its exports much more sensitive to the business cycle of its partners. Another inconsistency is that most of the German nominal readjustment occurred between 2008 and 2013, while most of its ULC acceleration happened since 2014. And Greece underwent a surprisingly low increase of its exports, despite large wage compressions, in part because markup increases have prevented export prices from diminishing. These various discrepancies show that, even if unit labor costs are major competitiveness determinants, there are other important factors that should not be forgotten, like markups, product tax rates, dependence on energy imports or non-price competitiveness.

Even if the situation has improved quite substantially since 2008, it appears that there are still significant current account imbalances within the EA, especially between France and Germany, where all other things equal a relative nominal price adjustment of 25% is needed. Another way to look at the current situation is to compute projections for long-term international investment positions (IIP, or net foreign assets) if trade balances remained the same as today, *i.e.* if no nominal readjustment were done; the result of this exercise is given by Table 5.

Table 5. Long-term projections for international investment positions in the absence of nominal adjustments (% of GDP, 20-year horizon)

AUT	BEL	DEU	ESP	FIN	FRA	GRC	IRL	ITA	NLD	PRT
42	19	187	8	-27	-24	-78	21	53	200	-27

Source: iAGS calculations.

Interestingly, what these results show is that the situation for deficit countries is quite good, since all of them except Greece would arrive at an IIP over the MIP threshold of -35% (and even Greece would improve its position relatively to today). The imbalance clearly come from Germany and the Netherlands, which would accumulate huge foreign assets, close to 200% of their respective GDP. Again, this shows the asymmetric nature of the adjustment underwent so far.

However, one should not forget that today the EA on aggregate has a large trade surplus, which may not last forever, since it creates pressures to the appreciation of the euro. If these pressures were to materialize, substantial external deficits could reappear in southern countries, jeopardizing the rather optimistic

scenario pictured in Table 5 and possibly even leading to a new balance of payment crisis.

Current account adjustments therefore remain an important issue that should be addressed by appropriate policies, beginning with surplus countries which cannot say that they have no responsibility in the disadjustments. The goal should be a still higher inflation in surplus countries, in particular Germany, in order to reduce nominal imbalances without pushing the deficit countries into deflation. Possible tools include a coordination of national wage policies over the long-term, a generalization of minimum wages in all countries, a better regulation of posted workers to avoid unfair competition, mandatory periodic wage negotiations at the branch level (which would include nominal readjustments), the coordination of fiscal devaluations (i.e. tax shifting from social security contributions to VAT), the substitution of particular high energy imports in the south by stronger investment in renewable energy, and in particular fiscal reevaluations in some countries (Germany, Netherlands).

1.3. Prospects for the longer term

a) Beyond the on-going recovery: is there a risk of a decline in long-term growth?

While the symptoms of the economic recovery are visible today in the whole of the European Union, the weakness of the pace of growth associated with the exit from the crisis might seem surprising. The slowdown of the growth trajectory over the visible horizon has given rise to profound questions about the possible demise of the developed economies' growth potential. Proponents of the advent of a phase of "secular stagnation", represented by the voice of Larry Summers, see in the inability of these economies to reconnect with a level of activity consistent with their pre-recession trajectory the impact of a mechanism of balance sheet deflation; i.e. a consequence of the excessive indebtedness of private agents before the recession, and of governments since 2010. In the face of swelling liabilities, agents are being forced to cut their spending in order to release resources for debt repayment and clean up their balance sheets. This process could be a lengthy one, first because clearing up private debt accumulated during the real estate bubble of the 2000s and reducing the colossal public deficits arising from the recession calls for a symmetrical effort. Second, because the deflationary pressures exerted by the adjustment hold back deleveraging by opposing the spontaneous devaluation of debt in real terms and raising real interest rates.

In addition to these questions about the trajectory of spending, the erosion of the path towards expansion has fed the debate about the repercussions of the recession of 2008/09 on the potential of the developed economies. Some studies, like those of Furcieri and Zdzienicka (2012), Furcieri and Mourougane (2012) and Reinhart and Rogoff (2008), attempt to shed light on the links between financial crises and the loss of potential and conclude with definitive losses of production rather than with a pick-up in growth following the crisis. But there is not a consensus about the empirical evidence provided, and the transmission channels from financial crises to potential are not adequately described.

In a perspective on the question that goes far beyond simply the impact of the recession on potential output, Robert Gordon considers that the exhaustion in the last few years of the impact of the new information technologies on growth in productivity heralds the end of the growth path that these economies have followed up to 2008. Herzog-Stein *et al.* (2017) examine the declining productivity trend in Germany and conclude that some, but not all, of the "headwinds" to productivity identified by Gordon for the US apply to Germany as well.

After years of quasi-stagnant economic activity, accompanied by a decline in the volume of productive investment and a rise in the unemployment rate, some determinants of growth potential—leaving aside demography, which is not affected by the crisis—have been badly affected. Potential GDP depends on the quantity of production factors available, labour and capital, as well as their productivity. The decline in investment since the onset of the crisis has reduced the pace of accumulation but also very probably the diffusion of technical progress, which models the trajectory of productivity.

Actually, most of recent estimates on the potential output and potential growth indicate a slowdown in the growth potential, mainly due to the decline in productivity gains. These estimates suggest that the reference for judging the normalization of the level of economic activity should no longer be the precrisis trajectory, but a lower trajectory. This would yield a less bleak picture of how economic activity is lagging in relation to the potential, while at the same time making for a more pessimistic assessment of longer-run performance – at least in the absence of countervailing policies. At the same, these estimates are not completely independent from the cycle as they rely on trends estimated over a period of declining growth so that when output recovers, potential

output will steadily rise. The risk is that fears of secular stagnation could be self-fulling. This prospect makes it all the more important to boost investment both in physical capital and in "human capital", i.e. the skills of workers in order to avoid falling in such a trap. It calls for a coordinated investment strategy.

It is therefore essential not only that economic policies at the European level are aimed at supporting the recovery but also that the European States adopt measures that will stimulate nominal growth in the future. This means policies to support investment—including public investment—and the continuation of an expansionary monetary policy, which is needed to push up inflation and facilitate the deleveraging of private agents and States, whose debts rose sharply during the crisis (Figure 10).

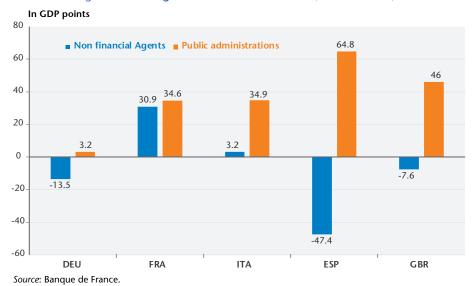


Figure 10. Change in debt between 2007-Q4 and 2017-Q1

b) Should euro area engage in a new episode of fiscal consolidation?

Besides, the scenario described above does not account for a risk of a new episode of fiscal consolidation. The fiscal impulse is slightly positive for 2017-2018 and then slightly negative in 2019. But some element may suggest that it could be made more restrictive. First, recovery could be (but is not) a strong argument to advocate for new fiscal consolidation. Euro area countries should also comply with fiscal rules. First, the country-specific structural deficit targets, the so-called medium-term objectives (MTOs). Second, public debt is expected

to converge to 60% of GDP. The reduction of debt should reach 1/20th of the spread between the current level of debt and the 60% target on average within three years. Third, an expenditure rule, which limits public expenditure growth (depending on potential growth). At present, Commission and Council focus in their evaluation of fiscal policies as well as their policy recommendations on the first rule, as it is the most restrictive one and it is in the centre of the TSCG, the so-called Fiscal Compact. However, the political attention can change quickly, notably when all EA countries will comply with the 3% rule for public deficit, as it should be the case in 2018. All the rules have to be kept in mind.

As long as the debt-to-GDP is above 60% and has not converged to that threshold, discussions on the need of further fiscal effort will not stop. Therefore, we simulate the path of public debt-to-GDP ratios until 2035, which is the horizon of the 1/20th debt rule incorporated in the revised SGP and in the Fiscal Compact. The simulated path of public debt depends on the fiscal impulses which have been forecasted in the euro area in 2018 to 2019. We then assume zero fiscal impulses beyond 2019. Simulations are realized with a model representing the main countries of the euro area: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal and Spain. Details of the model are available in a technical appendix to this chapter. The impact of fiscal policy on the economic activity depends on the fiscal multiplier effect, which is supposed to be time-varying. It is high when the output gap is negative (-1.5 for an output gap below -3%), supposed to be equal to 0.5 when the output gap is zero and it becomes small (0.2) when the output gap exceeds 3%.9

In the baseline scenario, ¹⁰ we suppose that interest rates in all euro area countries converge to the same level and that inflation expectations are anchored to the same inflation target (2%). Consequently, we consider a scenario of interest rates normalization. Risk premia decline and nominal interest rates are consistent with long-term real growth and expected inflation. Under these assumptions (initial conditions for the simulations are presented in the technical appendix), we compute the debt dynamics, structural balance, inflation rate and GDP growth rate (or output gaps) from 2017 until 2035. Results are reported in Table 6 and Figure 11. The simulations suggest that France, Italy, Spain, Belgium, and Portugal would not reach a 60% debt-to-GDP ratio by 2035. Consequently, these countries would have to implement additional fiscal

^{9.} See the technical Appendix of iAGS (2017) report for details of the model and Blot et al. (2014).

^{10.} The projected value of debt includes future stock-flow adjustments –forecasted in the AMECO database– that reduce or increase the debt ratio.

efforts to be able to comply with the debt rule. With public debt reaching 113% of GDP in Portugal, consolidation would have to be substantial. The gap would also be significant for Italy (102%), France (93%), Spain (86%) and Belgium (79%). It must yet be noted that while the debt ratio in Italy, in Portugal and in Belgium would be far from 60%, it would decrease significantly between 2020 and 2035 indicating that the convergence is ongoing. Conversely, the convergence would be very slow in France and in Spain.

Considering a "no change in fiscal policy" beyond 2019, debt level would decrease below 60% in other countries, providing some fiscal space. Germany and the Netherlands would be in this situation, with public debt reaching 37% and 35% respectively in 2035. Ireland and Finland would also be concerned whereas Austria would reach 58%. Structural balances may also illustrate the situation of public finances. France would record a structural deficit amounting to -2.2% in 2020 and the situation would still deteriorate from 2020 to 2035 because of hysteresis effects present in the model. Similar projections apply for Spain. Germany would benefit from a small surplus increasing the room for manoeuvre to implement more expansionary fiscal policy in the future.

Moreover, the average output between 2017 and 2035 would be almost null for the euro area with Spain and Greece being in the worst situation. Actually, all countries but Germany, Netherlands, Ireland and Portugal would be in a situation of negative average output over the period. The inflation rate would remain below the 2% target until 2022. This is good reason for why countries should not engage in more fiscal consolidation: growth has accelerated, but economies have not yet recovered from the crisis, and almost all countries (except Germany, Netherlands and Ireland) still have negative output gap.

The next step is to assess whether countries are able to meet the ceiling by 2035. As for previous reports, the aim is to reach 60% for all countries. Then countries, which have a debt below 60% in Table 6, implement positive fiscal impulses. Considering current fiscal rules, we apply fiscal impulses capped at +/-0.5. Successive positive (if country-debt is below 60% in Table 6) or negative (if country-debt is above 60% in Table 6) impulses are implemented from 2018 until the debt-to-GDP reaches 60%. We find that all countries would be able to comply with the fiscal rule on public debt despite a significant consolidation effort. Yet, it may involve a significant additional effort. The cumulated effort between 2017 and 2035 would amount to 3.2 points in Italy (Table 7). In France, additional effort would amount to 3 points, which is 2.5 points above the expected effort announced until 2018. Spain, Portugal and Belgium would

have to implement further consolidation with effort ranging from 1.3 points to 3.9 points.

Table 6. Public finance and output performances under the baseline scenario (no risk premium, no fiscal impulse beyond 2019, time-varying fiscal multiplier, hysteresis effects)

	Public debt (% of GDP)		Structural balance (% of GDP)		Cumula- tive fiscal impulse	GDP growth rate (%)		Average output gap	Inflation rate (%)	
	(1) 2020	(2) 2035	(3) 2020	(4) 2035	(5) 2017-2035*	(6) 2017- 2020	(7) 2021- 2035	(8) 2017- 2035	(9) 2017- 2020	(10) 2021- 2035
DEU	58	37	0.0	0.2	0.9	1.6	0.9	0.7	1.3	1.9
FRA	95	93	-2.2	-3.1	-0.5	1.7	1.3	-0.2	1.4	2.0
ITA	128	102	-0.6	-0.5	0.1	1.0	0.2	-0.2	1.0	1.9
ESP	94	86	-2.0	-2.4	-0.3	2.4	1.4	-0.4	1.4	2.0
NLD	51	35	-0.1	-0.2	1.3	2.0	1.2	0.3	1.5	1.9
BEL	98	79	-1.4	-1.7	-0.5	1.6	1.5	-0.2	1.9	2.0
PRT	122	113	-2.6	-2.9	2.5	2.0	1.0	0.1	0.7	1.9
IRL	68	41	-0.5	0.2	0.4	2.7	1.7	1.1	1.1	1.8
GRC	161	53	3.0	4.9	1.5	2.4	1.1	-1.8	1.3	2.1
FIN	56	46	-0.4	-1.1	-0.9	2.1	1.6	-0.2	1.0	2.0
AUT	71	58	-0.7	-1.2	0.4	2.2	1.3	-0.2	1.9	2.0
EA	85	68	-0.9	-1.1	0.3	1.7	1.0	0.1	1.3	1.9

 $^{^{\}star}$ In the baseline scenario, fiscal impulses are equal to 0 from 2020 to 2035. Source: iAGS model.

Germany would benefit from fiscal space according to the debt criterion and may implement a fiscal stimulus of 2.5 points, which is 1.6 points higher than what is currently expected and shown in Table 7. The Netherlands, Ireland and Finland would also implement expansionary fiscal policy in this scenario. This would result in higher GDP growth for these countries. From 2017 until 2020, the average GDP growth would be about 0.1 point higher. Conversely, growth performance in countries implementing a new wave of fiscal consolidation would deteriorate: by 0.6 point in Portugal, 0.2 point in Italy and Spain, and 0.1 point in France. Besides, structural balance would become in surplus in 2035 for Italy, France, Spain, Portugal, Belgium and Greece. In Greece, the surplus would reach 4.2% of GDP. This clearly questions the social sustainability of this policy. As illustrated in previous reports, there is obviously a trade-off arises between the debt objective and the growth objective. Though all countries would meet

the 60% debt-to-GDP ratios in 2035, it would imply a reduction in growth for countries implementing additional fiscal consolidation and for the euro area. Growth would be reduced in the euro area as a whole and heterogeneity in growth performance would widen. Growth would also deteriorate in countries which have already suffered from the double dip recession. The countries with fiscal space are already those in which the unemployment rate has recovered to or close to pre-crises levels.

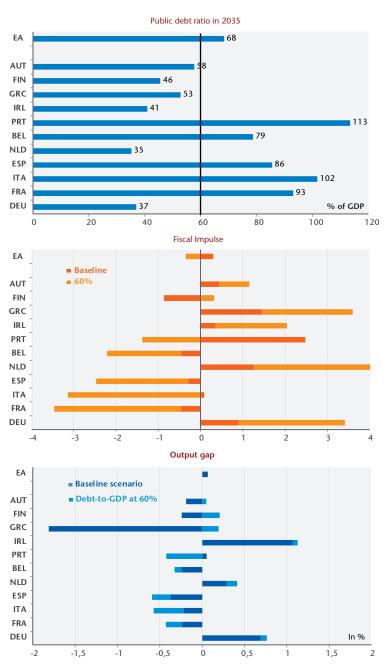
Table 7. Is it possible to reach a 60% debt-to-GDP ratio? (baseline scenario except +/- 0.5 fiscal impulses depending on public debt gap vis-à-vis 60% target)

	Public debt (% of GDP)		Structural balance (% of GDP)		Cumula- tive fiscal impulse	GDP growth rate (%)		Average output gap	Inflation rate (%)	
	(1) 2020	(2) 2035	(3) 2020	(4) 2035	(5) 2017-2035	(6) 2017- 2020	(7) 2021- 2035	(8) 2017- 2035	(9) 2017- 2020	(10) 2021- 2035
DEU	59	60	-0.9	-2.0	2.5	1.7	0.9	0.8	1.4	1.9
FRA	94	60	-1.0	0.1	-3.0	1.6	1.3	-0.4	1.3	2.0
ITA	128	60	0.7	3.6	-3.1	0.7	0.2	-0.6	0.9	2.0
ESP	93	60	-0.8	0.0	-2.2	2.2	1.4	-0.6	1.3	2.0
NLD	51	60	-0.4	-2.8	3.4	2.1	1.2	0.4	1.5	1.9
BEL	97	60	-0.2	0.1	-1.8	1.5	1.6	-0.3	1.9	2.0
PRT	121	60	0.0	2.2	-1.4	1.4	1.1	-0.4	0.5	1.9
IRL	70	60	-1.8	-1.7	1.7	2.8	1.7	1.1	1.1	1.8
GRC	159	60	2.5	4.2	2.1	2.6	1.1	-1.6	1.4	2.1
FIN	57	60	-1.4	-2.5	0.3	2.4	1.5	0.0	1.1	1.9
AUT	71	60	-0.9	-1.4	0.7	2.2	1.3	-0.1	1.9	2.0
EA	85	60	-0.6	-0.3	-0.3	1.7	1.0	0.0	1.3	1.9

Source: iAGS model.

These simulations suggest that there is still a risk of a new wave of fiscal consolidation in the future, unless fiscal rules will be changed or at least not applied strictly. This may still entail output costs and add deflationary pressures for the euro area and notably in countries where the output gap is negative and the unemployment rate high (Greece, Portugal, Spain, Italy and France).

Figure 11. Public debt in 2035, fiscal impulse and output gap



Source: iAGS model.

Finally, we simulate the EA economies' trajectory assuming that countries stick to the -0.5% structural balance to GDP ratio starting from 2020. We apply a simplified MTO rule. The fiscal consolidation depends on the output gap:

- no adjustment if the output gap is lower than -4%;
- a negative fiscal impulse of 0.25 point of GDP if the output gap lies between -4% and -3%;
- a negative fiscal impulse of 0.5 point of GDP if the output gap lies between -3% and 1.5%;
- a negative fiscal impulse of 0.75 point of GDP if the output gap is higher than 1.5%.

Applying this rule, countries that need to do some fiscal consolidation to reach the 60% debt-to-GDP ratio would have to do less adjustment (lower cumulative fiscal impulse in Table 8 compared to Table 7). In that way, applying the preventive arm of the SGP starting from 2020 would be a way to spread the adjustment and to avoid breaching the current recovery. France would reach

Table 8. Is it possible to reach a 60% debt-to-GDP ratio if we follow the preventive arm of the SGP?

(baseline scenario except fiscal impulses depending structural balance-to-GDP ratio target starting from 2020)

	Public debt (% of GDP)			Structural balance (% of GDP)		Cumulative fiscal impulse	_	rowth (%)	Average output gap
	(1) 2020	(2) 2035	(3) 2045	(3) 2020	(4) 2035	(5) 2017-2035	(6) 2017- 2020	(7) 2021- 2035	(8) 2017-2035
DEU	58	36	22	0.0	0.3	0.9	1.6	0.9	0.7
FRA	95	66	48	-1.7	-0.3	-2.7	1.6	1.3	-0.4
ITA	128	99	80	-0.5	-0.3	0.0	1.0	0.2	-0.2
ESP	93	64	45	-1.5	-0.2	-2.0	2.4	1.4	-0.5
NLD	51	34	26	-0.1	-0.2	1.3	2.0	1.2	0.3
BEL	98	64	44	-0.9	-0.2	-1.6	1.6	1.5	-0.3
PRT	122	85	58	-2.1	0.1	0.3	1.9	1.0	-0.1
IRL	68	40	23	-0.5	0.2	0.4	2.7	1.7	1.1
GRC	160	90	55	2.6	8.0	4.9	2.5	1.1	-1.4
FIN	56	40	30	-0.4	-0.4	-1.4	2.1	1.6	-0.3
AUT	71	51	39	-0.6	-0.4	-0.1	2.2	1.3	-0.2
EA	85	58	41	-0.7	-0.1	-0.4	1.7	1.0	0.0

Source: iAGS model.

66% debt-to-GDP ratio in 2035, Spain and Belgium 64%. For Greece, we assume that starting from 2020, the country does fiscal expansion until its primary surplus is 3.5%, as defined in the Memorandum.

But it has also some already known drawbacks. First, this kind of rule is asymmetric since countries that comply with the rule are not complied to do fiscal expansion. Moreover, in the long run it implies structural balances converging to 0 as debt and interest burden decrease. And when debt goes below 60%, the MTO is not compatible with a stabilized debt-to-GDP ratio.

As a conclusion, firstly EA countries should not engage in additional fiscal consolidation unless output gaps are closed. Secondly, countries with fiscal room of manoeuver could sustain growth in the EA. It would sustain economic activity, growth and the fall in unemployment rate without putting at risk debt sustainability (60% debt-to-GDP ratio could still be achieved in 2035)

UNEMPLOYMENT AND INEQUALITY

urope is entering an upswing with unemployment rates slowly approaching their pre-crisis levels. The unemployment is down at 7.7% in the European Union and at the current speed of reductions it will take 6 quarters in the European Union and 7.5 quarters in the Euro Zone to reach their 2007Q3 unemployment level.

However, the improvement of the overall employment numbers has not been extended to all countries and all social groups and are not followed by improvements in terms of job quality, income equality and poverty reduction (however, wage moderation caused by nominal adjustment casts doubts over the quality of jobs, see Chapter 1). The high unemployment rates during the crisis might have increased the competition for jobs and worsened the bargaining power of workers while the political interventions by the Troika in some countries have also increased inequality. In this way, the recovery of employment rates might have come at the expense of deteriorating working conditions and labour market inclusion. In addition, production technologies and international trade relations have shifted in a way which disproportionally advantage holders of physical capital and long educations. Overall, inequalities along a number of different dimensions have increased during the crisis.

The advancing upswing provides a long-awaited possibility of resolving the current social imbalances and inequalities—and, at the same time, to prepare Europe for possible economic and political shocks. This requires that we use the upswing wisely—to improve our taxation, strengthen the opportunities of middle-income earners, and improve social security and active labour market programs. In more general terms, economic policies should not just pursue high GDP growth rates but focus on increasing people's well-being in a fair and sustainable way.

To foster an economic policy that focus on high and sustainable well-being we have previously proposed the following goals as the main targets for economic

policy: Full employment and decent jobs (high quality, decent pay and working conditions), fairly distributed material well-being, quality of life and ecological sustainability (cf. the iAGS 2017 report). In this chapter, we use the goals of high employment and high equality as criteria for an assessment of the current social and economic development of the European Union.

In the first sections, we shed light on the co-evolution of the employment and the distribution of wealth and income during and after the recession. We then quantify the trade-off between unemployment and inequality and try to assess whether the goals of high employment and fair distribution have become less compatible during the crisis. We end with a discussion of possible policy measures to increase economic equality and labour market inclusion.

2.1. Goal: Full employment

a) Unemployment, underemployment and NEETs

At an overall level, unemployment rates are declining towards their pre-crisis levels. In the second quarter of 2017, there were 18.9 mio. unemployed persons in the EU resulting in an unemployment rate of 7.7%. In comparison, the unemployment rate in the EU was 7.0% in 2008. Nine countries even have a lower unemployment rate today than in 2008. This includes Germany, UK and Poland. In the other 19 countries the average unemployment rate was 10.8% in the second quarter of 2017 (up from 7.4% in 2008).

With this development in unemployment rates the European Union is finally on the verge of an upturn. However, a closer look at this positive development reveals some areas which are still marked by the recession.

First of all, the unemployment gaps differ greatly across Europe. Most of the recovery in terms of unemployment is taking place in the Eastern and North-Western Europe. The Southern European countries—which were hit most severely by the crisis—are far from having fully recovered. In particular, the unemployment rates were above 11% in Croatia, Italy, Cyprus, Spain and Greece in the second quarter of 2017.

Furthermore, a larger share of the unemployed persons are long-time unemployed today than before the crisis. Long-term unemployment refers to the number of people who are out of work and have been actively seeking employment for at least a year. As much literature points out, firms are more reluctant to hire unemployed persons the longer they have been unemployed as a long

unemployment spell signals low employability. Moreover, it is often harder for workers with longer unemployment spells to get back to work routines as their skills become outdated *etc.* (Clark and Summers (1979) were among the first to make that point).

From a policy perspective, therefore, it is important to keep in mind that the stock of unemployed workers might not be as employable today as it were in 2009. Thus, it might still require some economic stimulus and reintegration measures to induce employers to hire the currently unemployed. As the unemployment gaps at an aggregate level close the fiscal and monetary policies should, therefore, not be tightened too fast.

Some social groups have seen a slower recovery of unemployment rates than others. This is especially true for the groups which were most severely hit by the decline in labour demand following the recession. This includes young workers and workers with low education levels. The unemployment gaps of these groups are still far from their pre-crisis levels. Moreover, while the recession initially hit sectors with male over-representation the hardest (He-recession), the austerity has disproportionately affected female workers (She-Austerity) (see IAGS 2017).

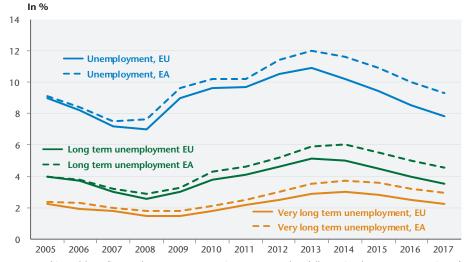


Figure 12. Unemployment rate in the EU and the euro area

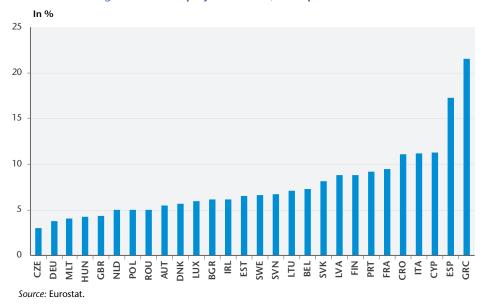
Note: In this and later figures the European countries are grouped as follows: Southern Europe consists of Cyprus, Greece, Italy, Malta, Portugal and Spain; Eastern Europe consists of Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia; North-Western Europe consists of Austria, Belgium, Denmark, Finland, France, Germany, Great Britain, Ireland, Luxembourg, Netherlands and Sweden. Averages across countries are weighted by total labour force.

Source: Eurostat and iAGS calculations.

In % Southern Europe **Eastern Europe** North-Western Europe Source: Eurostat.

Figure 13. Development in unemployment rates





The crisis has hit workers with relatively low education levels harder than workers of high education levels and, at the same time, the demands for low-skilled labour is changing due to globalization and shifts in the production technology. In consequence, the unemployment rates of unskilled workers remain far above the pre-crisis levels across the EU and euro area. The unemployment rate of workers with the lowest educational levels is especially high in some of the countries which suffered most during the crisis. In Lithuania, Greece and Spain one out of four workers with low education levels are unemployed, and in Slovakia this is the case for 32%. of the workers with low educational level. It should be noted that the population share of workers with education levels 1-2 is declining in most countries.

Workers with low education levels are already the workers who earn the least and who are most vulnerable to new negative shocks to the economy. If the long run social impact of the recession is to be minimised it is of great importance that the unemployment rates of low-skilled workers are reduced and upskilling efforts expanded.

For the long run social impact of the crisis to be minimised it is also crucial that the unemployment gaps for young workers are closed. Young workers who are unemployed are repeatedly becoming overtaken by new generations. Workers' labour market opportunities therefore tend to be persistently worse if they are unemployed for a large share of their first years on the labour market, *cf. e.g.* Mroz & Savage (2006).

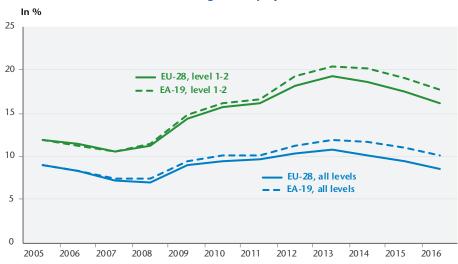


Figure 15. Unemployment rate of workers with the lowest education levels and average unemployment

Source: Eurostat.

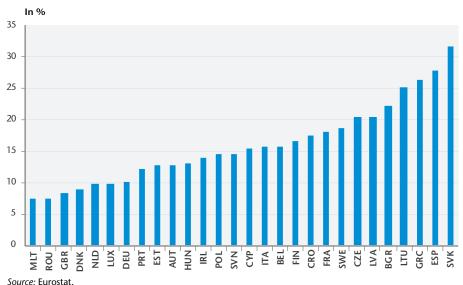


Figure 16. Unemployment rate of workers with the lowest education levels

The youth unemployment rates (age group 15-24) in the EU have fallen since 2013 but at a slow pace. In 2016 the youth unemployment rates of the EU were 18.7% as compared to 15.6% in 2008. In the Euro area the youth unemployment rate is still above 20%.

The poor employment opportunities for young people are mitigated by the possibility of extending education. This is reflected in the participation rates of education and training as many young people have attended an education instead of joining the work force when labour demand declined during the crisis, *cf.* Figure 49. This education effect is not captured by the youth unemployment rate which counts young people studying while searching for a job as unemployed.

The NEET rate captures the fact that many young people can extend schooling instead of joining the unemployment line. The NEET rate is the share of people aged 15-24 who are neither employed nor in education or training. The group of young people who are not attending training and do not have a job should be of particular concern from a policy perspective as these young people are in relatively high risk of having reduced employment opportunities throughout their work life.

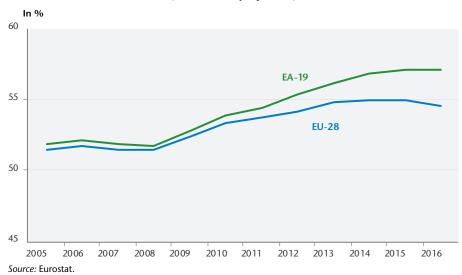
The NEET rate in the EU is 15.6% as compared to 14.2% in 2008. Like the youth unemployment rate, however, the NEET rate has decreased steadily since

2013. In Italy and Greece, more than a quarter of young people are out of job and not attending further schooling. And in Bulgaria, Romania and Croatia, this is the case for one out of five youngsters.

In % - EA-19 EU-28 EA-19, long term EU-28, long term Source: Eurostat.

Figure 17. Youth unemployment rates in EU and euro area

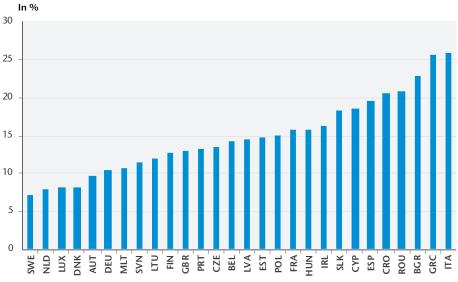




In % EA 19 **EU28** Source: Eurostat.

Figure 19. NEET rate in the EU and the euro area





Source: Eurostat.

The labour market for young workers is to an increasing extent divided between employees with open-ended contracts and employees with temporary contracts. In 2016, 43.5% of young workers were employed on a temporary basis (up from 39.8% in 2005) and this figure does not (yet) show signs of returning to its pre-crisis level. In both 2016 and 2005, about a third of the temporarily employed young workers were undertaking education or training. The increased participation rate in education and training, therefore, explains part of the increase in temporary employment of young workers.

The fact that many young workers are employed on temporary contracts might, further, have contributed to the increase in the youth unemployment rate as dismissing temporary employees is, in general, easier than dismissing employees with open-ended contracts.

Compared to young workers, the share of workers aged 25-64 who are employed on temporary contracts is relatively low (5-15%) and has remained fairly constant since 2005. Temporary contracts therefore seem to be used for the entry on the labour market rather than generalized to the entire workforce.

Figure 22 shows the development of underemployment which is the labour force share of persons who work less than they want—either because they do not have a job and would like to work or because they have a part-time job and would like to work more. The underemployment rate remains high compared to pre-crisis levels. In 2016, more than 20%. of people who are willing to work do not have a job or work less than they would like. In consequence, despite declining over the last three years, underemployment is still a big issue.

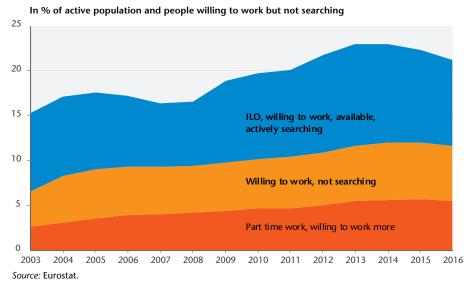
The development in the underemployment rate is not just a result of the 'discouraged worker effect' where more people are willing to work when labour demand is high. Thus, the share of part time employed who are willing to work more has increased steadily since 2003 without an obvious business cycle effect—and is now twice as high as in 2003. Similarly, there is no obvious business cycle effect driving the share of people outside the work force who would like to work.

While many people would like to work more others, of course, would like to work less. Some studies suggest that, at least for older workers, overemployment is more prevalent than underemployment (*cf.* Bell and Blanchflower, 2013; Schwendinger, 2015).

In % 25-49 years (right axis) 15-25 years 50-64 years (right axis) Source: Eurostat.

Figure 21. Temporay employment as a share of total employment in EU28

Figure 22. Underemployment and unemployment in the euro area



b) Gender equality and the European Employment Strategy

Whereas the previous section dealt mostly with the evolution of labour market indicators, this section deals with gender equality and the European Employment Strategy as of 2016.

The European Employment Strategy: a decreasing interest for gender

At the end of 1990, thanks to the coordination of different types of stakeholders, the launch of the European Employment Strategy (EES) gave visibility to gender issues (Hubert, 2001). Equal opportunity was stated as one of the four pillars of the EES. The 2000 Lisbon Council paid specific attention to the contribution of women to European labour markets. The agreement on quantitative targets was reached with the distinction of female and male objectives with a target of 60% for women and 70% overall to be fulfilled by 2010. The strategy involved promoting the contribution of women's employment, through quantitative targets in terms of female employment and in terms of childcare system, but the ultimate goal was to increase the overall employment level. In 2010, these key targets were due, and most countries achieved the assigned objective and quantitative progress had occurred in all European countries. However, despite these trends, gender inequalities in the labor market remains persistent.

Progressively, gender equality measures and gender mainstreaming have declined in the frame of the EES: the reformulation of the strategy in 2003 led to "a greater focus on the 'more' rather than the 'better' jobs stressed in earlier formulations of the Strategy" (Smith and Villa, 2010). Gender perspective was marginalized or ignored in national and EU policy responses to the crisis, and austerity policies implemented in the aftermath of the crisis were gender blind but not gender neutral (Périvier, 2017).

The 2010 revision of the EES reinforced this tendency of gender blindness: in the H2020 Strategy, the targets to be reached is 75% in employment rates (aged 20-64) by 2020 without regards for gender gap. The employment target is no more gendered explicitly, even though women represent the most important reserve force as female employment rate is lower than male's in most European countries.

In 2016, eight out of twenty-eight countries fulfil this objective. Figure 23 gives the respective contributions of men and women to the overall employment rate; the green bar in the figure give the increase in employment rate if the number of employed women reaches the male level.

In countries where the employment rate is above the recommended threshold, some improvement can be done in terms of gender equality in employment as the contribution of women to this rate is lower than that of men (Germany, Austria, the Netherlands, the United-Kingdom, Denmark). At the same time, some countries do not reach the target even though the contribution of men and women to employment rate is equal, as is the case in Portugal. In some countries for which the overall employment rate is far below 75%, the extra contribution of women to the labour market would not be sufficient to fulfil this target (Greece, Croatia, Italy or Spain). For those cases, the increase in employment rate requires increasing female employment rate.

Even for basic quantitative targets, gender inequalities and gender differences in terms of participation in the labour market and employment have to be taken into account.

In % 95 ■ Extra employment rate with gender parity in the number of employed persons 90 ■ Women contribution 85 H2020 Target ■ Men contribution 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 EU 28 HUN LVA FIN CYP POL SVK FRA FRA SVN IRL PRT AUT LTU EST CZE

Figure 23. Contribution of men and women to the total employment rate in Europe (aged 20-64) in 2016

Part-time employment: a key feature of gender inequalities in Europe

Source: Eurostat.

Beyond the quantitative target of employment, the type of jobs held by women is still different than the jobs held by men, in particular regarding the working time. In some countries, the reduction of unemployment goes through an increase for female part-time job. Countries where the level of female participa-

tion in the labour market is high and where female unemployment rate is low, are also those in which female part-time employment rate is the higher. It is the case in the Netherlands, where more than 76% of working women work part-time and female unemployment rate is about 6.5%; Germany, where the female part-time employment rate is 46.5% and the female unemployment rate is 3.8%; the United-Kingdom, with more than 40% of female workers working part-time and with a female unemployment rate of 4.8%. At the opposite, countries with comparable level of female participation in the labour market face higher female unemployment rate and lower part-time rate: in Finland (respectively in Sweden), the female part-time rate is around 20% (35.6%) and the female unemployment rate is 8.7% (6.7%). In France, where the overall level of unemployment in high, part-time rate for women is below 30% and the female unemployment rate is close to 10%.

The strategy of promoting female part-time jobs seems to boost female employment but in the same time, as the gender gap in part-time job is increasing, gender inequalities rise, depending on the length of working time in part-time and the quality of these part-time jobs. The Overall Gender Earnings Gap, a new

Female part-time employment rate in % 90 NLD 80 70 60 50 AUT DEU **SWE** GBR 40 EU-28 ITA DNK 🏅 30 MLT CYP 20 GRC POL **EST** 10 ROU HUN C7F 0 20 25 30 35 40 10 45 50 The gender overall earnings gap, in %

Figure 24. Female part-time rate and Gender Overall Earnings Gap (in %) in 2014 (15-64 years)

The gender overall earnings gap is a synthetic indicator. It measures the impact of the three combined factors, namely: (1) the average hourly earnings, (2) the monthly average of the number of hours paid (before any adjustment for part-time work) and (3) the employment rate, on the average earnings of all women of working age—whether employed or not employed—compared to men.

The size of the bubble give the gender gap in participation rate : the higher is the bubble the higher is the gender gap (male–female)

Source: Eurostat.

synthetic indicator calculated by Eurostat, gives a complete picture of the gender earnings gap. This measures the impact of the three combined factors, namely: (1) the average hourly earnings, (2) the monthly average of the number of hours paid (before any adjustment for part-time work) and (3) the employment rate, on the average earnings of all women of working age—whether employed or not employed—compared to men.

This unbalanced repartition of part-time employment reinforces the persistence of the gender gap in income. Figure 24 indicates that women still face inequalities in terms of overall earnings. The gender gap is higher in countries in which the female part-time employment rate is high. It is the case in Germany, the Netherlands, Austria or the United-Kingdom. In Nordic countries, women's part-time employment rate is high but the gender gap in earnings is also low (Sweden, Finland and Denmark).

Is Gender Equality still a founding value of European Union?

The strategy based on the sole overall employment rate leads some countries to increase part-time job for women and this increases inequalities in terms of economics resources. In order to structurally tackle gender inequalities, one should focus not only on gender gap in employment rate, but on other dimension of employment, by integrating the three major dimensions of economic gender inequalities: female employment rate, working time and hourly wage. Each of these dimensions concentrate the factors of gender inequalities:

- Employment rate reflects the effective possibility for women not only to participate in the labour but to have access to a job. In some countries women's unemployment is higher than men's, even though since the recession that has deeply affected male employment, this gender gap decreased in most countries.
- Working time reflects the level of sexual division of labour and the difficulties to articulate work and family life that is persistently a women's issues.
- Hourly wage reflects the impact of vertical segregation (glass ceiling phenomena), horizontal segregation (sectors in which women are overrepresented are less valued than sectors in which men are over-represented) and the discrimination faced by women at the workplace.

Eurostat calculates the contribution of each of these three factors to the Gender Overall Earning Gap. Figure 25 shows the results, it enlightens the diversity among European countries. In some countries, the gender gap is mainly due to the low level of female employment (Romania, Malta, Poland or Italy). In these

countries, the male breadwinner model persists and prevents women participating in the labour market. The hourly wage component is low due to a selection bias in the profile of women who are employed. In Germany, the Netherlands, Austria, the United-Kingdom, the hour's gap component is high, reflecting the level of female part-time employment. In these countries the strategy of increasing employment through the promotion of low quality job for women implies a high level of gender gap in economic resources. At the opposite, in the Nordic and Eastern countries (Finland, Sweden and Lithuania, Latvia, Estonia) the main component of the Gender Overall Earning Gap is the gender pay, reflecting the consequences of both vertical and horizontal segregation in the labour market. In these countries, the female employment rate is high, as well as the working time of women. The key issue in terms of gender equality is in terms of equal careers and tackling job segregation.

In % **■**Gender hours'gap **■**Gender employment rate gap 100 90 80 70 60 50 40 30 20 10 DNK FRA BGR СУР ΙNΑ ESP CZE LUX SVK PRT BEL IRL

Figure 25. Contribution of each component to the gender overall earning gap in European Countries in 2016

Source: Eurostat, Gender Statistics.

The employment strategies adopted by the member states are not bounded by a European framework anymore. This leads to mitigate results in terms of the reduction of economic inequalities. Gender equality objective requires to integrate different dimensions in European policies. This objective requires a combination of quantitative and qualitative components to insure women's emancipation and gender equality in the European Labour. This demands a strong commitment of European Institutions to put gender back in the core of the European Employment Strategy.

2.2. Goal: Fair distribution

a) Income inequality

It is not easy to characterize what constitutes a fair distribution. However, in all countries, a vast majority of respondents agree that "income differences are too large" (Osberg and Bechert, 2017). Of course, fairness does not end with a reduction of inequality—the relative positions of individuals also count (are social positions deserved). However, this goes beyond the scope of this chapter.

There is a great disparity of income inequality across European countries both before and after taxes and benefits. Anglo-saxon countries (UK, Ireland) have large before-transfers income inequality but their tax and benefit system reduce inequalities more than average (especially in Ireland). Eastern European countries are very diverse: Romania, Bulgaria and Lithuania are the most unequal countries—before transfers inequality is high and their tax benefit system reduce inequalities less than average—while the Czech Republic, Slovakia and Slovenia are among the least unequal countries. Scandinavian countries have low level of inequalities due to low before transfers inequalities (Sweden, Denmark) and a high reduction of inequalities by transfers (especially in Denmark and Finland).

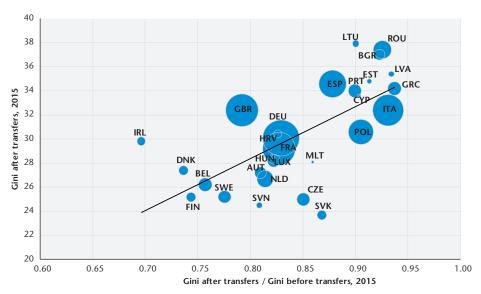


Figure 26. Gini after transfers and reduction of Gini by transfers

Note: The size of the circles indicates the population size. *Source:* Eurostat.

The Gini coefficient of equivalised disposable income has fallen since 2008 in a number of countries indicating that these countries have become more equal. This includes Latvia, Great Britain, Poland and Portugal. In contrast, Sweden, Cyprus, Hungary and Denmark have experienced a growing income inequality since 2008 as measured by the Gini coefficient.

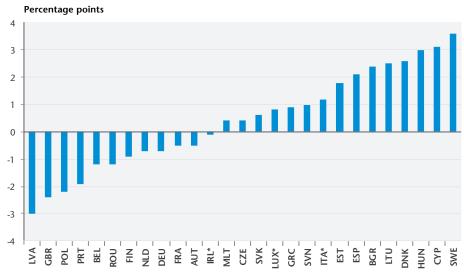


Figure 27. Change in Gini coefficients, 2008-2016

Note: (*) Latest data is from 2015. *Source:* Eurostat.

On average, inequality as measured by the Gini of equivalized disposable income (in purchasing power parity) is much lower in the European Union (around 0,31) than in the United States (around 0,39). However, the picture changes if we take the European Union as a whole, as if it was one nation, because the most equal countries are relatively small, *cf.* Figure 26. As EU-SILC data for Germany is not available for 2015, we calculated a Global Gini in the European Union excluding Germany from 2008 and 2015. It appears that inequality is higher in the European Union, taken as one nation, than in the US1. Figure 28 also shows that, although lower, inequality in the Euro Zone is on the rise.

For results from 2008 to 2014 including Germany, see IAGS 2017. When Germany is included, inequality in the European Union is on par with the United States.

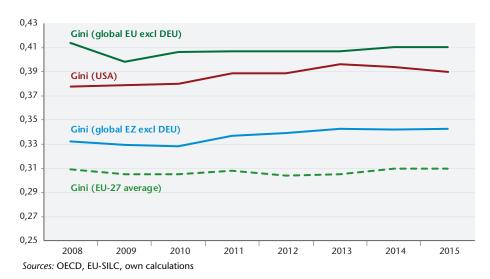


Figure 28. Comparison of Global Gini of equivalized disposable income, EU and Eurozone (excluding Germany) with US Gini

b) Wealth inequality

Wealth inequality is still a pressing issue in the European Union. The second wave of the Household Finance and Consumption Survey (HFCS) shows that private wealth is much more concentrated at the very top of the distribution than is income. These data thus confirm the results from the first HFCS wave described in iAGS 2015.

Figure 29 shows two indicators for net wealth inequality (gross wealth minus liabilities) in selected European countries. The bars in plot a) indicate the share of net wealth that is in the hands of the richest 5% of households. In the selected countries, the top 5% own roughly 38% of total net wealth. Latvia displays the highest concentration of wealth at the top, followed by Germany, Cyprus, and Austria where the 5% wealthiest households own more than 40% of private wealth. Plot b) displays the Gini coefficient as a more general inequality indicator that does not specifically measure concentration. As compared to income inequality, the disparities in the wealth distribution are far higher, reaching almost 0.8 Gini points. Since wealth is much more unequally distributed than income, wealth inequality should not be disregarded in the political discourse.

Figure 29. Indicators for net wealth inequality

a) Top 5% Share



b) Gini coefficient



Source: HFCS 2014.

The high wealth concentration found in the HFCS data is even likely to underestimate actual levels. Both the willingness to participate in voluntary wealth surveys at all, and to answer detailed questions on single wealth components is clearly smaller at the top of the distribution. Thus, very rich individuals and households are not covered in these figures. The inclusion of the missing wealth at the top would clearly exacerbate the inequality measures. Vermeulen (2016) estimated with HFCS 2010 data that the wealth shares of the top 1% increase significantly in Germany (from 24 up to 31%) and Austria (from 23 up to 34%), and to a lesser extent in France (from 18 up to 22%) and Spain (from 15 up to 18%) when adjusting the results for the missing rich. This shortcoming underlines the call for better data on private household wealth at the European level.

The differences in the levels of wealth inequality across the selected European countries also show the importance of the welfare state. An effective and welldeveloped welfare state goes hand in hand with lower levels of private wealth (Fessler/Schürz 2015). For instance, the homeownership rates are much lower in countries with a large public housing sector which explains part of the different wealth levels. In Germany and Austria, the homeownership rates are below 50% and the median household is a renter, in Spain (83%) and Greece (72%) the majority of households own their main residence. Thus, welfare states generate a safety net by providing old-age pensions, public housing, emergency assistance etc., which is much more relevant for less wealthy households than for the affluent. For poorer households, public wealth reduces the necessity for private wealth accumulation while ensuring a decent living standard. Thus, higher levels of wealth inequality do not implicitly indicate lower living standards. Nonetheless, a high concentration of private wealth in the hands of the very rich may lead to economic imbalances, undermine social cohesion, and threaten democratic principles. Reasonable taxation of wealth and its intergenerational transmission, and closing the loopholes for tax evasion by the rich can help reaching two goals: fostering the financial fundament of the welfare state for the general public while reducing the negative social and political side effects of wealth concentration (see section 2.4).

c) Poverty

While the Gini coefficient gives a measure of the variance of the whole income distribution poverty rates focus on the share of the population with income or consumption below a certain threshold level—and are not impacted by income dispersion above the threshold level. Poverty rates include the at-risk-of-poverty rate and by the material deprivation rate.

The at-risk-of-poverty rate measures the share of inhabitants having an equivalised disposable income below 60% of the national median. It is important to distinguish between the anchored and unanchored risk-of-poverty rate. When the cut-off point is a percentage of the national income median of a specific year the development in the risk-of-poverty rate measures the change in living standards for the poorest part of the population. When the cut-off point is not anchored to a specific year, but are instead varying with time, the risk-of-poverty gives a measure of how much income is distributed to the poorest households in each year—without capturing changes in how much income there is. In both cases the cut-off point varies substantially between countries.

The material deprivation rate measures the share of the population who cannot afford three out of seven specific goods deemed by most people to be desirable or indispensable. These goods include the ability to pay unexpected expenses, afford adequate heating, a telephone *etc.* In this way, the material deprivation rate focus on the aspect of income inequality with the greatest potential of generating social problems, namely the experience of material hardship at the bottom of the income distribution.

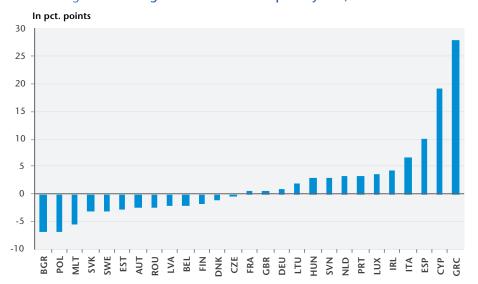
In 2015, the anchored risk of poverty rate fell from 19.4% to 18.6% in the EU, implying that 94.8 mio. people were at risk of poverty in the EU relative to the 2008 median. In the euro area, a fifth of the population were at risk of poverty. Despite the recent development, the share of the population with a real income below 60% of the 2008 median has increased by 2.0 percentage points since 2008. The development is particularly pronounced in the countries which were most severely hit by the recession.

Social transfers in cash such as unemployment benefits reduce the risk of poverty and mitigate the income loss associated with losing one's job. However, since 2006, social transfers in cash have been slightly less effective in reducing the share of the population situated at the bottom of the income distribution, cf. Figure 32. In Ireland, Finland, Denmark and the Netherlands social transfers have the highest impact on the poverty rate. Further, aggregate numbers indicate that the compensation of unemployed has decreased. In particular, evidence from the OECD suggests that the benefits of long term unemployed have been cut, cf. Box 1.

In % **EA-19** EU-27 Source: Eurostat.

Figure 30. Anchored risk of poverty rate





Source: Eurostat.

EU27 EA19

Figure 32. Impact of social transfers in cash on the unanchored risk of poverty

Note: In these calculations pensions and transfers in-kind are excluded from social transfers. *Sources*: Eurostat and iAGS calculations.

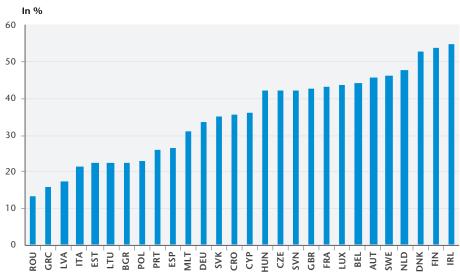


Figure 33. Impact of social transfers on the unanchored risk of poverty

Note: In these calculations pensions and transfers in-kind are excluded from social transfers. *Sources*: Eurostat and iAGS calculations.

Box 1. The development of unemployment benefits

OECD's computed compensation rate of unemployed persons and Eurostat's expenditures on unemployment-related social protection per unemployed both suggest that unemployed persons have experienced lower benefits rates across Europe. Thus, both indicators rose at the start of the recession but has decreased since 2009.

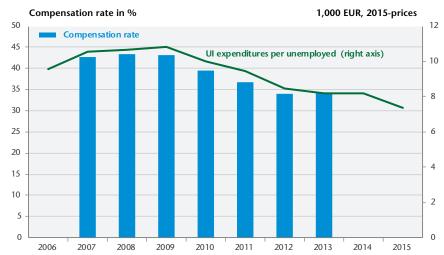


Figure 34. Average unemployment benefits in the EU

Note: The compensation rate is an average of the compensation rates of Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain and Sweden. The average is weighted by total unemployment.

Sources: OECD and Eurostat.

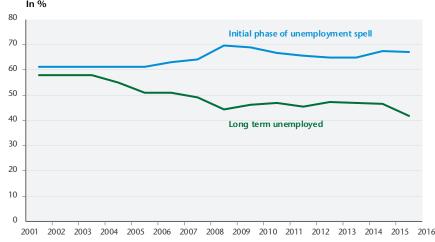
In all European countries does the compensation rates vary between recipients depending on their personal characteristics such as eligibility for unemployment insurance (UI), previous wage, household characteristics and the duration of their unemployment spell. The two indicators above handle this dependency in two different ways. Eurostat's UI per unemployed person gives a simple average across all groups, whereas OECD's indicator is the product of the population-level coverage rate and the compensation rate for a specific recipient type earning 67% of the average wage rate.

The development in both indicators reflect changing policies as well as changing characteristics of the unemployed persons. In particular, the level of unemployment benefits decreases during the unemployment spell in most countries. And in some countries part of the unemployment benefits is granted as a one-time payment at the start of the unemployment spell. Therefore, the

declining benefit rates can partially be explained by the increase in the share of long-term unemployed and by a decrease in the inflow to unemployment.

However, OECD's computed replacement rates indicate that there has been a shift towards granting a higher share of the unemployment benefits at the start of the unemployment spell.

Figure 35. Replacement rate at two phases of unemployment (EU median)



Note: The country cohort changes over time. In particular, some countries with low replacement rates for long term unemployed are missing in the first years of the panel. The overall conclusion of falling replacement rates for long-term unemployed remains if these countries are omitted from the panel or missing observations are set equal to the earliest available. *Source:* OECD.

Contrary to the risk-of-poverty rate, the material deprivation rate can not only be reduced by transfers in cash, but also by public supply of certain goods or services for free or at a reduced price. In this way, the material deprivation rate is better at measuring the impact of political efforts to pursue "specific egalitarianism", which is equal access to specific goods like healthcare and housing (cf. Tobin 1970).

The material deprivation rate has increased during the crisis for Southern-European countries and has remained constant since 2012. In the Eastern Europe a steep fall in the material deprivation rate was interrupted during the crisis years of 2008-2013.

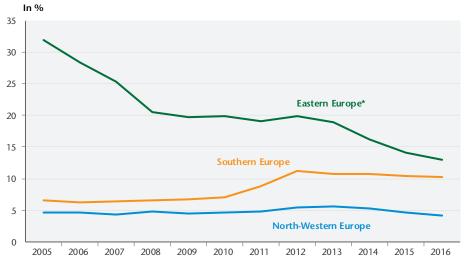


Figure 36. Material deprivation rate

d) The returns to labour

As we saw above, wealth is very concentrated with a large share of households relying heavily on their labour income. The reliance on labour income is particularly pronounced at the bottom of the income distribution. Consequently, the income inequality will, generally, rise if a falling share of income accrues to labour.

Before the crisis, the average annual real wage increased by 1% per year. The real wage increased at a faster pace in Eastern European countries due to catching-up—whereas Southern European countries have seen lower-than-average wage increases. The real wage rates across Europe stagnated in the years of 2008-2013, where the unemployment rate increased, but have increased at pre-crisis growth rates since the unemployment peaked in 2013. The average real wage rate is lowest in Eastern European countries but due to the relatively high growth rates the gap to the other European countries is narrowing.

^{*} Missing observations for Bulgaria (2005) and Romania (2005-2006) are set equal to the earliest available. *Sources:* Eurostat and iAGS calculations.

In % 2,0 1,5 1,0 0,5 0,0 -0,5 -1,0 -1.5 -2.0 -2,5 -3,0 IRL DNK LTU FRA DEU NED LUX ΝN

Figure 37. Average annual growth of the real wage rate, 2008-2016

Source: OECD and iAGS calculations.

Table 9. Average annual growth of the real wage

% p. a.

	2000-2008	2008-2013	2013-2016
Eastern Europe	0.3	0.2	3.0
Southern Europe	0.6	-0.5	0.5
North-Wester Europe	1.0	0.6	1.1
Total	1.0	0.4	1.1

Note: OECD does not report wage rates for Bulgaria, Croatia, Cyprus, Malta and Romania. The averages across countries are weighted by total employment.

Source: OECD and iAGS calculations.

The growth path of real wages is to a large extent determined by the change in productivity. And as we showed in chapter 1 productivity has not caught up with its pre-crisis growth path. Furthermore, the labour share of income has, in general, been slowly declining. In the Southern Europe, the labour share of income was constant before the recession but declined in 2009-2013. In the North-Western Europe, the labour share increased in 2008-2009 (probably due to labour hoarding and a sharp drop in corporate profits) and has declined a bit since. The labour share in the Eastern Europe has declined since 1995.

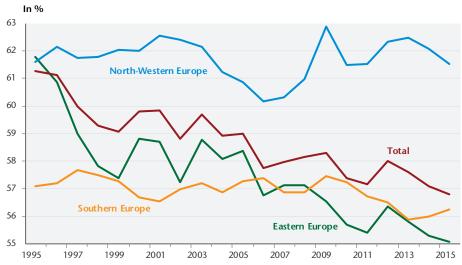


Figure 38. The labour share of income

Note: The labour share is calculated as in Gollin (2002) based on the asumption that self-employed persons have the same labour share as employees. The averages across countries are weighted by total factor income. There are missing observations for Bulgaria (1995-1998), Croatia (1995-1996) and Ireland (1995-1998). *Sources:* United Nations and iAGS calculations.

The mainstream literature primarily explains the level and development of the labour share of income by the production technology and by patterns of international trade. Moreover, the Post-Keynesian literature emphasizes the relevance of the bargaining power of labour and union density. Empirical evidence suggests that the labour share is, indeed, affected by the degree of wage competition between workers and by the degree of globalization, cf. table 10 which reports estimates from a regression analysis on a panel of 24 European countries.

According to this simple analysis the degree of centralized bargaining is statistically significant in explaining the development and cross-country differences in the labour share. The degree of centralized bargaining has declined in most countries (cf. e.g. OECD 2017) and according to the regression results this has contributed to the general decrease in the labour share. The results should be interpreted with caution as we cannot reject that the labour share is driven by random shocks rather than by the variables of the regression model.

While a higher coverage rate of collective agreements leads to higher labour share, the evidence is mixed regarding its effect on unemployment (cf. e.g. Jaumotte and Osorio Buitron 2015). The ambiguity of the literature might derive from the fact that the specific content of the agreements affects whether

agreements with high coverage lead to higher or lower unemployment. To not affect unemployment adversely it is important that unions internalise the effects of collective agreements on unemployed persons and vulnerable worker groups (young workers etc.).

According to the regression, globalization has also contributed to the decline in labour shares—possibly because globalization has lowered the demand for some forms of labour (primarily with low education levels, *cf.* above) and increased the international wage and price competition. Thus, globalization has increased the need for political actions to secure strong social safety nets and fair international competition.

Table 10. Effects on the labour share of centralised bargaining, globalization and controls

	Coefficient	Std. Dev.	P-value
Degree of centralised barganing	0.105**	0.043	0.015
Degree of globalisation	-0.100***	0.033	0.003
Linear trend	-0.002	0.001	0.211
Constant	0.593***	0.046	0.000
Number of countries: 24	R ² within: 0.12, R ² between: 0.06		
Number of periods: 20	Hadri test statistic (joint unit root test): 17.8 [0.000]		

Note: (**) Significant at 5% level. (***) Significant at 1% level. The regression model includes a common trend and country-specific fixed effects to control for technology and trade patterns. The labour share, the degree of centralised bargaining and the degree of globalisation are all in logit form. The Hadri test tests the null hypothesis that all the labour shares in the panel are stationary processes.

Source: Labour shares are taken from The Penn World Table. The degree of centralised bargaining are from J. Visser, ICTWSS Database, Version 5.1. Amsterdam: Amsterdam Institute for Advanced Labour Studies (AIAS), University of Amsterdam. The degree of globalisation is taken from Dreher (2006).

The labour share of income and the average wage rate both focus on the mean of the wage distribution. However, a growing literature points to increasing wage dispersion as an important explanation for the increasing income inequality (cf. e.g. Francese and Mulas-Granados 2015). The inequality of employed persons can be measured using the unanchored risk-of-poverty rate of employed persons which attempt to measure the population share of working poor.

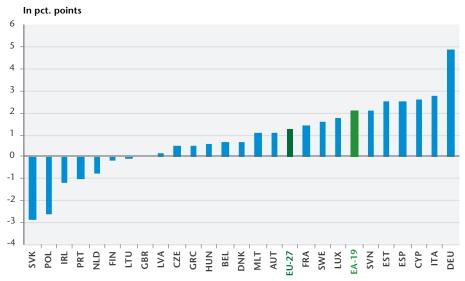
In 2015, 9.5% of employed individuals in the European Union were at risk of poverty (up from 8.2% in 2005). The increasing share of workers at risk of poverty is strongest for part-time workers but is seen for full-time workers as well. The in-work-risk-of-poverty-rate does not show a correlation with the severity of the recession across countries because it captures the extent to

which wages have been cut during the downturn rather than the increase in unemployment. In consequence, Germany has seen the largest increase in the in-work at-risk-of-poverty-rate which has also increased in *e.g.* Luxembourg, Sweden and France.

In % Part time **All workers Full-time** Source: Eurostat.

Figure 39. Unanchored risk of poverty rate for employed persons in EU27





Source: Eurostat.

The numbers above indicate that an increasing share of workers can be characterized as working poor. However, the numbers should be interpreted with caution as there are some problems with the current statistical definition of the working poor, *cf.* Box 2.

Box 2. Measuring the number of working poor

The in-work at-risk of-poverty was added to the European portfolio of social indicators in 2003 as a measure of the number of working poor. This adoption acknowledges the fact that while having a job reduces the risk of poverty it might not be enough. However, there at least two problematical aspects to this statistical concept due to the difficult articulation between the definition of who is in work and who is poor (Ponthieux, 2010): (1) poverty is calculated using disposable income during a reference period of one year, one must therefore define "in-work" using the same reference period whereas activity status is usually defined at a point in time; (2) work is usually defined at the individual level whereas poverty is calculated at the household level (an individual is considered poor is the equivalent disposable income of his/her household is below 60% of the median equivalent disposable income).

The European approach of in-work poverty takes a restrictive view of who is in work. For Eurostat, in-work is defined as being employed at least 7 months in the reference period and at the time of interview. In the US, the Bureau of Labor Statistics (BLS) defines the working population as the poor who are active more than half of the reference period (in a European perspective, we would call them "active poor"). In France, INSEE uses an intermediate definition: to be in-work poor, one has to be active for at least half the reference period and employed at least one month. Ponthieux (2004) shows that the definition of who is "in-work" affects both the importance of in-work poverty risk and its analysis: with a more selective employment criterium, the household situation of workers becomes the prominent factor of poverty risk (how many children? Is the spouse working?).

The in-work poor category is quite difficult to interpret because it is constructed using employment characteristics, which are individual by nature, and a measure of income at the household level. In a gendered perspective, this is especially problematic. In the EU, 21% of women are low-wage against 13.3% of men but risk of in-work poverty for employed women (8.7%) is less than for employed men (10.2%) because their spouse's income enables low-wage women to escape poverty. In a typical male-breadwinner household, the man might be at risk of in-work poverty while his spouse, who is not in-work will not be. In fact, despite its appellation, in-work poverty is often due to a lack of work at the household level.

In-work poverty is therefore a hard to interpret statistic. It could also be manipulated: if governments wanted to minimize in-work poverty instead of general poverty, they could implement generous in-work benefits (of tax

credit) instead of—for example—generous unemployment benefits. Figure 41 suggests that there is not much manipulation: in work poverty is very well correlated with inequality at the bottom of the distribution. The more unequal countries (Romania, Spain, Greece, Italy) are also the ones where the in-work poverty is highest. However, this strong correlation also suggests that the D6/D1 ratio might be the best available measure of inequality at the bottom of the wage distribution, given the problems with the in-work at-risk-of-poverty-rate.

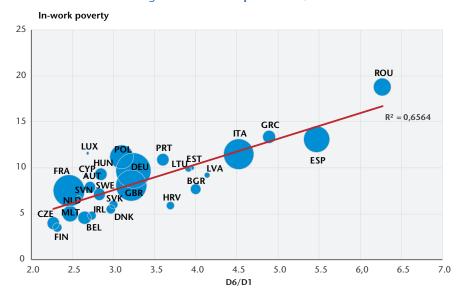


Figure 41. In-work poor vs D6/D1

Note: The size of the circles are function of population. *Source:* Eurostat.

2.3. Analysis of the relationship between unemployment and inequality

As documented, unemployment has started to drop in the European Union and the Euro Zone since a peak in the second quarter of 2013. As the unemployed are most often at the bottom of the distribution of living standards, this decline in unemployment is expected to reduce inequalities. Yet, this decline does not translate into a parallel decline in the indicators of income inequality. Between 2013 and 2015, the Gini of standard of living² (after transfers) or equivalent income before transfers are stable in the European Union and the Euro Zone. If we look at the entire period, we can conclude that there is a relative stability in living standards inequality (Figure 42) in the European Union (+0,2) and an increase in the Euro Zone (+1,4) due to increases both before and during the crisis³. The rise in inequality of living standards in the Euro Zone is entirely due to the increase in inequalities before transfers (+1,6): it is not therefore the tax and benefit system that has become less redistributive. Above we showed that the tax and benefit system has become less effective in reducing poverty—but when inequality is measured by the Gini coefficient there is no indication that the tax and benefit system has become less redistributive since 2005.

The Gini coefficient is an overall measure of the income dispersion affected both by dispersion among high and low incomes. To see which part of the income distribution the increase in overall inequality comes from we can compare standard of living deciles. In particular, we can compare the shares of standard of living received by the individuals belonging to the tenth decile (D10 which is the 10% of households with the highest standard of living) and the first decile (D1 which is the 10% of households with the lowest standard of living) with the sixth decile (D6). Figure 43 shows that in the European Union and in the Euro Zone, it is primarily inequalities at the bottom of the living standard distribution (represented by the ratio D6/D1) that progress while inequalities at the top (D10/D6) are relatively stable over the period studied. About half of the rise in inequality at the bottom of the standard of living distribution occurs in the period of sharp rise in unemployment (2008-2013). The other half occurs during periods of declining unemployment (2005-2008, 2013-2015).

^{2.} The standard of living is equal to the disposable income of the household divided by the number of consumption units (cu). CUs are calculated using the so-called modified OECD equivalence scale, which assigns 1 cu to the first adult in the household, 0.5 cu to other people aged 14 or over and 0.3 cu to children under 14. years. They thus take into account the possibility of economies of scale as well as the lower needs of children under 14 years of age.

^{3.} EU-SILC data are only available since 2005

Figure 42. Gini of living standards (ppp) before and after transfers, 2005-2015

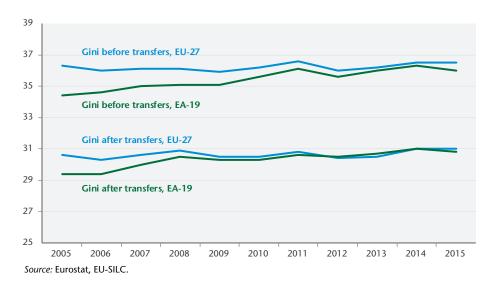


Figure 43. Evolution of inequalities in the bottom and the top of the living standard (ppp) distribution, 2005-2015

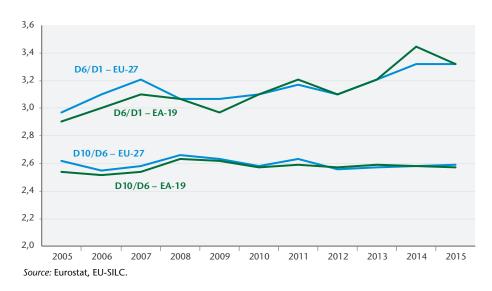
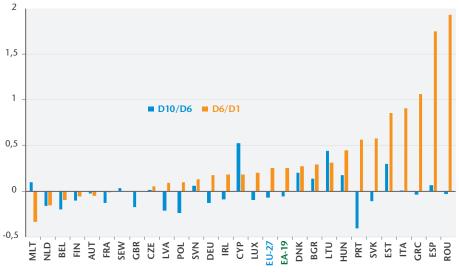


Figure 44 shows the evolution of inequalities at the bottom (D6/D1) and at the top of the income scale (D10/D6) from 2008 to 2015 in the different countries of the European Union. At the bottom of the distribution, there is a strong heterogeneity across countries, with strong increases in Romania, Spain, Greece and Italy and slight decreases in the Netherlands, Belgium and Finland. Heterogeneity is much lower for evolutions at the top of the distribution of living standards.

Figure 44. Evolution of inequalities in the bottom and the top of the living standard distribution in the different countries of the European Union, 2008-2015

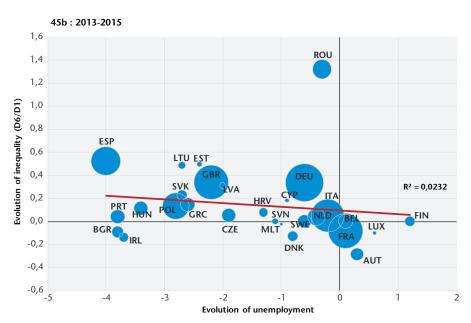


Source: Eurostat, EU-SILC.

Is there a link between rising inequality at the bottom of the income distribution and rising unemployment? Figure 45a shows that in the period 2008-2013, during which unemployment and inequalities increase on average in the European Union, there is indeed a strong correlation across European countries between the evolution of unemployment and the evolution of the D6/D1 ratio. The countries where the rise in unemployment was highest during the period (Greece, Spain, Portugal and Italy) also saw inequalities rise at the bottom of the income distribution. Conversely, unemployment and inequality declined slightly in Germany. This correlation disappears during the 2013-2015 period (Figure 45b), during which unemployment falls on average but inequalities increase: in many countries (Spain, Portugal, Greece, but also Hungary, the United Kingdom and Poland), inequalities at the bottom half of the distribution have increased despite an unemployment decline. There is also a sharp rise in inequality in Romania despite the slight decline in unemployment.

45a: 2008-2013 1,4 1,2 $R^2 = 0.3705$ 1,0 GRC ITA Evolution of inequality (D6/D1) 0,8 ROU PRT 0,6 0,4 BGR 0,2 SVN CYP 0,0 LTU -0,2 -0,4 -0,6 0 10 15 20 25 **Evolution of unemployment**

Figure 45. Evolution of D6/D1 vs evolution of unemployment



Note: The size of the circles are function of population.

Source: Eurostat.

One hypothesis is that the fall in unemployment concerns initially the relatively more highly qualified unemployed, which would have an effect on D6 at the same time as on D1. In fact, the share of standard of living received by D6 is stable on average between 2013 and 2015 whereas one would expect an increase according to this hypothesis. In countries where inequalities at the bottom increase (Spain, Greece, the United Kingdome, Romania), it is the share of income received by D1 that decreases. This is in accordance with the observation above that unemployment has risen much more for workers with low educations than for workers at high education levels.

A second hypothesis involves social transfers and therefore the role of the austerity policies that led some countries to reduce social transfers: the stability of D1 despite the fall in unemployment would be due to a corollary decline in social transfers to the poorest households. To test this hypothesis, one can look at how social transfers reduce poverty by comparing the poverty rate before and after transfers: does the reduction of poverty through transfers change between 2013 and 2015? During this period, there was a sharp decline in the reduction of poverty by transfers in Ireland (-3.6 points), Hungary (-2.8 points) and Romania (-2.5 points), which could help explain the poor performance in terms of the evolution of inequalities at the bottom in Romania and the disappointing performances of Hungary and Ireland. However, this factor does not explain the evolution of inequalities at the bottom in Spain, where the decrease in poverty reduction of social transfers is low (-0.2) in Portugal (+0.2), Greece (-0.2), Poland (-0.2) or the United Kingdom (-0.4).

We run a regression analysis explaining D6/D1 by unemployment between 2003 and 2015. The regression model also includes country fixed effects. Other explanatory variables were tested. Some of them are significant when they are alone but lose their significance when unemployment is added as a dependant variable (social protection spending as a % of GDP, the share of temporary workers, minimum wage as a % of mean salary, the share of part-time workers willing to work longer).

Table 11. Effect of unemployment on D6/D1

	Coefficient	Std. Error	t	P>ltl	
Unemployment rate Country fixed effects	0.03	0.00	5.37	0.00	
Constant	2.55	0.10	23.38	0.00	
			Number of obs 226		

Number of obs 336

R² 0.7789

According to the regression, the rise in unemployment would explain entirely the rise in D6/D1 inequality during the 2008-2013 period. However, it only explains 35% of the increase in inequality between 2008 and 2015. This is due to the fact that in many countries, the decrease in unemployment between 2013 and 2015 has not been accompanied by a decrease in inequality.

Box 3. A trade-off between unemployment and inequality in the labour market?

Do policymakers face a trade-off between unemployment and inequality? While the question was first raised in the early 1990s, it is still debated today (Dumont, 2013; Bicakova, 2014), for example in the case of the German labour market reforms (Chusseau and Helier, 2016). According to Krugman (1994), the increase in inequality in the United States and that of unemployment in continental Europe in the 1980s are both due to the decline in the demand for unskilled labor and to the rise in the demand for skilled labor, consequences of globalization and automation. The response to this change in demand has been different on both sides of the Atlantic due to different institutions in the labor market, with a more rigid labor market in continental Europe (due to high minimum wages, centralized collective bargaining, stricter employment legislation). According to this hypothesis, in the unemployment-inequality tradeoff, Europe has chosen unemployment while the United States has chosen inequality. There is no consensus on Krugman's hypothesis among labor economists not least because of historical counter-examples: in the United-Kingdom in the 1980s, high unemployment persisted despite the increase in wage inequality; on the contrary, in Germany, unemployment remained low in the 1980s despite the fact that wage inequality did not increase (Storer and Van Audenrode, 1998). In a literature review on the trade-off between unemployment and inequality, Blank (1995) concludes that there is not enough empirical evidence to support Krugman's hypothesis. A more recent review concludes that, if there is a tradeoff, it is country-specific (Dumont, 2013).

If Krugman's hypothesis was based on the difference between continental Europe and the United States in the 1980s, it remains relevant today: with the Hartz laws, Germany is said to have chosen to reduce unemployment at the cost of a rise in inequality. However, at the European level in 2014, there does not seem to be a correlation between the proportion of low wages and the level of unemployment (Figure 46). Regarding the unemployment rate, it is difficult to separate what is structural and what is cyclical. If we exclude the countries most affected by the economic crisis (Greece, Spain, Portugal), several models seem to co-exist. The United Kingdom and Germany have low unemployment rates and a high proportion of low wages, despite the recent introduction of a minimum wage in Germany (Chagny and Le Bayon, 2014) and its sharp increase in the United Kingdom. Conversely, France and Italy have a relatively high unemployment rate and a low proportion of low wages.

However, there also seems to be a Scandinavian model (Denmark, Sweden, Finland) which has a low proportion of low wages and a moderate unemployment rate. Belgium is also part of this group. On the contrary, some of the Eastern European countries (Bulgaria, Slovakia, Lithuania, Latvia) have both a high share of low wages and high unemployment rates.

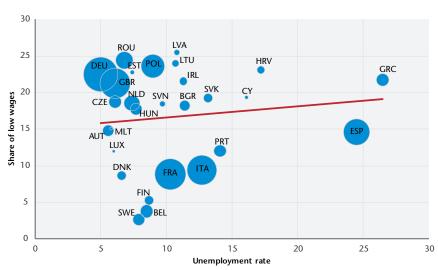


Figure 46. Share of low wages and unemployment rates, 2014

Note: The size of the circles indicates population size. *Source:* Eurostat.

2.4. A strategy to reduce inequalities

In the iAGS 2017 report we proposed a set of goals which economic policies should have as its main targets, including a fair distribution of income and wealth and low unemployment. A strategy to reduce within-country inequalities will clearly need to be tailored to the needs of different EU countries, which start from very different points and have different tools at their disposals. Nevertheless, some general recommendations and ideas can be put forward. ⁴

^{4.} The following draws in part on a more detailed set of proposals drawn up for Germany by the IMK (Horn et al. 2017). The focus here is on policies considered to be most relevant for EU countries more generally and incorporates some other elements based on best-practice cases from individual EU countries.

We focus here mainly on income inequality, but inequality has many dimensions that are inter-linked, with wealth inequality especially important. A strategy to reduce (income) inequality should focus not on just one, but on different points in the (income) distribution. One way of summarizing this is to say that policies need to do three things:

- Tie in the strong so that they shoulder a fairer share of the efforts needed to promote social cohesion.
- Strengthen the middle to reduce feelings of insecurity.
- Reduce poverty at the bottom as poverty is arguably the most concerning aspect of inequality.

a) Tie in the strong

Tying in the strong to ensure that they shoulder an appropriate burden of social welfare and public goods provision can be done in a number of ways, mostly involving reform of taxation and other contribution systems. This reduces the net incomes (and the capacity for wealth accumulation) of the wealthy and generates resources for transfers and public goods and services most of which disproportionately benefit lower income groups.

The increasing mobility of profit, capital and skilled labour has led to increasing tax competition in these areas. In consequence, there have been successive tax reductions in all European countries in tax rates on *e.g.* profits and dividends, *cf.* Figure 47 and 48. While the total amount of tax income from such sources may not have declined at a similar pace (*cf.* Devereux & Loretz 2012) the European countries have competed tax rates down to a level which is generally seen as neither fair nor efficient. As the reactions on the Luxemburg leaks *etc.* have shown tax competition also leads to a distribution of tax revenues between countries which is widely regarded as unfair. Combatting tax competition within the EU, therefore, remains a core issue in securing the continued social cohesion of European countries. This can be done through coordination of the tax rates or through a compensation scheme between countries.

Increase the top rate of income tax

In many EU countries top rates of income tax have been reduced substantially in recent decades (e.g. in Germany from 56% in 1975 to 44.3%). The most obvious and direct measure would be to offset at least some of the past reductions. To some extent tax-rate cuts have been justified with the real or supposed need to avoid mobile factors of production (capital, highly skilled workers) leaving the country, for tax purposes or even physically, weakening the tax base. A coordinated increase would alleviate this concern.

In %

Figure 47. Mean effective corporate tax rate in EU28 (with p20-p80 range)

Sources: Spengel et al. (2016) and iAGS calculations.

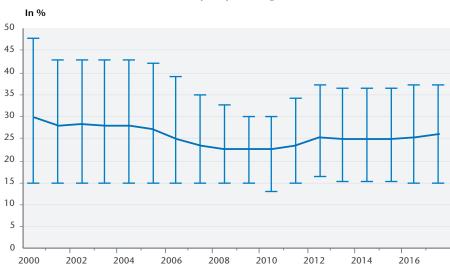


Figure 48. Mean personal dividend tax rate in European OECD countries (with p20-p80 range)

Sources: OECD and iAGS calculations.

Reversing the trend of falling capital income taxation

Since 2008, two thirds of EU countries have reduced taxation of capital as measured by the implicit tax rate on capital, defined as the ratio between taxes on capital and the aggregate of capital and savings income (European Commission, 2017). This is especially true in the UK and Ireland where implicit tax rates on capital have been reduced by 8 percentage between 2008 and 2015. This might trigger a race to the bottom: France just voted a large decrease of both wealth taxation and corporate taxation.

More effective taxation of companies

International tax competition is perhaps most pronounced regarding profit (corporation) taxes. There are huge incentives for companies via transfer pricing and other, more complex, strategies to ensure that profits are declared in low-corporation-tax jurisdictions. This in turn creates incentives for governments to cut corporation tax rates, which has been a pronounced international trend. It is true that capital owners are able to shift part of any increase in the tax burden on to either the company workers or to consumers, especially in open economies with capital mobility. The literature points to widely differing estimates of the quantitative importance of this effect. Gravelle und Hungerford (2012) conclude that corporate taxation still rests mainly on the owners of capital. Corporate taxation remains legitimate in a world where unrealized capital gains are not taxed.

International organizations such as the OECD (with its Base Erosion and Profit Shifting (BEPS) Program) and the EU (with its proposals for a Common Consolidated Corporate Tax Base) have made steps to address the issue of profit shifting. The CCCTB would severely limit transfer pricing within the EU by applying tax where turnover/employment is actually concentrated; it should be implemented without as far as possible incorporating the various deductions that business interests are seeking to have recognized. In addition, an agreed minimum rate of corporation tax should be agreed to put a floor in the race to the bottom.

Prevent tax evasion

The recent release of the so-called Paradise Papers is the latest indication of the massive resources of wealthy individuals and companies that evade—in most cases legally—taxation in the place where they are generated with resort to opaque instruments based in tax havens both outside and within the EU. Within Europe information exchange between fiscal authorities and common reporting

standards need to be imposed; free-riding by jurisdictions with special status, as in the Isle of Man, must be stopped. Similarly, with regard to overseas tax havens a coordinated attempt within the OECD and other frameworks needs to be made to monitor and restrict their parasitic activities.

Wealth and inheritance taxation

Some countries (including Sweden and Austria) have abandoned attempts to tax holdings of wealth or the passing on of wealth from one generation to another. As elsewhere, tax competition but also administrative difficulties (relating for instance to the valuation of capital assets) have been cited as reasons to reduce wealth and inheritance tax rates or abolish them altogether; in the case of inheritance taxes the supposed endangering of companies bequeathed to the next generation of owners has also been flagged by the opponents of the inheritance tax.

Yet the work of Piketty, Zucman and others (see for example, Piketty and Zucman, 2014) has underlined the increasing importance of wealth ownership in explaining rising inequalities in a context when wealth accumulation is substantial (war thankfully being a distant memory in most of Europe), wealth is substantially more unevenly distributed than income, and the rate of return on capital is high relative to the growth rate of the economy and thus incomes (Piketty, 2014). Rapidly rising prices of, in particular, housing in many areas has huge and arbitrary (inter-generational) distributional consequences. In fact inheritance tax is barely affected by issues of international tax competitions. Appropriate tax exemption thresholds reduce administrative costs and can reduce popular concern about "losing" wealth built up in a family.

For all these reasons, ways can and should be found to impose a reasonable annual tax on wealth holdings and a much more substantial tax rate on inheritances—to be seen not as a 'death tax' but one on unearned income—above suitable thresholds. Appropriate ways to avoid threatening bankruptcy on company succession are available (staged payment, transfer of equity shares to public authorities), although this is one area where financial markets ought to be able to devise appropriate solutions.

b) Strengthen middle-income households

To foster good and equal opportunities for the majority of people policies have to lift the middle class and promote a high level of social security and mobility to (and from) the upper income deciles. There is no single way of doing this. But central efforts include actions to counter the erosion of collective

bargaining and secure good public education, childcare *etc.* as well as equal job opportunities for men and women. Importantly, these policies do not necessarily involve a trade-off between employment and inequality as the example of Scandinavian countries show.

Reverse the erosion of collective bargaining

Middle-income households tend to be almost entirely reliant on earned (wage) income of one or more of its members and to some extent also on transfer incomes the bulk of which are entitlements derived from past waged employment. Limiting the dispersion of (pre-tax and transfer) wage and salary incomes is therefore an important element in reducing (post-tax) income disparities. Research by the IMF (Jaumotte und Osorio-Buitron, 2015), among others, has shown in panel analyses a clear negative correlation across countries and time between market wage inequality and trade union organizational density (the share of workers organized in unions). As we discussed above there is also evidence of a positive relationship between workers' share in the production value and the coverage of collective bargaining agreements.

Both union density and collective bargaining coverage have been steadily weakened in most, but not all, EU countries (Watt 2017, pp. 134). This has partly reflected secular trends such as the decline of manufacturing industry. But also active attempts have been made to reduce the reach of collective agreements by national governments, and, particularly since the economic and financial crisis by EU-coordinated and imposed initiatives within the context of bail-out programs (Müller and Schulten 2014). Rather, governments and the EU should promote a strengthening of coordinated forms of wage bargaining and setting; clearly these forms will need to take account of historically developed institutional configurations.

In some countries greater use could be made of legal extensions to agreements reached at sectoral level, for instance; in others appropriate increases in the statutory minimum wage will be more salient. Coordinated systems tend to produce greater wage equality and are associated with at least as good if not better macroeconomic performance than decentralized systems (for reviews of an extensive literature and empirical evidence see Watt 2017, pp. 159).

Public goods and social transfers

As we have shown above social transfers have a marked, positive effect on equality. Further, equality of access to high-quality public goods and services at low or reduced cost are an important way to promote social cohesion. This is

particularly true of those services that, if left to the market, would tend to disproportionately damage, even inter-generationally, the already disadvantaged: the most obvious example of this is surely access to education, particularly early-age schooling. But it applies to all services where reliance is independent of income or higher for the lower and middle income strata. Support for basic research—which generates higher living standards long-term for all citizens—would be an example of the former, public transport of the latter.

There may be some public goods—for instance in the cultural field, and, it is sometimes argued, also higher education—that benefit the better-off to a greater extent. Here determining the balance in terms of the impact on overall inequality, given the fact that they also pay more into the public coffers—given a progressive income tax—is more difficult.

Public provision of welfare services does not only secure equal access but is often efficient as well. For example, public provision of education eliminates undereducation due to financial frictions. And by targeting public services at groups who are needy on average, public provision can be more efficient than social transfers (Akerlof 1978). Moreover, public provision is often more cost effective than private provision in fields where we want everybody to have access anyway (healthcare, childcare etc.). This requires that public sectors are continuously aware of improving their productivity.

Support children and families

Raising children is often a risk factor for relative poverty due both to the expense of child-raising and child-care and the restrictions it imposes on parents' earning capacity. Generous child allowance schemes and public support for high quality pre-school child-care are appropriate counter-measures which can also decrease underemployment among female workers.

c) Reduce poverty

The European economies are—to varying degrees—on the verge of an upturn. This is a golden opportunity for investing in social inclusion and improved employment opportunities for people on the edge of the labour market. Doing so is necessary to reduce the long run social and personal impact of the recession.

The European Commission has set forth the framework of a 'European Pillar of Social Rights'. While this framework is promising, if it is to have a real impact, it must be backed by ambitious funding, enforceable rights, and a new direction of economic policy with a stronger focus on preventing poverty and social

exclusion. For example, as the unemployment rates of young people and workers with low education levels remain high it is important to increase investments in the EU Youth Employment Initiative and in efforts to upskill and reintegrate the unemployed.

Upskill persons with low education levels

As shown above the unemployment rates of workers with low education levels are markedly higher than unemployment rates of workers with high education levels. This gap expanded during the crisis, but it existed before the crisis as well. Research confirms that upskilling e.g. young persons with low education levels is a way to improve their employment opportunities as well as their earnings (ECLM 2017, McIntosh 2004). Enhanced efforts to upskill workers and unemployed with low education levels should, therefore, be a cornerstone of European labour market policies.

Minimum wages

Whether they are set via collective agreement or statutorily, minimum wages, can serve, within limits, to compress the lower part of the wage distribution, reducing both relative and absolute poverty. International experience shows that introducing minimum wages at (or raising them to) reasonable levels leads to concomitant shifts in the structure of relative goods/services prices and demand, without affecting unemployment or employment levels at the macro level (Schmitt, 2013).

Minimum income schemes

Social assistance transfers need to be set at a level that enables households unable to support themselves a secure and decent living standard. Incentive issues are better realized by sensible work-conditionality requirements, in-work benefits, active labour market policies (and decent minimum wages) than by forcing transfers down to absolute subsistence levels. In many countries, minimum income schemes have limited coverage and poor take-up due to poor administration, excessive bureaucracy and stigmatization (Frazer and Marlier, 2016).

A strong social safety net for long term unemployed is particularly important to reduce inequality from the bottom of the income distribution. As shown above there has been a tendency for lowering the replacement rates of the long-term unemployed in recent years. Low replacement rates for long-term unemployed push the lowest wages downwards and thereby deteriorate the standard of living of both the long-term unemployed and those who manage to find a job.

Reduce labour market precarity

Firms need a degree of flexibility in their labour deployment strategies. However, recent decades have seen in many EU countries successive labour market deregulations that have substantially increased the precarity of a sizeable proportion of the labour market, not least for young workers. Extreme forms of precarity (such as zero hours contracts) should be abolished and some measures—like fixed-term contracts—whose use can be justified in certain circumstances but that have become the default form of employment in some countries should be curtailed. Key is a sensible balance between flexibility and security.

Active reintegration policies

Poverty and unemployment can be reduced through further efforts to train and reintegrate unemployed. Thus, as shown in the iAGS 2015 report there is a strong negative correlation between inequality and the expenditures on active labour market programs. This indicates that further efforts to improve the employability of the unemployed is a way to both protect the weakest and counteract income inequality. European governments should therefore increase their investments in policies that actively seek to identify and resolve, at the individual level, barriers to (re)employment—skills, health, child-care issues etc.—and to provide public sector employment for those unable to find work in the market sector

REFORMING EMU ECONOMIC GOVERNANCE: WHAT WAYS FORWARD?

3.1. Introduction

Recent elections in a number of EU Member States may have eased concerns about an immediate break-up of the euro zone, but they have not mitigated questions about the European project as a whole: is it resilient in the face of crises and can it deliver what citizens want in the current global economic and political context?

The inadequacy of European governance is undeniable. Although the European Union is supposed to ensure the prosperity of its members (see the preamble to the Treaty of Rome), numerous member states have been going through a serious economic and social crisis, as evidenced, for example, by the situations in Greece, Spain and even France, where unemployment rates are still very high. The crisis extends to the political sphere: the populist temptation in Europe has not disappeared with the election of a pro-European President in France, the local electoral defeats of the 5 Stars Movement in Italy or the resilience of traditional parties in the last British elections, far from it. The entry of Alternative für Deutschland into the Bundestag and the difficulties of coalition-building in Germany are here to remind us. Independence movements in Catalonia and elsewhere threaten disintegration. And the risk of an anti-European majority in the Union's third biggest member, Italy, remains real. The European project still lacks resilience.

The organization of economic policies in the euro area is certainly far from optimal. The iAGS reports of the last five years can testify to this. Problems of economic governance remain important: on the one hand, the EU's inability to ensure a sustainable increase of the well-being of its peoples and upward convergence; on the other, the difficulty of providing European public goods that would help to revive the European project in a sustainable way. These weaknesses are an expression of a failure to implement appropriate policies and this, in turn, reflects institutional constraints and perverse incentives for policymakers.

Two questions are therefore crucial for the continuation of the EU project: are there alternatives to the current organization of European policies that bring sustainable increases in well-being and upward convergence, and can they be effectively applied?

A major problem in the management of European public debts is still the absence of a fully-fledged and recognised lender of last resort, a role that has not yet been officially devolved to the European Central Bank. Its recent ambitious policies—the quantitative easing that started in March 2015 and is now planned to end by September 2018—were justified narrowly with respect to the price stability mandate and thus appear to be an exception to the rule and no longer reliable once the target of "close to 2%" has been achieved.

At the same time, monetary policy has been overburdened by a failure to permit and encourage growth-promotion by fiscal policy. A first goal must be to mobilize new resources to allow for fiscal expansion without increasing public deficits. If the EU manages to engage more effectively against tax evasion, aggressive tax planning and tax havens, e.g. by rapid implementation of country-by-country reporting on multinational corporations or by a global wealth register, this goal can be achieved in the medium term. A second opportunity would seem to be offered by the clarifications—and to some extent amplifications—of the flexibility already built in the preventive arm of the Stability and Growth Pact at the beginning of 2015. Those flexibilities give some additional room for manoeuvre to the Member States, but largely only to those who have not exceeded the 3% of GDP limit of the public deficit. For countries that still exceed this limit, the relaxation does not allow to deviate, even temporarily, the return path below the 3% but only, possibly, to earn an extra year to achieve it. The reform is therefore insufficient to escape conditional austerity and to reorient fiscal policies towards growth. As previous iAGS reports have shown, the same applies to the Juncker investment plan, which has positive but ultimately limited effects. The establishment of the Macroeconomic Imbalance Procedure and the Fiscal Board and national productivity boards are also ambiguous. They offer a potential for more coherent governance but suffer from serious conceptual weaknesses; below we consider how they might usefully be developed.

Consequently more far-reaching institutional reforms are needed in order to meet a number of key aims: boost economic development, improve upward convergence and increase stability. There is certainly no shortage of individual proposals on the table.

It is helpful to group the proposals into two fundamental views, which have a contrasting philosophy and endorse quite different tools, even while sharing some principles. The first view, certainly in line with those of the former German Minister of Finance, focuses on the prerequisite for any further steps in European integration, which is seen as compliance with agreed rules, and which places faith in market discipline to incentivise improved competitiveness and reduced public indebtedness and reliance on public deficits. In contrast with this view, the second view, certainly embodied by the French President after his Sorbonne speech in September 2017, highlights the requirements of solidarity and coordination between the EU Member States. As such, this view promotes integrationist measures such as the creation of a euro area budget, funding for more common European public goods, and social and tax harmonization.

These two different views imply very different reforms and tools that we will examine in the following¹. While the first view requires some debt restructuring (without risk-sharing) for Member States to resolve legacy issues and release some fiscal space before a next economic crisis occurs, the second one focuses on completing an architecture left woefully incomplete when the common currency was established, the most important, and controversial, element being a fiscal capacity to help dampen future macroeconomic shocks. The first view recalls the functioning of the International Monetary Fund with a mix of macro guidelines (*i.e.* fiscal rules) and, provided they have been followed, financial assistance to prevent a liquidity crisis developing into insolvency and default, whereas the second one definitely involves risk sharing between the Eurozone Member States and begs the question of how to ensure that national policies are set taking account not just of national but also of area-wide considerations.

Despite their basic differences these two views also share a few common characteristics. First, they take for granted that the financial and economic crisis is over and prepare the after-crisis period, in view of facilitating the management of the next crisis via the fulfilment of the Banking Union. Second, they take for granted that the current fiscal rules will in general continue to apply and do not endorse the necessity of a change in fiscal rules. Third, both views are silent on the European Central Bank: they do not evoke a possible change of statute, objectives or governance of the ECB and do not seem to care about the post-

Reforms of Eurozone governance involving the creation of European safe assets or the set-up of debt redemption schemes have also flourished. In light of the strong opposition by the promoters of "Maastricht 2.0" and the lack of apparent support by the promoters of the integrationist view, their discussion is left to annex 1 to this chapter.

crisis approach of monetary policymaking. Fourth, there is a consensus that more integration has to go hand in hand with more transparent and more democratic decision-making for greater accountability, legitimacy and institutional strengthening.

We look in turn at the two views in greater detail in the next two sub-sections and then conclude the chapter by considering pragmatic ways to strengthen "soft" forms of coordination, based on reforms to already existing institutions.

3.2. "Maastricht 2.0": enforcing fiscal rules and market discipline will not stabilise the Euro!

Here we describe, interpret and critique the first of the two visions, which we will call the "Maastricht 2.0" view. While it is an approach closely associated with the outgoing German Finance minister, Wolfgang Schäuble, and certain other German institutions, such as the Bundesbank and Council of Economic Experts (Sachverständigenrat), it would be wrong to call it the "German view". Recommendations along these lines are made by actors in many other countries while a minority of informed opinion in Germany is opposed.

a) "Maastricht 2.0": the general view

The basic logic behind the "Maastricht 2.0" proposal can be succinctly stated in four linked claims (e.g. Bundesbank 2016: 41):

- The crisis has led to measures that have increased risk-sharing.
- This has not been accompanied by more intense joint decision mechanisms and central constraints on national policy.
- It appears that there are no political majorities for such policy deepening in future.
- It follows that it is best to ensure the credibility of the existing rules governing, in particular, national fiscal policy.

There is nothing fundamentally wrong with the internal logic connecting these statements, although there are doubts about the validities of the first three statements. The first two steps are empirical and at least partly correct. It can be debated how significant the increase in mutualisation has really been though; in the case of ECB activities it is more apparent than real. And some of the measures implemented (the Fiscal Compact, or the Macroeconomic Imbalance Procedure, for example) have increased European influence over national policy, certainly on paper, although arguably less in practice. In the case of the

so-called programme countries, though, substantial national policy making autonomy has clearly been lost. The third step is a more or less well-founded guess about future political majorities that may or may not be correct. Nevertheless one can provisionally accept the statements as possibly valid hypotheses and to turn to the measures that are proposed in order to implement the idea of "Maastricht 2.0", to "ensure sound public finances at the national level and to strengthen financial stability by limiting the negative interplay between governments and systemically important financial institutions" so that monetary union is "able to withstand the extreme scenario of a default of a member state" (Bundesbank 2016: 41). We set out the principles, reserving a critique for the sub-section (c) below.

The overriding principle guiding proposals in this tradition is the necessity to align rights and responsibilities, especially for national fiscal policy. This is usually phrased as the need to avoid so-called moral hazard: the tendency not to fulfil one's responsibilities if someone else, via an insurance scheme of some sort, is picking up the bill or even just part of it. If the argument is accepted that it is not possible (or according to some observers even desirable) to exert bureaucratic control over member state fiscal policies, then it follows that national governments must themselves be made to feel the negative consequences of any actions impinging on fiscal rectitude.

This requirement has a number of implications, according to the logic of the "Maastricht 2.0" view. The treaty-based measures to prevent bailouts by either EU institutions or other Member States must be adhered to. Given spillovers from one Member State's fiscal policy to the banking system and real economy (and thus indirectly also to the fiscal position) of other countries, steps must be taken to ensure that such contagion is limited as much as possible; otherwise recalcitrant states will persevere with harmful policies because they know that, ultimately, other countries and/or the EU institutions will be forced to bail them out. More specifically this means that other countries and banking systems must be shielded from the negative consequences of a sovereign debt default. Sovereign debt defaults cannot and should not be ruled out, because they are considered a necessary disciplining device. At the same time such defaults must be rendered manageable, less though from the perspective of the country directly concerned than from that of its partners.

At the same time it is recognized that financial assistance is needed to prevent a collapse of the economy and ensure that other, "innocent" countries are not harmed by spill-over effects. The European Stability Mechanism has been set up to this end, and its existence is not questioned by "Maastricht 2.0" adherents.

Stabilisation can, however, only be offered against commitments to adhere to strict fiscal rules in their view. And lending in crisis situations can be provided only to tide over fundamentally solvent governments and if it is accompanied by a parallel loss of fiscal sovereignty and compulsory sovereign debt restructuring; this "bailing-in" of bondholders is supposed to restore "market discipline" on national governments.

The institutional framework envisaged to operationalize these precepts clearly precludes all ideas—discussed in the next section—involving common debtraising capacities, automatic cross-border stabilization (e.g. through a EU unemployment insurance fund) and debt mutualisation. Transfers are not entirely ruled out but are subject to extremely tight constraints. Instead a reform process towards an institutional configuration along the following lines is called for:

- A simplification of the fiscal rules in the direction of a removal of all exceptions and room for political discretion, and the transfer of supervision to a purely technocratic institutions, both with the aim of ensuring a more rigorous application
- A restatement of the fundamental no-bail-out principle (with tightly constrained emergency lending for short-term insolvency)
- Development of banking union in the direction of: clearing up legacy bank liabilities (through bank closures, sales of non-performing loans); ensuring bail-ins by holders of bank bonds, so that the taxpayer only intervenes in a systemic crisis (Sachverständigenrat 2016: 265ff.); and deprivileging bank holdings of sovereign bonds (*i.e.* removing the zero capital charge and increasing bond yields), to reflecting the fact that sovereign debt is, and should be, fundamentally risky.

The ESM is tasked with crisis-prevention and emergency lending, whereby it is to apply rules for "orderly" government bond defaults (on which more below). The explicit aim is to restrain public borrowing by making it more costly and using "market discipline" to ensure that stabilization measures do not lead to moral hazard; market incentives for sound fiscal policies will then supplement bureaucratic incentives and oversight.

b) "Maastricht 2.0": in search of a modus operandi

It is worth setting out in somewhat more detail the proposal for a sovereign debt restructuring procedure, as this is in many ways at the core of the "Maastricht 2.0" concept. Following the German Council of Economic Experts (Sachverständigenrat 2016: 23ff, Andritzky *et al.* 2016), and also the Bundesbank (2016: 57-

61), this would function in the following sequence. A country applies for assistance to the ESM, which analyses its debt and debt service dynamics and decides whether, in a first stage, creditors should agree to a maturity extension to reduce service payments. Standardised criteria should be used, including debt levels, gross refinancing needs (in both cases as a share of GDP) and recent violations of the fiscal rules. The second stage, should analyses indicate its necessity, is then a debt restructuring (haircut). The decision is taken by a majority of the relevant creditors, which implies the need for government bonds to contain so-called creditor participation clauses (sometimes also called collective action clauses). These mean that those purchasing government bonds sign up ex ante to the idea that a decision by qualified majority of bondholders to restructure debt service payments would have a binding effect on all bondholders.

On international markets this is a standard procedure for individual bond series; under "Maastricht 2.0" proposals however, the provision would apply across large swathes of a country's sovereign bonds, making it virtually impossible for private speculators to build blocking minorities. As noted, government bonds thus lose their status as (in nominal terms) "safe" assets. The mechanism applies to all new sovereign bond issues, which gradually replace existing "safe" bonds.

Box 1. Origins of the European Monetary Fund

Soon after the European crisis of 2008, Gros and Meyer (2010) argued in favour of creating a European Monetary Fund (EMF). They argue that the no bail-out rule of the Maastricht Treaty is not credible: the disorderly default of a single euro zone country would create a European and possibly global crisis. Frightened by this systemic financial instability, the European institutions would never let any debtor country reach the default step. Moral hazard ensues from this forced risk sharing due to the fact that the Eurozone is not prepared to get along with an orderly default.

Still according to Gros and Meyer (2010), the EMF should thus be focused on two main purposes: give incentives for member countries to restore fiscal discipline, and make bankruptcy possible by designing a framework of orderly default. These two aims achieved, risk appetite would be limited and a sovereign debt crisis would be less likely. Both purposes are compatible with the solidarity and cooperation principles established in the EU Treaty.

The European Stability Mechanism (ESM), established in 2012, is an intergovernmental organization which provides financial support to member countries of the Eurozone in financial stress. The ESM has a maximal lending capacity of ?500 billion, which enables it to deal with temporary liquidity crisis. But it seems that the ESM, which is in charge of raising resources, could be turned to a European Monetary Fund. Crisis prevention and management are actually

run by the European Commission, but these charges might be transferred to the EMF.

Gros and Meyer (2010) propose a financing framework for the EMF which would limit the moral hazard: countries that breach the Maastricht criteria, and result in a higher potential risk, would contribute more to the EMF funding than safer member countries. The EMF would be able to issue a common Eurobond and borrow on markets. Gros (2017) suggests also that the ESM (which would act as an EMF) should be independent from the IMF: Euro countries should not contribute to the IMF anymore, but should contribute to the ESM which should represent the whole Euro zone at the IMF.

At least above a certain amount, the Commission and the Eurogroup would pilot the application of a tailor-made adjustment program (Gros and Meyer, 2010). The EMF would thus involve conditionality. The EMF could also directly lend to member countries, or may only provide a guarantee for a particular loan or issuance.

A strength of the EMF would be its rapid action capacity, because there would be no need for large and long financing operation beforehand.

According to Gros and Meyer (2010), the orderly default framework could be the following. The EMF could exchange the defaulting claims with lower new ones on the EMF. Depending on the losses holders of the defaulting debt can absorb without causing a global crisis, the level of the haircut might be calculated to make the EMF invest an amount accounting for up to 60% of the defaulting country's GDP, following the Maastricht fiscal criteria as a guideline. To promote healthy and transparent financing, this framework would only be applied on bonds traded on open exchanges or registered by the EMF. All the claims of the defaulting country would so belong to the EMF, which would have to approve any use of additional fund received by the debtor country. This framework could be considered as a violation of the country's sovereignty, but any country is free to leave the EU and the European Monetary Union, and can also be thrown out if it refused all cooperation. This framework would help to order a sovereign bankruptcy and to minimize the disruption it would cause.

Sapir and Schoenmaker (2017) see the EMF as a path to both risk-sharing and risk-reducing within the euro area. It should be able to back-up a complete banking union thanks to a European deposit insurance mechanism. The ECB still should have to deal with sovereign and banking liquidity crisis, whereas the EMF should be responsible for insolvency issues.

Wyplosz (2017) is much more critical of the creation of an EMF, an "idle" institution in quiet times, hence hopefully most of the time, while generating potential conflicts with other institutions, like the Commission and the ECB, already in charge of monitoring Eurozone countries and participating in the management of debt restructuring.

Before moving on to a critique of approaches in this tradition it can be noted in passing that a number of commentators that otherwise have little in common with "Maastricht 2.0"-thinking have also proposed applying sovereign debt restructuring as part of a progressive reform agenda; prominent examples include Wren-Lewis 2015, Stiglitz 2016). While the underlying principle is very similar it is applied in a different way and with a different motivation. The aim is not so much to avoid the need for inter-country transfers as to avoid forcing deficit countries into excessive austerity by the need to run primary surpluses in order to maintain debt servicing. It also prevents ordinary taxpayers being put on the hook for, ultimately, the excesses of the financial industry. Despite this important difference, the subsequent critique applies also to these latter proposals as it focuses on the changed status of sovereign bonds (as nominally risky assets), which is a fundamental feature of such schemes.

c) Critique

The "Maastricht 2.0" approach may seem superficially attractive. However, a closer look reveals that the approach poses serious risks to the good functioning and even the very survival of monetary union. It is also arguably politically unworkable.

First, in a very real sense it effectively abandons certain elements of monetary union altogether and puts countries—specifically a certain sub-set of countries—effectively back into a situation resembling that in the previous European Monetary System (EMS). Even in good times, countries whose currencies and sovereign bonds are perceived as weak would pay an interest premium over "hard-currency" countries, just as they did in the EMS; it would just reflect the probability of default rather than depreciation. It would be passed on from the treasuries' market to private sector credits. Higher interests rates would, by themselves, tend to perpetuate and even exacerbate income differentials between the members of the monetary union. A key incentive for former "soft currency" countries to sign up to the Euro or remain within its confines would be removed. (It is true that the substantial lowering of interest rate differentials on joining monetary union, created some problems for periphery countries, but the answer would have been for them to implement tighter fiscal policy and/or macroprudential policies).

It is ironic that supporters of "Maastricht 2.0"-sytle solutions tend to emphasise incentive compatibility, but they have failed to consider (or maybe simply do not care about) the incentives of the majority of euro area members, who

would be effectively tied into a system that, for them, combines the disadvantages of the EMS and the EMU without many of the respective advantages.²

Secondly, and much more insidiously—even if this is not made explicit—the job of imposing discipline on national economies on a day-to-day basis is left primarily to the financial markets, that is to that institution that the global crisis, at the latest, revealed to be systematically incapable of consistently providing measured, fair and predictable assessments of credit-worthiness (Bordon et al 2014). First, it should be left to citizens to press for political changes, not financial markets. The rising government bond spread of Portugal during the last election campaign and under the new government illustrates a bias to orthodox economic policies, although the new Portuguese government showed that alternatives can bring good results.

Second, the innate fickleness of financial market assessments would be amplified by massive cumulative causation properties: any perceived deterioration of the economic or fiscal outlook would lead rational investors to demand an increase in risk premiums and interest rates. This would exacerbate the cost of debt servicing, worsening the fiscal outlook and, via knock effects on private loans, also depress the economy, further worsening the capacity to service debts.

This problem is compounded by the fact that, while solvency is an important concept that must be operationalized for a sovereign default scheme to work well, it is a highly problematic, and arguably impossible, concept to apply to sovereigns (Lindner 2015). A company is insolvent when it has negative equity, its debts exceed its assets. However, a country's public assets cannot be liquidated by a creditor as those of a company can. Given this basic fact, all decisions on (in)solvency are fundamentally arbitrary or at least highly political. Indicators such as debt/GDP ratios are at best rough guides. What is ultimately decisive is investors' willingness to roll over bonds. But this rollover risk is driven by little more than mass psychology characterized by sudden changes in perception. Cumulative causation combined with the lack of a standard and transparent "fundamental" to anchor expectations makes the system highly susceptible to sudden panics.

An additional factor is that the introduction of risk on sovereign debt has substantial implications for the banking sectors of different Member States. In

^{2.} In fact this is part of a more general problem that those constantly referring to moral hazard issues tend to be very selective in their use of the concept. It is also a form of moral hazard to run disinflationary policies at national level while relying on other member states to create adequate demand. Fiscal rules can lead to inter-generational moral hazard issues leading to an underprovision of public infrastructure for future generations.

the light of European Banking Authority's guidelines involving the imposition of risk-weights on public debt holdings, we can show that banks capital ratios would decline unevenly across Eurozone member states, generating higher rather than lower banking risk (see Annex 2 to this chapter). It should be noted that these calculations refer to a controlled increase in risk weightings. If markets are allowed to determine risk in real time, as argued above, the swings in perceived risks are likely to be much more extreme.

In short the "Maastricht 2.0" proposal would in reality achieve the exact opposite of its stated intention of creating stability. In order to spite the face of moral hazard, a sovereign debt restructuring procedure cuts off several noses, and makes the euro area an economic area in which sudden crisis can appear at any time for the smallest real-economic reason and even, ultimately, from an entirely spurious shift in financial market sentiment.

Last but not least, even in good times imposing a risk weighting on state bonds creates a risk which taxpayers then have to compensate bond-holders for taking on. Interest payments will be higher for all countries (more for some than others), crowding out other spending priorities. The private sector produces risky assets with high returns at will. Only the state can provide (nominally) riskfree, low return assets. In normal times there is considerable demand for such assets. And that demand rises precipitously in a crisis. If countries are not then able to issue (nominally) risk-free debt, which can ultimately be purchased by the central bank, crises are much more likely to be self-fuelling. This was a crucial lesson of the euro area crisis, manifesting itself in a fundamental difference between the euro area countries vis-à-vis non-members like the US, and in the sudden and substantial improvement in the euro area periphery following the announcement of OMT and Draghi's "whatever it takes" speech. This dramatically reduced rollover and default risk, with substantial benign effects on economic performance. It showed the huge advantages that accrue to systems in which state bonds are risk free. Voluntarily depriving itself of the ability to create risk-free assets is therefore a wholly misguided policy similar to the return to the gold standard one hundred years ago.

3.3. Options for deepening euro area governance

Those participants in the debate on the reform of the economic governance of the euro area arguing for greater policy integration are very largely agreed on the need to build a budgetary capacity at European level. There is a lot of uncertainty and discussion about the form this capability should take, though. What characteristics should a budget of the euro area have to constitute a step forward in the construction of Europe? What needs should it meet? How can issues of democratic legitimacy and spending efficiency be ensured? In this section we discuss a number of policy options that go in the direction of greater policy integration and assess their advantages and possible drawbacks. These proposals are not mutually exclusive and can be combined in different ways.

a) A budget and a finance minister: to do what and how?

While no one has ever believed that the euro zone was an optimal currency area, many economists and policymakers have long thought that the focus on market flexibility and on nominal targets (inflation, deficit, etc.) by European institutions would be sufficient to ensure the convergence of the economies of the euro area both in times of growth and in times of crisis. This was an illusion, given the evidence available already in the early 1990s that even in the United States transfers from the federal budget help to absorb more than a third of asymmetric shocks.

In the European Union, it is not the case that there are no transfers between countries. There are, notably, the Structural Funds which have the objective of ensuring the convergence of incomes per capita; as a result, transfers are made from the richest countries/regions to the poorest. This is done irrespective of the cyclical position of the different countries. However, the Structural Funds are rather limited in volume, although in individual countries they may play a significant role, as is therefore its impact on upwards convergence. By definition Structural Funds cannot fulfil cyclical smoothening (otherwise they would not be "structural"), neither for the EU as whole nor cyclical divergences between countries resulting from asymmetric shocks.

The Report of the Five Presidents of 22 June 2015 set out the principles that should be followed in the attempt to provide the euro area with an asymmetric shock absorption capacity. A budget of the euro area (p.17):

- "should not lead to permanent transfers between countries or to oneway transfers. [...] Nor should it be designed to equalize income between Member States:
- should not discourage participating countries from developing sound national fiscal policies or addressing their structural weaknesses. [...];
- should be developed within the framework of the European Union to be fully compatible with the current budgetary framework of the Union and with the procedures for coordinating economic policies [...];

— should not be used as a crisis management tool as the European Stability Mechanism (ESM) already provides this function. [...]"

The report therefore highlights that a federal budget should provide for a stabilization of asymmetric shocks in normal times, be neutral from the budgetary point of view over the medium term, and not in charge of stabilization in the event of a major crisis. To take into account the specificity of the European institutional framework, which could be defined as an 'economic federation without a political federation', the euro area budget should not hinder the functioning of the budgetary rules which discipline the Member States (irrespective of the effectiveness of the rules themselves). Since the publication of the report of the 5 presidents the discussion has evolved, and the majority of commentators agree on the necessity of a fifth criterion, *i.e.*, in accordance with the principle of tax consent ("No taxation without representation"):

— Democratic control over the body supposed to manage the budget (the "Minister of Finance" of the euro area)

This principle has been internalized by the Commission in its latest progress report on European governance, which talks about "rooting economic responsibility" in parallel with the construction of the common fiscal capacity.

Finally, own resources would be needed for stabilization not only in the case of asymmetric shocks (positive in some countries and negative in others), but also in cases of symmetrical shocks but of different magnitudes (De Grauwe and Ji, 2016). Some proposals have been made to generate own resources (see Monti 2016). The most prominent example is a European corporate income tax, maybe also in a specific form addressing digital global players known for their aggressive tax planning like the GAFAMs (Google, Amazon, Facebook, Apple, Microsoft). (Irrespective of stabilisation needs, the implementation of measures to combat tax fraud, tax evasion and aggressive tax planning is a general task which should be part of deepening EMU, as it is clear that these issues cannot be addressed just at the level of each member state).

On the issue of a budget of the Eurozone, the Commission work programme up to the end of 2018 in the economic field is enlightening. Among priority 5 ("A deeper and fairer EMU"), beyond the transformation of the European Stability Mechanism into a European Monetary Fund, the programme includes "the creation of a dedicated euro area budget line within the EU budget". This can clearly appear as a first good step in the direction of improving the budget capacity of the Eurozone at large to cope with an economic crisis in the future. Nevertheless, the fact that the new budget line would be "within" the European budget raises the unresolved issue of the size of the budget line and of the

composition of the European budget. Will the European budget grow to match the new priority? If not, what will be the composition change of the European budget, what category of expense within the European budget will be partly sacrificed: sustainable growth (natural resources), competitiveness, cohesion, security? Clearly a transparent and robust evaluation of the rationale for and the relative costs and benefits of the different headings of the European budget is needed.

Another concern with the current programme of the Commission on the euro area budget line relates to its functions. It should provide "for (1) structural reform assistance building on the Commission's structural reform support programme, (2) a stabilisation function, (3) a backstop for the Banking Union, and (4) a convergence instrument to give pre-accession assistance to Member States with a derogation on their way towards adoption of the single currency". The euro area budget line will match none of its objectives and will be suboptimal overall if it is given too wide a range of tasks.

b) How best to achieve automatic stabilization in Europe

European countries need—especially if they are within the euro area—mechanisms with which they can offset asymmetric shocks. They also need mechanisms to cope with in-built tendencies within EMU for countries to diverge due to the difference in real interest rates generated by a single nominal interest rate and differential inflation rates. The need for coordination of Member State's policies is all the more important as fiscal policy is slowly (and painfully) regaining a place in the policy makers' toolbox. A reform of European rules that were to give more autonomy to Member States (for example the golden rule of public finance, see iAGS, 2017, chapter 3) might yield inconsistent choices at the national level³. Thus, a central coordinating institution would be invaluable in maximizing real convergence and EMU-wide growth.

There are legal and practical limits on national counter-cyclical policies. Automatic stabilization mechanisms that channel spending power from high to low demand regions would be extremely helpful. But how could they be organized?

European unemployment insurance has been proposed by various governments and the Commission. Beer *et al.* (2014) present a comprehensive framework of issues related to the establishment of European unemployment insurance, and

^{3.} This is exactly what happened in 2010, when austerity in peripheral countries has not been accompanied by an expansion in countries that could afford it (most notably Germany). Therefore, the global EMU fiscal stance has been pro-cyclical and contractionary

difficulties related to coordination with national policies. The studies cited by the authors agree that if European unemployment insurance had been in place during the crisis, the stabilizing effect on GDP and income would have been non-negligible. Not surprisingly, the impact would largely depend on the institutional characteristics of different countries and the interaction with national programs. Also EU UI schemes can be designed in different ways which allow policymakers to prioritise different objectives and make trade-offs (e.g. between a desire to maximize stabilization capacity and limit cross-border transfers).

The studies reviewed by Beer *et al.* (2014) suggest that it might be difficult to comply with the first criterion, budget neutrality (*i.e.* non-permanent transfers). If unemployment insurance had been in place since 1999, the core countries would have been net contributors. This does not only depend on the fact that structural unemployment is higher in the peripheral countries, but also on the short-term (cyclical) reaction of unemployment to shocks (the Okun coefficient) being different. This partly depends on the design of the scheme, though. Focusing the program on short-term unemployment, as the vast majority of proposals do, can solve the first problem, but not the second. To remain budget neutral, unemployment insurance would need to include measures such as clawbacks, ex post compensation, and periodic re-parameterisation of the program, which would greatly complicate its operation and reduce the extent of stabilisation.

Budget neutrality would hence require the implementation of a complicated system that will reduce its attractiveness to/understanding by the public.

c) "European public goods"

Another coordination fiscal device may accrue to a dedicated "Finance Minister" for the Eurozone: financing European public goods. In this respect, the Fiscal Board has a mandate neither to actually coordinate the different fiscal policies in the Euro area, nor to target specific expenditures at the level of Eurozone. In contrast, several proposals, for example that of the Italian government, recommend among the tasks of the Minister in charge of the European budget, the supply of "European public goods", which are more easily delivered at the "federal" level. This is the case, for example, of transnational public investments, which could avoid the complicated construction of the Juncker Plan, but also of migration and refugees policies at European level, whose management and costs are currently borne disproportionately by a few countries. And even financial support for policies supporting the fulfilment of Europe 2020 and similar common European targets could be considered. If such public goods

were financed via a European tax based on (part of) corporation tax, as proposed by French president Macron, European level public goods could be provided while exerting a certain counter-cyclical effect at national level: tax revenues from corporation (profit) tax vary strongly with the business cycle, so in a situation as we have experienced in past years in the euro area in which some countries are booming while others stagnate, a degree of equilibration will be assured.

A streamlined and centralized supply of European public goods would be very important to boost growth and increase productivity; especially if one thinks of the important investment, and economies of scale, related to the energy transition. In other areas, such as border security, the benefits are more of a political nature, resolving a collective action problem to the ultimate benefit of all countries. Thus the coordination and management at European level of such efforts offers potentially significant improvements over the present situation.

In itself this part of the European budget could not help the cyclical stabilization and the absorption of asymmetric shocks, because it is linked to structural needs. However, nothing would prevent the European Finance Minister from using it with a view also to stabilization purposes:

- Directly, even if the horizon of needs remains "structural" and multi-year, the Minister would have some flexibility in the management of the budget in the short term. There would be nothing to prevent or delay spending allocated to a certain region / country according to the cycle, while ensuring long-term coherence at the aggregate level.
- More indirectly, by centralizing part of the investment expenditure at the global level, the European budget would free up resources for member countries, which could be used for social protection and the cyclical stabilization of each country.

This raises the issue of the creation of a "Minister of finance" for the Eurozone. This creation does not appear high in the political agenda of the Commission, remaining an "initiative to be launched with a 2025 perspective".

d) Meanwhile, budgetary orthodoxy by the rules becomes more complex

The "easing" of the Stability and Growth Pact consists mainly in clarifications—and to some extent amplifications—of the flexibility already built in the preventive arm, *i.e.* if there is no pending excessive deficit procedure. The changes relate to the nature of the structural reforms (if they are "important", enhancing

the long-term potential growth and effectively implemented), exceptional economic circumstances and eventually public investments co-funded by European institutions. They take the form of an allowed temporary deviation from the medium-term budgetary objective (country-specific targets for the structural balance, accounting for 0.3% of GDP for the EA as whole). Undeniably, the flexibilization paved the way for many debates of interpretation (what is meant by "important" reform and how is potential growth measured in a transparent and precise manner?) and disputes of experts (does more flexibility of the labour market increase potential growth?). Instead of easing the gap between citizens and their elected representatives, they could increase it. As some of the flexibilization is conditional on the difference between GDP and its potential—the more negative the output gap and the greater the flexibility of the Pact—high uncertainty surrounding the concept and calculation of potential GDP will be a source of debate and controversy.

However, economically the clarification of the flexibility within the preventive arm of the SGP allowed for a more reasonable European fiscal policy. After the widespread critique on the harsh austerity programmes and the subsequent double-dip recession 2012/2013, the European Commission reacted by giving more and more priority to an overall economic analysis instead of just executing the fiscal rules whatever it takes. Since the rearrangement of the European Semester in 2015, with the proposal of the country-specific recommendation to the euro area brought forward to autumn (respectively before the other CSRs), the analytically important concept of the area-wide "fiscal stance" (see Chapter 1) played a more important role. Last year, the concept was further developed and gained even more importance. This is based on the Treaty on European Union and more specifically on the articles devoted to European budgetary coordination, mainly Article 136, and Regulation 473/2013 of the 2-Pack which enjoins the Eurogroup to discuss the overall fiscal situation of the euro area.

At the end of 2016, the European Commission expressed the wish that the euro area implements a positive aggregate fiscal stance, *i.e.* a fall in the euro area's cyclically-adjusted balance and interest charges (or primary structural balance), of up to half a percentage point of GDP in 2017.

This wish quickly fizzled as the German authorities soon announced that they would not use their "fiscal space" to participate in the recovery effort advocated by the Commission. This view was backed by the Eurogroup/ECOFIN, who watered down the already modest Commission's recommendation to a "broadly neutral" fiscal stance for the EA.

Despite this failure, the aggregate fiscal stance of the euro area opened a debate on the possibility of expansionary fiscal policies in Europe when needed to counteract economic stagnation. So it has a virtue: to return to a sensible view of fiscal policy, ultimately able to stabilize the economy.

In practice, the procedures involved are more complicated. Firstly, the aggregate fiscal stance coexists with the Stability and Growth Pact, which it supplements and which it does not replace in any way. As a result, two theoretical visions of fiscal policy oppose: a priori denial of the stabilizing effects of fiscal policy (along the lines of, e.g. expansionary fiscal contractions, that remain vivid in some policymakers' imagination despite their empirical irrelevance) opposes the a priori belief in the same stabilizing effects (along the lines of, e.g. high fiscal multipliers, that depend on the business cycle, the monetary stance, openness, etc.). Moreover, two institutional views about fiscal policies are opposed as well, and may not perfectly match the former theoretical are opposition: the idea that each State has to put its own house in order and the idea that what is important is the overall stance (and maybe the spillovers between countries). The SGP does contain some flexibility and (subject to some conditions) allows the automatic stabilisers to play, but in practice it has nevertheless constrained the ability of States to cope with economic and social shocks and therefore fed criticism of the stabilizing capacity of fiscal policy. The SGP fosters the prevalence of the two first schools of thought mentioned above: denial of stabilizing properties of fiscal policy and "housekeeping".

Secondly, the aggregate fiscal stance can be inconsistent with the Pact when analyzed at the level of the domestic stances of euro area Member States. Neither does it allow countries with no room for maneuver to implement a fiscal stimulus, nor can it force countries with leeway to use them for stimulus purposes, which the German authorities have very well understood. Indeed, the Stability and Growth Pact is asymmetrical: it limits public deficits, not surpluses; countries that respect it cannot be constrained in their fiscal policies.

Thirdly, remaining in the realm of the Pact, the individual orientation of fiscal policies corresponding to the aggregate stance could be counterproductive. If a fiscal policy is all the more effective if it intervenes at the low end of the cycle (Auerbach and Gorodnichenko, 2012, Creel, Heyer and Plane, 2011), there is no reason to ask Germany to implement a fiscal and economic stimulus and prevent Italy or France from doing the same. It is rather the opposite that should be done to ensure the greatest possible budgetary impetus, but the spirit and practice of the Stability and Growth Pact are at odds.

Fourth, and certainly more importantly, the aggregated fiscal stance is, by definition, the aggregation of domestic fiscal impulses that were calculated in 2016 in such a way as to achieve two objectives: a macroeconomic stabilization goal—which results in a target of reducing the output gap by 25 to 50% over the year—but also a goal of fiscal sustainability. The Commission therefore calculates, for each country, the fiscal stimulus that stabilizes output, then the one which ensures the return of the debt to the limit of 60% of GDP at different horizons. There are therefore several stabilizing impulses and several impulses of sustainability, for the same country, as shown in the graph below from the European Commission's Public Finances in the EMU—2016 report (p.146).

On the basis of these different impulses, the Commission proposes a single impulse, the fruit of compromise between the two objectives assigned to the budgetary policy. The fiscal impulse then becomes very political, since it can consist in choosing between two risks: that of seeing the economy continue to sink into the crisis, with a negative output gap, or that of seeing the public finances become unsustainable.

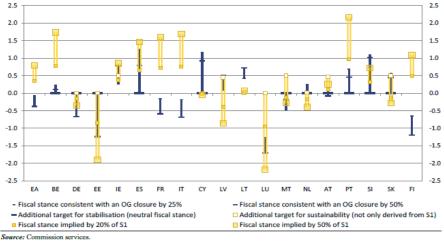


Figure 49. Ranges of fiscal targets derived from stabilisation and sustainability needs

Note: Fiscal stance measured as the change in the SPB. Additional target for stabilisation: a neutral fiscal stance if the output gap is broadly closed in 2016 or if a neutral fiscal stance implies a faster output gap closure than targeted. Additional target for sustainability: either a neutral fiscal stance if the SI indicator is negative and all the other indicators point to low risk, or, if S1 is low or negative but other indicators point to some risk, benchmark consolidation by 0.5% of GDP or the distance to the MTO if lower than 0.5%.

The French case is certainly symptomatic of the difficulty of effectively implementing an appropriate fiscal stance. In fact, in 2016, the Commission calculates the need for a fiscal stimulus for France to close its output gap and a

budgetary contraction to ensure the sustainability of the public debt. The maximum gap between the two impulses is more than 2 points of GDP, hence more than 40 billion euros on a yearly basis. In order to escape such a large discrepancy between recommended fiscal impulses, the Commission proposes a combinatorial procedure to calculate a single recommended budgetary impulse for each country which weighs both objectives (output gap and sustainability). Such a combinatorial procedure is far from simple. Hence, it deviates substantially from one of the criteria of "good fiscal rules" (Kopits and Symansky, 1998). The less simple it is, the less understandable it is for the public, and the less it helps closing the gap between citizens and their representatives.

e) A change in monetary policymaking?

The implementation of the assets purchase programme by the ECB consists in setting ceilings for the monthly net purchases in the expanded asset purchase programme (APP)—including CBPP (covered bond purchase programme), ABSPP (asset-backed securities purchase programme), PSPP (public sector purchase programme) and CSPP (corporate sector purchase programme)—and defining the list of eligible assets. Purchases are then realized by the ECB and the national central banks (NCBs). There is a major difference with the operations of liquidity provisions. The latter are realized upon banks' requests whereas the assets purchases are on the initiative of the ECB. As the PSPP entails purchases of sovereign assets issued by euro area countries, it has led the ECB to adopt the rule according to which the share of each country in the Eurosystem's monthly purchases is determined by the ECB's capital key. Besides, it has been decided that NCBs focus exclusively on their home market, while the ECB may focus on supranational assets and assets of other programmes. Although the weightings applied on a monthly basis can be a bit different to ensure smooth implementation, the policy is meant "to achieve market neutrality in order to avoid interfering with the market price formation mechanism".

However, the rules adopted for the implementation of the PSPP have some shortcomings that may limit the effectiveness of monetary policy. The availability of some eligible assets, notably of German assets, may indeed hinder the ability for the ECB to meet the objectives for the monthly purchases. Blot *et al.* (2016) suggested that the ECB could remove the 25% purchasing limit and the deposit floor constraint on purchases in order to amplify the effect on sovereign rates. Here, we suggest departing from the capital key if it becomes a constraint for the implementation of the programme and limits the ability to pursue assets purchases.

Beyond the constraints on the availability of eligible assets, the ECB might also consider other options to take advantage of the decentralization of monetary policy. Two arguments may notably be raised to justify that sovereign asset purchase within the PSPP could depart from the capital key.

- The capital key is only one among other criteria that can be used to implement a homogenous monetary stimulus across countries
- The ECB could also take advantage of decentralization to implement a differentiated stimulus.

The capital key is one weighting scheme among others that can be used to determine the national asset purchases of the Eurosystem. It can be noticed that this weighting scheme modifies the relative availability of sovereign assets in the Euro area bond market. For instance, whereas the Netherlands have a higher share in the capital key of the ECB than Belgium, their public debt represents a lower share of the total sovereign debt in the euro area (Table 12). With relatively more purchases of sovereign debt issued by the Netherlands, the implementation of the PSPP brings the Eurosystem to be relatively more active on this market than on the market of Belgian sovereign bonds. If the geographical breakdown of asset purchases had been set according to the respective shares of government debt it would have notably resulted in additional purchases of French, Italian and Belgium bonds and smaller purchases of German, Spanish and Dutch bonds. It would have mitigated the constraint on the availability of eligible assets since the Eurosystem would have purchased assets for which the supply would have been relatively higher. The choice of basing the purchases on the capital key is consequently not neutral. Considering the way it has been applied so far, the PSPP may well have produced distortions on the sovereign bond market by creating scarcity, hence contributing to push down some sovereign yields.

The argument for a breakdown by debt shares is reinforced by the fact that the purchases of sovereign bonds do not account for the business cycle position of countries. The recovery has been buoyant in Germany but sluggish in France and Italy. In Spain, despite a better economic performance since 2014, unemployment is still above its pre-crisis level. Consequently, it is not straightforward to decide on a rule which would give similar stimulus to heterogeneous countries. Theoretically, monetary policy must consider the situation of the Euro area as a whole and should not account for cross-country heterogeneities that should be addressed by appropriate decentralized fiscal policies. However, the ability to mitigate idiosyncratic shocks in the Eurozone is limited by fiscal rules and by the limited role for fiscal transfers. Under the APP, the Eurosystem could

Table 12. Country weights with alternative measures (%)

	Capital Key	GDP weights	Public debt weight
Belgium	3.5	3.9	4.6
Germany	25.6	29.2	21.8
Estonia	0.3	0.2	0.0
Ireland	1.6	2.6	2.0
Greece	2.9	1.6	3.2
Spain	12.6	10.3	11.3
France	20.1	20.7	21.9
Italy	17.5	15.5	22.6
Cyprus	0.2	0.2	0.2
Latvia	0.4	0.2	0.1
Lithuania	0.6	0.4	0.2
Luxembourg	0.3	0.5	0.1
Malta	0.1	0.1	0.1
Netherlands	5.7	6.5	4.4
Austria	2.8	3.2	3.0
Portugal	2.5	1.7	2.5
Slovenia	0.5	0.4	0.3
Slovakia	1.1	0.8	0.4
Finland	1.8	2.0	1.4

Sources: ECB and Eurostat.

manage to implement differentiated stimuli to stabilize the Eurozone as a whole and help Eurozone economies to converge, provided it does not jeopardize the inflation objective. It was notably the aim of the SMP since only some countries, where market distortions were supposed to be significant, were concerned by the asset purchases. It is certain that using the PSPP to address economic heterogeneities would neither be a simple task nor a first-best policy. Such a change would modify the purpose and the implementation of monetary policy and would have to be made transparent by explicitly stating that the ECB is concerned with heterogeneity and adapts marginally its monetary policy to address this issue. Heterogeneities have remained pervasive in the Eurozone and have reinforced since the global financial crisis. A "one size fits all" approach is not necessarily optimal and may even contribute to imbalances as was already emphasized before the crisis. By adopting an outright transactions policy, the Eurosystem has the ability to carry some fine-tuning. Macroprudential policy might be another way to implement differentiated policy to account for hetero-

geneity of domestic financial risks but it does not depend on the ECB's decisions.

f) Banking union: incomplete without a structural reform of the banking system

The future of the euro area cannot be decoupled from developments on the financial markets. In the last couple of years, the EU has introduced a number of important legal acts in the field of financial market regulation, but there is still a lot more that has to be done. The aim must be to put the core function the financial sector should play in the economy back at the centre, namely to finance long-term investment in the real economy by both companies and the public sector while creating opportunities for households to save.

As a further deepening of the banking union, what is required first and foremost is a structural reform of the banking system which separates the risk associated with investment banking from that of commercial banking and solves the "too big to fail" problem. Credit institutions which are too big, too complex and too deeply interwoven with other financial market actors to fail still constitute a serious problem. There is also plenty of work still to be done in the shadow banking sector, the over-the-counter trading of derivatives, high-frequency trading etc. Furthermore, the problem of regulatory arbitrage has still not been solved within the euro zone. Following successful structural reform of the entire financial sector, a strengthening of the third pillar of the Banking Union—i.e. a common deposit insurance—should be implemented.

The envisaged expansion of the Capital Markets Union is a new threat to Europe's financial stability, since it will mean the stimulation of already controversial financial instruments. We provided a fuller analysis in iAGS 2017. The proposal is based on a highly problematic approach framed by the motto "this time is different". The securitisation of and trading in credits made a major contribution to the emergence of the crisis, since the separation of the taking of risks and the assessment of risks has led to false incentives. Instead, it is necessary to regulate the shadow banking system and to introduce a financial transaction tax to decrease speculative activities.

g) Elaborate further the European social pillar especially by setting minimum social standards

Minimum social standards in the form of directives have made a contribution to improving living and working conditions in Europe in the decades prior to the crisis. These minimum social standards should be extended further to prevent distortions in the common internal market because of 'regime shopping' (like in the area of taxes on mobile factors). Both the non-regression principle and the principle of the most favourable conditions need to be established as mandatory horizontal principles. Social rights are only effective if they are enforceable. Effective enforcement of the rights of workers should be guaranteed by a directive.

At the centre of the minimum standard approach are minimum wage thresholds at the level of member states, for example 60% of the national median value, which ensure a decent standard of living.

In the area of social law, European minimum standards like a minimum net replacement rate for unemployment benefits (and social minimum income systems) could strengthen automatic stabilizers. As a first step, it should be stipulated that Member States provide a reasonably high net replacement rate in the unemployment insurance system and a minimum duration of entitlement (with reference to the preceding period of employment). They could be supplemented by schemes to promote lifelong learning and other forms of active labour market policy also to ban unfair contractual provisions, putting a floor to downward competition on labour standards, constitute structural reforms that serve the goal of bolstering the economic potential as well as improving social outcomes.

3.4. Progress through a pragmatic strengthening of existing institutions?

The previous analysis has shown—and indeed this is disputed by almost noone—that the economic governance of the EU and the euro area is not fit for the purpose of ensuring balanced, crisis-free growth. There is a risk that reforms in the direction of a "Maastricht 2.0" will be implemented that will destabilize rather than stabilize the monetary union. We have discussed the virtues and possible drawbacks of a number of different initiatives currently in the debate in the direction of a deepening of risk-sharing and policy integration, in the context of having only a few details on what these initiatives precisely involve (size, composition, institutional change requiring a new Treaty, *etc.*). While there is support for some of these initiatives from important actors at both EU and national level, we are concerned that the debate in the coming months will founder. Clear majorities will not be found for any proposal and little or nothing will be achieved. Euro area governance would then remain fragile. Political difficulties, notably the upcoming Italian elections, need to be kept in mind. And even if we expect the cyclical recovery to continue, negative shocks cannot be excluded.

Against this background we sketch out a pathway of pragmatic conceptual and institutional development that takes existing regulations and institutions as a basis. It thus appears politically feasible, while—even if partly relies on a "soft" form of coordination, —it would at least go some way towards improving the coordination of Member State economic policies, with a view to achieving the necessary convergence and reducing the potential for imbalances, tensions and crises (see also Koll/Watt 2017). The main elements can be summarised as follows.

As a starting point the European authorities need to make it clear that the framework for the coordination of national economic policy is given by the procedures in Article 121 TFEU (in conjunction with Articles 120 and 119). Within this framework Member States are to see economic policy as a matter of common interest and to ensure their coordination in the Council, with a view to achieving the broad goals of the EU set out in Article 3; these include sustainable economic growth, full employment and price stability. Moreover, the Broad Economic Policy Guidelines—which involve a monitoring, reporting and policy recommendation system similar to that of the SGP and now the MIP provide, again in principle, the operational means to bring about a consistent macroeconomic policy mix in the member states oriented towards these broad welfare goals. Conceptually they encompass the entire macroeconomic policy mix, and thus ensure transparency and coherence. The problem is that they have long played second fiddle to the fiscal rules. No country has seriously been threatened with sanctions, although these are foreseen in the Treaty, for failure to adjust economic policy to bring it in line with the BEPGs. It is necessary to ensure that the Broad Economic Policy Guidelines play the role of key coordination instrument.

The next element is to bring together at the level of the euro area macroeconomic expertise whose analyses can be put in the service of policy coordination. To this end we propose a board similar to the European Fiscal Board, already established in the wake of the Five Presidents' Report. The Fiscal Board itself could serve as the nucleus for an institution whose thematic area of competence is substantially extended, or it would be wound down in favour of a new body. Rather than focusing on budgetary issues more or less in isolation, its remit would extend to the macroeconomic policy mix as a whole, with respect to the objectives of a sustainable high degree of well-being and upward conver-

gence. In other words its focus should be the interaction between monetary, fiscal and "incomes" (that is nominal wage and profit developments) policies. Membership of the new board would need to be substantially increased compared to that of the Fiscal Board, not only to allow for the much broader thematic reach and cross-cutting issues (an example would be the use of fiscal devaluation as a strategy), and it would be vital to ensure a degree of pluralism in theoretical approaches.

The key task of this institution—which could be termed "Advisory Board for Macroeconomic Policy Convergence"—is to produce quantitative macroeconomic scenarios for the euro area as a whole. These chart in a quantitative form alternative paths, which can be based on a range of different assumptions, that, however, all take account of the interactions between euro area monetary policies and fiscal and incomes policies at national level. In so doing it offers a counterweight to a likely tendency of national councils (see below), to fail to take account of the externalities of national economic policy decisions on other actors, and indeed of consciously relying on "race-to-the-bottom"-type strategies that are harmful for the European economy in aggregate. As the proposed name indicates, the role of the Board is purely analytical and advisory; it does not issue recommendations.

At the national level corresponding National Convergence Boards are to be set up. These represent an institutional development of the already agreed Productivity Boards. Their remit and main task match those of the euro area level convergence board. They should elaborate country-specific, forward-looking quantitative scenarios. Clearly monetary policy will here primarily take the form of an exogenous factor and the focus will be on the interaction between fiscal and incomes policies. Here, too, the role is purely analytical.

The point of the analyses and scenarios developed by the boards at euro area and national level is to provide a coherent basis, taking account of relevant macroeconomic feedback effects, for action by governments and social partners, action that is ultimately coordinated *via* the BEPGs in which the European Commission continues to play a leading role. What is needed is an appropriate mediation body. Here we propose to take as a basis the European Macroeconomic Dialogue (EUMED). While largely in the shadows until now, it brings together top level representatives of the social partners (European Trade Union Confederation and three employer federations), the monetary authorities (the ECB plus one non-euro area central bank), the ECOFIN Council and representatives of the EU Commission. The goal is, while respecting the autonomy of actors, to improve mutual understanding between actors with a view to

achieving a better balance between incomes policies (in particular nominal wage developments), monetary and fiscal policy stances. The MED has the required thematic focus and brings together the decisive around the table. However, the EUMED has as its point of reference the EU as a whole. The new body needs to be tailored to the specific needs of the euro area and at the same time be given the necessary underpinning at national level that is currently lacking. This will require the basic MED architecture to be developed in two directions.

First a Macroeconomic Dialogue must be established at the level of the euro area (EUROMED). A pragmatic and effective way to achieve this would be to informally extend, at least twice a year, the meetings of the Eurogroup by incorporation representatives of the peak European social partner organisations. Unlike in the EUMED (where Member States are represented by Council committees, this would ensure full representation (finance minister) of all the euro area Member States. Second, in each Member State a national dialogue (MEDNAT) is to be set up, also with top-level representation of monetary (the national central bank), fiscal policy and the social partners.

In both the EUROMED and the MEDNATs the report of the respective macroeconomic convergence board serves as the point of departure for an evaluation and the cooperative orientation of the relevant elements of the macroeconomic policy mix. In the case of monetary policy in the narrow sense, at national level this is more or less a given; however national macroprudential policy by the national central bank (where appropriate in conjunction with other government agencies) can be an important tool for maintaining balanced economic developments and correcting imbalances, and in any case the participation of the respective national central bank is valuable in exchanging information and working towards joint evaluations of the situation. Discussions within the MEDs respect the autonomy and independence of the various actors and results should give guidance in formulating the final BEPGs. At the same time actions and policies are framed by basic quidelines established over the course of past BEPG exercises, notably the need to limit the size of output gaps (while seeking to expand productive potential) and ensuring a balanced development of nominal wages and profits that are consistent with balanced non-inflationary growth and, where appropriate, help to correct any imbalances that have arisen in a symmetrical fashion.

Clearly this institutional enrichment and deepening constitute by themselves "soft" forms of policy coordination. The goal is to ensure that the "ownership" of national actors for the country-specific macroeconomic needs identified in

this inclusive and consultative process is substantially greater than at present. On the other hand the BEPGs are, in principle at least, a hard form of coordination. And it is here that the EU Commission and the Council play their role, as per the existing rules. Already there is provision in the treaty for sanctions in the case of repeated failure to respect recommendations. The existing sanctions provisions can initially be retained, although more effective instruments need to be designed, along the lines of those envisaged in the Verhofstadt report (e.g. withdrawal of access to public goods).

The reforms suggested here are not a binary alternative to other proposals and would by no means solve all problems relating to economic governance. Yet a more far-reaching deepening of policy integration, while desirable, may be difficult to achieve in the current situation. The conceptual and institutional reforms that we have briefly set out here are modest. No changes to the treaties are required. These institutional developments would at least go some way towards achieving a greater degree of policy coherence and convergence and avoiding damaging coordination failures. By improving the chances of extending the current broad-based recovery and rendering it more resilient, it can gain time and policy space to win majorities for the further-reaching changes that will ultimately be needed. Moreover, by establishing a framework conducive to national policies that are compatible with the "common interest" in an appropriate policy mix at the level of the monetary union as a whole, such a package would serve to reduce the need for crisis-related interventions and transfers.

3.5. Conclusion

The Treaty on European Union (TEU) clearly states that the Union's overall "aim is to promote [...] the well-being of its peoples" (Art. 3 (1)) and goes on to specify in paragraph 3 that it shall work, amongst other things, for sustainable development, social progress and the quality of the environment. In reforming EMU economic governance, policymakers should therefore take such primary economic objectives as a point of departure. However, since the 2008 economic and financial crisis, economic governance reforms in the European Union have been decided in an ongoing state of emergency, guided by the principle "whatever it takes to preserve the euro", formulated by ECB president Mario Draghi in 2012. Proposals have emphasised crisis prevention, resilience to economic shocks and the "dangerous obsession" (see Krugman 1994) of competitiveness. Although strictly necessary, such goals are not sufficient to quarantee sustainable well-being and upward convergence.

Especially now that the immediate pressure for crisis management has eased in parallel to economic recovery, when reforming EMU economic governance policy makers should pay more attention to the longer-term overall economic objectives of fostering sustainable well-being and upward convergence. In cyclical terms the sun is now shining. It is time to fix the leaky roof (if not to say the unstable foundations) of European Monetary Union. It would be a fatal error to confuse a cyclical recovery with an indication that all is well and only minimal reforms are needed.

In our last year's report (see chapter 2.4 in iAGS 2017), we proposed a "magic polygon for well-being oriented economic policy", similar to the well-known 'magic square' used as a central economic policy guidance tool since 1967:

Magic Polygon Fairly distributed Full employment material wellbeing and good jobs **Ecological** Quality of life Wellbeingsustainability oriented **Economic Policy** Financial stability Stable state activity Price stability External balance Quelle: AK AK/APA-AUFTRAGSGRAFIK

Figure 50. Well-being oriented economic policy making based on the Magic Polygon

Source: AK-Wien.

This framework entail more concrete economic, environmental and social goals as well as a closer look on economic stability, backed by indicators to measure any progress made and a procedure for setting discretionary priorities based on the current economic, environmental and social situation. Since some of these goals are in tension with one another (particularly low inflation and full employment), in practice the 'magic' involves achieving these goals simultaneously as far as possible, whilst taking account of the current economic situation.

In the previous sections, we have set out and analysed some of the many proposals to deepen the EMU, measured against the overall criterion of their potential for, but also their possible risks to, economic stability and sustainability and upward convergence. We have given special attention to the trade-offs that some commentators allege exist between the two goals, as this lies at the centre of the political debate in Europe now: on the one side, proposals emphasing economic stability created by disciplining "unsolid" policies at the national level, either through markets or intergovernmental institutions; on the other side, proposals stressing the need for more risk sharing, solidarity and policy coordination to foster upward convergence.

In fact we believe that this trade-off does not exist. As we have argued, a "disciplinary" approach is very likely to generate instability rather than stability. Conversely, upward convergence is a pre-condition, in both economic and political terms, for a monetary union membership of which is perceived by all countries to be an advantage in delivering social and economic goals, rather than a burden. Achieving policy coordination and upward convergence is no easy task given political realities. If agreement cannot be reached on ambitious risk sharing mechanisms, which would imply constraints on national policymaking, an intensification of softer forms of coordination may be the only way forward.

APPENDIX 1. European safe assets and debt redemption schemes, a look at the literature

Alternatively to the "Maastricht 2.0" view and in parallel to the integrationist view, some proposals of debt redemption or the creation of a European safe asset have emerged in the economic and political debate.

i. Safe Assets in the Eurozone

Before the Euro crisis, safe assets were only occasionally discussed as a new step of European integration. During the crisis however, the fact that banks tended to hold excessive amounts of debt of their home countries became an existential problem for peripheral countries. This so-called home bias (De Marco & Macchiavelli, 2016) was problematic because banks thereby became linked to the fortune of their home countries. Meanwhile, States were also dependent on their banking system, especially when it was possible that it would fail. In a nutshell, this is the bank sovereign "doom-loop" which exacerbated the crisis. (Baldwin & Giavazzi, 2015) There are several proposals being discussed, which all try to achieve a better diversified banking sector through a liquid safe asset with market volumes high enough to satisfy a large part of banks liquidity needs. Next to making changes in capital regulations credible, this asset is meant to ease lending for periphery countries and give them the fiscal space necessary to do countercyclical fiscal policy, while at the same time preserving market discipline.

One of the earliest proposals was put forward by J. Delpla and J. von Weizsäcker (2010) and rests on the idea to pool only the debt that is in compliance with the 60% debt to GDP requirement in the Maastricht Treaty. In the case of a sovereign default, a State would treat "blue debt" preferentially, whereas "red debt", which is the debt issued above 60%, would be junior debt. Thus, if a country issued more debt than it was supposed to under the treaty, it would be punished by especially high yields, while the first 60% debt to GDP would have much lower funding costs. This is not only because it would be riskier than the "blue debt", but also because the liquidity for the marginal debt above 60% of a single country would be drastically lower than for the "blue debt". At the same time, even the debt of safe countries with less than 60% debt to GDP would be traded with a liquidity premium, meaning it is possible that their

yields would be lower as well. To implement the proposal, Delpla and Weizsäcker propose an Independent Stability Council, which should regulate the "blue bonds" allocation which are then subject to the parliamentary approval of member states. This allocation would not work mechanically. Instead States would only be allowed to borrow the full amount possible if they also implemented credible fiscal policies. If a member state did not comply, it would gradually lose its share in the "blue bonds", hence safe guarding remaining states from free riders.

In essence this is similar to what Brunnermeier, Garicano, et al. (2016), which would rely on two pooled assets, next to regular bonds, have argued. Brunnermeier et al. proposed that either private institutions such as large banks or a European Debt Agency should buy bonds and essentially put them into a tranched CDO. A CDO pools underlying debt contracts and includes the safest debt in the senior tranche and pools the riskiest debt in the junior tranche. The senior tranche, coined European Safe Bonds (ESBIES) is thus extremely safe, while European Junior Bonds (EJBIES) provide relative safety compared to government bonds, but higher returns than ESBIES. Similar to Delpla and Weizsäcker, the overall pool should only contain a limited amount of government debt (one proposal would also be 60% of GDP), so that the rest is treated similarly to "red bonds". Since governments would keep issuing their debt in the same way they do today, except for potential cooperation to match the maturities in the bond pool, this would create no joint liability for governments. Brunnermeier et al also show in a simulation, that it is likely that ESBIES would yield less than German bonds and that there would roughly be two times as ESBIES than there were AAA bonds in 2011.

According to the authors of this proposal, these bonds could be implemented by a centralized swap in which the ECB would exchange portfolios of Government bonds to ESBIES. In a variation of this proposal, Corsetti et al. (2015) propose that once ESBIES are introduced, government bonds should only be treated as risk free or count within the liquidity requirements, if they are held according to the weighting of the safe asset. They also propose that the ECB should buy and sell country bonds in packages with this weighting, so that the ECB would lead financial markets to implementing safe assets.

Both the German Council of Economic Experts (Bofinger, Feld, Schmidt, Schnabel, and Wieland, (2017)) and German Bundesbank president Jens Weidmann (Weidmann, 2017) have shown conditional interest in such proposals, referring to them as "sovereign bond-backed securities" (SBBS). Both also highlight the publication of S&P Global Ratings, which warned of the high risk

correlations between European States. It indicated that it would therefore probably rate such securities such that the senior tranch would have the rating of the lowest rated country in the pool. At the moment, this would be Italy with a rating of BBB-. Marcello Minenna (Minenna, 2017) from the Italian securities regulator, Consob, also warns that peripheral banks have return targets for their government bonds, meaning they would rely on EJBIES while core banks buy the safe tranche. Moreover, he warns of a zero sum game in which countries would pay so much on their remaining government bonds that their average yield would stay the same, questioning the effect the safe asset would have.

ii. Debt redemption schemes

Another possibility to improve the situation for banks and sovereigns are forms of debt redemption for European states. These proposals also rely on a European pooled bond to finance debt buybacks but they can also be complementary to the safe bonds proposals above. In general, they tackle the problem of existing government debt more directly by specifically reducing debt payments to feasible levels.

Corsetti et al. (2015) propose, that in addition to a safe bond, the European Stability Mechanism (ESM) should be augmented with a "Stability Fund". This fund would buy back all European debt which is above 95% of GDP of a country and swap the debt with zero yielding perpetuities. To cover the costs of such an operation, the fund would be financed either by a combination of VAT and seigniorage by each member state to cover the costs of their own capital, or if member states agree, simply by pooling the seigniorage income of all member states. To reach a net present value of seigniorage incomes high enough to borrow against it and buy back the debt, this idea hinges on the credibility of member states to commit their incomes from the chosen source for a long enough time period (the authors estimate 50) years.

Pâris and Wyplosz (2014) would use a relatively similar strategy to ease European debt payments. However, their Politically Acceptable Debt Restructuring Fund for the Eurozone (PADRE) regime holds that the ECB should act in place of the stability fund by buying and swapping member states bonds to zero interest perpetuities. In their scenario, the ECB would acquire debt in proportion of the ECB of member countries. Because, the losses the ECB makes have also have to be borne in relation to the ECB shares, losses and debt ease are automatically proportional. However, since the yield the ECB would have to pay on its bonds issued to finance the debt buyback would likely be small, the authors argue that forgoing their seigniorage income for an indefinite time horizon would be

enough to finance the credit. Since this too could lead to free riding of members, Pâris and Wyplosz propose strict rules to ensuring the sustainability of the scheme. Firstly, should a country start to accumulate debt again, the ECB could opt to swap the perpetuities back to normal yielding bonds, meaning that countries would again face market discipline. Secondly, if governments collectively want to relax this condition, this would require a vote, which—if successful—would automatically impose any additional losses to the ECB on the governments who voted for the change. Third, governments would need to implement a constitutional debt break, with the highest legislative authority, meaning if possible, with a referendum.

Constitutional debt breaks would also be a condition for the scheme the GCEE has proposed. They argue for a European "Redemption Fund" through which participating states should finance their debt above 60% and which would be guaranteed by all members. Moreover, members would also be bringing collateral in the shape of gold or other reserves of 20% to the fund. As in the case of Corsetti et al., the redemption of the yield would be paid for by tax provisions, which would be earmarked for servicing the debt. Over the course of roughly 25 years, member states paying back their share of the debt within the fund and thereby ultimately resolve the fund as a whole.(Bofinger et al., 2017)

Lastly, Corsetti et al. (2017) argue for more powerful "Eurozone Fund" which would be able to issue non-defaultable debt by issuing bonds which would be convertible at par into currency once they mature. If necessary, member states which complied with budgetary criteria depending on their state of the economy, could rely on the fund to purchase parts of their debt. As long as they complied with the rules, this would safeguard them from self-fulfilling equilibria. Of course, to avoid forcing States into austerity in times of economic downturn, these rules would allow expansionary policies in such cases. On the other hand, if a country violated the fiscal criteria, the fund would have to refrain from lending to the country. Similar to Corsetti et al. (2015), the fund would also finance itself by collecting taxes in the form of VAT surcharges and seigniorage revenues. However, unlike the other proposals, Corsetti et al. (2017) have a broader objective for the fund. They point out, that such a fund could also act as a backstop for the Single Resolution Mechanism and a European deposit insurance scheme.

APPENDIX 2. New capital regulations for banks and their possible incidence of bank capital ratios

In the process of reviewing capital regulations, the Basel Committee for Banking Supervision has pointed out that the European Union is for this reason materially non-compliant with its capital standards (the worst rating any member received), because the regulation inflates capital ratios by decreasing the regulatory amount of risk-weighted assets (BCBS 2014). However, in their assessment program, Basel regulators also pointed towards the fact that in 2018 the European Banking Authority is due to issue guidelines significantly limiting the volume of which banks are allowed to assign zero-risk to EU countries, by deciding on a percent of balance sheet or risk-weighted assets, that can be permanently calculated by the standardized approach.(Basel Committee on Banking Supervision, 2014). Yet, regulators in the EU have relatively high leeway in implementing such guidelines and frequently do not comply with them ⁴. This makes it very questionable as to how they will in the end effect European banks.

Within the EU, banks usually have to cover themselves against the risk of their investments by holding capital for each of them. Specifically, banks calculate their risk exposure from an investment by multiplying the invested capital with a risk-weight that depends on the riskiness of the undertaking. For the sum of these exposures, banks have to hold a percentage of capital to cover potential losses on their investments. In summary this can be calculated in with the simple formula:

$$Capital \ Ratio = \frac{\sum_{j}^{k} Capital_{k}}{\sum_{i}^{n} Risk - Weight_{i}*Investment_{i}} \cdot$$

The required capital ratio depends on the measure of capital holdings. It ranges between 4.5% for common equity and 8% for total capital, while the ratio for tier one capital is 6% according to Article 92⁵ of the Capital Requirements Regulation (CRR).

Incompliance is listed within the Annual reports. See for example: European Banking Authority (2013)

Regulators decided that government bonds from *non-European* countries should receive a risk weighting based on internal models of the bank or based on their credit rating, whereas debt issuances from States within the EU are allowed to be treated as risk free. Specifically, regulators allow banks to assign zero risk-weights to all European sovereign bonds as long as they are issued in the local currency of the issuer. This, of course includes almost all European bonds, and scholars and regulators agree that most banks are thus treating European debt as risk free.⁶

In order to get a proxy of how capital ratios of large European banks would change if EBA guidelines were implemented, we use the standardized approach/ the formal ratings approach based on calculations by Kirschenmann, Korte, and Steffen (2016), using data from EBA transparency exercises. Specifically, we use the latest release of the dataset by the European Banking Authority including 88 banks across Europe.

In this analysis, we started by calculating tier one ratios by dividing tier one capital by risk-weighted assets. Next, we extracted the "Financial assets: Carrying Amount" of each bank with respect to all EU governments to proxy for the exact amount of sovereign exposure to a government. Thirdly, we use the Fitch Long Term Credit Ratings in Local currency to risk-weight the exposures in two ways: i) we use the application of the Foundation IRB of Basel II (Basel Committee On Banking Supervision, 2005) application, by Kirschenmann, Korte, and Steffen, who rely on standard assumptions of 2.5 years maturity and a loss given default of 45% to calculate risk-weights in a similar fashion as banks would do if they used the IRB approach; ii) we simply apply the risk-weights states would face if they were not in the EU as laid out in CRR Article 114 in combination with Article 136, and the competent authorities mapping of credit ratings to credit steps in the implementing technical standards by the Joint Committee of the European Supervisory Authorities (2015). Lastly, we add the risk-weighted sovereign exposure we obtain from each approach to the risk weighted assets, to ultimately calculate tier one ratios.

^{5.} To give some examples, common equity includes capital from shares and retained earnings, tier one capital includes contingent convertibles, and total capital includes subordinated loans. (Bank of England, 2017) We use tier one capital, which includes less capital measures than total equity (e.g. subordinated loans) but more than common equity (e.g. Contingent convertibles).

See for example, (Lautenschläger, 2013, p. 3), (Nouy, 2012, p. 105), (Andritzky, Gadatsch, Körner, Schäfer, & Schnabel, 2016).

In general, one can see that all banks in this sample would still have capital ratios well above the 6% minimum (Figure A1). However, it is also obvious that especially banks in the periphery such as Portugal, Italy, Spain, and Malta have bank capital ratios below the EU mean and are lower capitalized than banks in core countries.

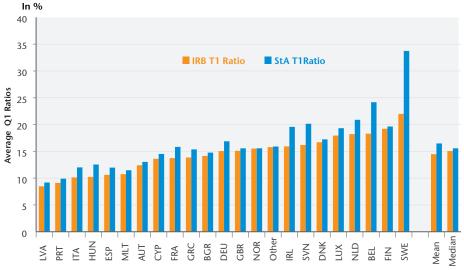


Figure A1. Ratios if Sovereign Exposures are assigned a positive risk-weight

Source: European Banking Authority, 30/06/2016. Authors Calculations.

Using the standardized approach, which still assigns a zero risk to countries with AA rating or better, we can also see on Figure A2 that especially banks in Portugal and Greece would be strongly affected if they had to hold positive risk-weights. This suggests that especially Portugese banks are exposed to risky sovereign debt which would reduce their capital ratios if positive risk-weights were assigned.

This picture changes slightly once positive risk-weights are applied to AAA and AA states (Figure A3). In this scenario, especially banks from Belgium would lose large fractions of their tier one ratio. However, these banks are still generally well capitalized. Banks from Portugal, Cyprus, Greece and Hungary lose more capital than the average no matter which methodology we choose.

At least the banks tested by the EBA in 2016 would not fall below minimum requirements due to positive risk-weights. However, apart from the fact that current capital ratios should be maintained to reach the highest possible level of

In % 16 14 12 Average decline in Q1 Ratios ■ Decline in Q1Ratio due to Sovereign Exposure (StA) 10 8 6 4 2 0 GBR NFD AUT LVA СҮР FRA Ľ MLT 핌

Figure A2. Decline in Tier 1 Ratios if Sovereign Exposures are weighted by the Standardized Approach for non-European Countries

Source: European Banking Authority, 30/06/2016. Authors Calculations.

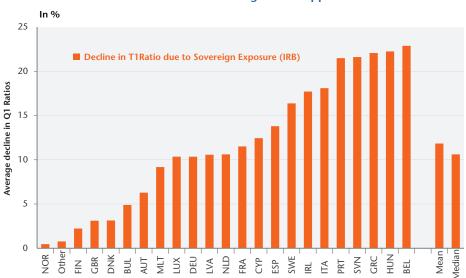


Figure A3. Decline in Tier 1 Ratios if Sovereign Exposures are weighted by the Formal Internal Ratings Based Approach

Source: European Banking Authority, 30/06/2016. Authors Calculations.

financial stability, point out that simply applying risk-weights overnight could be a problem due to liquidity regulations. Indeed, under current regulations, banks need to hold enough high quality liquid assets to account for potential outflows during a 30-day stress scenario. If banks prefer low risk-weighted bonds to fulfil their liquidity requirements, Brunnermeier *et al.* (2016) argue that this would induce a "regulatory-driven flight to quality" (p.26). Fully and properly implemented safe assets are therefore necessary to ward off this unintended consequence. Given the acute possibility of change in capital regulations, and the risks described by Brunnermeir *et al.*, we will now quickly summarize the proposals for the creation of a European safe asset.

It remains to acknowledge that these reform proposals—safe assets, debt redemption but also the European Monetary Fund—are also closely related to the current fiscal framework. They may thus share some of its shortcomings. First and foremost, safe assets and debt redemption proposals take for granted that the Maastricht debt ratio of 60% of GDP is an optimal target. However, a non-contingent *constant* public debt does not exist. Second, the introduction of conditionality on the ability to resort to any of these new schemes is biased against peripheral countries. They are those most requiring debt restructuring for their debts are high (Italy) or have increased substantially since the onset of the global financial crisis (Spain) but they are also those most able to provoke a banking and financial crisis. For this latter reason, they will be watched over closely before they receive aid via a haircut. This resembles the Greek crisis management... and we know how wrong it went

- Akerlof, G. A. (1978), "The Economics of 'Tagging' as Applied to the Optimal Income Tax, Welfare Programs, and Manpower Planning", *The American Economic Review*, 68: 1.
- Andritzky, J., Gadatsch, N., Körner, T., Schäfer, A., & Schnabel, I. (2016), *Ending the privileges for sovereign exposures in banking regulation* | VOX, CEPR's Policy Portal. Retrieved March 24, 2017, from http://voxeu.org/article/ending-privileges-sovereign-exposures-banking-regulation
- Andritzky, J., L. Feld, C. Schmidt, I. Schnabel, V. Wieland (2016), Creditor participation clauses: Making orderly sovereign debt restructuring feasible in the Eurozone, vox.eu 21 July 2016. http://voxeu.org/article/mechanism-proposal-eurozone-sovereign-debt-restructuring/
- Auerbach, A., and Gorodnichenko, Y. (2012), "Measuring the Output Responses to Fiscal Policy." *American Economic Journal: Economic Policy*, 4(2): 1-27, May.
- Baldwin, R., & Giavazzi, F. (2015), *The Eurozone crisis: A consensus view of the causes and a few possible solutions* | VOX, CEPR's Policy Portal. Retrieved June 7, 2017, from http://voxeu.org/article/eurozone-crisis-consensus-view-causes-and-few-possible-solutions
- Bank of England (2017), Explanatory Notes—Banking sector regulatory capital | Bank of England. Retrieved November 15, 2017, from http://www.bankofengland.co.uk/statistics/Pages/iadb/notesiadb/capital.aspx
- Basel Committee On Banking Supervision. (2005), Basel II: International Convergence of Capital Measurement and Capital Standards. Basel: Bank for International Settlements.
- Basel Committee on Banking Supervision. (2014), Basel III Regulatory Consistency Assessment Programme (RCAP)—Assessment of Basel III risk-based capital regulations. Financial Stability Institute. Basel: Bank for International Settlements.
- Beer, C., Köhler-Töglhofer, W. and Stiglbauer, A. (2014) "A Common European Unemployment Insurance—A Much Debated Route toward European Fiscal Union." *Monetary Policy & the Economy*, issue 4, 35-52.
- Bell, D. N. F. & Blanchflower, D. G. (2013), "How to measure underemployment?", Working Paper 13-7, Peterson Institute for International Economics.
- Bicakova, A. (2014), "The trade-off between unemployment and wage inequality revisited", Oxford Economic Papers, 66(4, 1): 891–915,
- Blank, R. (1995), "Changes in inequality and unemployment over the 1980s. Comparative cross-national responses", *Journal of Population Economics*, 8:1.

- Blot, C., Cochard, M., Creel, J., Ducoudré, B., Schweisguth, D., & Timbeau, X. (2014), "Fiscal consolidation, public debt and output dynamics in the euro area: lessons from a simple model with time-varying fiscal multipliers", *Revue d'Économie Politique*, 124(6): 953-989.
- Blot, C., Creel, J., and Hubert, P. (2016), Rooms for extension of the ECB's quantitative easing programme, European Parliament's Committee on Economic and Monetary Affairs, In-depth analysis, Directorate General For Internal Policies Policy Department A: Economic And Scientific Policy, February.
- Bofinger, P., Feld, L. P., Schmidt, C. M., Schnabel, I., & Wieland, V. (2017), Für Eine Zukunftsorientierte Wirtschaftspolitik. Wiesbaden.
- Bordon, Ingo G. / Schmid, Kai Daniel / Schmidt, Michael (2014), "Hypnosis Before Wake-up Call? The Revival of Sovereign Credit Risk Perception in the EMU-Crisis." *IMK Working Paper*, N° 138.
- Brunnermeier, M. K., Garicano, L., Lane, P. R., Pagano, M., Reis, R., Santos, T., ... Vayanos, D. (2016), "The Sovereign-Bank Diabolic Loop and ESBies." *American Economic Review*, 106(5): 508–512.
- Brunnermeier, M. K., Langfield, S., Pagano, M., Reis, R., Nieuwerburgh, S. Van, & Vayanos, D. (2016), "ESBies: safety in the tranches." *Economic Policy*. https://doi.org/10.2849/5698
- Chagny, O., & Le Bayon, S. (2014), "L'introduction d'un salaire minimum légal: genèse et portée d'une rupture majeure", *Chronique Internationale de l'IRES*, (146): 3-18.
- Chusseau, N. and J. Helier, (2016), "Structural policy and the inequality-unemployment trade-off: Is the German strategy applicable to France?", *URL: http://www.ecineq.org/ecineq_nyc17/FILESx2017/CR2/p204.pdf*
- Clark, K. B. & Summers, L. H. (1979) "Labor Market Dynamics and Unemployment: A Reconstruction", *Brookings Papers on Economic Activity*, 10:1.Devereux, M. P. & Loretz, S. (2012), "What do we know about corporate tax competition?", *Oxford University Centre for Business Taxation Working Paper 12/29*.
- Corsetti, G., Dedola, L., Jarociński, M., Mackowiak, B., Allard, C., Bluedorn, J., ... Weder, B. (2017), *Business cycle stabilisation in the Eurozone: Ways forward*. Retrieved November 15, 2017, from http://voxeu.org/article/business-cycle-stabilisation-eurozone
- Corsetti, G., Feld, L. P., Lane, P. R., Reichlin, L., Vayanos, D., Rey, H., & Weder di Mauro, B. (2015), *A New Start for the Eurozone: Dealing with Debt*. London: CEPR Press.

References 137

- Creel, J., Heyer, É. and Plane, M. (2011), "Petit précis de politique budgétaire par tous les temps: Les multiplicateurs budgétaires au cours du cycle." *Revue de l'OFCE*, 116(1): 61-88.
- De Grauwe, P., and Ji, Y. (2016), "Flexibility Versus Stability: A Difficult Tradeoff in the Eurozone." *Credit and Capital Markets*, 49(3): 375-413
- De Marco, F., & Macchiavelli, M. (2016), "The Political Origin of Home Bias: The Case of Europe." *Finance and Economics Discussion Series* (Vol. 2016-30). Washington. https://doi.org/10.17016/feds.2016.060
- Delpla, J., & von Weizsäcker, J. (2010), *Bruegel Policybrief* (bruegelpolicybrief No. 2010/03). Brussels.
- Deutsche Bundesbank (2016), Monthly Report, July 2016.
- Dreher, A. (2006), "Does Globalization Affect Growth? Evidence from a new Index of Globalization", *Applied Economics*, 38/10. Updated in: Dreher, A., Gaston, N. & Martens, P. (2008), Measuring Globalisation—Gauging its Consequences. Springer, New York.
- Dumont, M. (2013), "Is there a Trade-off between Wage Inequality and Unemployment?", In: Hellier J., Chusseau N. (eds) Growing Income Inequalities. Palgrave Macmillan, London.
- ECLM (2017), "Uddannelse løfter beskæftigelsen for ufaglærte unge markant, Arbejderbevægelsens Erhvervsråd", https://www.ae.dk/analyser/uddannelse-loefterbeskaeftigelsen-for-ufaglaerte-unge-markant.
- European Banking Authority (2013), 2013 Annual Report. London. https://doi.org/ 10.2853/65701
- Fessler, P. and Schürz, M. (2015), "Private wealth across European countries: the role of income, inheritance and the welfare state", ECB Working Paper, n°1847.
- Francese, M. & Mulas-Granados, C. (2015), "Functional Income Distribution and Its Role in Explaining Inequality", *IMF Working Paper No. 15/244*. Available at https://ssrn.com/abstract=2727209
- Furceri, D., & Zdzienicka, A. (2012), "How costly are debt crises?". *Journal of International Money and Finance*, 31(4): 726-742.
- Furceri, D., & Mourougane, A. (2012), "The effect of financial crises on potential output: New empirical evidence from OECD countries", *Journal of Macroeconomics*, 34(3): 822-832.
- Gollin, D. (2002), "Getting Income Shares Right", Journal of Political Economy, 110/2.
- Gordon, R. (2012), "Is US economic growth over? Faltering innovation confronts the six headwinds », CEPR Policy Insight, 63.
- Gravelle, J. G. & Hungerford, T. L. (2012), "Corporate Tax Reform: Issues for

- Congress", CRS Report for Congress No. 7-5700, Congressional Research Service.
- Gros, D. (2017), *An evolutionary path towards a European Monetary Fund*. Paper requested by the European Parliament, PE 602.075, IPOL, EGOV.
- Gros, D. and T. Mayer (2010), "How to deal with sovereign default in Europe: Create the European Monetary Fund Now!." *Policy Brief*, No. 202, CEPS.
- Herzog-Stein, A., Friedrich, B., Sesselmeier W., and Stein, U. (2017), "Wachstum und Produktivität im Gegenwind Eine Analyse der Argumente Robert Gordons im Spiegel der deutschen Produktivitätsschwäche", *IMK Report*, Nr. 124.
- Horn, G. et al. (2017), "Was tun gegen die Ungleichheit?", IMK Report 129, https://www.boeckler.de/imk_6456.htm?produkt=HBS-006660
- Hubert, A. (2001), "From Equal Pay to Parity Democracy: The Rocky Ride of Women's Policy in the European Union", in J. Klausen and C. S. Maier (eds), Has Liberalism Failed Women? Assuring Equal Representation in Europe and in the United States (New York, Palgrave) pp. 143–164.
- iAGS (2014), "From austerity to stagnation: How to avoid the deflation trap".
- iAGS (2016), "Give recovery a chance".
- iAGS (2017), "The elusive recovery".
- Issing, O. (2009), Why a common eurozone bond isn't such a good idea (No. 3). Brussels.
- Jaumotte, F. & Osorio Buitron, C. (2015), "Inequality and Labor Market Institutions", *IMF Staff Discussion Note SDN/15/14*.
- Joint Committee of the European Supervisory Authorities (2015). Joint Final Draft Implementing Technical Standards on the mapping of ECAls' credit assessment under Article 136(1) and (3) of Regulation (EU)? 575/2013 (Capital Requirements Regulation—CRR). London: European Banking Authority.
- Kirschenmann, K., Korte, J., & Steffen, S. (2016) "The Zero Risk Fallacy Banks â€TM Sovereign Exposure and Sovereign Risk Spillovers (Discussion und Working Paper)." *Unpublished Working Paper*. Center for European Economic Research.
- Koll, W. and Watt, A. (2017), "A feasible conceptual and institutional reform agenda for macroeconomic coordination and convergence in the euro area", in H. Herr, J. Priewe, A. Watt (eds) Saving the Euro: Redesigning Euro Area economic governance, Social Europe Publishing, pp. 335-352
- Kopits, G. and Symansky, S. (1998), Fiscal policy rules, IMF Occasional Paper, N°162, July.
- Krugman, P. (1994), "Past and Prospective Causes of High Unemployment", *Economic Review*, Federal Reserve Bank of Kansas City, pp. 23-43.

References 139

- Lautenschläger, S. (2013), The leverage ratio—a simple and comparable measure? Frankfurt: Deutsche Bundesbank.
- Leeper, E. M., Traum, N., & Walker, T. B. (2017), "Clearing up the fiscal multiplier morass", *American Economic Review*, 107(8): 2409-2454.
- Lindner F. (2015), How a sovereign insolvency regime would polarise the eurozone, Social Europe, 14 August 2015, https://www.socialeurope.eu/sovereign-insolvency-regime-polarise-eurozone/
- McIntosh, S. (2004), Further Analysis of the Returns to Academic and Vocational Qualifications, Centre for the Economics of Education, London.
- Minenna, M. (2017), Why ESBies won't solve the euro area's problems | FT Alphaville. Retrieved November 12, 2017, from https://ftalphaville.ft.com/2017/04/25/2187829/guest-post-why-esbies-wont-solve-the-euro-areas-problems/
- Monti, M. *et al.* (2016), Future Financing of the EU, http://ec.europa.eu/budget/mff/hlgor/library/reports-communication/hlgor-report_20170104.pdf
- Mroz, T. A. & Savage, T. H. (2006), "The Long-Term Effects of Youth Unemployment", *The Journal of Human Resources*, 41/2.
- Nouy, D. (2012), Is Sovereign Risk Properly Addressed by Financial Regulation? Banque de France Financial Stability Review, April(No. 16), 95–106.
- OECD (2017), OECD Employment Outlook 2017, OECD Publishing, Paris. Available at http://dx.doi.org/10.1787/empl_outlook-2017-en
- Osberg, L. and Bechert, I. (2017), "Social values for equality and preferences for state intervention: Is the USA 'Exceptional'", Working Paper.
- Pâris, P., & Wyplosz, C. (2014), PADRE: Politically Acceptable Debt Restructuring in the Eurozone. Geneva Reports on the World Economy. Geneva and London.
- Périvier, H., (2018), "Recession, Austerity and Gender: A Comparison of Eight European Labour Markets", *International Labour Review*, to be published.
- Piketty T. (2014), Capital in the Twenty Fist century, Harvard University Press
- Piketty, T., & Zucman, G. (2014), "Capital is Back: Wealth-Income Ratios in Rich Countries, 1700-2010", *Quarterly Journal of Economics*, 129:3, p.1155-1210.
- Ponthieux, S. (2004), "Les travailleurs pauvres : identification d'une catégorie", *Travail, Genre et Société*, 11.
- Ponthieux, S. (2010), "An analysis of in-work poverty risk in the EU", Eurostat methodologies and Working papers, Eurostat, Luxembourg.
- Reinhart, C. M., & Rogoff, K. S. (2008), "This time is different: A panoramic view of eight centuries of financial crises", *Annals of Economics and Finance*, 15(2): 1065-1188.

- Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung (2016), Jahresgutachten 2016/17
- Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung (2017) Jahresgutachten 2017/18
- Sapir, A. and D. Schoenmaker (2017), The time is right for a European Monetary Fund. Policy Brief 2017/10, Bruegel.
- Schulten, T. and Müller, T. (2014), European economic governance and its intervention in national wage development and collective bargaining, in: Lehndorff, S. (ed.), Divisive integration: The triumph of failed ideas in Europe—revisited, Brussels: ETUI, 331-363.
- Schwendinger, M. (2015), "Arbeitszeiten in Österreich", Materialien zu Wirtschaft und Gesellschaft Nr. 148—Working Paper-Reihe der AK Wien, AK Wien.
- Smith, M. and Villa, P. (2010), "The ever-declining role of gender equality in the European Employment Strategy", *Industrial Relations Journal*, 41(6): 526–543
- Spengel, C. *et al.* (2016), "Effective tax levels using the Devereux/Griffith methodology", *Project for the EU Commission TAXUD/2013/CC/120: Final report*, ZEW-Gutachten und Forschungsberichte.
- Stiglitz, J. E. (2016) *The Euro: How a Common Currency Threatens the Future of Europe*, W. W. Northon & Company.
- Storer, P et Van Audenrode, M. (1998), "Exploring the Links between Wage Inequality and Unemployment: A Comparison of Canada", *Analyse de Politiques*, Vol. 24.
- Tobin, J. (1970), "On Limiting the Domain of Inequality", *The Journal of Law & Economics*, 13/2.
- Vermeulen, P. (2016), "Estimating the Top Tail of the Wealth Distribution", American Economic Review, 106(5).
- Watt, A. (2007), "The role of wage-setting in a growth strategy for Europe". Philip Arestis, Michelle Baddeley and JohnMcCombie (eds.) *Economic growth*, New directions in theory and policy, Edward Elgar: 178-199.
- Watt, A. (2017), "Explaining unemployment developments in Europe. The role of wage-setting institutions and macroeconomic policies", *IMK Study* 57, https://www.boeckler.de/imk_5274.htm?produkt=HBS-006621&chunk=1&jahr
- Weidmann, J. (2017), Exercising responsibility—how monetary union can be made future-proof. Vienna.
- Wren-Lewis, S. (2015), Debt restructuring: a proposed principle, https://mainlymacro.blogspot.de/2015/01/debt-restructuring-proposed-principle.html/
- Wyplosz, C. (2017), A European Monetary Fund? Paper requested by the European Parliament, PE 602.076, IPOL, EGOV.

Index

Figure

Contribution to the euro area's growth
Impact of Fiscal Policy on GDP growth24
ob creation by sector in the EU
Core inflation in the main countries in the third quarter of 2017
Nominal ULC in the euro area and the golden rule for wages $\dots \dots 28$
Nominal adjustments needed with respect to EA average
Indicator of intra-EA nominal disadjustments, with per-country contributions $\dots\dots32$
Nominal ULC and current accounts between 2008Q1 and 2017Q234
Nominal ULC, exports and imports (in volume), 2008-2017
Change in debt between 2007-Q4 and 2017-Q1
Public debt in 2035, fiscal impulse and output gap
Unemployment rate in the EU and the euro area
Development in unemployment rates
Unemployment rates, 2nd quarter of 2017
Unemployment rate of workers with the lowest education levels and average
unemployment
Unemployment rate of workers with the lowest education levels
Youth unemployment rates in EU and euro area
Participation rate in education and training of young people (without employment) .53
NEET rate in the EU and the euro area54
NEET rates in the EU
Temporay employment as a share of total employment in EU28
Underemployment and unemployment in the euro area
Contribution of men and women to the total employment rate in Europe
(aged 20-64) in 2016
Female part-time rate and Gender Overall Earnings Gap (in $\%$) in 2014 (15-64 years) .59
Contribution of each component to the gender overall earning gap in
European Countries in 2016
Gini after transfers and reduction of Gini by transfers62
Change in Gini coefficients, 2008-2016
Comparison of Global Gini of equivalized disposable income, EU and Eurozone
(excluding Germany) with US Gini

Indicators for net wealth inequality
Anchored risk of poverty rate68
Change in anchored risk of poverty rate, 2008-2015
Impact of social transfers in cash on the unanchored risk of poverty 69
Impact of social transfers on the unanchored risk of poverty69
Average unemployment benefits in the EU
Replacement rate at two phases of unemployment (EU median)
Material deprivation rate
Average annual growth of the real wage rate, 2008-2016
The labour share of income
Unanchored risk of poverty rate for employed persons in EU27
Change in unanchored risk of poverty rate for employed persons, 2006-2015 76
In-work poor vs D6/D1
Gini of living standards (ppp) before and after transfers, 2005-201580
Evolution of inequalities in the bottom and the top of the living standard (ppp) distribution, 2005-2015
Evolution of inequalities in the bottom and the top of the living standard distribution in the different countries of the European Union, 2008-2015
Evolution of D6/D1 vs evolution of unemployment82
Share of low wages and unemployment rates, 201485
Mean effective corporate tax rate in EU28 (with p20-p80 range)87
Mean personal dividend tax rate in European OECD countries (with p20-p80 range) . 87
Ranges of fiscal targets derived from stabilisation and sustainability needs113
Well-being oriented economic policy making based on the Magic Polygon123
Ratios if Sovereign Exposures are assigned a positive risk-weight
Decline in Tier 1 Ratios if Sovereign Exposures are weighted by
the Standardized Approach for non-European Countries
Decline in Tier 1 Ratios if Sovereign Exposures are weighted by the Formal Internal Ratings Based Approach

Index 143

Table

Contribution to growth
Growth forecast in the European Union
Discretionary fiscal impulse (point of GDP)
Euro area Aggregate Fiscal Stance
Long-term projections for international investment positions in the absence
of nominal adjustments (% of GDP, 20-year horizon)
Public finance and output performances under the baseline scenario $\ \ldots \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
Is it possible to reach a 60% debt-to-GDP ratio?
(baseline scenario except +/- 0.5 fiscal impulses depending on public debt gap vis-à-vis 60% target)
Is it possible to reach a 60% debt-to-GDP ratio if we follow the preventive arm of the SGP?
Average annual growth of the real wage
Effects on the labour share of centralised bargaining, globalization and controls 75
Effect of unemployment on D6/D183
Country weights with alternative measures (%)
Box
The impact of aggregate fiscal policy on growth in the euro area
Structural reforms in the euro area and unit labour costs
The development of unemployment benefits
Measuring the number of working poor
A trade-off between unemployment and inequality in the labour market?84
Origins of the European Monetary Fund
Appendix
European safe assets and debt redemption schemes, a look at the literature 125
New capital regulations for banks and their possible incidence of bank capital ratios .129

Abbreviations Country names

Euro area EA

AustriaAUT
BelgiumBEL
BulgariaBGR
CroatiaHRV
CyprusCYP
Czech Republic CZE
Denmark
EstoniaEST
FinlandFIN
France FRA
Germany DEU
Greece
HungaryHUN
IrelandIRL
ItalyITA
LatviaLVA
Lithuania LTU
Luxembourg LUX
Malta MLT
NetherlandsNLD
PolandPOL
PortugalPRT
Romania ROU
SlovakiaSVK
SloveniaSVN
SpainESP
SwedenSWE
United Kingdom GBR