

# I. How to make the Economic and Monetary Union more resilient?

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*In the absence of nominal exchange rate policies, euro area Member States need to absorb economic shocks via internal adjustment processes. The assumption that the launch of the euro would initiate a structural convergence process increasing economic resilience across euro area countries turned out to be too optimistic. Instead, differences in economic structures contributed to the length and depth of the last crisis and still pose a significant risk to the proper functioning of the Economic and Monetary Union (EMU). There is a broad consensus about the need to enhance convergence in economic resilience in the euro area Member States.*

*This Section explains that economic resilience can be strengthened by lowering a country's vulnerability/exposure to economic shocks (likelihood of shock occurrence) and/or by fostering its capacity to adjust to shocks that may occur, namely by reducing their persistence and minimising their amplitude. In product markets, adjustment capacity can be improved by policies fostering the reallocation of productive resources, such as deregulation or reducing the cost of starting or closing a business. Flexible labour market policies, in tandem with social protection for individuals, can facilitate the adjustment capacity of the labour market while at the same time providing workers with better labour market attachment, financial security and skills support. A promising way to strengthen resilience in the area of taxation would be to remove tax distortions that encourage excessive corporate and household leverage. These measures would help to foster inclusive growth. Finally, it remains vital for the resilience of the euro area to prevent and correct macroeconomic imbalances before they get out of hand. <sup>(1)</sup>*

## I.1. Introduction

While economic differences are to some extent inevitable in a monetary union, large and persistent differences are a serious concern for several reasons. They can: (i) make the single monetary policy less effective, in particular if monetary policy is constrained by the zero lower bound; (ii) turn into lasting differences in structural growth; (iii) spill over to other countries; and/or (iv) undermine citizens' trust in the EMU.

It therefore comes as no surprise that the necessary degree of economic convergence among members of the EMU has been discussed intensely in both the academic and political arena. The theory of optimum currency areas (OCA) provides a natural starting point.<sup>(2)</sup> It identifies several criteria as determining the optimality of a currency union, in particular wage and price flexibility, inter-regional labour mobility, economic openness, and both fiscal and financial integration. The higher the level of integration or flexibility in those criteria, the quicker and more complete the adjustment after

being hit by (a)symmetric shocks and the more optimal the currency union. The synchronisation of business cycles between members forming a currency union has been established as a key indicator measuring the fulfilment of the OCA criteria.

The main criteria for entering the EMU, the so-called Maastricht or euro convergence criteria, were based on the concept of nominal convergence, i.e. convergence of nominal variables such as long-term interest, inflation and exchange rates, and government deficit and debt ratios.

When the euro area project was designed, a number of scholars raised the question whether the OCA criteria were sufficiently met in the participating Member States to ensure the proper functioning of the EMU.<sup>(3)</sup> Many policymakers and scholars expected that these criteria were 'endogenous'.<sup>(4)</sup> This means that the criteria,

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<sup>(1)</sup> This section was prepared by Erik Canton, Philipp Mohl, Adriana Reut and Melanie Ward-Warmedinger.

<sup>(2)</sup> Mundell, R. (1961), 'A theory of optimum currency areas', *American Economic Review*, 51(4), 657-665; McKinnon, R. (1963), 'Optimum currency areas', *American Economic Review*, 53(4), 717-725.

<sup>(3)</sup> Bean, C. (1992), 'Economic and Monetary Union in Europe', *Journal of Economic Perspectives*, 6, 31-52; Feldstein, M. (1997), 'The political economy of the European Economic and Monetary Union: Political sources of an economic liability', *Journal of Economic Perspectives*, 11, 23-42.

<sup>(4)</sup> Emerson, M., D. Gros and A. Italianer (1992), 'One market, one money. An evaluation of the potential benefits and costs of forming an Economic and Monetary Union', Oxford University Press: Oxford; Frankel, J. and A. Rose (1998), 'The endogeneity of the optimum currency area criteria', *Economic Journal*, 108,

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although not satisfied before the euro was introduced, would be met thereafter, because EMU participation would entail increased trade integration. In a similar vein, losing the exchange rate as an adjustment instrument was expected to trigger a process of structural reform aimed at strengthening the resilience of participating Member States.<sup>(5)</sup>

Empirical evidence from the initial years of EMU seemed to support the ‘endogeneity hypothesis’.<sup>(6)</sup> However, the Great Recession and the sluggish recovery again revealed sizeable and persistent differences among euro area Member States, the origin of which predates the onset of the crisis.<sup>(7)</sup>

Against this background, this article analyses how the EMU could be made more resilient. Section 2 reviews the convergence trends in the EMU. Section 3 looks at defining economic resilience. Sections 4, 5 and 6 examine how economic resilience could be strengthened in the euro area in key policy areas, namely in product and labour markets and in taxation. Section 5 presents conclusions.

## I.2. Convergence trends in the EMU

Convergence trends in the EMU can be divided into at least two phases.<sup>(8)</sup>

### From the run-up to the EMU to the Great Recession

The aim of becoming a member of the euro ‘club’ pushed Member States to fulfil the Maastricht criteria, resulting in a nominal convergence process

(see Graph I.1). In the run-up to the EMU, the differences in inflation rates between countries participating in monetary union narrowed. Similarly, differences in nominal interest rates dropped substantially, supported by converging inflation differentials, reduced exchange rate risk, the integration of financial (notably bond) markets and reduced government deficits. Despite these positive developments, differences between euro area countries’ public debt ratios have remained high.

However, and in contrast to earlier expectations, the first decade of EMU has led neither to sustainable convergence of per capita income across euro area countries nor to major synchronisation of business cycles (see Graph I.2). Instead, there is evidence for per capita income convergence only if catching-up by central and eastern European countries is included in the sample.<sup>(9)</sup>

This lack of per capita income convergence and synchronisation of business cycles is related to several factors.<sup>(10)</sup> Despite the sizeable capital flowing from the ‘centre’ to the ‘periphery’ following the reduced exchange rate risk and default probabilities, investment in the periphery flowed in particular to the non-tradable sector, which resulted in unsustainable developments in the housing sector in countries like Spain and Ireland. Moreover, after the entry to the euro area, several Member States disregarded the need for structural reforms in key areas such as product and labour market policies, and despite some improvement concerning mainly product market reforms, this resulted in incomplete convergence of economic structures (see Graph I.3).<sup>(11)</sup>

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1009-1025; De Grauwe, P. and F. Mongelli (2005), ‘Endogeneities of optimum currency areas. What brings countries sharing a single currency closer together?’, ECB Working Paper, No 468, April.

<sup>(5)</sup> Calmfors, L. (1998), ‘Macroeconomic policy, wage setting, and employment — What difference does the EMU make?’ Oxford Review of Economic Policy, 14(2), 125-151.

<sup>(6)</sup> European Commission (2008), ‘EMU@10. Successes and challenges after ten years of Economic and Monetary Union’, European Economy, 2; Böwer, U. and C. Guillemineau (2006), ‘Determinants of business cycle synchronisation across euro area countries’, ECB Working Paper, No 587, February.

<sup>(7)</sup> Crespo-Cuaresma, J. and O. Fernández-Amadore (2013), ‘Business cycle convergence in the EMU: A second look at the second moment’, Journal of International Money and Finance, 37, October 239-259; Ruscher E., (2015), ‘An overview of market-based adjustment in the euro area in the light of the crisis’, Quarterly Report on the Euro Area, Vol.14, No 4; Mohl P. and T. Walsh (2015), ‘Revisiting the relative price mechanism’, Quarterly Report on the Euro Area, Vol 14, No 4.

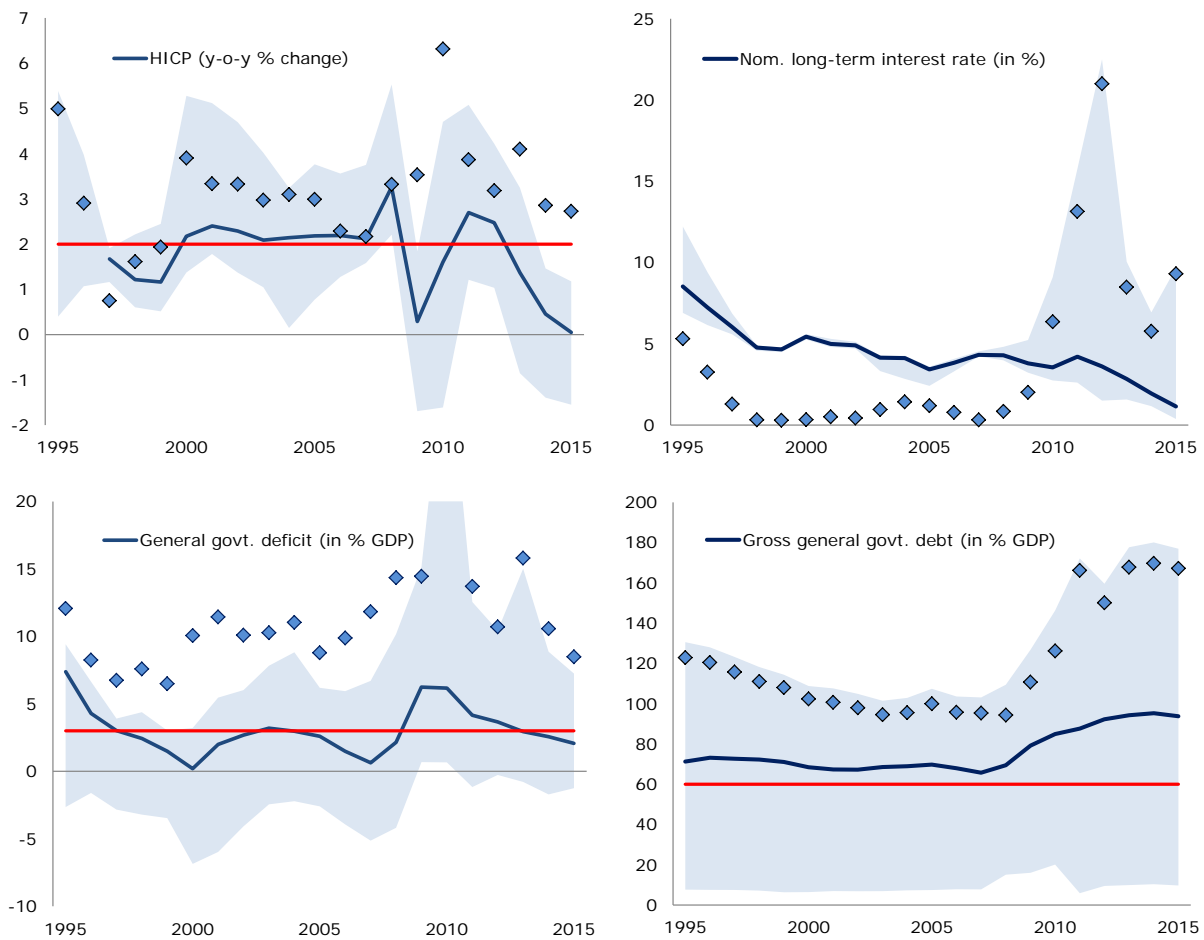
<sup>(8)</sup> For a similar divide see Buti, M. and A. Turrini (2015), ‘Three waves of convergence. Can Eurozone countries start growing together again?’, VoxEU.org, 17 April 2015.

<sup>(9)</sup> Some authors explain the stronger real convergence effect of eastern European countries with more positive effects from economic integration for poorer Member States (e.g. Crespo Cuaresma, J., Ritzberger-Grünwald, D. and M.A. Silgoner (2008), ‘Growth convergence and EU membership’, Applied Economics, Vol. 40, No 5, 643-656).

<sup>(10)</sup> See, for a survey, Balta N., (2015), ‘Business cycle synchronisation in the euro area’, Quarterly Report on the Euro Area, Vol. 14, No 2; ECB (2015), ‘Real convergence in the euro area: Evidence, theory and policy implications’, ECB Economic Bulletin, Issue 5, 30-45.

<sup>(11)</sup> Regarding the economy-wide product market regulation indicator, differences across countries have become smaller over time. However, there are still substantial and persistent differences in product market regulation at sectoral level. For example, the product market regulation indicator for professional services ranges from 3.47 for Luxembourg to 0.55 in Sweden; Finland is the best performing EMU country with a sectoral PMR for professional services of 0.62 (data pertain to 2013).

Graph I.1: **Nominal convergence in the EMU (1)**  
(1995-2015)



(1) Blue shaded areas indicate the distribution of the observed indicators (from maximum to minimum) across euro area Member States. Euro area defined as EA-11 (as of 1995), EA-12 (2001), EA-13 (2007), EA-15 (2008), EA-16 (2009), EA-17 (2011), EA-18 (2014), EA-19 (2015). The dark blue lines display EA-12 average values. Blue diamonds show the differences between the maximum and the minimum value, which give an indication of dispersion. For lack of space, the highest government deficit in 2011 (32.3 %) and the max-min for the same year (31.6) are not shown. The red lines show the ECB price-stability target and the reference values of the Stability and Growth Pact (SGP).

**Source:** European Commission forecast April 2016, DG ECFIN calculations.

### Post-‘Great Recession’

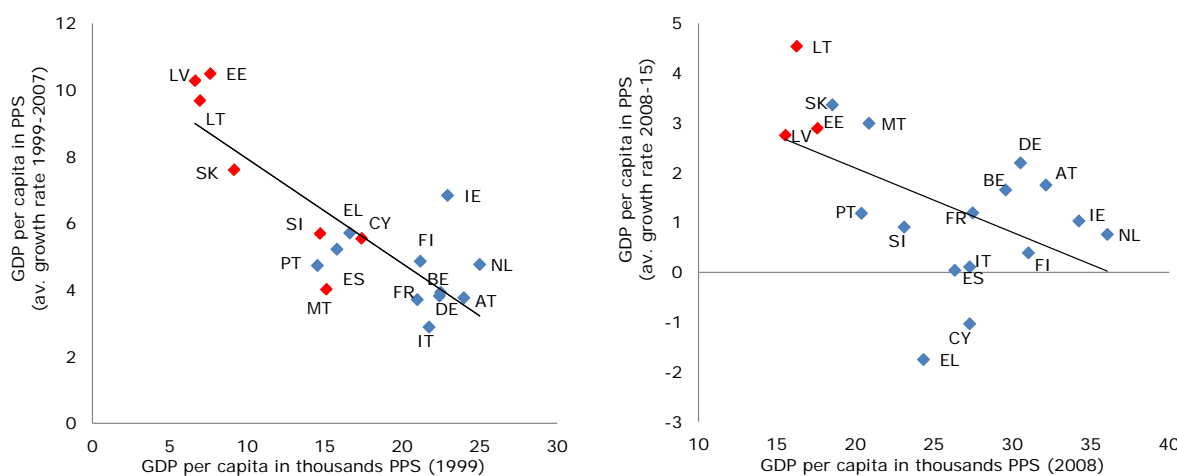
The financial crisis acted as a detonator for the imbalances accumulated during the first decade of the EMU. The massive shock that originated in the US housing sector infected the global economy in 2008. As a consequence, the euro area lived through the deepest recession since World War II.

The initial years after the crisis led to sizeable nominal divergence. Capital started flowing from the periphery to the ‘safe haven’ of the centre, supporting strong divergence in interest rates. Sizeable divergence in public deficit and debt ratios emerged following large fiscal stimuli or reflecting a collapse in revenues in some euro area Member States.

Interestingly, as predicted by the OCA analysis, most of the countries with more rigid economic structures (as measured by widely used product and labour market indicators) experienced a particularly strong downturn during the crisis and sluggish adjustment.<sup>(12)</sup> A number of Member States implemented structural reforms strengthening economic resilience in the post-crisis period to overcome the most severe rigidities. However, despite the broadly supported evidence of the positive economic impact of structural reforms, progress in implementing credible reforms remains overall quite slow in many Member States’ and

<sup>(12)</sup> Mohl P. and T. Walsh (2015), ‘Revisiting the relative price mechanism’, Quarterly Report on the Euro Area, Vol. 14, No 4.

Graph I.2: Per capita income convergence in the EMU (1)



(1) Countries which were not members of the euro area in 1999 (left chart) and in 2008 (right chart) are highlighted in red. Graph excludes 'outlier' data points for Luxembourg. The black regression line is based on the full sample of countries.

Source: Eurostat.

important differences in economic structures still remain.<sup>(13)</sup>

As a result, structural reform is unfinished business and this can be considered one important reason for the large business cycle divergences since the euro area debt crisis.<sup>(14)</sup> There is in addition a risk of complacency and reform fatigue now that economies are recovering.<sup>(15)</sup>

### I.3. Understanding economic resilience

*Strengthening economic resilience* is one of the two key ways to promote economic convergence (see Graph I.4 for a stylised illustration).

By addressing large and persistent cyclical differences through changes in economic structures, strengthening economic resilience has

commonly a short- to medium-term impact on the economic cycle (actual growth).

Second, economic convergence can be fostered by *increasing living standards*: This aims to address per capita income levels in Member States. It typically has a medium- to long-term impact on the economic trend (potential growth). EU regional policy has the clear objective of strengthening economic and social cohesion (Article 174 of the Treaty on the Functioning of the European Union (TFEU)).

In practice the distinction is less clear-cut, as more resilient economic structures may also contribute to higher living standards.<sup>(16)</sup>

For the purpose of ensuring the smooth functioning of the EMU, we consider convergence in resilient economic structures to be key. The economic and financial crisis demonstrated that several euro area Member States lacked appropriate economic structures to deal with the deepest economic recession since World War II. This caused sizeable negative cross-country spillover effects, questioning the viability of the euro area as a whole.

How can economic resilience be strengthened?<sup>(17)</sup> Resilient economic structures would mean that

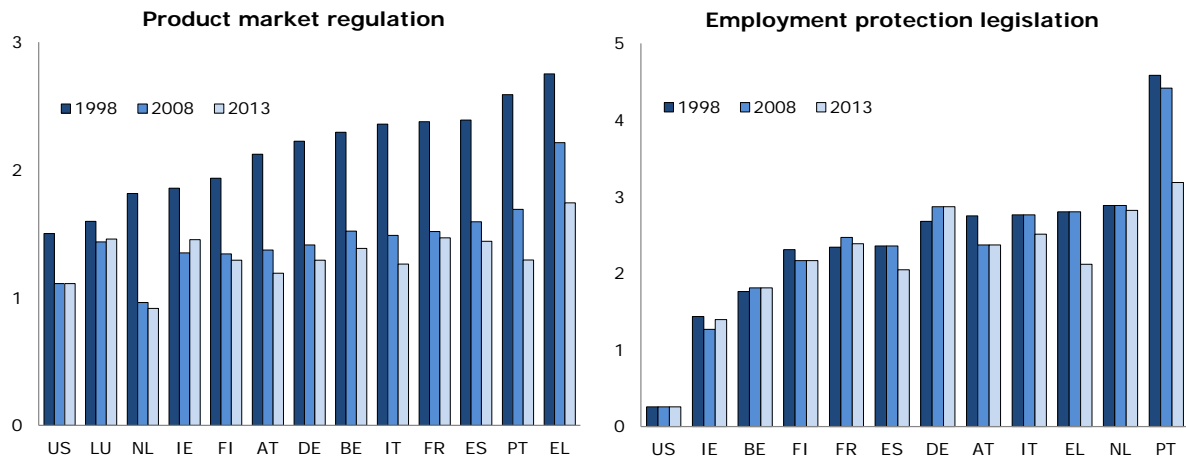
<sup>(13)</sup> This could be related to political cycles, with politicians being reluctant to engage in risky and complicated reform discussions when general elections are approaching, but rent-seeking behaviour and the protection of vested interests may also block reforms. The distributional consequences of structural reforms cannot be ignored; the reality is that these reforms tend to generate per capita benefits for the general population, but at the same time may entail substantial losses for those whose privileges are reduced.

<sup>(14)</sup> In addition, the balance sheet adjustment in both the private and public sector and the accumulation of macroeconomic imbalances have been identified as other major drivers for the large business cycle divergence since the euro area debt crisis, see Balta N., (2015), 'Business cycle synchronisation in the euro area', Quarterly Report on the Euro Area, Vol. 14, No 2.

<sup>(15)</sup> Buti, M. and P. Padoan (2013), 'How to make Europe's incipient recovery durable: End policy uncertainty?', VOX column, 12 September.

<sup>(16)</sup> For instance, available empirical evidence shows that policies which improve resilience (for example deregulation of labour and product markets) typically also boost innovation and innovation diffusion and thereby the economy's long-term growth prospects.

Graph I.3: Convergence in economic structures in the EMU (1)



(1) The graph shows OECD indicators measuring the degree of product and labour market regulation (the latter refers to individual and collective dismissals). Indicators range on a scale from 0 (least restrictions) to 6 (most restrictions). Latest data available 2013.

Source: DG ECFIN calculations based on OECD data.

Member States have low vulnerability to shocks and a high degree of flexibility to adjust to economic shocks (see Graph I.4). The vulnerability can largely manifest itself in terms of the likelihood of incurring a shock. The adjustment capacity is related to the magnitude and persistence of economic shocks. It also relates to mitigating the impact on those who are affected by the adjustment, and need to find a new job and/or to adjust their skills.

*Reduce vulnerabilities to shocks:* In the pre-crisis decade, several euro area Member States accumulated large fiscal and (internal and external) macroeconomic imbalances. This can be explained in part by a myriad of country-specific factors such as excessive demand relative to production capacity, over-optimistic growth expectations, excessive credit flows, and a lack of fiscal rigour in some Member States. These imbalances left some countries more vulnerable to shocks. In addition, euro-area-specific vulnerabilities also played a role. In particular, the EMU's institutional architecture turned out to suffer from serious design flaws, such as the lack of a financial supervision and resolution framework, a crisis resolution mechanism and a framework to monitor and correct macroeconomic imbalances. Overall, these vulnerabilities put countries in a poor starting position when hit by the shocks from the financial

crisis, being these asymmetric shocks or common shocks which turn into asymmetric (country-specific) ones. Given these starting positions, it is therefore crucial that bad policies are identified and mitigated as early as possible and that any impact of bad policies on vulnerabilities is minimised. The Macroeconomic Imbalance Procedure, launched in 2013, was designed to prevent and correct harmful macroeconomic imbalances.<sup>(18)</sup>

*Foster adjustment to shocks:* Member States need substantial adjustment capacity to cope with shocks for several reasons. First, shocks with asymmetric origins or effects cannot be fully eliminated in the euro area. Second, Member States can no longer use exchange rate policies to address asymmetric shocks. Finally, although recent evidence points to an effective functioning of the automatic stabilisers in the euro area,<sup>(19)</sup> the role of national fiscal policy is often constrained by high deficits and debt ratios, mainly because good times have not been used for deficit reduction.

Is there a trade-off between the amplitude and persistence of a shock? The empirical evidence is mixed. It should, however, be acknowledged that

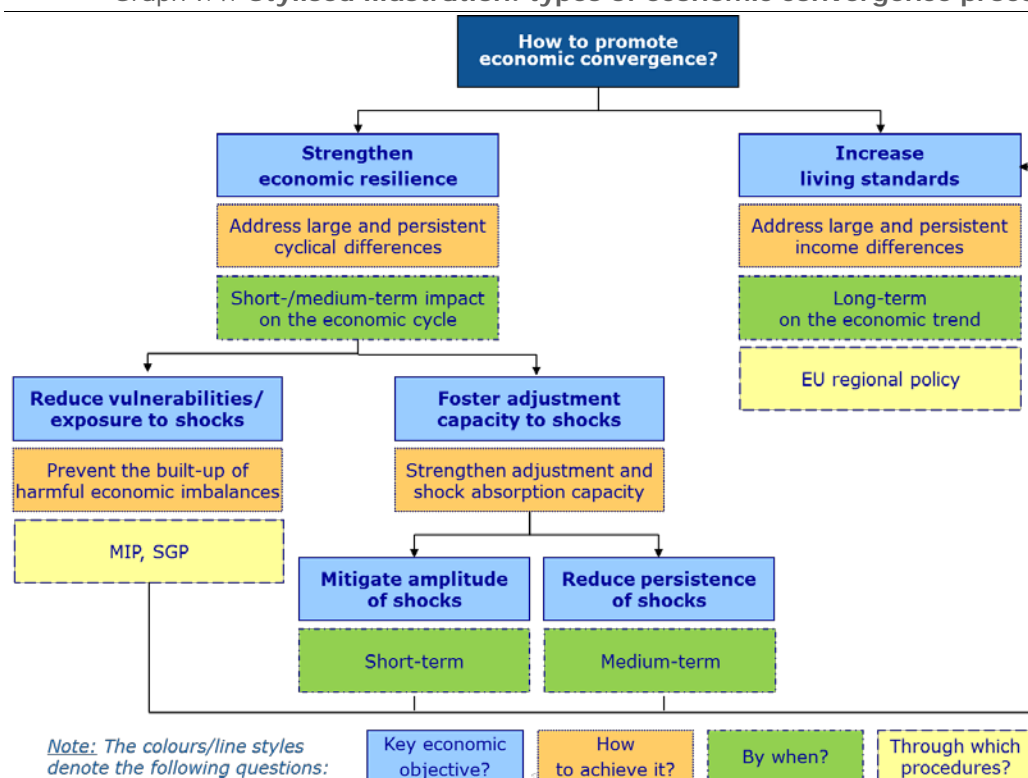
<sup>(17)</sup> Sánchez, A., Rasmussen, M. and O. Röhn (2015), 'Economic resilience: What role for policies?', OECD Economics Department Working Papers, No 1251.

<sup>(18)</sup> The Great Recession revealed the need to expand policy surveillance in Europe beyond the fiscal domain to cover macroeconomic developments. The MIP aims at identifying potential macroeconomic risks early on, preventing the emergence of harmful macroeconomic imbalances and correcting the imbalances already in place.

<sup>(19)</sup> Dolls, M., Fuest, C. and A. Peichl (2012), 'Automatic stabilisers and economic crisis: US vs. Europe', *Journal of Public Economics*, 96, 279-294.



Graph I.4: **Stylised illustration: types of economic convergence processes**



(1) The European Semester aims at contributing to all the economic objectives listed above.

Source: DG ECFIN.

increased adjustment may come at a cost. For example, previous OECD work on resilience pointed to a trade-off in terms of reforms.<sup>(20)</sup> More flexible structures could lead to later shocks being larger in amplitude, although less persistent. In particular, some literature suggests that high levels of flexibility in labour markets may increase short-term volatility in output or employment in reaction to negative shocks.<sup>(21)</sup> Recent work by the OECD is more sceptical about the existence of a trade-off.<sup>(22)</sup> In addition, Sánchez et al. (2015) conclude that 'less restrictive product market regulations can help lower the impact and reduce the persistence of shocks'. A faster recovery process after a shock may thus go hand in hand with smaller amplitude upon impact. Careful design of reforms and

avoidance of policy mistakes are important to escape such a trade-off.

The Great Recession demonstrated the importance of reducing the persistence of economic shocks for several reasons. First, slow speed of recovery poses risks of hysteresis. For example, lengthy unemployment spells lead to a loss of human capital, with permanent adverse consequences. Second, slow speed of recovery maximises risks of a political backlash (notably in terms of trust in national and European institutions).<sup>(23)</sup> Finally, if there is a trade-off between the amplitude of the shock and persistence, a bigger shock upon impact is an issue for stabilisation policies (whether at euro area or national level).

How to strengthen economic resilience? Empirical and theoretical evidence shows that flexible labour and product markets, in particular, can foster adjustment to shocks by significantly reducing the persistence of a shock. For instance, structural

<sup>(20)</sup> Duval, R., Elmeskov, J. and L. Vogel (2007), 'Structural policies and economic resilience to shocks', OECD Economic Department Working Papers, No 567.

<sup>(21)</sup> Delong, J. and L. Summers (1986), 'Is increased price flexibility stabilizing?', NBER Working Paper No 1686; Gali, J. and T. Monacelli (2016), 'Understanding the gains from wage flexibility: the exchange rate connection', NBER Working Paper No 22489.

<sup>(22)</sup> Sutherland, D., and P. Hoeller (2013), 'Growth-promoting policies and macroeconomic stability', OECD Economics Department Working Papers, No 1091.

<sup>(23)</sup> Funke, M., Schularick, M. and C. Trebesch (2016), 'Politics in the Slump: Polarization and extremism after financial crises, 1870-2014', forthcoming, European Economic Review.

reforms can contribute to smoother reallocation of productive resources to more efficient firms, which would support faster recovery after a negative shock.

The next sections provide more details on the link between resilience and three policy areas, namely product and labour markets and taxation. This list represents three policy areas where little progress has been made in the euro area. The list is not exhaustive, and could easily be extended to include e.g. financial markets and/or public administration. For instance, in the area of financial markets significant progress has been achieved. However, more needs to be done to complete the Banking Union and to step up implementation and accelerate reform to establish a Capital Markets Union.

#### I.4. Product markets

##### Importance for resilience

There is some empirical work, mostly by the OECD, suggesting that product markets have an impact on economic resilience. This literature shows that structural rigidities can significantly slow down the speed of adjustment as measured, for instance, by the change in the output gap. The speed of adjustment notably depends on the extent to which both prices and quantities respond to shocks. For example, lower amplification and persistence of shocks is found to be associated with lower state control<sup>(24)</sup> and fewer barriers to entrepreneurship.<sup>(25)</sup> Canova et al. find that countries which have advanced more in terms of product market reforms are at the top of the resilience ranking.<sup>(26)</sup>

##### How can policies affect the economic adjustment to shocks?

Product market policies can support economic adjustment mainly via two channels, namely price flexibility and the reallocation of resources.

###### *Price flexibility*

Price flexibility is crucial not only to recover losses in competitiveness, but also to allow adjustment of relative prices, which is central to provide appropriate signals for the reallocation of capital and labour across sectors and firms. Flexibility of prices of goods and services is to a large extent determined by wage flexibility, although this connection may be weaker when the production technology is more energy- or capital-intensive. Lack of competition and regulation are other factors that affect price reactivity to shocks.<sup>(27)</sup> Dhyne et al. find that price flexibility is strongly reduced when prices are regulated.<sup>(28)</sup> Some countries have such price regulations, for example Luxembourg and Germany in regulated professions. Álvarez et al. conclude that prices in the euro area are sticky, and more so than in the US.<sup>(29)</sup>

###### *Reallocation of resources*

An important policy priority is ‘to create the conditions for the most productive firms to expand quickly and attract resources. This depends on well-functioning product and labour markets, a financial system that channels capital to dynamic firms, and policies that prevent resources from becoming trapped in unproductive firms, such as efficient judicial systems and bankruptcy laws.’<sup>(30)</sup> When such conditions are in place, economies can adjust more swiftly to shocks. Resilience therefore also has a strong reallocation dimension. Literature on this reallocation process is rather thin but we

<sup>(24)</sup> Sutherland, D., and P. Hoeller (2013), ‘Growth-promoting policies and macroeconomic stability’, OECD Economics Department Working Papers, No 1091.

<sup>(25)</sup> Ziemann, V. (2013), ‘Do structural policies affect macroeconomic stability?’, OECD Economics Department Working Papers, No 1075.

<sup>(26)</sup> Canova, F., Coutinho, L. and Z. Kontolemis (2012), ‘Measuring the macroeconomic resilience of industrial sectors in the EU and assessing the role of product market regulations’, DG ECFIN European Economy Occasional Papers, No 112. Canova et al. define resilience using the estimated correlation between sectoral output changes over the business cycle and common shocks.

<sup>(27)</sup> Monteagudo, J., and A. Dierx (2009), ‘Economic performance and competition in services in the euro area: Policy lessons in times of crisis’, DG ECFIN European Economy Occasional Papers, No 53.

<sup>(28)</sup> Dhyne, E., Konieczny, J., Rumler, F. and P. Sevestre (2009), ‘Price rigidity in the euro area: An assessment’, DG ECFIN European Economy Occasional Papers, No 380.

<sup>(29)</sup> Álvarez, L., Dhyne, E., Hoeberichts, M., Kwapil, C., le Bihan, H., Lünemann, P., Martins, F., Sabbatini, R., Stahl, H., Vermeulen, P. and J. Vilminen (2005), ‘Sticky prices in the euro area; A summary of new micro evidence’, ECB Working Paper, No 563.

<sup>(30)</sup> Draghi, M. (2016), ‘On the importance of policy alignment to fulfil our economic potential’, speech at the Fifth Annual Tommaso Padoa-Schioppa, Lecture at the Brussels Economic Forum 2016.

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can draw some lessons from a related work stream that looks at the determinants of the misallocation of productive resources.

Allocative efficiency is the extent to which the most productive firms have the largest market shares within the sector. Allocative efficiency is generally higher in manufacturing (producing tradable goods and hence more exposed to international competition) than in services (which are generally more sheltered from international competition). In addition, there is a large variation across countries in sectoral allocative efficiency. In the event of severe misallocation of resources, we can logically expect the reallocation of productive resources to be hampered. Indeed, reallocation in terms of business dynamics has been shown to contribute to allocative efficiency. <sup>(31)</sup>

A conclusion from a review of the literature on the drivers of capital and labour misallocation in the EU is that inflexible product market regulation is hampering the reallocation of productive resources. In addition, a substantial amount of work exists on the impact of the business environment on entry and exit of firms (which more directly reflect reallocation). For example, a recent ECFIN study analyses the role of red tape barriers to firm entry, and finds that the cost of starting a business, the number of procedures needed to start and formally operate a business, the time needed to export, and a proxy for public authorities' late payments all contribute negatively to firm entry. <sup>(32)</sup> Another paper reports a positive relationship between efficiency of the justice system and firm entry. <sup>(33)</sup> The World Bank reviews the literature on the impact of effective insolvency regimes on entrepreneurship, and reports for example on a study which found that the probability of starting a business is much higher in US states with higher bankruptcy exemptions for personal property. <sup>(34)</sup>

To conclude, in the area of product markets the literature has identified a number of drivers of price flexibility and resource reallocation. These

refer to: facilitation of market entry of new firms; an effective and efficient insolvency framework that would facilitate redeployment of resources and a second chance for entrepreneurs; a friendly environment for doing business; a well-functioning justice system and public administration; the suppression of corruption, including in public procurement practices; availability of high-quality public infrastructure; and a regulatory framework that is conducive to competition (including effective implementation of competition law).

## I.5. Labour markets

### Importance for resilience

In the area of labour markets, a growing body of literature emphasises the importance of the interaction of shocks with institutions. <sup>(35)</sup> Its focus is on how labour market institutions may influence the capacity of an economy to adjust to a shock, once it hits. The results of this literature emphasise the importance of the design of labour market institutions for strengthening economic resilience.

### How can policies affect the economic adjustment to shocks?

Institutions shape the immediate response of output or employment to negative external or internal shocks. For example, indexation clauses in labour contracts and the level and structure of collective bargaining affect macroeconomic performance. The main conclusions of research in this area <sup>(36)</sup> suggest that either highly decentralised or highly centralised wage-setting systems support wage developments that are in line with productivity growth. <sup>(37)</sup> The idea being that wage bargaining at national level may better perceive and reflect aggregate trends and more effectively

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<sup>(31)</sup> European Commission (2013), 'Product Market Review 2013: Financing the real economy', DG ECFIN European Economy, No 8.

<sup>(32)</sup> Ciriaci, D. (2014), 'Business dynamics and red tape barriers', European Economy Economic Papers, No 532.

<sup>(33)</sup> Lorenzani, D., and F. Lucidi (2014), 'The economic impact of civil justice reforms', European Economy Economic Papers, No 530.

<sup>(34)</sup> World Bank (2014), 'Debt resolution and business exit: Insolvency reform for credit, entrepreneurship, and growth', viewpoint.

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<sup>(35)</sup> Acemoglu, D., Johnson, S., Robinson, J. and Y. Thaicharoen (2003), 'Institutional causes, macroeconomic symptoms: volatility, crises and growth', *Journal of Monetary Economics*, 50, 49-123; Rodrik, D. (1999), 'Where did all the growth go? External shocks, social conflict and growth collapses', *Journal of Economic Growth*, 4, 385-412.

<sup>(36)</sup> Calmfors, L. and J. Driffill (1988), 'Centralisation of wage bargaining', *Economic Policy*, 6(April), 13-61; Bruno, M. and J. Sachs (1985), 'The economics of worldwide stagflation', Oxford, Basil Blackwell; Sockice, D. (1990), 'Wage determination: The changing role of institutions in advanced industrial countries', *Oxford Review of Economic Policy*, 6(4), 36-61 and Layard, R., Nickell, S. and R. Jackmann (1991), 'Unemployment: macroeconomic performance and the labour market', Oxford University Press.

<sup>(37)</sup> Calmfors, L. (1993), 'Centralisation of wage bargaining and macroeconomic performance — a survey', *OECD Economic Studies*, 21, winter, 159-191.



coordinate wage changes for the economy as a whole, while wage bargaining at the individual and firm level may allow wage developments to more closely reflect individual qualifications and local labour market conditions. Prominent research into institutions influencing the quantity of labour includes Boeri, et al. (2001).<sup>(38)</sup> This study finds that restrictions on firing, including dismissal and redundancy procedures, imposed the greatest restraint on firms in terms of adjusting their work force in the response to shocks. Under overly strict employment protection legislation, dismissals are costly, hence employers will fill vacancies only with well-matched employees, reducing hires in cyclical upturns and increasing long-term unemployment (also through hysteresis effects). Firms will also reduce layoffs during downturns if dismissal costs are high, reducing short-term unemployment. The concept of ‘flexicurity’ strikes a balance between flexible job arrangements and secure transitions between jobs. It includes four policy components: (i) flexible and reliable contractual arrangements; (ii) comprehensive lifelong learning strategies; (iii) effective active labour market policies; and (iv) modern social security systems providing adequate income support during employment transitions.<sup>(39)</sup> Recent studies emphasise the importance of well-designed activation policies<sup>(40)</sup> and low rates of taxation on labour to maximise the potential to create more and better jobs.

The results of these studies hold important policy implications. They suggest that while social security buffers are a key element of Europe’s social model of choice, overly stringent employment protection legislation can generate labour market ‘dualism’, by favouring insiders (for instance typically prime-aged males) and making it even more difficult for outsiders (such as young and female workers) to enter (quality) jobs. In the recent crisis, Spain is an example of a country whose experiences of a dramatic rise in unemployment was closely linked with labour market dualism created by high employment protection legislation (EPL) on standard contracts and low EPL on temporary contracts. Overly rigid job protection may lead to

less labour market resilience, by making it more costly to reallocate labour. It suggests that social safety nets should focus on protecting the worker, rather than protecting the job, e.g. via flexicurity systems.

The euro area labour market adjusted only slowly to the Great Recession. While unemployment rates have declined in the euro area since 2013, the labour market situation remains relatively weak as evidenced in particular by the high structural unemployment rates.<sup>(41)</sup> Several studies explain the slow labour market adjustment with weak design features of labour market institutions. Research considers specifically how the presence of rigid institutions might prevent wages from adjusting, workers from moving to new jobs, and unemployment from returning to equilibrium in response to a shock, thus increasing the persistence of a shock’s negative impact on unemployment or output.<sup>(42)</sup>

Studies such as Blanchard and Portugal argue that some labour market institutions, such as benefit systems and employment protection with insufficient or badly designed activation policies, increase the duration of unemployment by making the unemployed less attractive to potential employers (since skills depreciate as unemployment duration increases and since the unemployed may become demotivated and stop searching altogether).<sup>(43)</sup> A lack of incentives to participate in the labour market or to return to work as fast as possible can therefore also reduce participation and/or increase unemployment rates. This literature also stresses that labour market institutions affect the composition of the unemployed. For example, a minimum wage that is too high can increase the effect of adverse shocks on the unemployment rate of less educated workers or the young. Since the wage is fixed, it can also weaken the equilibrating role of wages in reducing unemployment. Collective bargaining systems, if they primarily reflect the preferences

<sup>(38)</sup> Boeri, T., Garibaldi, P. and M. Macis (2001), ‘The concept and measurement of European labour market adaptability’, Issues Paper.

<sup>(39)</sup> See European Commission (2007), ‘Communication towards common principles of flexicurity: More and better jobs through flexibility and security’, June.

<sup>(40)</sup> See, for example, Andersen, M. and M. Svarer (2007), ‘Flexicurity — Labour market performance in Denmark’, CESifo Working Paper Series, No 2108.

<sup>(41)</sup> Deroose, S. and P. Mohl (2016), ‘Recovery from the global economic and financial crisis in the euro area in the US: Not so different after all?’, *Revue bancaire et financière/Bank- en Financierwezen*, 2016/4, 276-287.

<sup>(42)</sup> Blanchard, O and J. Wolfers (2000), ‘The role of shocks and institutions in the rise of European unemployment: The aggregate evidence’, *The Economic Journal*, 110, C1- C33.

<sup>(43)</sup> Blanchard and Wolfers (2000) provides a review of the main channels of this research. Blanchard, O. and P. Portugal (1999), ‘What hides behind an unemployment rate. Comparing Portuguese and U.S. unemployment’, NBER Working Paper, No 6636.

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and labour market prospects of prime-aged workers, may reduce the responsiveness of wages to youth unemployment, leading to greater persistence in unemployment. This body of literature therefore emphasises how the design of existing institutions in Europe can perpetuate and complicate the negative effects of economic shocks on employment and growth. It may suggest a role for public employment offices to support activation and the retention of workers' skills. It further suggests the need for flexibility in wage-setting institutions to allow firms to adjust to economic downturns. Wage flexibility is also important if wages are to provide the appropriate signals for labour market mobility between jobs, industries, occupations and locations in response to labour market stimuli <sup>(44)</sup> and for individuals and firms to invest in human capital — this, in turn, is important in preparing the workforce for changing demands made by e.g. technological progress.

One adjustment channel that has received less attention until more recently is adjustment through hours of work. Flexible working-time arrangements and crisis measures in several euro area countries helped euro area firms to adjust, survive and retain their skilled workers at the beginning of the Great Recession. <sup>(45)</sup> Flexitime and the legal assurance of easy conversion between full-time and part-time contracts can allow firms to adapt employment and enable workers to more easily combine work with personal lives, potentially drawing the non-employed into the labour force.

The above body of work suggests that flexible labour market policies, along with adequate social protection for individuals, can facilitate labour market adjustment and improve the economy, while at the same time providing workers with a better degree of labour market attachment, financial security and skills support.

## **I.6. Taxation**

### **Importance for resilience**

A well designed tax system can also play a role in ensuring resilient economic structures. By contrast, features of national tax systems that encourage

excessive corporate and household leverage raise vulnerability to shocks and hamper adjustment. Policies aiming at removing such tax distortions help reduce the risk of exposure to adverse shocks and facilitate adjustment to such shocks.

A bias towards debt financing for companies is created when interest payments are deductible from the corporate income tax base, while returns on equity (such as dividends paid to shareholders) are not. The debt bias in corporate taxation may affect companies' capital structure by encouraging them to finance investment through debt rather than equity. In turn, the corporate capital structure affects the economy's exposure to adverse shocks. With rising indebtedness, the ability to repay becomes progressively more sensitive to falls in income or sales and to interest rate rises. <sup>(46)</sup> Moreover, in an economic downturn, the burden of interest costs and capital repayments is likely to lead highly indebted firms to reduce investment, output and employment more severely than less leveraged firms. <sup>(47)</sup>

Tax breaks for housing, such as mortgage interest deductibility, also create a bias in favour of debt-financed house purchases. Mortgage interest tax relief allows the taxpayer to deduct mortgage interest payments from taxable income. This type of tax incentive, combined with low interest rates and looser lending conditions, may have a non-negligible role in the dynamics of house prices and mortgage debt. This situation may pose serious risks, for example in situations where household earnings fall or the number of households with negative housing equity increases due to lower house prices during economic downturns. Van den Noord (2003) finds that generous tax relief on mortgage interest payments is correlated with house prices and mortgage debt, while Andrews et al. (2011) suggest that the impact of a positive demand shock on real house prices is greater in OECD countries offering more generous housing tax relief on debt financing costs. <sup>(48)</sup> <sup>(49)</sup>

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<sup>(44)</sup> Beatson, M. (1995), 'Labour market flexibility', Employment Department Research Series, No 48, Moorfoot, Sheffield, UK.

<sup>(45)</sup> Balleer, A., Gehrke, B., Lechthaler, W. and C. Merkl (2016), 'Does short-term work save jobs? A business cycle analysis', European Economic Review, 84, 99-122.

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<sup>(46)</sup> Cecchetti, S., Mohanty, M. and F. Zampoli (2011), 'The real effects of debt', Bank of International Settlements Working Paper, No 352.

<sup>(47)</sup> ECB (2014), 'Deleveraging patterns in the euro area corporate sector', ECB Monthly Bulletin, February, 97-114.

<sup>(48)</sup> Van den Noord, P. (2003), 'Tax incentives and house price volatility in the euro area: theory and evidence', OECD Economics Department Working Paper, No 356.

<sup>(49)</sup> Andrews, D., Sanchez, A. and A. Johansson (2011), 'Housing markets and structural policies in OECD countries', OECD Economics Department Working Paper, No 836.

## How can tax policies affect economic adjustment to shocks?

Tax biases towards corporate debt and debt-financed house purchases can be curtailed by limiting or removing tax incentives that contribute to debt accumulation.

### *Debt bias in corporate taxation*

The debt bias in corporate financing can be addressed by limiting the deductibility of interest costs or by extending the deductibility allowance to equity financing. Most countries have some form of limit on interest deductibility such as ‘thin capitalisation’ rules (i.e. ceilings on the proportion of capital that can be made up of debt), but these reduce the debt bias only to some extent. Belgium and Italy allow a notional cost of equity to be deducted. Empirical evidence shows that an allowance for the deduction of equity costs has an impact on financial and non-financial companies’ leverage. Panier et al. (2013) finds that this type of allowance raised the equity-to-asset ratio of non-financial companies in Belgium.<sup>(50)</sup> The debt-to-equity ratio of financial companies also declined.<sup>(51)</sup> Empirical evidence suggests that changes in the statutory corporate tax rates also have an impact on the capital structure of companies and their leverage. For example, a higher statutory tax rate increases the debt-to-asset ratio for both non-financial and financial companies.<sup>(52)</sup>

### *Housing taxation and household debt*

The debt bias in favour of debt-financed house purchases can be addressed by limiting the generosity of tax deductibility for mortgage interest payments. The tax systems in many Member States favour investment in owner-occupied housing, partly by allowing mortgage interest tax relief, in order to promote home ownership. However, this relief creates incentives for households to borrow and to consume owner-occupied housing rather than rental housing. Particularly if housing supply

is relatively inelastic, a lower after-tax cost of debt may contribute to higher demand for housing, raising house prices and household debt. Hilber and Turner (2014) find evidence that reduced interest costs due to taxation favouring owner-occupied housing through interest deduction tend to be capitalised into higher house prices.<sup>(53)</sup> If house prices rise as a result of the debt bias, the tax relief policy does not necessarily achieve its objective of increasing home affordability, but contributes to higher household debt levels. When combined with substantial transaction costs of changing residence, the propensity to higher owner-occupied housing may also reduce the mobility of workers. Following the crisis, mortgage interest tax relief for new loans was removed in Ireland and Spain; it is being reduced gradually in Finland and the Netherlands.

## I.7. Conclusions

It should be emphasised that structural reforms are beneficial to the economies mainly for productivity-enhancing reasons irrespective of the single currency. Furthermore, in a currency union with the absence of flexible nominal exchange rates, euro area Member States need to respond to economic shocks via internal adjustment processes. Available evidence clearly indicates that rigid markets slow down this adjustment capacity with potential adverse effects on the economy.<sup>(54)</sup> For example, excessive credit growth alongside slow price adjustment and excessive wage growth well above productivity, and excessive protection legislation delaying the reallocation of labour have been cited as major factors contributing both to the loss of competitiveness in the periphery countries of the euro area before the crisis and to the sluggish adjustment process following the Great Recession. Finally, it remains vital for the resilience of the euro area economies to prevent and correct macroeconomic imbalances before they get out of hand.

In the run-up to the introduction of the euro, there was a belief that the common currency itself would work as an incentive for reform towards resilient economic structures. Despite the potentially large positive long-term benefits to growth, this did not

<sup>(50)</sup> Panier, F., Perez-Gonzalez, F. and P. Villanueva (2013), ‘Capital structure and taxes: What happens when you (also) subsidize equity?’, Stanford University Working Paper.

<sup>(51)</sup> Schepens, G. (2016), ‘Taxes and bank capital structure’, *Journal of Financial Economics*, 120(3), 585-600.

<sup>(52)</sup> Mooij, R. de (2011), ‘The tax elasticity of corporate debt: A synthesis of size and variations’, IMF Working Paper, No 11/95; Keen, M. and R. de Mooij (2012), ‘Debt, taxes and banks’, IMF Working Paper 12/48.

<sup>(53)</sup> Hilber, C. and T. Turner (2014), ‘The mortgage interest deduction and its impact on homeownership decisions’, *The Review of Economics and Statistics*, 96(4), 618-637.

<sup>(54)</sup> Mohl P. and T. Walsh (2015), ‘Revisiting the relative price mechanism’, *Quarterly Report on the Euro Area*, Vol. 14, No 4.

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materialise. The record on structural reform has been far from satisfactory. Since the crisis, despite some progress with structural reform, particularly in the programme countries, reform progress across the euro area remains low. As a result, many Member States exhibit a low degree of economic resilience leading to long and deep adjustment periods.

Progress with reform would help to support convergence by both increasing Member States' resilience to economic shocks and boosting their potential growth, incomes and standards of living. Sustainable convergence would therefore require more efficient labour and product markets and stronger public institutions to enable euro area Member States to benefit from their comparative advantages within the Single Market. This, in turn, would contribute to strengthen inclusive growth.

Despite the potentially large positive long-term benefits to growth, some of the short-term impact of structural reforms on economic activity may be negative when monetary policy is constrained at the zero lower bound (i.e. when interest rates are close to zero and cannot be reduced much further).<sup>(55)</sup> As a consequence, reforms should be tailored to minimise short-term negative effects, and complementarities among reforms could be sought to increase the positive effects.

Ambitious structural reforms have the potential to facilitate the necessary economic adjustment within the euro area and to boost growth in the countries that implement them. If carried out jointly across Member States, they offer benefits to the euro area as a whole through positive spillover effects.<sup>(56)</sup>

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<sup>(55)</sup> Eggertsson, G., Ferrero, A. and A. Raffo (2014), 'Can structural reforms help Europe?' *Journal of Monetary Economics*, 61 (C), 2-22. Vogel, L. (2016), 'Structural reforms at the zero bound', [European Journal of Political Economy](#), in press: available online 31 August 2016.

<sup>(56)</sup> Varga J. and Jan in 't Veld (2013), 'The growth impact of structural reforms', *Quarterly Report on the Euro Area*, Vol. 12, No 4.