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ECONOMIC RESILIENCE IN EMU

THEMATIC DISCUSSIONS ON GROWTH AND JOBS

Note for the Eurogroup

Executive summary

This note discusses why convergence towards resilient economies is fundamental for improving the functioning of EMU. Economic resilience refers to the ability of countries to withstand shocks and recover quickly to potential. The experience of the past years has shown how lack of resilience in one or several economies of the euro area can have significant and persistent effects not only on the countries concerned but also on other countries and the euro area as a whole, through multiple channels. Going beyond the identification of instruments and processes to foster adoption of policies at national and European level, this note instead focuses on which policies can contribute to resilience in EMU. To do so, it develops the notion of economic resilience, provides a framework to identify key areas for resilience in a monetary union and a taxonomy of factors and policies that influence the resilience of Member States' economies. The proposed framework does not envisage a one-size-fits-all approach, but leaves room for country-specific policy settings and sharing of best practices. There are notable differences in economic resilience among EA countries and the broad taxonomy in this note could provide guidance for the prioritization of topics in future thematic discussions. The ultimate purpose of this note is to help orient discussions in the Eurogroup, taking account of work done a.o. in the context of thematic discussions, based on a coherent framework that will help prioritise the key reforms needed – at both EA and national level -to boost economic resilience in the EA.

Potential Issues for Discussion

- *Do you agree with the proposed definition of resilience?*
- *Do you agree that strengthening resilience of economies is fundamental for improving the functioning of EMU? Do you agree that action is needed on all three elements provided in this note, i.e., vulnerability, absorption and recovery?*
- *Which topics should be prioritized in future thematic discussions? What would be relevant criteria to prioritize topics?*

I. Why is economic resilience important in EMU?

Economic resilience refers to the ability of the country to withstand a shock and recover quickly to potential after it falls into recession. Resilient economic structures herewith prevent that economic shocks have significant and persistent effects on income and employment levels and thus they can reduce economic fluctuations.

The global economic and financial crisis reinforced the realization among policy makers in international fora that countries must be better equipped to weather shocks and to recover also quickly once they are affected. The concept of resilience has attracted considerable attention recently. The German Presidency of the G20 has launched a reflection process and issued a set of "resilience principles" for the G20 countries.¹ The OECD has also undertaken significant related work in recent years, showing a.o. that shocks are more

¹ Note on Resilience Principles in G20 countries, G20, March 18, 2017.

persistent in countries with rigid product and labour markets.² Important contributions to this debate have been provided by the IMF and ECB.³ In addition, a number of papers show that product market regulation and inflexible economic institutions can reduce resilience to shocks.⁴ The insights from these work strands are highly relevant for the euro area.

The Reflection Paper on the deepening of the EMU reiterated the Five Presidents' Report (5PR) that convergence towards more resilient economic and social structures in Member States is an essential element for the successful performance of EMU in the long run. The Reflection Paper discusses possible instruments to facilitate convergence (e.g. strengthening policy coordination under the European Semester, reinforcing links between national reforms and existing EU funding). This note instead focuses on *which* policies can contribute to resilience in EMU, building also on the experience of painful adjustment and significant spillovers throughout the euro area from a lack of resilience in a number of countries.

The recent economic and financial crisis revealed that many euro area economies had vulnerabilities which proved very costly when repeated shocks hit them and lacked the appropriate economic structures to smoothly absorb these shocks and quickly overcome the deep economic adjustment that followed. The depth of the downturn was linked to the limited absorption capacity of Member States but also to the fact that the crisis coincided with the unwinding of accumulated current account imbalances and the bursting of housing bubbles which resulted in large and persistent drops in output (i.e., to the size and complexity of the shock itself). The unwinding of these imbalances had repercussions for sovereign debt via sovereign-bank feedback loops, and created spillover effects across Member States, thereby endangering the stability of the euro area as a whole.

Resilient economies are better able to weather shocks. This is particularly relevant in a monetary union, where the policy instruments to address the effects of significant economic events are more limited and where inflation differentials can exacerbate real interest rate differentials that can magnify shocks by fuelling economic booms. Resilient economies are able to avoid dangerous vulnerabilities, and deal more efficiently with shocks, which helps preventing unsustainable booms and reducing the depth of recessions, thereby preventing the strong spillover-effects across the euro area witnessed through multiple channels during the crisis.

² See: <https://www.oecd.org/eco/growth/economic-resilience.htm>; Duval, R. and L. Vogel, 2008. "Economic resilience to shocks: The role of structural policies." *OECD Journal: Economic Studies*, Vol. 2008/1; Caldera-Sanchez, A., A. de Serres, F. Gori, M. Hermansen and O. Röhn, 2016 "Strengthening economic resilience: insights from the post-1970 record of severe recessions and financial crises." OECD Economic Policy Papers No. 20; Sutherland, D. and P. Hoeller, 2014. "Growth Policies and Macroeconomic Stability" OECD Economic Policy Papers No. 8.

³ IMF (2016). "A Macroeconomic Perspective on Resilience." Note to the G20.

ECB (2016). "Increasing resilience and long-term growth: the importance of sound institutions and economic structures for euro area countries and EMU." Economic Bulletin Issue 5.

⁴ Pelkmans, J., L.A. Montoya and A. Maravalle, 2008. "How product market reforms lubricate shock adjustment in the euro area." *European Economy Economic Papers* 341.; Canova, F., L. Coutinho and Z. Kontolemis, 2012. "Measuring the macroeconomic resilience of industrial sectors in the EU and assessing the role of product market regulations." *European Economy Occasional Papers* 112.; Sondermann, D., 2016. "Towards more resilient economies: the role of well-functioning economic structures." ECB Working Paper Series No 1984.

Resilience also fosters cyclical convergence and the effectiveness of the single monetary policy. Cyclical convergence means that countries are in the same phase of the business cycle. This is important in a monetary union, because the conduct of single monetary policy is less effective if countries are in different stages of the economic cycle or experience significantly different inflation rates, as some countries would need a more restrictive policy stance than others. Business cycles in the euro area have become increasingly synchronized, meaning that countries are simultaneously in recession and expansion phases – particularly due to policy convergence and trade integration. However, the amplitude of business cycles differs across Member States. Prior to and during the crisis, some Member States experienced strong booms and subsequent deep busts.

Resilient economies are better able to resume long-term growth and promote social outcomes. Insufficiently resilient economies may experience long and persistent downturns and can affect long-term growth and social cohesion. The lack of real convergence seen in the recent years in the euro area suggests that the effects can be important for cohesion not only within countries but across the member states of the euro area. Resilient economic structures help prevent the negative social consequences of deep recessions, and further promote social outcomes by combining the positive employment effects of effectively-functioning labour and product markets with active labour market policies to support the search for new opportunities, including possibilities for lifelong learning and an effective social safety net.

Overall, social considerations should always be kept in mind when proposing policies. Catering for more equal outcomes needs to be also high on the agenda at the national and EA level. Sustainable and well-targeted social security systems are among the key means to cater for such social needs in the face of shocks and during economic transitions

II. Defining economic resilience

The definition of resilience used here is broadly in line with those used by the OECD⁵, IMF⁶ and ECB⁷ and other academic contributions. This note takes the concept of resilience one step forward by disentangling in more detail three different phases that may be relevant for policy purposes.

Resilient economic structures are herewith defined as those which prevent that economic shocks have significant and persistent effects on income and employment levels, and thus are able to reduce economic fluctuations. Economic resilience entails three elements:

5 OECD (2016). "G20 Policy Paper on Economic Resilience and Structural Policies." Note to the G20: "Economic resilience is a key policy priority to achieve strong, sustainable and balanced growth [...] Strengthening economic resilience includes all of the following elements: Ex-ante resilience: Reducing the vulnerability of economies to severe shocks; Ex-post resilience: strengthening the capacity to absorb and overcome such shocks; Supporting sustainable and inclusive growth in the face of risks and pressures related to structural challenges and megatrends."

6 IMF (2016). "A Macroeconomic Perspective on Resilience." Note to the G20: "Resilient economies combine strong, sustainable, and inclusive growth with the ability to absorb and overcome shocks."

7 ECB (2016). "Increasing resilience and long-term growth: the importance of sound institutions and economic structures for euro area countries and EMU." Economic Bulletin Issue 5: "Economic resilience has an ex ante and an ex post aspect. In general, ex ante resilience refers to the capacity to resist to shocks while ex post resilience refers to the capacity to moderate the costs of, and recover quickly after, an adverse shock."

(i) the **vulnerability** to shocks (ii) the shock **absorption capacity** and (iii) the **ability to recover quickly** after a shock.

- a. **Vulnerability** refers to whether and how strongly a shock hits the economy, hence it reflects concepts such as exposure to shocks and frequency and intensity of shocks. It depends on a host of parameters, including, for example, the structure of the economy, various policy settings, the financial sector and asset markets, and the state of the non-financial sector. Some countries may be more exposed than others by the same shock.
- b. The **absorption capacity** reflects the ability of the economy to cushion the direct impact of a shock, minimizing immediate output and job losses. A shock can be absorbed by spreading its effects across the economy –to other variables than employment and output – temporarily and over time, for example through automatic stabilisers, responsive wages and prices, credit provision and financial risk sharing .
- c. The **ability of an economy to recover** affects how persistent the effects of shocks to the economy are. It reflects the capacity to ensure a swift return to the previous status, when the shock is temporary, or a smooth reallocation of productive resources, which is affected by product and labour market flexibility. The extent of the needed adjustment or reallocation depends on the type of shocks. Permanent shocks typically require a significant reallocation of resources. The faster this process is, the stronger will be the recovery.

The 3-phase characterization is useful for identifying more accurately the policy implications in terms of prevention, immediate reactions which minimize the impact of the shock (by governments, the financial and non-financial sectors), and a more prolonged adjustment or reallocation process in the case of more permanent-type shocks. Prevention – which has received considerable attention in recent years, including by developing the MIP and reinforcing the preventive part of the fiscal rules – is key, and more is needed to ensure that vulnerabilities are minimized across all countries. With regards to absorption we emphasize the (immediate and in some cases temporary but) important nature of key factors that can help minimize the impact of the shock (e.g., fiscal stabilizers, and consumption smoothing via savings or borrowing). Finally, the recovery phase could entail significant reallocation processes that may need more time and which rely on the institutional frameworks in each Member States.

III. A stylised description of resilience factors and relevant policies

This section provides a first analysis of factors that influence economic resilience for each of the three phases identified (vulnerability, absorption and recovery). Table 1 maps the relevant factors for the three phases in the financial, product and labour markets and in the public sector.

Vulnerability: reducing exposure to shocks

Member States are exposed to a wide range of domestic and external shocks that they cannot directly influence. These different shocks affect countries through different channels. One can distinguish between temporary or permanent shocks, supply or demand shocks, and

policy shocks. These affect countries in different ways, and their effect may be amplified through indirect channels such as confidence effects. The exposure of a country can change depending on policies and the evolution of its economic structures. For example, a country with poor energy efficiency, high energy content of its output and high dependency on foreign energy imports, will be more exposed to change in global energy prices, which recent experience shows can be very substantial over relatively short period. Often vulnerabilities interact and accumulate, increasing the likelihood that a common shock affects the more vulnerable country much harder.

The crisis particularly highlighted Member States' exposure to financial shocks. Sudden interest rate changes or revaluations of asset prices may have strong effects on Member States economies. Indebtedness exposes Member States to the impact of changes in market interest rates, which can abruptly change perceptions about sustainability risks. Economies which borrow predominantly through short-term debt and flexible interest rates loans are more exposed to changes in short-term interest rates which tend to vary more sharply. Microprudential supervision, as well as use of macroprudential instruments can limit financial vulnerabilities. Prudential measures can reduce the risk that diverging real interest rates that can fuel asset price bubbles and misallocation of resources (e.g., overinvestments in the construction sector). A debt bias in corporate taxation and tax breaks for housing, such as mortgage interest deductibility, may also fuel debt build-up by firms and households. Measures to improve the sustainability of public finances, including the sustainability of pension systems and health- and long-term care, are important to reduce risks on public sector balance sheets.

Absorption capacity: cushioning the immediate effect of a downturn

Financial markets can cushion shocks via risk sharing on capital markets, and via use of savings and access to credit to smooth of consumption and production. Figure 1 shows that shock absorption through cross-country equity holdings and credit markets is lower in the euro area than in the US.⁸ The crisis showed that a weak banking sector may result in procyclical credit tightening during a downturn (Figure 2). A healthy financial sector is also important for the transmission of monetary policy, which can more effectively absorb common euro area shocks through changes in interest rates and in liquidity provision if these measures spread appropriately across the euro area economy. It is therefore important to ensure a well-capitalized banking sector. Beyond the banking sector, resilience can be increased by larger use of equity financing. Cross-border equity holdings are relatively small in the euro area, but in contrast to credit exposures they did not fall during the crisis.⁹ The measures to create a Capital Markets Union are therefore a priority to ensure that viable firms have access to finance also during recessionary periods and to strengthen the absorption of shocks through cross-border ownership of financial assets.

⁸ European Commission (2016) "Cross-border risk sharing after asymmetric shocks: evidence from the euro area and the United States", Quarterly Report on the Euro Area 15(2).

⁹ Valiante, D. (2016), "Europe's Untapped Capital Market: Rethinking integration after the great financial crisis", CEPS Paperback, London: Rowman & Littlefield International.

Properly functioning labour market institutions responsive to business cycle conditions may dampen the effect of shocks on employment and are important to enhance the responsiveness of competitiveness. Figure 3 shows that an increase in unemployment between 2007 and 2010 coincided in some Member States with rising or rigid real wages. Wage inertia in the face of a shock can result in a sharper rise in unemployment.¹⁰ Responsive institutions to cushion shocks include for example existence of flexible working time arrangements and flexible wage setting mechanisms, which may reduce the impact on headcount employment levels.¹¹

Smoothly adjusting prices are in turn important to foster competitiveness adjustment and ensure that changes in labour costs pass through to or match adjustments in consumer prices. This prevents that the burden of absorption falls on the purchasing power of households, while it may also help to regain competitiveness.¹² Price flexibility is lower in the euro area compared to the US, and it is in particular strongly reduced when prices are regulated.¹³ Swift price responses are also important to prevent that inflation differentials magnify the impact of shocks through real interest rate effects.¹⁴ Addressing barriers to cross-border activities, such as differences or complexities in taxation, may enhance cross-country diversification of firms, reducing exposure to individual economies.

Finally, governments contribute to shock absorption via automatic stabilisers. An optimal operation of automatic stabilisers requires that budgetary expenditures are sufficiently elastic to the economic cycle and well-targeted to those who are most affected by a shock. Figure 4 shows that budgetary elasticities differ across countries. Noting that the effectiveness of automatic stabilisation varies across countries and that even countries with smaller budgetary elasticities can stabilise their economies, these mechanisms can be further improved through effective unemployment benefit schemes which reduce income losses and help to support demand, and through the build-up of buffers in the expansionary part of the cycle. Built-in buffers are also needed in viable social security systems, so they are in a position to be able to absorb unexpected shocks. Containing the part of the budget made of inelastic outlays could leave more room for policy action to absorb the shock.

The recovery phase: reallocation of resources

Product market institutions that foster competition and provide a business-friendly environment – by facilitating a speedy entry of new actors and exit of inefficient firms – are important to foster reallocation in the recovery process. Figures 5 and 6 show that

¹⁰ Bakker, B.B. (2015), "Employment and the Great Recession: The Role of Real Wages", IMF Working Paper 15/229.

¹¹ Flexible working-time arrangements helped euro area firms to adjust, survive and retain their skilled workers at the beginning of the great recession, see e.g. Balleer, A., B. Gehrke, W. Lechthaler and C. Merkel (2016), "Does short-term work save jobs? A business cycle analysis," *European Economic Review*, 84, 99-122.

¹² ECB (2016), "Increasing resilience and long-term growth: the importance of sound institutions and economic structures for euro area countries and EMU". *Economic Bulletin*, Issue 5, 2016.

¹³ Dhyne, E., J. Konieczny, F. Rumler and P. Sevestre (2009), "Price rigidity in the euro area: an assessment", DG ECFIN *European Economy Economic Papers*, No 380. Alvarez, L., E. Dhyne, M. Hoerberichts, C. Kwapil, H. le Bihan, P. Lunneman, F. Martins, R. Sabbatini, H. Stahl, P. Vermeulen and J. Vilmunen (2005), "Sticky prices in the euro area: a summary of new micro evidence", ECB Working Paper, No 563.

¹⁴ A strong responsiveness to shocks is key to overcome this so-called "Walters' critique". See, e.g., European Commission "EMU@10", *European Economy* No. 2, 2008.

Member States with less restrictive product markets and enabling business climates experienced a stronger post-2009 recovery.¹⁵ Lack of market entry and competition may also protect profit margins in case of economic booms, thereby fuelling the build-up of imbalances and preventing a timely reallocation to more productive sectors.¹⁶ A number of reforms are facilitating the market entry and expansion of new firms, ensuring the quality of public administration, and limiting sectoral regulations such as retail regulations and regulated professions.¹⁷ An efficient judicial system supports business dynamics by facilitating contract enforcements and via effective insolvency frameworks that enable the winding down of unviable firms and the swift redeployment of resources. More generally it is key for the proper functioning of product and labour markets and for facilitating a swift reallocation process.

Labour market adjustment is also important for ensuring smooth transition of workers towards new opportunities. Figure 7 shows that Member States with overly protected labour markets experienced a weaker recovery in unemployment after 2010. Restrictive employment protection legislation increases separation costs and may prevent more productive firms from hiring new employees. This can lead to labour market dualism, with multiple negative implications, including in terms of incentives to accumulate human capital. Flexible employment protection legislation, as it makes it easier to both separate from employees during downturns and provide higher quality contracts for all during upturns, needs to be complemented with an adequate social safety net and active labour market policies to support the taking up of new opportunities into more productive activities. Labour mobility is also a relevant channel of adjustment that appeared to increasingly matter for adjusting in EMU.¹⁸ Improving the portability of pension rights and social security benefits may support labour mobility. Education and training play a crucial role in the reallocation process of labour.

Financial markets can also play a significant role supporting the recovery by ensuring that financing is available for the most productive, and financially-viable, firms during the reallocation process. Figure 8 shows that high public and private debt levels are not only associated with vulnerabilities but also with a weaker recovery. A swift resolution of non-performing loans releases resources for productive purposes. In addition, a diversified financial landscape including for example developed equity markets and availability of venture capital may support the funding, thus facilitating the growth of dynamic firms.

To foster a maximum recovery, it is important that governments avoid a loss of productive capacity during the downturn. Growth-friendly public expenditures such as public investment and expenditures on active labour market policies need to be preserved as

¹⁵ Cf. ECFIN (2017): "Ease of doing business", Note for the Eurogroup, 15 February 2017.

¹⁶ See e.g. Praet, P., 2014. "The financial cycle and real convergence in the euro area" Speech at the Annual Hyman P. Minsky Conference on the State of the US and World Economies, Washington DC.

¹⁷ Cf. ECFIN (2017): "Investment in the Euro Area: Common principles", Note for the Eurogroup, 4 April 2017.

¹⁸ Arpaia, Kiss, Palvolgyi, Turrini (2016). Labour mobility and labour market adjustment in the EU, European Economy, Discussion Paper No. 539.

much as possible through the cycle. The use of spending reviews can promote efficient expenditure allocation and growth-friendly budgetary decision making.¹⁹

IV. Conclusion

Based on the taxonomy of the factors affecting resilience in Table 1, we can identify a non-exhaustive list of possible policy areas which can become topics for future thematic discussions. This approach does not envisage a one-size-fit-all policy framework as the design of the welfare state and the economic structure differs across countries. Policies will need to take into account such country-idiosyncrasies and national institutions (e.g., in labour markets). The selection of topics for future thematic discussions could be based on criteria such as the degree of cross-country spillovers, the impact of policies on resilience, the divergence of performance across Member States, and the ability to identify best practices in certain policy areas. In addition, reforms that can deliver quicker outcomes and reforms where progress is more easily attainable could be prioritized. Some broad areas for discussion are highlighted below. Follow-up discussions should lead to a narrowing of the key issues and common understanding and future actions in the selected areas.

Vulnerability

The reduction of vulnerabilities is the focus of the existing surveillance under the MIP and SGP. Sustainability of public finances has also been covered in previous thematic discussions on pensions and health- and long-term care. Similar topics related to sustainability remain relevant for future thematic discussions. Micro- as well as macro-prudential capacity can be improved across all European capital markets.

- *Additional topics that could be discussed is the debt bias in corporate taxation and tax breaks for housing, as well as critical aspects in the supervision of the European capital markets.*

Absorption capacity

Considerable progress has been made in recent years to boost the shock absorption capacity of the financial sector. The banking union and the capital markets union are crucial in this respect, and swift steps to deliver the outstanding elements of the Banking Union will greatly increase the absorption capacity in the euro area.

Examples of topics that could be discussed in future thematic discussions are:

- *the role of financial risk sharing in Member States and how to enhance it,*
- *the performance of automatic stabilisers across Member States,*
- *the absorption capacity of labour markets with a focus on wage inertia – with particular emphasis on the role of the public sector – and flexible working-time arrangement,*

¹⁹ European Commission (2016) “Quality of Public Finance – Spending Reviews for Smarter Expenditure Allocation in the Euro Area”. Note for the attention of the Eurogroup.

- *rigidities that prevent prices from adjusting to changing economic conditions.*

Ability to recover

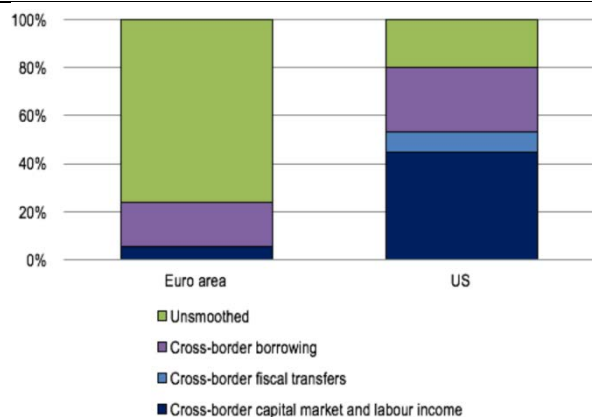
The Eurogroup already held thematic discussions on the business environment, insolvency and spending reviews, which support the growth-friendly composition of public finance. Further discussions on these topics remain relevant from the perspective of resilience. In addition, initiatives to deepen the single market, which are pursued in EU28-format are also conducive to reallocation processes.

Topics that could be discussed in future thematic discussions are:

- *Barriers to reallocation in product markets, such as entry barriers and sectoral regulations and the role of R&D and innovation including investment in intangibles,*
- *The role of employment protection legislation in combination with active labour market policies to foster job-rich recoveries,*
- *Barriers to reallocation in labour markets, both within and across Member States such as related to human capital, pension portability, healthcare coverage etc.*
- *Remaining barriers to a complete CMU, such as taxation rules or insolvency procedures*
- *The effectiveness of judicial systems, relating to the role played by the legal framework (e.g., civil procedures) and institutions (e.g., the efficiency of courts) in facilitating the reallocation process.*

Figure 1: Risk sharing

Capital markets and credit markets absorb less than 6% of asymmetric shocks to euro area GDP, as opposed to the US where capital markets are the main absorption channel. Shock absorption through credit markets is also lower in the euro area than in the US.

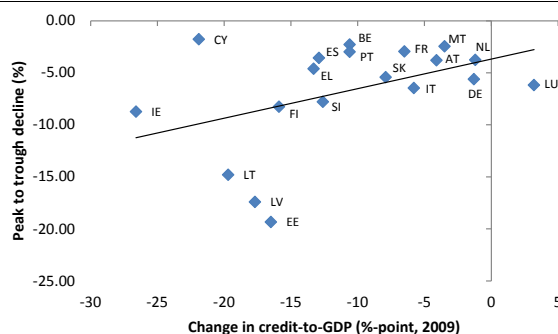


Source: European Commission, 2016²⁰

Notes: The figure shows the absorption of asymmetric output shocks across EA Member States and US states. The green bars show the impact of shocks on consumption. In the Euro Area, a 1% decline in GDP leads to a consumption decline of about 0.8% versus only 0.2% in the US. The purple, light blue and dark blue bars show the contribution of risk sharing via credit markets (cross-border borrowing), fiscal transfers, and capital markets and labour income to shock absorption.

Figure 2: Pro-cyclical credit tightening

The decline in credit flows as a share of GDP was larger in countries with a larger fall in GDP during the crisis.



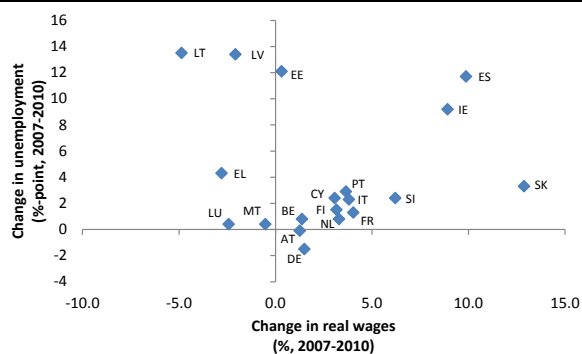
Source: AMECO, Eurostat

Notes: Peak to trough decline defined as the percentage difference between the maximum level of real GDP in 2007 or 2008 and the level in 2009.

Credit-to-GDP is measured as non-consolidated private sector credit flow.

Figure 3: Wages and unemployment

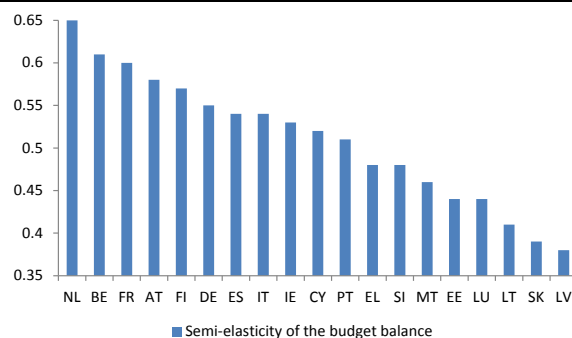
In some Member States, increasing unemployment coincided with rising real wages.



Source: AMECO

Figure 4: Semi-elasticity of budget balance

Elasticity of budget balances varies across Member States, affecting automatic stabilisation



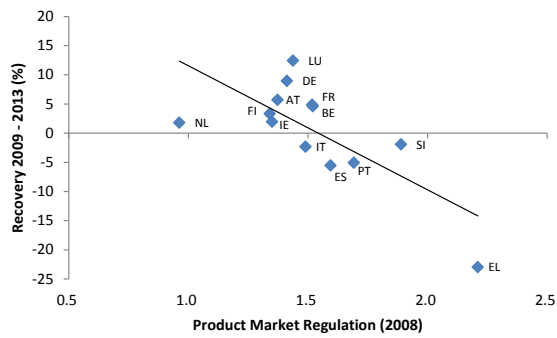
Source: Mourre et al., 2014²¹

²⁰ European Commission (2016) "Cross-border risk sharing after asymmetric shocks: evidence from the euro area and the United States", Quarterly Report on the Euro Area 15(2).

²¹ Mourre, G. C. Astarita and S. Princen (2014) "Adjusting the budget balance for the business cycle: the EU methodology", European Economy Economic Papers 536, November 2014.

Figure 5: Product market rigidities and recovery

Member States with overly-restrictive product market regulations experienced a weaker recovery.



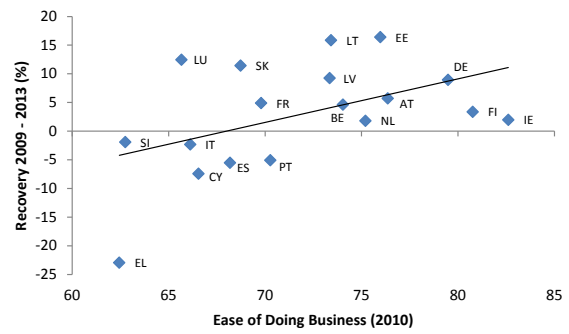
Source: AMECO, OECD

Notes: Recovery is measured as the real GDP growth between 2009 and 2013.

The OECD indicator for Product Market Regulation has higher values for more restricted product markets.

Figure 6: Business climate and recovery

Member States with an enabling business climate experienced a stronger recovery.

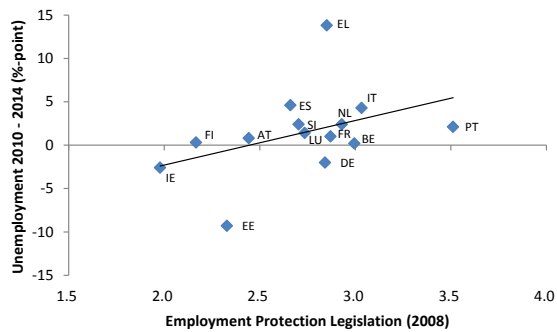


Source: AMECO, World Bank

Notes: The World Bank Ease of Doing Business indicator shows the Distance to the Frontier score, with higher values indicating that countries are closer to the frontier.

Figure 7: Employment protection and recovery

Member States with overly protected labour markets experienced stronger increases in unemployment.

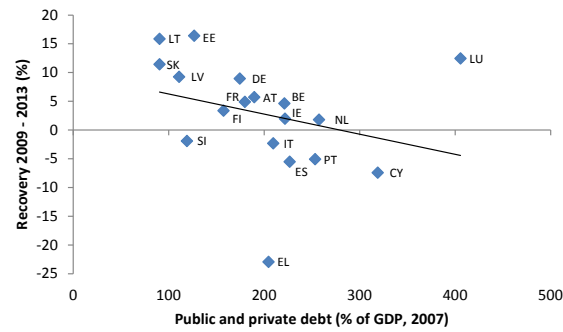


Source: AMECO, OECD

Notes: The OECD indicator for Employment Protection Legislation refers to individual and collective dismissals. Higher values indicated more regulated labour markets.

Figure 8: Debt and recovery

Member States with high public and private debt levels experienced a weaker recovery.



Source: AMECO, Eurostat

Note: Public and private debt is measured as the sum of consolidated general government gross debt and private sector debt in % of GDP.

Table 1: Taxonomy of factors affecting resilience

	Vulnerability	Absorption	Recovery
Financial sector	<p>Leverage and risk taking</p> <p>Household debt, including mortgages</p> <p>Corporate debt</p> <p>Tackling bank-sovereign loops</p>	<p>Properly functioning Monetary policy transmission mechanism</p> <p>A healthy banking sector, allowing for income smoothing by households and firms.</p> <p>Deep capital markets, allowing for funding diversification and equity risk-sharing.</p>	<p>A procedure for efficient resolution of viable banks.</p> <p>A procedure for swift resolution of NPLs</p>
Product market/ Business environment	Diversification of the economy	<p>Price flexibility</p> <p>Properly functioning Internal Market where firms can diversify risks (e.g. by increasing exports when domestic demand weakens)</p>	<p>Business regulations</p> <p>Competition – internal market</p> <p>Insolvency procedures</p> <p>Judiciary</p>
Labour market		<p>Responsive wages</p> <p>Well-functioning (contract-)bargaining mechanisms</p> <p>Flexible working time arrangements</p>	<p>Properly functioning labour market institutions</p> <p>Human capital</p> <p>Reallocation of labour to more productive firms/sectors, possibly supported by active labour market policies</p> <p>Labour mobility/portability of pension rights</p>
Public sector	<p>Public debt and solvency risk</p> <p>Long-term sustainability of public finances</p>	<p>Adequate automatic stabilisers and budgetary room to apply these</p> <p>Sustainable and well-targeted social security systems</p>	Growth-friendly composition of public expenditure over the cycle
Taxation	<p>Debt bias in taxation, i.e. tax features favouring corporate and household debt</p> <p>Address tax distortions in the housing sector to reduce high household borrowing levels</p>	<p>Differences and complexities in corporate taxation make it difficult for firms to diversify risks through cross-border activities</p>	Labour-supply friend tax system