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The four unions “PIE” on
the Monetary Union “CHERRY”:
a new index of European Institutional
Integration

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ABSTRACT

This paper presents a European Index of Regional Institutional Integration (EURII), which maps developments in European integration from 1958 to 2014 on the basis of a monthly dataset. EURII captures what we call: (i) the “Common Market Era”, which lasted from 1958 until 1993; and (ii) the first twenty years of the “Union Era” that started in 1994, but gained new impetus in response to the euro area crisis. The paper complements the economic narratives of the crisis with an institutional approach highlighting the remedies to the flaws in the initial design of Economic and Monetary Union (EMU). In fact, since 2010, EMU’s institutional framework has been substantially reformed. While work on EMU’s new governance is still in progress, the broad contours of a “genuine union” have been outlined in the Four Presidents’ Report of December 2012. The report envisages a more effective economic union, a fiscal union, a financial union, and a commensurate political union. The aim of the EURII index is threefold: (i) to provide a tool to synthesise and monitor the process of European institutional integration since 1958 and, in particular, track institutional reforms since 2010; (ii) to expand a previous integration index by showing that monetary unification – which was initially understood as “the cherry on the Internal Market pie” – implied a *major discontinuity* in the process and nature of European integration, that is, a new “pie on the cherry”; and (iii) to offer a tool for further research, policy analysis and communication.

JEL codes: F33, F42, N24.

Keywords: Economic and Monetary Integration, Euro, Institutions and Governance, Financial Deepening and Integration, Sovereign Crisis, Four Presidents’ Report, Optimum Currency Area.

NON-TECHNICAL SUMMARY

This paper presents the second generation of the European Index of Institutional Integration (in short, EURII), which was initially developed in Dorrucchi et al. (2002). The second vintage of this index has been motivated by the global financial crisis and the sovereign crisis in the euro area. Both have exposed and exacerbated the weaknesses in the architecture of Europe's Economic and Monetary Union (EMU). EMU was established on the basis of the "blueprint" of the Treaty of Maastricht in the early 1990s, which itself was conceived in the late 1980s. Europe and the wider world were very different places at that time, for example, in terms of the degree of globalisation, as well as financial depth and sophistication. Yet, even then there was an awareness of the need to fill diverse institutional and governance gaps. Diverse recommendations in the 1989 Delors Report were watered down in the less ambitious compromise signed by the EU Member States on 7 February 1992. The view of the so-called monetarist field that the common currency would harmoniously act as a catalyst for further economic and political integration proved to be only partly true.

A catalyst for strengthening EMU's governance arose with the financial crisis, which became severe in the euro area in 2010. The prolonged and evolving crisis revealed several vulnerabilities in EMU's political economy, such as an inability to discourage excessive macroeconomic and financial intra-area imbalances or to have them smoothed out through policy tools and market forces such as those predicted by a theoretical optimum currency area model. Moreover, the euro area and the rest of the EU did not have a crisis management toolkit, which meant an escalation of the costs involved in dealing with the crisis. Even though the crisis is not over at the time of our writing, the institutional response to these developments in the euro area/EU may one day be considered remarkable by historical standards, in terms of both scope and pace. What is more, a broader assessment of the future of EMU has made progress at the highest policy level, thus providing some understanding of what a new "EMU steady state" might look like in the future.

Against this backdrop, the paper presents a quantitative index of the path of EMU-relevant institutional integration in Europe since the late 1950s. This novel monthly dataset takes account of the institutional responses to the euro area crisis from 2010 until 2014 (see summary chart below). It is articulated along two overarching periods of institutional integration: (i) the "Common Market Era", from 1958 until 1993; and (ii) the "Union Era" thereafter. The vertical blue line marks the boundary between eras. For reasons explained in the paper, a maximum score of 50 points is assigned to each of these periods, with the index starting at 0 on 1 January 1958 (when the Treaty of Rome entered into force) and then making progress up to the current cumulated value of around 78.8 as at 1 January 2015. The gap between 100 points – i.e., the maximum total score that would be assigned in the index if all objectives of the Common Market and Union Eras were fully accomplished – and the current score, gives an indication of the distance still to be covered until a "new perceived steady state" is achieved in the process of European economic integration under EMU.

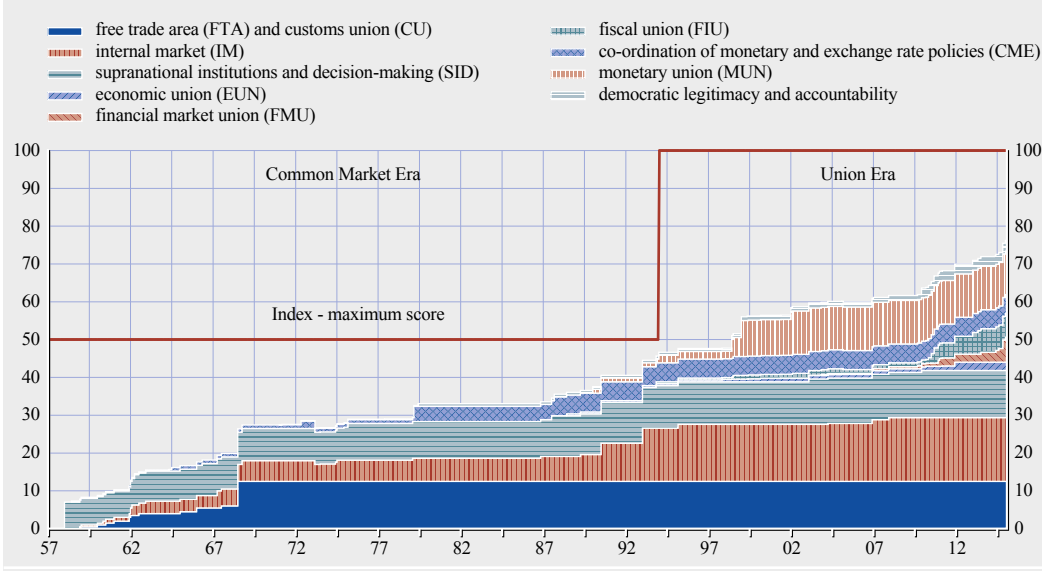
Concerning the Common Market Era, the most prominent achievements are the European Internal Market – also referred to as the Single Market – alongside various supra-national institutions and laws. EURII draws on previous research, such as the traditional Balassa classification of regional economic integration recognising "five stages" of integration. Regional economic integration starts with a free trade area and customs union (stages 1 and 2, which the six founding members of the European Economic Community had already accomplished by 1968), as well as the gradual build-up of the European Internal Market (stage 3, which to a significant, but not full extent was

finalised in 1993). During these 35 years, some degree of coordination of, for instance, monetary and exchange rate policies was also set up (stage 4) alongside a number of institutions, laws and decision-making processes which can be defined as – though to different degrees – supranational in nature (stage 5). Given the final goal of a fully-fledged common market, this process was not too far from being completed in the early 1990s, though additional work needed (and still needs) to be done to complete the Internal Market.

However, the start of Stage Two of EMU in 1994 and, even more, of EMU’s Stage Three in 1999, implied a major discontinuity in the integration process. The introduction of the euro was not just, as some would have argued, a “cherry on the pie”, with the pie being the completion of the EU Internal Market. It rather implied what in this paper we call a new – and gigantic – “pie on the cherry”. This is because the initial version of EMU, despite including some mechanisms for the coordination of national economic policies, proved unable to cope with the shocks emanating from the global crisis and even contributed to endogenously creating some of the preconditions for the euro area crisis.

In the Union Era, a new set of goals in the process of European integration were broadly identified in the Four Presidents’ Report of December 2012 (Van Rompuy 2012), which sees the need to complement the monetary union with a more effective economic union, a fiscal union, a financial union, and a commensurate political union. The contours of the first three unions have been defined, though to different degrees. A series of detailed legislative acts – including a new Treaty on Stability, Coordination and Governance in the Economic and Monetary Union, better known as the Fiscal Compact – have been adopted in the past few years. Alongside legislation changing the nature of integration (e.g. Bank Recovery and Resolution Directive), new institutional structures have also been set up (e.g. Single Supervisory Mechanism and Single Resolution Mechanism under the financial/banking union). While not all goals identified in the Four Presidents’ Report have been implemented, progress made in the first three unions has been tangible, with the European banking union probably being the most notable achievement so far.

European Index of Regional Institutional Integration (EURII)



Concerning the political union, the European Council Conclusions of December 2012 state that “any new steps towards strengthening economic governance will need to be accompanied by further steps towards stronger legitimacy and accountability”, and that this should be ensured “at the level at which decisions are taken and implemented”. Political union remains, therefore, broadly undefined as it is seen in this context as the complement needed to be able to achieve the accountability and legitimacy of the economic governance developed in the other three unions, rather than as a process on its own. This explains the relatively low score given to political union in the EURII index. Not to deny that, “despite its predominantly economic content, the European Union is an eminently political construct. Even readers primarily interested in economics would hardly understand the euro if they ignored its political dimension.” We do concur with this statement by Tommaso Padoa-Schioppa, to whose memory this paper is dedicated.

As for where the integration process currently stands after entering the Union Era in 1994, the index suggests that a major institutional quantum leap has taken place especially in the last few years. It is a leap which probably very few would have anticipated when the Maastricht Treaty was signed. This partly explains why there are benefits to measuring the integrative developments undertaken under the two main blocks of the index, that is, the Common Market Era and Union Era.

“Europe will be forged in crises, and will be the sum of the solutions adopted for those crises.” Jean Monnet (1978)

“Despite its predominantly economic content, the European Union is an eminently political construct. Even readers primarily interested in economics would hardly understand the euro if they ignored its political dimension.” Tommaso Padoa-Schioppa (2004)

I INTRODUCTION

The crisis of the euro area¹ has exposed and exacerbated several weaknesses and gaps in the architecture of Europe’s Economic and Monetary Union (EMU), which are often lumped together as “flaws in EMU’s design”. EMU’s political economy could not impede – and in part, it has been argued, endogenously fuelled² – the accumulation of substantial private and/or public debt in a number of its member countries. Nor could it prevent significant losses in competitiveness. Incentive structures proved to be poorly designed and badly implemented. When the sovereign crisis erupted in 2010, there were no financial backstops for either sovereigns or banks to counter the sudden stop in financial flows to some member countries. Several financial market segments collapsed. Then, adverse feedback loops built up between weak sovereigns, weak banks and weak economies (Schambaugh (2012)). This brought a risk of financial implosion in some countries, with Greece, Ireland and others experiencing bank runs. The deep trade, financial and monetary links within EMU became a vehicle of contagion, and break-up risks came to the fore.

However, these adverse developments have also spurred a rethinking and reshaping of institutional integration in Europe. Questions have been addressed, such as: *What would render a regional institutional framework such as EMU stable? What is needed for the euro area to become resilient to major financial and economic shocks, and display its benefits?* In replying to these questions, the crisis has taught hard lessons about the reforms needed. Since 2010 we have seen some of the most important institutional reforms in the 60 years of EU integration, including: enhanced fiscal governance, procedures to keep macroeconomic imbalances in check, a crisis management and resolution framework with financial backstops for sovereigns centred on the European Stability Mechanism, five far-reaching adjustment programmes, and the establishment of banking supervision (Single Supervisory Mechanism) and resolution (Single Resolution Mechanism, Bank Recovery and Resolution Directive, etc.). These institutional adjustments and, in some cases, innovations are covered in detail in this paper. The paper also shows how the euro area is being “re-forged” in line with Jean Monnet’s prediction above.³

The aim of the paper is to present the *European Index of Regional Institutional Integration (EURII)*, which maps developments in European integration from 1958 to 2014. EURII is a second-generation index arising from previous work,⁴ and is organised into two main eras of European integration:

- The **“Common Market Era”**, which displayed most of its effects between 1958, when the Treaty of Rome entered into force, and 1993. This era comprises the progressive construction

1 For a chronicle of the crisis, see Drudi, Durre and Mongelli (2013), and Durre, Maddaloni and Mongelli (2014).

2 See e.g. Fernández-Villaverde et al. (2013) and de Grauwe (2013).

3 The paper mainly focuses on the global financial crisis that started in 2007 and the euro crisis that started in 2010, not on earlier crises, such as the Bretton Woods collapse in 1971-73, the ERM crisis of 1992 and other past events that also “forged” Europe.

4 The first-generation Index of Regional Institutional Economic Integration (IRIEI) presented in Dorrucchi et al. (2002, 2004) and Mongelli et al. (2007) is discussed later in this paper.

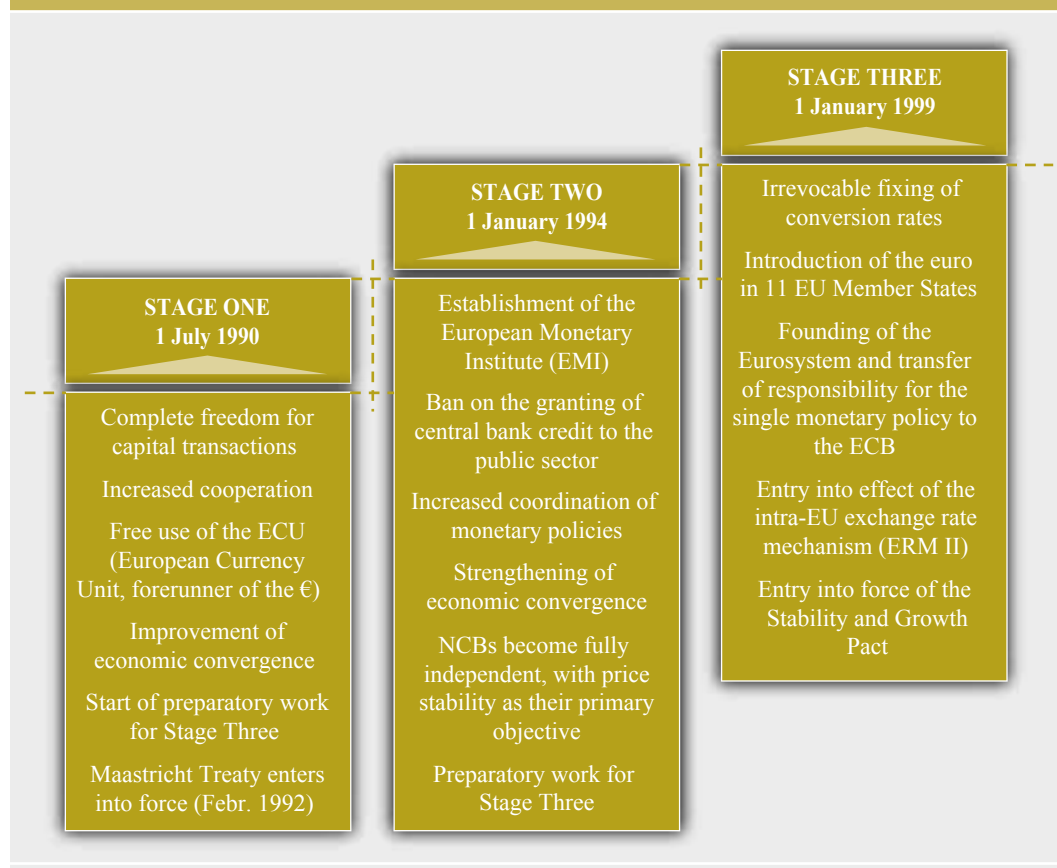
of a free trade area and customs union, and then of an internal market, coupled with increasing harmonisation, coordination and even unification of several policies, as well as with European institutions and laws. These components have proven resilient throughout the crisis. Euro area countries remain very integrated and interdependent; and

- The “**Union Era**” that started in 1994 with Stage Two of EMU and continued in 1999 with Stage Three. A description of the three Stages of EMU is provided in Chart 1.

The main argument of this paper is that the launch of EMU in the 1990s represented not only a substantial new step in the process of European integration. But EMU also implied a transformation whose consequences and implications were not fully understood at the time. A major discontinuity indeed materialised when Europe shifted from the Common Market Era to the Union Era in 1994. That is, the moment when the preparatory work for the launch of the euro started becoming more credible and binding. The nature of European integration changed in that moment.

As we see it, the introduction of the euro was not just – as some believed – a “*cherry on the pie*”, with the cherry being the need to give up monetary autonomy and move to a monetary union in order to solve the “impossible trinity” implied by the EU Internal Market and fixed exchange rates. It rather implied a new “*pie on the cherry*”, as monetary unification could not survive without economic,

Chart 1 The three stages of EMU



fiscal, financial and, ultimately, political unification. Such a discontinuity in the history of Europe's regional institutional integration was in turn exacerbated by two additional factors. First, euro area countries have become more interconnected and interdependent than ever before; they are each other's direct stakeholders. The crisis has shown that events in any euro area member can rapidly spill over to the others through diverse channels of transmission. Second, EMU's governance was weak even when assessed against the original blueprint of the Delors Report (Delors *et al.* 1989). Although it included some mechanisms for the coordination of national policies, it proved unable to cope with the shocks emanating from the global crisis.

Thus, just updating the first-generation index of institutional integration as developed by Dorrucchi, Firpo, Fratzscher and Mongelli (2002) would not have been enough. The new index needed to: (i) be *recalibrated* to take account of the significant functional dissonances set in motion by the monetary union, and (ii) incorporate the new dimensions of the Union Era.

The second-generation EURII index brings a change in perspective: it takes stock of the pillars of European integration but also anchors its scoring to the elements of a genuine union that are within reach, and can secure a robust and beneficial economic and monetary union.

In the Union Era, the framework on the way forward for European economic integration is outlined in the Four Presidents' Report of December 2012. The Report was commissioned at the June 2012 European Council where, *inter alia*, the euro area Heads of State or Government requested the work to begin on banking union. A second draft of the Report was then presented at the October 2012 European Council before being concluded in time for the December 2012 European Council summit. Given that there were some differences between the Reports, we take all of them as reference for the index (as well as potential next steps that may be taken).

The Four Presidents' Report (but also the Commission Blueprint of 2012) embed some important steps towards a "genuine EMU" that will be characterised by four main elements: (i) an integrated economic policy framework (*Economic Union*), (ii) an integrated budgetary framework going beyond the previous fiscal governance (*Fiscal Union*), (iii) a *Financial Union* comprising a Single Supervisory Mechanism, plus a shared resolution framework for the banking system, and (iv) a *Political Union* engaging citizens more deeply in European decision-making.

The advice of the Four Presidents' Report is to progress with the four unions in parallel. Nevertheless, as seen in practice in the past two years, the contours of such a "*Genuine Union*" are progressing at different speeds and are defined to different degrees. In some cases, a series of detailed legislative acts – including a new Treaty on Stability, Coordination and Governance (TSCG) signed by 25 of the (then) 27 EU Member States, better known as the Fiscal Compact and lying outside the Treaty on the Functioning of the European Union, TFEU – have been adopted since 2010, which deepen economic and fiscal integration. In other cases, new dimensions have been added to the process of integration and the rules of the Internal Market, for example, with the Bank Recovery and Resolution Mechanism. Some new institutional mechanisms have also been set up, notably the European Stability Mechanism (ESM), which is an intergovernmental body, and the Single Supervisory Mechanism under the Financial (or more narrowly Banking) Union. Indeed, although not all the goals identified in the Four Presidents' Report have been implemented yet, it can be confidently stated that the progress made in the first three unions has been tangible, with the European banking union probably being the most notable achievement so far.

Concerning the Political Union, the European Council conclusions of December 2012 state that “any new steps towards strengthening economic governance will need to be accompanied by further steps towards stronger legitimacy and accountability”, and that this should be ensured “at the level at which decisions are taken and implemented”. Given the nature of the Report, Political Union remains broadly undefined as it sees such a Political Union as the necessary complement to achieving the accountability and legitimacy of the economic governance developed in the other three unions, rather than as a process on its own. This also explains the relatively low score given to Political Union in the EURII index.

These four unions have limitations, concerning the extent by which they have been implemented and the extent by which they foresee all elements indispensable for a “genuine” EMU. Yet, they provide a broad map for the way forward in terms of further integration. They help constructing an index for, and quantify, EU institutional integration in this paper.

The index of **EU Regional Institutional Integration (EURII)** is thus anchored by the new building blocks of EMU under the Union Era, the contours of which is now taking shape, and builds on the Common Market Era. A maximum score of 50 is assigned to each era, and thus the index can reach a maximum score of 100. Following a rapid rise in the past few years, the index stands at 78.8 as of 1 January 2015. Only decisions that have already been taken enter the index. It is foreseen in the Four Presidents’ Report, even if in a vague manner, and not yet implemented or even decided upon is not included. Is seen as what could become operational to reach a maximum score of 100. Indeed, the gap in institutional integration to be filled under the Union Era is, currently, greater than the gap of the Common Market era in 1993.

The paper is organised as follows. Section 2 briefly recalls what went wrong in the run-up to the euro area crisis and what had to be addressed by the EMU’s governance reforms. Some of the roots of the euro area crisis are very old. Section 3 discusses the theoretical foundations of our EURII index, and the Balassa stages of integration. Section 4 describes the methodology behind the new EURII index, and explains why simply updating the original index was not an option. Instead, the index had to be fully reconsidered and recalibrated and enriched with several new components. Section 5 presents the scoring for the Common Market Era in a step-by-step way and the distribution of nearly all of the 50 points of the EURII index. Section 6 then presents the scoring of the Union Era in a step-by-step way: about half of the 50 points are assigned unevenly across the various components/stages. Section 7 brings together the main findings and scores for both the Common Market Era and the Union Era. Section 8 qualifies these findings and offers some final remarks.

Several caveats apply to our analysis. Ratification and transposition into national law does not guarantee immediate application or enactments of the various steps; thus, there can be differences between *de jure* and *de facto* institutional integration. Also, our measure of legitimacy and accountability is necessarily limited. Moreover, the impact and effectiveness of institutional reforms may have long and varying lags which are only partly captured by the index. Finally, EU integration is a process and, as such, may not only lack some envisaged steps, but during critical phases it may even lack coherence (see Haas (1958), Meade (1958) and Sapir (2011)).

2 AN INSTITUTIONAL NARRATIVE OF EU ECONOMIC INTEGRATION

The EURII index allows us to complement the economic narratives of the crisis – i.e., the fiscal, competitiveness and banking narratives – with an institutional narrative.⁵ Starting from the economic narratives, early on during the crisis a “*fiscal narrative*” prevailed, prompted by the public finance crisis in Greece. A number of authors noted that the “preventive arm” of the Stability and Growth Pact had failed to thwart persistent budget deficits and encourage significant reduction in existing debt, in good times. Then the “corrective arm” was unable to force fiscal corrections where necessary (see Schuknecht, Moutot, Rother and Stark (2011)). Such flaws in fiscal governance were then coupled with macroeconomic imbalances going beyond what public finances could account for.

To ensure that structural convergence efforts would not stop with the launch of the euro, the EU Lisbon Strategy was introduced into the economic policy coordination framework in 2000 to encourage product and labour market reforms and spur competitiveness where it was eroded.⁶ However, these mechanisms did not prevent certain euro area countries from experiencing continuous erosions of competitiveness, leading to the accumulation of current account deficits in the presence of rigid labour and product markets, low growth in productivity and innovation, and excessive private borrowing. Thus, a “*competitiveness narrative*” of the crisis also developed, according to which divergences in unit labour costs were the ultimate reason behind the formation of current account imbalances across the euro area (see e.g. Sinn and Valentinyi (2013) and, for a critique, Wyplosz (2012)).

Over time, a “*banking narrative*” has also gained ground. Real estate and other asset bubbles fuelled by excessive credit growth and capital inflows, which artificially supported demand in several countries, were indeed a key explanatory factor of the crisis in countries such as Spain or Ireland. Excessive private and public leverage laid the ground for the sudden capital stops experienced since 2010. This narrative stresses that it was the banking system inside the single financial market that enabled imbalances to accumulate for a long period by providing “cheap” financing across the euro area (see e.g. Constâncio (2013)). In particular, factors such as the low-yield environment and the liberalisation of European and international capital markets had ushered in an era of unprecedented capital mobility and credit growth which was not accompanied by appropriate regulation and supervision either in the EU/euro area or in the global economy. At the same time, financial market “self-discipline” also failed. Banks and other financial market participants, such as credit rating agencies, did not sufficiently discriminate between debt issuers with different debt sustainability prospects. In fact, in the initial years after adoption of the euro, the cost of sovereign borrowing converged to an unprecedented degree.⁷

5 EMU’s political economy raised concerns even before the launch of the euro. There were warnings about sharing a single market and a currency while national fiscal, economic and financial policies remained weakly coordinated (see Padoa-Schioppa (2000) and (2004b), and the review by McNamara (2013)). Sims (1999) presciently asked if EMU’s institutions could deal with “stress”. Krugman (1993 and 1998) and Feldstein (1998) doubted that the euro area could ever function because of, among other reasons, a lack of supranational fiscal arrangements, such as the US federal budget, and a low degree of political union. For a review of the critical stance of US academic, see Jonung and Drea (2009).

6 This strategy was based on the open method of coordination as the main economic and employment policy coordination mechanisms of the Treaty (Articles 121 and 148). Under the Maastricht Treaty the coordination of economic policies should have been treated as “a matter of common concern”, but it proved to be ineffective.

7 The critical role of the banking sector in the Internal Market was for a long time underestimated in both the academic and the policy debate – an exception being Padoa-Schioppa (2001). Apart from the provision of “cheap” financing through rising cross-border financial activity throughout the Union, a specific problem that emerged during the euro area crisis was that the single monetary policy still had to be transmitted in a regime of national banking supervision, coupled with wide discrepancies in the European financial regulation and national deposit insurance frameworks. Against this backdrop, academics such as Eichengreen, Obstfeld, Rogoff, Bordo and Kenen pointed to various flaws in EMU’s architecture and, specifically, to a lack of centralised banking supervision and lender of last resort for sovereigns. Another important issue was heterogeneity across banks. Financial fragmentation was one of the manifestations of the crisis, which in turn implied uneven transmission of the single monetary policy across stressed and non-stressed euro area countries. The so-called financial trilemma (Schoenmaker (2005), (2011)) of European financial integration, European financial stability and national prudential supervision had not been addressed.

Against the background of these three main economic narratives, the index developed in this paper proposes a complementary “**institutional narrative**” of the crisis. The index shows that European institutions and rules did not keep pace with developments in the economic and monetary sphere. The Treaty of Maastricht was agreed in the late 1980s and then ratified by all EU Member States in the early 1990s, when both Europe and the world were very different and real and financial linkages were looser. The crisis showed how decentralised economic, fiscal and financial policies entailed problematic incentive structures that amplified the imbalances under the previous narratives: i.e., systemic risks were to some extent endogenous.

Moreover, no crisis resolution mechanism or financial backstops for either sovereigns or banks existed prior to the crisis. Why this omission? Probably it was considered that market forces would by themselves play a disciplinary role across the single financial market, underpinned by the prohibition of bailing out public creditors. With hindsight, EMU’s institutional framework was based on the assumption that countries could keep their own houses in order (as some did) and that in a crisis the necessary adjustments would be possible through market mechanisms.

The implications were severe and could have been even more devastating if a crisis management framework had not been deployed with, at its centre, the European Financial Stability Facility (EFSF) in 2011 and the European Stability Mechanism (ESM) in 2013. The euro area found itself on the verge of a financial meltdown on several occasions (see e.g. Durre *et al.* (2013)). The euro area’s governance shortcomings in the face of the crisis have elicited efforts to strengthen the foundations of EMU and, more generally, the EU. A new European governance framework, whose contours are not yet completely defined, is now taking shape.

Whichever narrative one adopts, the crisis showed that EMU needed to be completed in one way or another, requiring a number of institutional integration steps. Subsequently, the metaphor of EMU and the euro in particular being initially understood just as a sort of “cherry on the pie”, with the pie being the EU’s Internal Market, did not seem to hold any longer. This would have been the view of the Committee chaired by the President of the European Commission, Jacques Delors, which prepared the ground for the Maastricht Treaty’s EMU architecture. His report presented the roadmap for EMU in April 1989. It called, for example, for EU rules and procedures in the macroeconomic and budgetary field to “become binding”.⁸ All in all, the report concluded, “countries would have to accept that sharing a common market and a single currency area imposed policy constraints” (Delors *et al.* 1989). These recommendations were not sufficiently mirrored either in the Maastricht Treaty or in ensuing Treaty revisions (at Nice, Amsterdam or even Lisbon). In addition, initiatives such as the Stability and Growth Pact (SGP), which was added in 1997 in an attempt to correct the shortcomings of the Maastricht Treaty, or the Lisbon Strategy of 2000, did not provide for an appropriate governance to avoid the global financial crisis from taking a stronghold in the EU. Macroeconomic and fiscal governance eventually proved inadequate while the expected market discipline also did not provide an adequate substitute for the institutional gap.⁹ In the end, the crisis initiated a number of integrative steps that are captured under the pillars of the Four Presidents’ Report and reflected in the index.

8 According to the Delors Report, the ECOFIN Council, in cooperation with the European Parliament, should have had the “authority to take directly enforceable decisions, i.e. to impose constraints on national budgets to the extent to which this was necessary to prevent imbalances that might threaten monetary stability”. The report also proposed “discretionary changes in Community resources (...) to supplement structural transfers to Member States or to influence the overall policy stance in the Community”, as well as “multilateral surveillance of economic developments and policies based on agreed indicators (...) and recommendations” so as to promote “the necessary corrections in national policies”.

9 Both the preventive and corrective arms of the Stability and Growth Pact (SGP) did not encourage faster deficit and debt reduction. As Mayer (2012) observes, even the *Werner Plan of 1970*, which was never implemented, had envisaged the establishment of a “centre of decision for economic policy”, politically accountable to the European Parliament, and exerting decisive influence over countries’ economic policies (Werner *et al.* 1970). On the SGP failing to stem excessive deficits and debts in EU Member States, see Ioannou and Stracca (2012).

3 FOUNDATIONS OF THE EURII INDEX

3.1 SOME BASIC DEFINITIONS

The EURII index measures regional institutional integration in the EU/euro area context. Before focusing on this specific context, however, a more general discussion is required of the concept of “regional institutional integration”.

We define **regional institutional integration** as the joint policy decisions which two or more governments of countries belonging to the same geographic area take in order to deepen and/or widen the spheres of common economic¹⁰ interest under the terms of an agreed arrangement, such as a pact or a treaty. According to this definition, arrangements could vary widely in form, ranging from narrow intergovernmental cooperation agreements (e.g. a preferential trade area) to fully-fledged unions with (partial and/or full) transfer of sovereignty to supranational institutions, as is the case in today’s EU.

Regional institutional integration can be seen as part of a broader spectrum of policies designed to enhance economic integration¹¹ with one or more countries. Such policies, which can be named “**preferential arrangements**” (PAs), may or may not be regional in nature since they may be:

- multilateral (e.g. WTO-based Doha Round of multilateral trade negotiations),
- inter-regional (e.g. Yaoundé/Lomé Convention),
- regional (e.g. EU),
- sub-regional (e.g. euro area as compared with the whole EU, Andean Community and MERCOSUR as compared with the whole Latin American region, etc.),
- bilateral (e.g. Chile approach to PAs, and free trade agreements between the EU and several individual countries), and
- possibly even unilateral in nature, at least according to a broad definition of PAs¹² (e.g. a country either unilaterally anchoring its currency to a third currency or dollarizing/euroizing).

The above spectrum of PAs relates to the choice of the partners, i.e. the **scope** of PAs or their “horizontal dimension”. But there is also a “vertical dimension” of PAs, which pertains to their **depth**, defined as the *final* objectives being pursued. According to the Balassa classification discussed in Section 3.2, such objectives consist of a wide spectrum ranging from Free Trade Arrangements (FTAs) to full unification of economic policies.

In conclusion, each country, regional arrangement, or territorial entity faces, at a given moment of its history, a menu of options pertaining to the scope and depth of PAs. Experience shows that such options are not necessarily mutually inconsistent, i.e. that several options may be adopted at the

10 Please note that we focus here on the economic dimension of regional institutional integration, but there are of course several other dimensions to which the general definitions in this sub-section would equally apply.

11 The notion of economic integration in turn comprises real (i.e., related to trade, services and FDI), financial and monetary (including exchange rate) integration.

12 The definition adopted in this paper is broad as PAs usually take the form of *mutual* agreements instead of *unilateral* decisions. However, a unilateral initiative may as well be “designed to enhance economic integration with one or more countries”.

same time. For instance, the EU is regional in nature, but also involved in multilateral, inter-regional, bilateral and sub-regional (e.g. Schengen, euro area) PAs, each presenting a different level of depth.

3.2 THE EURII INDEX AND THE BALASSA FRAMEWORK OF INSTITUTIONAL INTEGRATION

Regional institutional integration across the EU/euro area partner countries has been a process that has developed in several “stages”, and displayed its effects over time. An index of institutional integration is meant to capture both the main features and timeline of such a process. The second-generation Index of EU Regional Institutional Integration (EURII) presented in this paper builds in part on the first-generation **Index of Regional Institutional Economic Integration (IRIEI)** presented in Dorrucci *et al.* (2002, 2004) and Mongelli *et al.* (2007). Both the IRIEI and the EURII indices are based on the Balassa framework of institutional integration (Balassa, 1961): its “five stages” are the building blocks of IRIEI and EURII. These stages are a Free Trade Area, a Customs Union, a Common Market, an Economic Union, and Total Economic Integration, and they are described in Box 1.¹³

¹³ For a survey of various other indicators and indices of institutional integration and their applications to various geographic areas, see De Lombaerde *et al.* (2008).

Box 1

FIVE STAGES OF REGIONAL INSTITUTIONAL INTEGRATION: THE BALASSA FRAMEWORK

Bela Balassa is often cited for his work on the relationship between purchasing power parity and cross-country productivity differences, also known as the “Balassa-Samuelson effect”. Yet, when working at the World Bank he also made important contributions in the sphere of regional integration. In a seminal article of (1961) he identified five stages of regional institutional integration (RII), as follows:

- **Stage 1. Free Trade Area (FTA)** – An area where tariffs and quotas are abolished for imports from area members, but which retains national tariffs and quotas against third countries. Examples are ASEAN and NAFTA;
- **Stage 2. Customs Union (CU)** – A FTA setting up common tariffs and quotas (if any) for trade with non-members. An example is the European Economic Community since 1968;
- **Stage 3. Common Market (CM)** – A CU abolishing non-tariff barriers to trade – i.e., promoting the integration of product and service markets – as well as restrictions on factor movement (i.e., promoting the integration of capital and labour markets). Examples are the Andean Community and the European Community since 1993, i.e. following the establishment of the European Internal Market. It is noteworthy that the CM was already identified as an objective under the 1957 Treaty of Rome (so-called “four freedoms”);
- **Stage 4. Economic Union (EUN)** – A CM with a significant degree of coordination of national economic policies and/or harmonisation of relevant domestic laws. An example is the European Union nowadays; and

- **Stage 5. Total Economic Integration (TEI)** – A EUN with all relevant economic policies conducted at the supranational level. To this end, both supranational authorities and supranational laws need to be in place. There are no concrete examples of TEI, though the euro area (comprising, from 2015 onwards, 19 out of the 28 EU member states) has a number of relevant features, including, for instance, a single monetary, trade and competition policy, as well as supranational authorities (European Central Bank (ECB), European Court of Justice (ECJ)) and legislation.

3.3 AT THE ROOTS OF THE EURII INDEX: THE FIRST-GENERATION INDEX OF REGIONAL INSTITUTIONAL ECONOMIC INTEGRATION (IRIEI)

In the first-generation IRIEI by Dorrucci *et al.* (2002, 2004) and Mongelli *et al.* (2007), the overall degree of institutional integration achieved within the European Union at a given point in time was quantified by assigning “scores” to each relevant integration event (e.g. the entering into force of a Treaty or directive, the start of a new institution, an important ECJ ruling, etc.). This kind approach, based on a monthly database starting with the entering into force of the Treaty of Rome in January 1958, is the same as the one now implemented for the EURII index.

In the IRIEI index, the sum of all scores indicated the overall level of integration recorded, for each of the five Balassa stages, from 1958 onwards. Scores were assigned *in parallel* along four main headings, each one ranging between 0 and up to a maximum of 25: Free Trade Area/Customs Union (jointly considered); Common Market; Economic Union; and Total Economic Integration.

Concerning “what is measured”, in line with the general definitions provided in Section 3.1, the index measured both the depth of integration – or **vertical integration** – and its geographic scope, or **horizontal integration**. In each regional arrangement, a group of partner countries sets the upper limit to vertical integration at a given point in time. Within the EU, these countries were the six founding members (Belgium, France, Germany, Italy, Luxembourg and the Netherlands, or EU6) from the 1950s onwards. All of them joined the euro area in 1999 (see Chart 2). Given this upper limit, it was then possible to reconstruct the path followed by each individual member of the EU/euro area over time (horizontal integration). Dorrucci *et al.* (2002 and 2003) illustrated the outcome of this exercise for each of the EU15 Member States, i.e. the countries which participated in the enlargements of the EU prior to those in 2004 and thereafter.

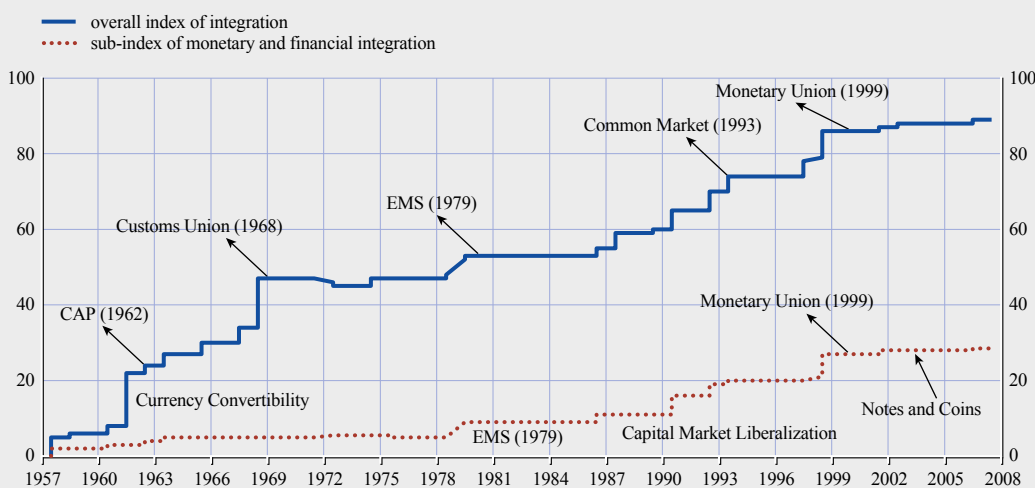
Turning to the process of calibration of the scores to be assigned to each integration event, the first step consisted in properly assigning them to the right “stage” (e.g. to the free trade area, common market or total economic integration). This made it possible to create a structure for the index.

The second step involved the weighting, with a top-down approach (i.e. ensuring that the index can range from 0 to 100) of each relevant joint policy decision. To the extent possible, the authors assigned scores on the basis of the year and month when such a decision started being actually *implemented*. Projects which were never implemented – e.g., the Werner Plan – are not taken into account.

Finally, the third step consisted of summing up the scores achieved in each moment in time. We used monthly data. As mentioned, the index could range between 0 (no economic integration at all) and 100 (representing full economic integration as understood when the Rome Treaty was

Chart 2 The first-generation Index of Regional Institutional Economic Integration (IRIEI)

(index of Institutional Integration for the EU-6 (i.e., BE, DE, FR, LU, IT, NL), 1957 – 2007)



approved). In the European case until the early 1990s, the final objective of economic integration had been identified already in the 1957 Treaty of Rome as the common market (subsequently called “internal market”). In parallel, however, two other Balassa “stages” of integration were also pursued, which needed to be captured in the index: (i) harmonisation of national economic policies (for example, the Common Agricultural Policy); and (ii) co-existence of the intergovernmental method – for example, through the Council – with supranational authorities (for example, the European Court of Justice, the European Parliament) and laws.

The resulting measure of the first-generation IRIEI index was used either by itself or to conduct econometric analysis: for example, to gauge the interaction between Regional Institutional Integration (RII) and the actual degree of economic and financial integration that has been achieved by two or more countries belonging to the same arrangement.¹⁴ This complementary perspective – which is not pursued in this paper – resembles and further extends what Balassa referred to as the “*state of affairs*” of regional integration¹⁵. In this setting, Dorrucchi *et al.* (2002, 2004) found a two-way interaction between institutional and economic integration.

In the introduction we explained that the preparation for the euro and then the launch of the euro implied a moment of *discontinuity* in the EURII process: the final objective of the RII process has fundamentally changed in the EU, thus calling for a recalibration of the index. Thus, simply updating the first-generation index up to 2014 was not an option. Instead we had to fully rethink and recalibrate it by adding several new components.

14 Such Regional Economic Integration (REI) can be captured by a number of economic, monetary and financial indicators at a given point in time: e.g. business cycle synchronisation, dispersion in real GDP per capita and price levels, trade integration, labour mobility, correlation of inflation and interest rates, financial market integration, etc. A high degree of REI implies, not surprisingly, the fulfilment of the basic Optimum Currency Area (OCA) criteria.

15 Regarding economic integration as a state of affairs, Balassa defined it as “*the absence of various forms of discrimination between national economies*” (Balassa 1961). Our definition is broader in nature, since we look at the actual data for economic and financial integration, i.e. “regional economic integration” (REI). We prefer this broader definition because the absence of economic discriminations within a region is a necessary, but not sufficient, condition to attain economic integration. Regarding the absence of discriminations, we consider it as a component of regional institutional integration (RII).

4 METHODOLOGY TO CONSTRUCT THE EURII INDEX

There are elements of continuity and discontinuity between the first original index of regional institutional integration recalled in the previous section, and the enhanced new second-generation EURII index proposed here. To start with, what is measured, and how it is measured, remain unchanged, i.e. the general criteria for the measurement are the same.

4.1 EURII CAPTURES INSTITUTIONAL REFORMS

A fundamental change resulting from the crisis has been a *crisis management and crisis resolution framework*. The economic adjustment programmes for Greece, Ireland, Portugal, Spain and Cyprus were supported financially by the European Financial Stability Facility (EFSF) and later also by the permanent European Stability Mechanism (ESM). The EU's new crisis framework drew on the crisis management framework of the IMF. *The funding of the ESM* comes from paid-in capital plus joint and mutual pledged guarantees in proportion to the share of ECB capital.

Such risk-sharing in turn requires a strengthening of the governance framework to counter the moral hazard inherent in such an insurance scheme. This is what we have witnessed since 2010. The governance of the euro area has been strengthened. There is a new governance to restore fiscal sustainability and prevent or correct macroeconomic imbalances. The Stability and Growth Pact has been tightened up by the so-called “six-pack” of economic governance measures, including the Macroeconomic Imbalance Procedure (MIP). They in turn have been complemented by the “two-pack”.

Something new emerged at the June 2012 summit of euro area leaders: glimpses of a **shared European vision for a coherent and viable architecture of EMU**. The Presidents of the European Council (Herman Van Rompuy), the European Commission (José Manuel Barroso), the Eurogroup (then Jean-Claude Juncker) and the ECB (Mario Draghi) drew up thereafter what is known as the “Four Presidents’ Report”. The report puts forward a proposal for a new architecture of Europe’s Economic and Monetary Union in the shape of four unions over the next decade:

1. a **“banking union”** comprising an integrated financial framework, including three main arms: the Single Supervisory Mechanism (SSM), a common deposit insurance scheme and a shared resolution framework;
2. a **“fiscal union”** comprising an integrated budgetary framework that will go beyond the fiscal compact;
3. an **“economic union”** comprising an integrated economic policy framework; and
4. a **“political union”** enhancing the democratic legitimacy and accountability of all decision-making bodies within the EU.

These “four unions” are envisaged to mesh and engage with each other. Like cogwheels in a clockwork in which the turning of one wheel sets the others in motion. Conversely, when the momentum of one decreases the others follow suit (Mersch (2014)). The banking union, the fiscal union, the economic union, and the political union can transmit and reinforce the dynamics of European integration, boosting the overall resilience of EMU to endogenous and exogenous shocks.

4.2 LOOKING AT THE NOT-TOO-DISTANT FUTURE...

For the purposes of our EURII index, this means that we have recalibrated it so as to capture the aforementioned discontinuity in the final goal:

- Concerning the Common Market Era and until 1993, the main goal of European integration was to set up a fully-fledged integrated market to secure the benefits from trade in goods and services and free movements of people and capital. This block now receives a score of 50 in our index. As we will see, this process was quite advanced already in the early 1990s;
- Concerning the Union Era, as of the start of Stage 2 in 1994, however, the new goal of the process of European integration is identified *ex ante* by the contents of the Four Presidents' Report of December 2012 (Van Rompuy *et al.* 2012).

4.3 ...A NEW GOVERNANCE FRAMEWORK IS EMERGING.

The new governance, crisis management and financial backstops can support a viable euro area. Further progress towards the four unions should instead make them more resilient and stable over the next decades. The Four Presidents' Report, while not having the standing of a Treaty, is one of the most advanced efforts by policy-makers thus far to identify and implement the institutional steps towards a viable EMU, or in other words a "genuine EMU". As a result, from 1994 onwards the maximum score that our RII index can achieve is doubled from 50 to 100. This implies that the institutional integration gap to be filled out under the "Union Era" has widened, quite significantly, in comparison with the concluding years of the Common Market Era (as we shall see below). Therefore, it was decided to double the scale of the index in 1994.

4.4 THE STRUCTURE OF THE EURII INDEX

The EU index of regional institutional integration (EURII) follows a balanced quantitative structure between the "Common Market Era" and the new "Union Era", as displayed in Table 1 below. The maximum score for EURII is 100, which is split equally between the two eras. Each era is in turn partitioned in various stages that are illustrated below and covered in detail in the next two sections of the paper as well as the appendix. Every distinct stage and step of the integration falls under one of the categories and contribute to the full score.

Table 1 The main building blocks of the EURII index

Components	"Common Market Era" (1957-1993)					"Union Era" (1994-Today)				
	Free Trade Area	Custom Union	Intern. Market	Coordination of Monetary & Exchange Rate Policies	Supranat. Institutions & Decision-making	Monetary Union	Economic Union	Fiscal Union	Financial Market Union	Democratic Legitimacy & Accountability
Maximum Score	12.5		20	5	12.5	12	10	10	12	6
Aggregate Maximum Score	50					50				
Total	100									

4.5 REASONS TO PREFER THIS METHODOLOGICAL APPROACH TO ALTERNATIVE APPROACHES

Being an institutional index, methodologies such as the Principal Components Analysis (PCA) cannot be implemented as our weights cannot be determined statistically. The same applies to other possible approaches, such as factor analysis and Unobserved Component Models (UCM). These methodologies might certainly be more objective than the *a priori* weighting which we adopt for our institutional index EURII. However, as OECD (2005) argues, “*no matter which method is used, weights are essentially value judgements. While some analysts might choose weights based only on statistical methods, others might reward (punish) the components that are deemed more (less) influential depending on expert opinion to better reflect the policy priorities or theoretical factors*” (p. 21).

It could be further objected that the majority of institutional indices (e.g. Human Development Index, IMF Financial Index) use an “equal weighting” policy. This means that every dimension or component of such indices, or even all the individual variables which make up such indices, are assigned equal weighting. There are cases in which it is important that the dimensions of a certain “object of research” are chosen in such a way that they are all equally important. Yet, this is not necessarily the case in point here. Assigning equal weighting to different events in the process of institutional integration would often just give the impression of a lack of understanding of their relative importance.

When constructing the EURII index, efforts were taken to account for the relative merits of both the equal weighting and the judgemental approach. As a result, it made sense that the main building blocks of our index – the Common Market Era and the Union Era – be given equal weights. After careful reflection, this seems indeed to be the least arbitrary solution. In the same vein, equal weight has also been given to some components of these two building blocks. But not to all of them: it would indeed not be meaningful, for instance, to give the same weight to the European Monetary System and to Economic and Monetary Union. Nor would it be reasonable to assign the same weight to each of the institutional steps and decisions entailed in the index. Yet, the construction of the index, and the underlying list of events, is fully transparent and available upon request, thus enabling further research to experiment with different weightings.

It is particularly important to stress that the dimension “Democratic Legitimacy and Accountability” (DLA) in our index is the least developed of all sub-components of the index for a precise reason, namely our purpose to keep track of the *actual* steps in the process of institutional integration. As such, the index is not the proper tool to reflect the extensive debate about legitimacy and the democratic deficit in the EU (see e.g. Siedentop (2000) and Scharpf (2011)). Instead, EURII is intended to capture those steps that have been already taken, plus those which are envisaged in the Four Presidents’ Report and are specifically relevant to the steps taken under the other pillars. Since such steps are still defined in a rather limited way, this part of the index is identified as DLA rather than “political union”.

Indeed, as several streams of academic discourse (e.g. European integration studies, “traditional” political philosophy and political science, fiscal federalism etc.) as well as historical precedents show, a true political union in Europe may still take very different shapes along different time horizons in Europe:

- First, state-building can take a variety of forms that, as some have argued, comes about through historical “accident” rather than precise intention;

- Second, advanced forms of political integration would not necessarily imply “full centralisation” of institutions and policies. In the EU, a basic principle enshrined also in the Treaty is indeed that of subsidiarity. At the same time, subsidiarity does not necessarily mean just greater decentralisation. It rather means allocation to the appropriate level of governance of the powers and tools required to conduct the policies assigned to that level. And in line with this, another basic principle in the EU is that accountability exists at the level at which such policy is conducted; and
- Third, “differentiated integration” seems to continue to characterise the European process (see, for example, Leuffen, Rittberger and Schimmelfennig (2012)). Yet even if a very advanced form of political union were to materialise in a core group of countries, a significant degree of decentralisation could still characterise the related institutional set-up.¹⁶

To sum up, the EURII index has both a backward-looking component and a forward-looking component which takes the not implemented parts of the Four Presidents’ report as an anchor. Its most complex component pertains to the dimension of the political union. Since the latter is not being pursued per se, but DLA has to be commensurate with the other three unions as currently envisaged, the total maximum score (6) assigned to it is, very low.

¹⁶ According to Padoa-Schioppa (1995), for instance, federalism would supplement the horizontal division of government functions – legislative, executive, judicial – with a vertical division, whereby government powers have to be distributed at various levels (ranging from the village to the regional arrangement to the whole world) based on the principle of subsidiarity. This is defined as the rule that the functions of higher levels of government should be as limited as possible and be secondary to those at lower levels. At the same time, the euro area crisis has clearly shown that a number of crucial powers need to be shifted to the supranational level, while at the same time filling the democracy gap.

5 (RE-)MEASURING THE COMMON MARKET ERA

This section explains in a step-by-step way the construction of the Common Market Era component of EURII.

5.1 FREE TRADE AREA (FTA) AND CUSTOMS UNION (CU)

Changes over time of **tariffs and quotas on trade** within the area (FTA) and vis-à-vis third countries (CU) are used to measure the progress made in the establishment of the FTA/CU by the six founding Member States (MS) of what is now called the EU (EU6). This process evolved from January 1958 until July 1968, when it was completed for the EU6, thereby setting the “upper bound” for the subsequent integration of the 22 other EU Member States in the subsequent decades. Compared with the other components of the index, this one has the advantage of being the most easily measurable and unbiased, as shown in Table 2.

Using these indicators, a fully-fledged CU (i.e., incorporating a FTA) obtains a score of 12.5. As shown in the Table 2, the final step toward a FTA/CU obtains a much higher weight than each intermediate step, marking the completion of the FTA/CU. The same “non-linear” approach applies to the other dimensions of the EURII index described hereafter.

5.2 INDICATORS USED FOR THE INTERNAL MARKET (IM)

a) Completion of the free movement of goods through the progressive abolition of non-tariff barriers – The creation of a CU did not automatically imply the full integration of product markets among the participating countries. A further step was needed, namely the abolition of all residual barriers with

Table 2 Construction of the EURII: Free Trade Area and Customs Union components

	Scores	Max score possible under the 4PR
1) Free Trade Area (FTA) and Customs Union (CU)	12.50	12.50
a) FTA:	7.50	7.50
1 Intra-EU6 quotas cut by 20%	0.50	
2 Intra-EU6 quotas cut by 20%	0.50	
3 Intra-EU6 tariffs are reduced by 20% (10% January '59, 10% July '60)	0.50	
4 Intra-EU6 quotas cut by 20%	0.50	
5 Intra-EU6 quota restrictions lifted (with a few exceptions)	1.00	
6 Intra-EU6 tariffs reduced by 30% (10% January '61, 10% January '62, 10% July '62)	0.50	
7 Intra-EU6 tariffs reduced by 20% (10% June '63, 10% January '65)	0.50	
8 Intra-EU6 tariffs reduced by 20% (10% in January '66, 10% in July '67)	0.50	
9 FTA completed: all remaining internal tariffs abolished	3.00	
b) CU:	5.00	5.00
1 The difference between average external tariffs in individual countries and the Common External Tariffs (CETs) is reduced by 30% (both agriculture and industrial products; for the latter, reduction had taken place already in 1961)	0.50	
2 The difference between average external tariffs in individual countries and the Common External Tariffs (CETs) is further reduced by 30% (both agriculture and industrial products; for the latter, reduction had taken place already in 1963)	1.00	
3 National customs duties in trade with the rest of the world replaced by the Common External Tariffs (CETs)	3.50	

an effect comparable to that of tariffs and quotas. Two important, preliminary steps in that direction were the attribution of strong powers to the Commission for competition policy (1962, 0.75 additional point) and the harmonisation of VAT on trade of goods (1967, 0.75 additional point).

In 1974, the European Court of Justice defined non-tariff barriers as “*all trading rules enacted by Member States which are capable of hindering, directly or indirectly, actually or potentially, intra-Community trade*” (“Dassonville” case 8/74). Since in the years thereafter some progress was made as a result of repeated rulings of the Court of Justice, 0.5 point is assigned for the year 1974. Another 0.5 point was assigned in 1979, when the Court issued a particularly important ruling (Cassis de Dijon).

However, there is no doubt that in Europe the key step towards the abolition of non-tariff barriers was the 1985 White Paper – a programme abolishing non-tariff barriers which, by the end of 1992, was estimated to have been 95% completed. The White Paper was put into effect with the European Single Act of 1986, which entered in force in 1987 (2.5 additional points). As it would be extremely difficult (and possibly arbitrary) to quantify the intermediate steps between 1987 and the official launch of the European Single Market on 1 January 1993, the methodology assigns 2.5 points just on the occasion of the latter event. In our EURII index, we consider the free movement of goods to have been accomplished on that date (see Table 3).

*b) Measures taken in order to liberalise capital movement*¹⁷ – The role of capital movement in the European process of regional integration has changed over time. On the one hand, in most EU countries until the mid-1980s *restrictions* on capital movements were tolerated and in fact helped to preserve some degree of intra-regional exchange rate stability coupled with some degree of monetary policy autonomy. On the other hand, the *liberalisation* of capital movements became one of the key drivers of monetary union for those EU member countries that wanted to preserve intra-regional exchange rate stability.

The ultimate condition for securing intra-regional exchange rate stability in a sustainable way is *intra-regional economic convergence*. While capital flow restrictions can well play a role in preserving intra-area exchange rate stability in the early stages of integration, in the longer run they jeopardise this objective since they allow policy-makers to postpone those policy measures that eventually create the preconditions for both economic convergence and greater exchange rate stability. As the European experience since the early 1990s clearly illustrates, free capital movement was a key disciplining factor that “forced” policy-makers to pursue economic convergence as one of the key objectives of economic policy in Europe.

Consequently, in our EURII index all steps towards the liberalisation of capital movements obtain a positive score, whereas all restrictive measures receive a negative one. Emphasis is given to those measures which were taken at the *regional* level, since liberalisation in one individual country does not *per se* imply increased integration. In the EURII index, the free movement of capital is considered to have been virtually accomplished with the launch of the common

¹⁷ In the EURII index, technology is not treated as a separate production factor. This choice is based on the assumption that foreign direct investment (FDI), which is an important component of capital movements, is a major instrument of technology transfer. Opening a branch, setting up joint ventures and acquiring foreign companies in order to horizontally or vertically extend the production structure are indeed significant components of capital movement. However, some recent studies suggest that FDI fails to transfer technology and that improvements often remain confined to the headquarters. This would imply that technology should be measured as a separate factor. Hence, although this is not the case for the time being, more advanced versions of this paper may include technology as a separate item, using additional indicators such as the EU patents policy.

market for capital in 1993, although we take also account of the impact of the Payment Services Directive of 2007 (see Table 3).

*c) Measures taken to liberalise the **movement of services*** – The establishment of a truly functioning internal market for services is vital, as today services account on average for about 70% of EU GDP. They are the most important source of foreign direct investment (FDI), and they are the only source of net job creation in the EU. We can track the progress made in this field in six key steps:

1. Attribution of strong powers to the European Commission in the area of competition policy (1962);
2. Harmonisation of VAT on services trade (1967);
3. Council Directive on the abolition of restrictions on the freedom of establishment and freedom to provide services in respect of self-employed activities of banks and other institutions (1973);
4. Official launch of a single market for services in 1993, as part of the European Single Market; and
5. Payment Services Directive (2007); and
6. The Directive on services in the internal market, which is commonly referred to as the Bolkestein Directive (2009).¹⁸

However, as the Monti Report of May 2010 – “A New Strategy for the Single Market” – has clearly pointed out, “*in the case of services, Europe is still in a phase of “market construction” that requires breaking down barriers to cross-border activity, cutting the dead wood of national administrative and technical barriers and overcoming corporatist resistances*” (Monti (2010), p. 37).¹⁹ For this reason, out of a possible maximum score of 5, we cumulatively give 3.6 points to the services dimension of European integration, indicating that more needs to be done in the coming years. The blueprint for such additional action is provided by the Monti report itself (see in particular Monti (2010), Section 2.6).

*d) Measures taken to liberalise the **movement of people and workers*** – This is another key indicator, in line with Mundell’s seminal paper on optimum currency areas (OCA, Mundell (1961)). However, achieving a truly single labour market is far more complex and elusive than integrating product, capital and services markets.

In the Treaty of Rome, this objective was initially envisaged by entitling workers to accept job offers within the internal market, and by removing any discrimination based on nationality between workers (Art. 48). By 1968 this rule was, at least in principle, already enforced (one point). However, this *de jure* approach to labour mobility was clearly insufficient. It left disincentives to move across EU borders in place. Such obstacles would involve that a number of supplementary measures be taken at the regional level, such as: (i) promoting the mobility of pension rights;

¹⁸ The Bolkestein Directive – named after the former European Commissioner for the Internal Market – aims to establish a single market for services within the European Union (EU). It was seen as an important kick-start to the Lisbon Agenda of 2000.

¹⁹ For example, “*telecommunications services and infrastructures in the EU are currently still highly fragmented along national borders*” (p. 44); further regulatory action is required “*to ensure the quick uptake of new technologies and greater efficiency through competition in energy services*” (p. 47); “*the market for rail freight services is still not yet functioning due to incorrect or incomplete transposition of Community law by Member States* (p. 51); and, more generally speaking, “*services markets remain strongly fragmented with only 20% of the services provided in the EU having a cross-border dimension*” (p. 53).

Table 3 Construction of the EURII: Internal Market component

	Scores	Max score possible under the 4PR
2) Internal market (IM)	16.85	20
a) Free movement of goods (abolition of non-tariff barriers)	5.00	5
b) Free movement of capital	5.00	5
c) Free movement of services	3.60	5
d) Free movement of people	3.25	5

(ii) making information on cross-border job opportunities transparent; (iii) recognising professional qualifications across different countries; and (iv) harmonising national labour market regulations.

Although since 1993 the EU is supposed to have had an internal market for labour, these measures are far from being fully implemented. Also for that reason²⁰, less than 3% of the working age population of the EU consists of people from one Member State working in another. This explains why the maximum score possible for this indicator cannot be given to EU countries in this field (a score of 3.25 is reached), despite the fact that, following the Amsterdam meeting of the European Council in 1997 and the Action Plan elaborated by the Commission in the same year, policies in the area of labour mobility have been gaining momentum. Four additional steps have, however, been selected for our index: (i) the Reyners ruling of June 1974 (half a point); (ii) a directive of 1989 on mutual recognition of higher education diplomas; (iii) the full implementation in an increasing number of Member States, since 1998, of the Schengen convention of 1990 – which does not apply to all EU Member States – on the free circulation of people; and (iv) the introduction, in 2004, of the right of permanent residence, coupled with a reduction in the administrative formalities.

On the whole, the Internal Market as such (i.e. without considering the other stages of regional integration) could obtain a maximum score of 20 points. There remains a gap: the score we assign is 16.85, in order to signal that more remains to be done in the areas of free movement of services and labour mobility (see Table 3).

5.3 INDICATORS USED FOR THE COORDINATION OF MONETARY AND EXCHANGE POLICIES (CME)

We now turn to the **degree of coordination of national exchange rate and monetary policies prior to the launch of the euro: i.e., until end-1998**. There are various ways to incorporate this dimension of regional integration in our EURII index. The avenue taken in this paper is that such policies should become an *integral part* of the index, despite the fact that the European Monetary System (EMS) has not been in place since the irrevocable fixing of exchange rates on 1 January 1999. The rationale for this choice is that EMU would probably have been impossible without the previous experience of exchange rate and monetary policy coordination. This building block, moreover, constituted a fundamental bridge between the collapse of the Bretton Woods System – which, until 1971/73, had provided a monetary anchor for the European process of regional integration – and the launch of the euro in 1999. Finally, membership without significant tensions in the Exchange Rate Mechanism II (ERM II) for two years at least remains a key convergence criterion to be fulfilled by EU members without derogation before they can adopt the euro (Art. 140 TFEU).

²⁰ There are of course additional factors explaining scarce labour mobility which are very difficult, if not impossible, for policy-makers to deal with, such as: differences in language and culture, life style and preferences, and different housing markets.

Table 4 Construction of the EURII: Coordination of monetary and exchange rate policies component

	Scores	Max score possible under the 4PR
3) Co-ordination of monetary and exchange rate policies (CME)		5
a) Monetary and exchange rate policy:	5.00	5
1 Establishment of the Monetary Committee	0.30	
2 Council Decision on cooperation between the central banks of the Member States of the European Economic Community (64/300/EEC)	0.10	
3 Establishment of the Committee of Governors	0.50	
4 Council Decision on the strengthening of cooperation between the central banks of the Member States of the European Economic Community (71/142/EEC)	0.10	
5 Launch of the “snake”	1.00	
6 Crisis of the “snake”	-1.00	
7 Launch of the EMS – the ECU is first defined	3.00	
8 Strengthening of the EMS, with the Basel-Nyborg agreements	1.00	

The first key events we identify start back in 1958, when the Monetary Committee was set up, thus providing a forum for discussing monetary and exchange rate issues. The Committee of Governors was established in 1964 with more formalised cooperation among the relevant national central banks. Following the collapse of the Bretton Woods regime, the short-lived experience with the “Snake” in the 1970s is also captured, initially with a positive sign and then with a negative sign when that experience ended. The EMS was launched in March 1979 and strengthened in 1987 with the Basel-Nyborg agreement. The ERM I crisis of September 1992 is not marked with a negative score because, with the benefit of hindsight, that crisis played a crucial, positive role in pressuring Member States towards greater convergence ahead of euro adoption.

On the whole, the coordination of monetary and exchange rate policies obtains a maximum, as well as an actual, score of 5 points (see Table 4).

5.4 INDICATORS USED FOR THE DEVELOPMENT OF SUPRANATIONAL INSTITUTIONS AND DECISION-MAKING BODIES (SID)

We conclude the first part of the EURII index with the crucial component of the setting-up of **supranational institutions and decision-making processes**, as well as the **structuring of the process of regional integration through laws issued and enforced at the supranational level**.

In the EU experience, supranational institutions and laws were set up at the very outset of the process. Although they have been strengthened over time, there is little doubt that the basic supranational framework was already available with the Treaty of Rome (1957). This implies the assignment of 7 points back in 1958, when the Treaty of Rome came into force. Out of several subsequent developments, five have been selected: *(i)* the establishment in 1974 of the European Council as a permanent forum providing political impulses; *(ii)* the introduction of Qualified Majority Voting (QMV) on Single Market issues with the Single European Act (1987); *(iii)* the extension of QMV with the Maastricht Treaty (1993); *(iv)-(v)* the subsequent Treaties of Nice (2003) and Lisbon (2009), with further extension of QMV.

As a residual item, we included in this component of the index also the start of **structural policies** in the Common Market Era. Here we identify the launch of the Common Agricultural Policy (1962)

and its strengthening in 1966, as well as the establishment of the European Regional Development Fund, which in 1975 started the provision of structural and cohesion funds.

To sum things up, on the whole, this component of the index obtains a maximum, as well as an actual, score of 12.5 points (see appendix). The reason for this is that we *separate* this component of the index, which focuses on the years preceding the euro area crisis, from the subsequent parts of the index.

6 MEASURING THE UNION ERA

In line with the Four Presidents' report, we think of EMU throughout the process of European integration as any agreement or governance framework at supranational level that promotes growth and employment, in line with the EU objective of generating “*sustainable development [...] based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress*” (Art. 3, (3)).

All indicators discussed in the next subsections and the related scoring are summarised in the appendix at the end of the paper.

6.1 INDICATORS USED FOR THE ECONOMIC UNION (EUN)

A multitude of steps could be identified under this heading. However, in line with the rationale behind the RII, which continues to apply to the EURII, we only assign scores to nine developments that we believe mark significant advances in European integration.

In chronological order, the first significant step was the decisions taken in 1988 to recalibrate and increase the firepower of the EU's Structural Funds, modulating them towards a more effective enhancement of a convergence in productivity levels across the Union. This was followed, in 1997, by the Luxembourg Process, reinforced by the Amsterdam Treaty, which established a European Employment Strategy. The year after, in 1998, at a European Council meeting in Cardiff, the “Cardiff process” for product market reform was introduced as a way to improve peer review of economic reforms. One year later, when the European Council met in Cologne, these processes were complemented by a Macroeconomic Dialogue of social partners at European level. The aim was to improve cooperation on wage formation among all stakeholders.

All these processes were based largely on existing Treaty provisions – essentially the so-called Broad Economic Policy Guidelines and the Employment Guidelines of today's TFEU Articles 121 and 148) which later converged into the so-called Integrated Guidelines – and in essence relied on an open method of policy coordination. They had limited effectiveness and we assign very small scores of 0.10 to each of them.

The Lisbon Strategy of 2000 (and its revamped version in 2005) also enters our index as a form of strategic and comprehensive approach to policy coordination. The aim was to provide a top-down framework to stimulate competitiveness from the centre. However, it too relied on the open method of coordination and the above-mentioned economic and employment guidelines of the Treaty. It did not result in an adequate form of economic coordination especially from a euro area perspective, and enters the index with a small score. Another pact which had the potential to prove significant, but with practically no elements of additional shared sovereignty and enforcement methods, was the Euro Plus Pact adopted in the early stages of the crisis. As a consequence, it had limited results and also takes a very small score in the index.

The latest, and most substantial, attempt at putting in place a shared mechanism that would monitor and foster policies aimed at boosting macroeconomic stability and competitiveness is the Macroeconomic Imbalances Procedure (MIP) embedded in the European Semester established by the so-called “six-pack” in 2011. Although with definite shortcomings, the MIP, with its macroeconomic scoreboard and objective thresholds, allows for much less discretion than, say,

the country-specific recommendations of Article 121 TFEU when assessing a country's macroeconomic performance, and it includes the possibility for preventive and corrective measures to be taken with respect to countries found on imbalanced or unsustainable paths. Since the MIP also includes an Excessive Imbalances Procedure (EIP) that can ultimately also lead to pecuniary fines similar to those of the SGP, it marks a notable departure in the economic sphere from the peer support, pressure and OMC-type of surveillance and thus deserves a higher score than its predecessors.

All in all, throughout the history of European integration several steps have been taken to strengthen economic coordination: their impact was modest. Perhaps, due to the sensitivity of this dimension, which goes to the very heart of national sovereignty, these steps were, until recently, solely grounded in very loose coordination and mutual discussion. As such, we currently judge the overall level of Economic Union as being far from that required for a genuine EMU of the sort discussed today. It is assigned an overall score of 2.2 out of a maximum of 10.

As discussed in section 3 above, for this latter part of the EURII, the Four Presidents' Report sets an ambitious benchmark. This implies that, in order to reach the maximum score, integration would have to be pursued along the lines of creating a stronger system that incentivises structural reforms in low-productivity countries, thereby improving the overall stability of EMU to macroeconomic shocks. One possible form for this, as detailed in the report, would be a system of national reform contracts, to be signed with EU institutions, in exchange for financial support.

The other crucial milestone that would be needed, according to the Four Presidents' Report, in order to complete the Economic Union pillar, would be the establishment of some sort of pre-condition to pass strong economic reforms promoting competitiveness and economic convergence in order to be part of a European macroeconomic stabilisation mechanism (which is discussed further in the fiscal section, below). In the words of the Report itself, “[...] *setting up risk-sharing tools, such as a common but limited shock absorption function, can contribute to cushioning the impact of country-specific shocks and help prevent contagion across the euro area and beyond. However, this needs to be complemented with a mechanism to induce stronger economic convergence, based on structural policies aiming at improving the adjustment capacity of national economies and avoiding the risk of moral hazard inherent to any insurance system*”.

6.2 INDICATORS USED FOR THE MONETARY UNION (MU)

“*The ECB shall have the exclusive right to authorize the issue of bank notes within the Community. [...] The bank notes issued by the ECB and the national central banks shall be the only such notes to have the status of legal tender within the Community.*” With this wording, Article 105a (1) of the Maastricht Treaty was effectively establishing a full monetary union (MU). However, the steps that eventually led to a full MU were manifold and some had even started before the ratification of the Treaty. In January 1990, Stage One of EMU was launched. This involved the implementation of decisions on multilateral surveillance (objective of economic convergence) and on strengthening the task and role of the Committee of Central Bank Governors (monetary cooperation). It also called for the complete abolition of barriers to the movement of capital for eight Member States by 1994 (Spain, Greece, Ireland and Portugal received some temporary derogations). In 1994, Stage Two of EMU commenced, involving, among other things, the creation of the European Monetary Institute, the forerunner of the European Central Bank. As discussed above, we consider this as a crucial moment which necessitates a recalibration of the scale of the index, as the Union moved from the “Common Market Era” to the “EMU Era”.

In June 1998, the ECB and the Eurosystem formally started their operations, managing a single monetary and exchange rate policy for the whole euro area from 1999. The Eurosystem was set up with fully federalized decision-making, and with the Governing Council granted independence in respect of its objective(s) and instruments. This implied a significant step in terms of sovereignty transferred to the euro area level and European integration (see Jung and Mongelli, 2009). The euro was then officially launched in January 1999, when also the TARGET system (later to be replaced by TARGET2) began operating. At the same time, the European Exchange Rate Mechanism (ERM II) replaced its predecessor, as a full part of the overall EMU framework and a requirement for euro accession. Finally, perhaps more symbolically but still importantly, in January 2002, euro notes and coins entered into circulation, very quickly replacing the legal tender in each country.

Today the Monetary Union is highly credible and widely deemed to be one of the most federalized elements of European decision-making. It is also the most integrated headlines under our EURII framework. The Four Presidents' Report does not identify any further steps to be taken under Monetary Union, which seems to fully justify the maximum score of 12 out of 12 which we are assigning to it.

6.3 INDICATORS USED FOR THE FINANCIAL MARKET UNION (FMU)

Financial market integration has been an integral component of European integration since the early days of the Community: initially as part of the freedom of capital objective, later for the establishment of the single currency. As early as 1973, directives were being passed abolishing restrictions (harmonisation) on providing services with respect to self-employed activities of banks and other financial institutions. In an attempt to increase the degree of harmonisation of the market, directives were also passed on banking supervision; own funds, solvency ratios, large exposures, just to mention a few. These were all small steps, which do not enter our index with a score. However, in 2000 the main pieces of legislation on banking were consolidated into a single text – the Single Banking Directive from Basel I²¹ – to which we assign a small positive score.

In the following years several technical fora were established, including the Committee of European Securities Regulators (CESR) in 2001, followed by the Committee of European Banking Supervisors (CEBS) and the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) in 2003. These fora represented the predecessors of the three European Supervisory Authorities, the European Banking Authority (EBA), the European Securities Markets Authority (ESMA), and the European Insurance and Occupational Pensions Authority (EIOPA) at the centre of the European System of Financial Supervisors (ESFS), together with the European Systemic Risk Board (ESRB), which was set up in 2011 to provide analysis, warnings and recommendations on macro-prudential policy, following the aftermath of the 2008 financial crisis. The last step identified as substantive was the entry into force, in July 2013, of the Capital Requirements Directive (CRD) IV and Capital Requirements Regulation (CRR), implementing the Basel III agreement.

However, as described in Section 1, at the origin of the crisis there were also persistent financial imbalances (see Constâncio (2013) intermediated mostly by banks.²² Such large intra-euro area capital flows were not matched by a common supervision and resolution scheme for financial institutions. Then, in June 2012, the European Council agreed to advance with centralised European

²¹ Directive 2000/12/EC.

²² Chen, Milesi-Ferretti and Tresselt (2012) argue that sustained cheap financing was provided from banks in core euro area countries – mostly France and Germany – to the largest net debtors (stressed/program countries).

banking supervision which was confirmed following the presentation of the Interim Four Presidents' Report in October 2012. Since then, substantial progress has been made, with the approval of the Council Regulation on the SSM entering into force on 3 November 2013, and supervisory tasks under Article 127(6) TFEU to the ECB.

The financial markets union has in the meantime become the most advanced of the four unions in terms of integration, with the so-called banking union at its core. The ECB took up fully its supervision of credit institutions under the SSM on 4 November 2014. An EU Regulation, co-decided by the EU Council and European Parliament, has set up a Single Resolution Mechanism (SRM), with a Single Resolution Board (SRB) and a bank-levy funded Single Resolution Fund (SRF). Parts of this SRF are based on an Intergovernmental Agreement because of (politically perceived or legally viewed) national obstacles relating to the possibility of supranational fiscal/financial transfers). The SRM is set to become operational on 1 January 2015, while the SRF will be built up gradually. In the meantime, it will be buttressed by national financial backstop arrangements. Moreover, the Bank Recovery and Resolution Directive (BRRD), with the senior bail-in provisions entering into force on 1 January 2016, has also been adopted. Moreover, in August 2013, the Commission updated its rules concerning state aid for the assessment of public support of banks. A Deposit Guarantee Schemes Directive (DGSD) has been adopted, ensuring the protection of deposits across Europe up to €100,000.

Finally, Direct Recapitalisation Instrument (DRI) by the ESM, for the direct recapitalisation of banks through European public funds as an *ultima ratio* and in line with the bail-in provisions of the BRRD, SRM and ESM conditions, has also been agreed and is set to enter into force on 1 January 2016 (together with the bail-in of senior creditors).

Various financial market segments going beyond the banking sector should also integrate further. These cover the financing of the European economic through capital markets or more broadly non-bank financing.²³ Ultimately, far-reaching decisions in a number of financial market dimensions also of a structural nature are likely to be warranted to ensure that the financial trilemma is adequately resolved. For example, as a follow up to the so-called “Liikanen proposals”, the Commission’s (2014) proposed a draft Regulation on bank structural reforms similar as regards issues to the Volcker rule in the USA. This could entail *inter alia* a more integrated solution than the DBR of the ESM, the harmonisation of bankruptcy law, improving the markets for high quality securitisation, harmonising the rules pertaining to market infrastructures and so on.

As such, under our index, the FMU pillar is roughly 30% complete, with a total score of 3.55 out of a maximum of 12.

6.4 INDICATORS USED FOR THE FISCAL UNION (FIU)

The need for stronger of fiscal coordination was already recognised at the time EMU was set up. In the Treaty of Maastricht, the need for Member States to “*avoid excessive government deficits*” was articulated in the text as the Excessive Deficit Procedure (EDP). The EU Commission was to monitor public finance developments and the Council could issue warnings and potentially even impose fines, if deemed necessary. This mechanism was deemed vague and unsatisfactory

²³ At the time of publication, the debate on the stable equilibrium in this policy domain is in some ways advanced as compared to the other unions but nevertheless remains inconclusive and in fact attempts are being made to define what a capital markets union might entail; see for example, N. Veron (2014).

and, as such, in the mid-1990s, it was further articulated in the Stability and Growth Pact.²⁴ We recognise both steps in our index. However, the SGP has been breached on a number of occasions, most notably by France and Germany, which in the ECOFIN Council of November 2003 rejected the Commission's proposal to open the sanctions procedure foreseen under the EDP against them.

The SGP was subsequently revised and weakened in 2005, allowing for more “flexibility”, extending the definition of “exceptional and temporary” circumstances that would allow above-threshold deficits and debts without falling under the EDP. This development was, especially in retrospect, one of the most sensitive during the Union Era. Arguably, it also tolerated the type of profligate public finances that contributed to the debt crisis in some euro area countries that erupted in May 2010 following Greece's exclusion from the international capital markets (see Durre, Drudi and Mongelli (2013) and Durre, Maddaloni and Mongelli (2014)). The reform of the SGP in the mid-2000s thus enters our EURII index with a negative sign, illustrating a setback for the integration of fiscal policies.

A large part of the initial crisis response by 2010 focused on the index fiscal side. The considerable advances thereafter are captured also quite visibly by the EURII. In December 2011, the SGP was once again strengthened as part of the so-called “six-pack” legislation containing two Regulations updating the SGP Regulations of 1997 (as amended in 2005), as well as a Directive on national fiscal frameworks (see below for the other three Regulations). Furthermore, with the so-called “fiscal compact”, a new Treaty on Stability, Convergence and Governance (TSCG) was ratified, leading most notably to the embedding of a balanced-budget rule of constitutional status at national level. Interestingly, the Treaty was not only signed by euro area members; in fact, 25 of the then 27 EU Member States were signatories (Croatia did not join until 1 July 2013).

Last but not least, the fiscal framework for the euro area has been significantly strengthened through the “two-pack”. These two Regulations applying to euro area members only, allow for subjecting, initially by the Commission, the draft budgets of member states to European surveillance in order to comply with the rules of the SGP. This entails enhanced/“semi-automatic” processes that allow for quicker decision making once the Commission has decided to apply the preventive and corrective arms of the SGP to bring down high public deficits/debts. All these steps represent a significant weight in our EURII.

The fiscal response to the crisis was characterised not only by a tightening of the rules and procedures of fiscal surveillance. Significant steps were also taken on the burden-sharing side, as euro area governments pooled resources in an effort to provide assistance to stressed partner countries. The first such step was the creation of the Greek Loan Facility in May 2010. As this structure was effectively channelling bilateral loans to the Greek government, it is not seen as an integration milestone under fiscal union. However, it represented an important actual first step to the fiscal firewalls that were decided simultaneously and later set up and it thus contributes with a small positive score to the EURII.

Indeed, in May 2010, the decision was taken for setting up the EU-wide European Financial Stabilisation Mechanism (EFSM), allowing the Commission to borrow in financial markets up to €60 billion under the implicit guarantee of the EU budget, in order to provide financial assistance to EU Member States in need. Notwithstanding its relatively limited financial envelope, this is considered to be a significant step in terms of integration, as a decision regarding the activation

24 Council Regulations 1466/97 and 1476/97, Council Resolution 97/C236/01-02.

of the EFSM facility can be taken by qualified majority in the Council, and it implies a fairly far-reaching form of pooling of fiscal resources. The EFSM mirrors the Medium-Term Financial Assistance facility (MTFA), established in February 2002 to assist non-euro EU countries affected by a balance of payment crisis.

The other major milestone at the time with regard to establishing a solid and permanent fiscal firewall for euro area sovereigns was the European Financial Stability Fund (EFSF). This was a euro area special purpose vehicle that came into operation soon after the inception of the first Greek Economic Adjustment Programme. Notwithstanding its temporary nature, its strict unanimity rules, and the fact that liabilities continued to be allocated to individual countries, the EFSF takes on an important role in the EURII given its strong firepower (which was also increased in July 2011), allowing for an effective containment of the sovereign debt crisis and acting as the precursor to the European Stability Mechanism (ESM). Indeed, through the ESM Treaty, the EFSF was later effectively replaced by the ESM, a permanent international organisation with a significant lending capacity (€700 billion) with 80 billion in paid-in capital and some 620 billion of callable capital. This size is not dissimilar to that of some proposals put forward by commentators of an EMU budget i.e. some 10% of GDP. The ESM has a large toolkit of lending options and market support facilities to assist euro area countries under the stress of financial markets. It was one of the key elements – together with banking union and the strengthening of the fiscal framework – of an effective crisis management toolkit for the euro area. The ESM represents the largest step taken hitherto in terms of pooling of resources under the fiscal union heading.

At the same time, even though the EU Treaty (TFEU) itself was changed in the midst of the crisis to accommodate the creation of the ESM (amendment of Article 136 TFEU), the ESM is nevertheless based on an intergovernmental Treaty which is outside the *acquis communautaire*. Decisions in the ESM are taken with a very high majority threshold (with only partial possibilities for lower thresholds under emergency situations). There are many veto players and potentially lengthy processes in case of difficult decisions e.g. for increasing financial support for economic adjustment programmes). As such, it is assigned a high score that could nevertheless be higher if the ESM were to acquire a more supranational dimension. One step in this direction could come when Treaty change next takes place. This is likely to bring into the Treaty framework not only the ESM (as committed politically after pressures by the EP when the ESM was adopted on an intergovernmental basis) but also the Fiscal Compact, and possibly parts of the rules of the SGP currently contained in Regulations.

In this regard, it is important to note that we do not see initial intergovernmental agreements as steps “back” in the integration process, but rather as smaller steps “forward”. During the crisis, this has apart from the ESM also been the case most notably for the SRF, as noted above, and the Fiscal Compact. Thus, such steps enter the index with positive scores, yet smaller than would otherwise be the case.

All in all, these steps bring the overall score of the Fiscal Union heading upon 6.25 out of 10. This is remarkable, given the short time in which most of these steps were agreed and implemented. Along the lines of the Four Presidents’ Report, there are however still a number of elements missing in order to reach a genuine EMU. These would include the creation of a euro area fiscal capacity (linked to the discussion on automatic stabilisers presented under the Economic Union chapter), the possibility for some sort of shared issuance of euro area debt, enhanced tax coordination and a fiscal backstop to both the SRM and a Deposit Guarantee Scheme.

6.5 INDICATORS USED FOR DEMOCRATIC LEGITIMACY AND ACCOUNTABILITY

Although sometimes forgotten, a key element that sets the European Economic Community and now the European Union apart from any other form of association of sovereign states or international organisation is the development of democratic legitimacy and accountability procedures and institutions at supranational level. This process started already in the early stages of European integration, when it could still be argued that the legitimisation of the process through national governments and parliaments was sufficient given the initial, relatively limited pooling of sovereignty. At the same time, it should be underlined for the purposes of this paper and the EURII index that we concentrate on accountability and legitimacy steps that relate to EMU and not other EU policy domains, or the EU in general.

Nevertheless, we still take into account the first notable steps that involved the development of key institutions, notably the European Parliament (EP), even if these were not always linked to economic integration alone. The European Parliamentary Assembly held its first meeting as early as 1958. Composed of representatives of national parliaments, this body evolved into the European Parliament (EP) in 1962. Several small but significant steps towards an increasing role for the EP followed, some of which substantially increased our EURII index,

In chronological order, the decision to grant the EP the right to have the final word on non-compulsory expenditure through the First Budgetary Treaty is deemed significant. This 1971 decision was then followed by a Second Budgetary Treaty, which granted the right to the EP to reject the Community's budget. In 1979, the EP was directly elected for the first time, through universal suffrage. EP elections have been held regularly thereafter and have on the whole attracted increasing attention in the public European debate. Most recently, in the run up to the May 2014 EP elections, a public debate was held among the *Spitzenkandidaten* of the EU political groups/parties; at the same time, turnout has been falling from the original very high percentage of 1979.

As regards the role and powers of the EP in the supranational institutional construction of the EU, successive amendments to the Treaties have progressively expanded the use of the so-called "co-decision" legislative procedure (now called "ordinary legislative procedure"), whereby the EP and the Council co-decide on an equal footing on legislation proposed by the Commission. With very few exceptions, this applies to all financial legislation for the Single Market, and to a large degree, economic governance legislation. For example, the "six-pack" and "two-pack" were adopted *de facto* through the co-decision procedure, although some elements would have required the Council to get only the non-binding consent of the EP.

Moreover, accountability requirements vis-à-vis the European Parliament has gradually increased. With the Nice Treaty, the nomination for Commission President had to receive the consent of Parliament, while Parliament could reject the Commission President's proposal for the "College" of Commissioners. Thus, in 2009, the EP effectively "brought down" the Santer Commission, and in 2009 and 2014 rejected some of the Commissioners proposed by the President of the Commission. With the Lisbon Treaty of 2009, the Heads of State have to "take into account" of the result of the European elections when proposing to Parliament the Commission President. Following the first elections under this new constitutional arrangement in 2014, the EP effectively co-decided with the European Council (the Heads of State or Government) on the nomination of the Commission President by appointing as President of the Commission Jean-Claude Juncker, the candidate of the European political group (in this case the European People's Party,) that had obtained the highest percentage of votes in the elections, with the Heads of State voting

by *qualified majority* to propose the candidate to Parliament (two heads of state or government voted against this nomination).

Moreover, under the Maastricht Treaty, the ECB is accountable to the European Parliament, while the Council Regulation establishing the Single Supervisory Mechanism (SSM) under Article 127(6) of the Treaty provides for the accountability of the ECB's supervisory tasks towards the European Parliament and the Council via the ECB's Chair of the Supervisory Board. These accountability and reporting provisions are detailed in an Inter-Institutional Agreement between the EP and ECB, and a Memorandum of Understanding between the Council and the ECB. They entail the provision of confidential Records of Proceedings of the ECB's Supervisory Board to the Economic and Monetary Affairs Committee of the European Parliament. Accountability under the "banking union" has extended also to resolution: as this paper was being finalised, the Single Resolution Mechanism was being established under the auspices of the Commission. It will be accountable to the EP and the Council.

A number of other provisions have over the years gradually strengthened the legitimacy of EU decisions. Perhaps most notably from an economic policy perspective and as became evident during the crisis, the European Council, composed of the Heads of State or Government, turned into a fully-fledged European institution in the last EU Treaty revision in Lisbon. It has a permanent President for two and one half years and also meets in euro area composition as necessary, reflecting the important dimension of Economic and Monetary Union for the highest level of political executive authority in the EU and euro area. In addition, and notably also in the EMU and four unions context, the role of the Eurogroup was formally recognised in a Protocol of the Treaty. The Eurogroup's President is appointed for a fixed term also of two and one half years (thus not following the six-month rotation of the Council Presidency). Finally, in terms of legitimacy, the Lisbon Treaty introduced the possibility for citizens to collect signatures and, having obtained a specific number of signatures, to present a legislative proposal to the Commission, thus giving the right of legislative initiative directly to EU citizens albeit under rather restrictive conditions.

As for other notable developments, the establishment already in 1977 of an independent European Court of Auditors to scrutinise the budget of the Community, is worth highlighting. The ECA is one of the seven EU institutions listed in the relevant Article 13 of the Lisbon Treaty on European Union (TEU) of 2009.

It should be added that the role of National Parliaments has also been somewhat elevated in the Lisbon Treaty as a means of adding to the legitimacy of *European* decision making. Such moves as well as agreements of an intergovernmental nature at European level (enumerated above) indicate that political legitimacy and democratic accountability constraints will need to be further addressed as integration under EMU deepens. Nevertheless, also by way of a methodological note, we see such elements as obtaining positive scores in our index, even if their national dimension, seen from a European, and four unions, perspective, acquire smaller scores than supranational solutions would obtain. As an additional methodological note, it should be mentioned that depending on whether the decisions taken for integrative steps were implemented at the time of finalising this paper, they were included in the EURII accordingly (as "expected" steps). 1 January 2015 is the effective cut-off date. The actual way in which these and other procedures were or will be implemented in practice has been an additional element in determining the score of steps in our index. In order to be as clear and transparent about the steps and scores, the full list of both "expected" and "future" steps under the Four Presidents' Report, as we have accounted for them, is available upon request.

Despite the progress in raising the democratic legitimacy and accountability of the Union, the Four Presidents' Report recognises calls for still further steps. However, these are identified only in general terms, such as the need for deep, institutionalised cooperation between the EP and national parliaments for law-making and accountability purposes, full SRM (including SRF) accountability, deeper if not full involvement of the EP in the European Semester (and thereby also possible involvement, for example, in the scrutiny of national budgets), still-to-be-determined accountability of the fiscal capacity, just to mention a few. In light of the significant steps still to be taken, our aggregate score for the completion of the Democratic Legitimacy and Accountability pillar comes to 23%.

7 MAIN FINDINGS OF THE EURII INDEX

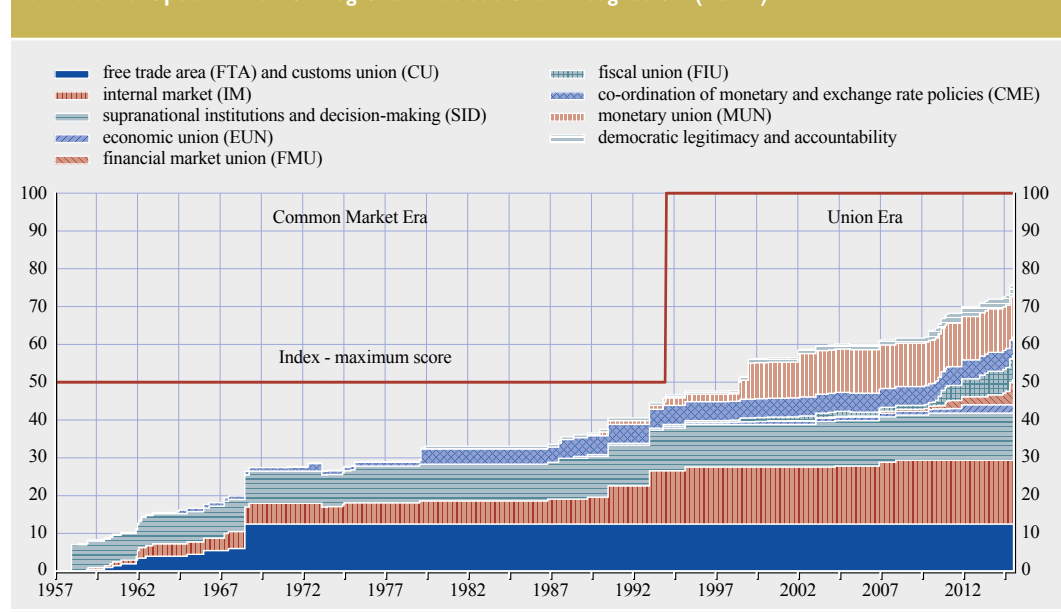
The main findings of the second-generation EURII index are depicted in Charts 3 and 4 and Table 5. For an overall overview of the structure and composition of the index, see appendix.

The EURII index records each key step of European integration from the 1957 Treaty of Rome onwards. The nature of European integration changed following the Maastricht Treaty that entered into force in November 1993, ushering in a new Union Era initially focused on monetary union, but from the very beginning implying a major “re-scaling” of the process of integration, hence of the index. Indeed, as McNamara (2014) observes, “*No currency union has ever succeeded without being embedded within a broader political union with a robustly centralised fiscal system*”. While it is perhaps still unclear what exactly this will imply for the institutions of EMU in the longer run, the EURII index takes stock of the current state of affairs. This is provided by the institutional framework that has been identified in the Four Presidents’ Report and (significantly) accomplished thus far, in order to provide the single currency with the necessary degree of “embeddedness” over and above the single market, and ensure economic and financial stability alongside sustainable growth in the years to come.

The introduction of the single currency was, therefore, a key moment of discontinuity in the index, which jumped from 48/100 to 58/100 in 1999-2002 (see Chart 3). Jumps in the index had also occurred previously (e.g. with the completion in 1968 of the free trade and customs union, which led to a rise in the index from 20/100 to 28/100), but they did not lead to fundamental discontinuities in the process of regional institutional integration.

The lack of adequate institutional steps to make up for the introduction of the euro and the (initially just implicit) start of the Union Era was one of the factors leading, after the global crisis triggered by collapse of Lehman Brothers in September 2008, to the start of the euro area crisis in 2010. In response, the reaction of policy-makers and politicians in Europe within a period of five years, from 2010 to 2014, has been significant not only in terms of specific measures taken within the existing national and

Chart 3 European Index of Regional Institutional Integration (EURII)



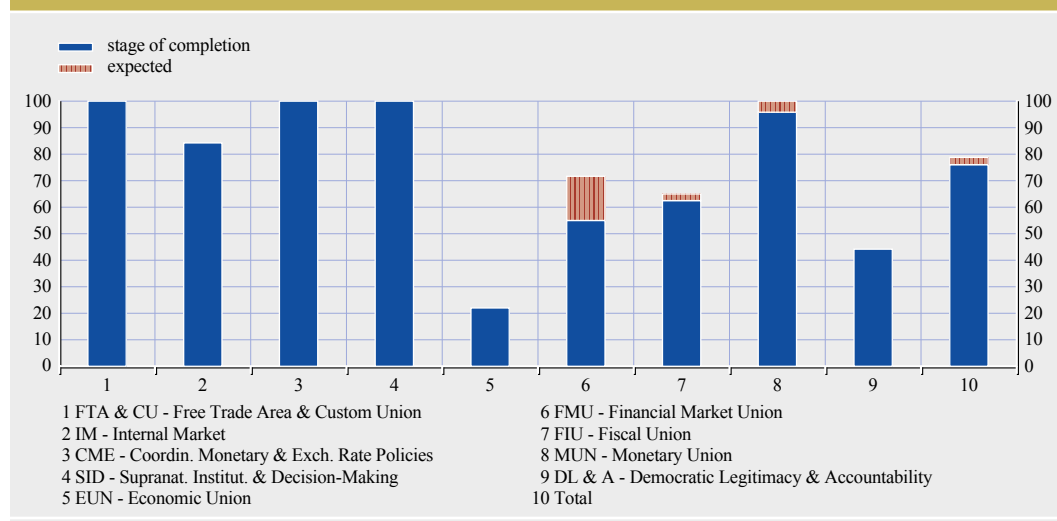
European governance, but also in adapting the EU institutional framework itself to cope with the crisis and ensure the longer-term sustainability of the European project. The index thus shows another, even more notable, jump during this more recent period, from 62/100 to 74/100.

At the same time, the EURII index also highlights that the European process of institutional integration process is not yet complete – far from it, some would argue (see Table 5 and Chart 4). The process requires *at least* a number of elements identified in the Four Presidents' Report. With

Table 5 The various steps in the process of European regional institutional integration: A backward- and forward-looking summary

(percentage)				
	Stage of completion	Expected	Future steps	Total
FTA & CU – Free Trade Area & Custom Union	100	0	0	100
IM – Internal Market	84	0	16	100
CME – Coordin. Monetary & Exch. Rate Policies	100	0	0	100
SID – Supranat. Institut. & Decision-Making	100	0	0	100
EUN – Economic Union	22	0	78	100
FMU – Financial Market Union	55	17	28	100
FIU – Fiscal Union	63	3	35	100
MUN – Monetary Union	96	4	0	100
DL&A – Democratic Legitimacy & Accountability	44	0	56	100
Total	76	3	21	100
				Stage of completion
FTA				100
CU				100
Free movement of goods				100
Free movement of capital				100
Free movement of services				72
Free movement of people				65
Monetary and exchange rate policy				100
Creation of supranational treaties and institutions				100
Structural policies in the common market era				100
Structural policies				22
Micro- and macro-prudential policy				55
Fiscal policy coordination				63
Monetary policy				96
Accountability				23
Legitimacy				65
				Number of steps identified
FTA				9
CU				3
Free movement of goods				5
Free movement of capital				8
Free movement of services				5
Free movement of people				5
Monetary and exchange rate policy				8
Creation of supranational treaties and institutions				6
Structural policies in the common market era				3
Structural policies				9
Micro- and macro-prudential policy				15
Fiscal policy coordination				12
Monetary and exchange rate policy				7
Accountability				5
Legitimacy				9
Total				109

Chart 4 Degree of completion of the various steps of European regional institutional integration



the most recent advances in the banking union having added significantly to what is considered a well-integrated financial markets union (see the light blue component “FMU” in Chart 3), the main areas where progress may be expected include the economic and fiscal spheres, as well as the necessary political adjustments to ensure appropriate legitimacy for such integration (see Table 5 and Chart 4 for the stage of completion of each sub-component of the index). Advances can also be expected in other spheres. The Single Market, in particular, has yet to be completed, while the banking union does not imply, in our understanding, the end of the necessary steps in the financial sphere. Moreover, the third pillar of the banking union (i.e., beyond supervision and resolution) is a common deposit insurance system, which still has to be implemented. Finally, capital markets are arguably not integrated enough to provide deep and evenly distributed funding across the European economy as a stable complement, if not an alternative, to bank funding (see e.g. Juncker (2014) and Cœuré (2014)).

It can be expected that the steps identified here may eventually undergo a trial and error process, not always in a consistent and coherent manner. This will possibly require more iteration before reaching a steady – or, better said, *steadier* – institutional state, in line with the neo-functionalist logic of integration (see Niemann and Ioannou 2015). An example of such a development is the financial markets union itself, which began with the setting-up of committees (e.g. CEBS), then of authorities (e.g. ESAs, ESRB) and is now being complemented with centralised European banking supervision. Moreover, elements from the different sub-components may well advance in parallel – for example, advancing in the centralisation of economic and fiscal policies as a precondition to greater fiscal risk-sharing among countries – which is in fact the recommendation of the Four Presidents’ Report itself.

This process will likely to go beyond what is explicit in the Four Presidents’ Report (i.e., the scope of this paper) and be closer to what might be more implicit therein, until a more complete form of integration is achieved which ensures the sustainability of a combination of efficiency, stability and equity under EMU. At that stage, it is not unlikely that developments may also result in negative

scorings in our index, as happened in the past. While the broad direction, in our view, will continue to be one of additional sharing of sovereignty in the Union Era, adjustments may likely take place also in order to ensure both upwards and downwards subsidiarity.

Like other currency unions, EMU contains elements that are unique to it, resembling the fact that state-building (whether “unitary”, “federal” or “confederal” in nature) is the result of historical experience that does not reflect a single, universal form. Nevertheless, the functional logic in terms of economic policy-making requires that at least the basic elements for sustainability need to be present for currency unions to be more or less stable over much longer periods of time than EMU’s two-decade history.

8 FINAL REMARKS

We have shown in this paper how the EURII index: (i) synthesises and monitors many diverse institutional innovations; (ii) expands and normalises the previous-generation index; and (iii) offers an indicator for further research and policy analysis. Yet, there are limitations, and several caveats apply. The main one is that the EURII index is anchored by a new governance framework, whose contours are slowly taking shape, albeit at different speeds. It remains a dynamic process at the end of which the EU/euro area will remain different from, for example, the United States or other sovereigns.

Moreover, ratification and transposition into national law does not guarantee immediate application or enactments of the various steps. By the same token, there are differences between *de jure* and *de facto* integration. The national dimensions and scorecards matter as well; they represent the biggest challenges – and our next endeavour. Our measure of legitimacy and accountability is necessarily limited: institutional reforms are only as good as they are effectively explained, understood, embraced and complied with. Such characteristics are not captured by our EURII index. The impact and effectiveness of institutional reforms may have long and varying lags. Therefore, there is a need to cross-check EURII with a variety of indicators of, say, effective financial integration and/or confidence, and a need for econometric analysis with OCA variables.

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