THE FUTURE OF THE EURO AT 15: ROUNDING THE CORNERS OF THE HOLY TRINITY?

Ad van Riet *

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Abstract

This paper takes a look at the future of the euro at 15 as a currency without a unitary state. Responding to the euro crisis, European leaders have put in place an enhanced governance framework and taken steps towards a banking union for the eurozone. This should secure sound national economic and fiscal policies, a healthy banking sector and the availability of a euro area fiscal backstop for member countries in distress. However, they stopped short of a further transfer of national sovereignty to the eurozone level. National governments therefore still have considerable leeway to 'round the corners' of the eurozone's 'holy trinity' (one market, one money and one monetary policy), i.e. they may try to circumvent the hard budget constraint that should subject them to strong market discipline. Some appear to suppress market forces by targeting more captive sovereign debt markets. Such fiscal protectionism feeds moral hazard on the part of sovereigns, entrenches fragmented financial markets and frustrates the efficient allocation of capital in EMU which is vital for the proper functioning of the single monetary policy. The optimal solution to stabilise EMU and ensure its integrity may well be to establish a higher level of market-preserving fiscal federalism – involving a transfer of fiscal sovereignty to the eurozone level – which limits the ability of member countries to encroach on markets.

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Key words: European Monetary Union, monetary policy trilemma, protectionism, market fragmentation, fiscal federalism

* Tilburg University and European Central Bank (ECB). E-mail: ad.van_riet@ecb.europa.eu. The views expressed in this paper are those of the author and should not be reported as representing the views of the European Central Bank. Helpful comments from Francesco Mongelli are gratefully acknowledged.

1. Introduction

On 1 January 2014 the euro celebrated its 15th anniversary as the single currency of the European Economic and Monetary Union (EMU). During the first 15 years, EMU membership increased from initially 11 Member States of the European Union (EU) to 18. Although there were a few episodes of moderate tensions, during the first 10 years the 'holy trinity' of a single market with a single currency governed by a single monetary policy was perceived as delivering remarkable stability. While the European Central Bank (ECB) secured price stability for the eurozone, countries participating in the euro appeared to enjoy an expansion of trade, output growth, employment creation and higher prosperity (ECB, 2008). Meanwhile, macroeconomic imbalances, fiscal vulnerabilities and systemic financial risks were growing.

Following the bankruptcy of Lehman Brothers in September 2008, the next five years successively saw a financial crisis, economic crisis and sovereign debt crisis which undermined public confidence and threatened the very existence of the euro (Mongelli and van Riet, 2013). This traumatic triple crisis acted as a wake-up call and a catalyst for change (Mongelli, 2013). European leaders repeatedly showed their commitment to "do whatever is required" to sustain financial stability in the euro area as whole. In addition, the ECB expressed its willingness to "do whatever it takes" within its mandate to preserve the euro. While many institutional reforms were undertaken and market volatility abated, policy makers still have to address the question how to fully restore long-term confidence in the euro.

Several commentators argue that the euro at 15 stands at a crossroads of two alternative choices: to go back to the beginning or to jump ahead. Some suggest abolishing the euro to allow member countries to return to their currencies and make a new start on a more durable, democratic basis (Heisbourg, 2013). Others argue that the triple crisis has shown the fault lines in the initial institutional design of EMU, pointing out that the euro was created as a "fair weather" currency without a unitary state behind it to combat a major euro crisis. To restore confidence in the single currency Bergsten and Kirkegaard (2012a,b) urge its political leaders to complete the euro's half-built house "as far as possible as soon as possible". This requires in their view a firm political commitment to substantially deepen euro area integration and transfer national sovereignty in key policy areas to the supranational level.

As this quantum leap in the process of creating the “ever-closer union” foreseen since the Treaty of Rome of 1957 repeatedly ran into political resistance and the alternative of breaking-up the euro would be very costly, a growing group of politicians, experts and academics instead favours pragmatic intermediate solutions. They generally suggest to reduce the level of ambition regarding euro area political integration and focus on making EMU work in an environment where for the time being national sovereignty remains predominant. This would recognise that European populations are heterogeneous and have different preferences, which raises the costs of integration with every integration step (Spolaore, 2013).

For example, den Butter and Segers (2014) look for welfare-enhancing ways to deepen economic coordination in EMU as a middle road between nationalism and federalism. Trichet (2013) proposes a “federation by exception”, whereby countries running astray would be called to order by using federal powers only in exceptional circumstances. Draghi (2012, 2013) advocates gradually putting in place the “minimum requirements” for EMU efficacy by pooling the set of functions that are necessary for a “more perfect union”. Given the fundamental barrier to giving up sovereignty, Mody (2013) favours moving in the opposite direction of making national governance frameworks more robust. This could be done by agreeing a set of voluntary compacts between member countries that create time, space and pressure for the evolution of mutual solidarity.

Taken together, these positions show a continuum of views about the future of the eurozone (Emmanouilidis, 2013), ranging from advocates to sceptics of further political integration (Mongelli, 2013), with those favouring intermediate approaches for the time being gaining the upper hand. This paper takes a look at the future of the euro area at 15, bruised by a severe crisis but entering a new era with many additional or enhanced EU governance tools to prevent a re-occurrence. The question it poses is whether half-way solutions for euro area political integration are sustainable in a monetary union where the market mechanism is in principle foreseen to act as a disciplinary force over national policies and a driving factor towards creating an optimal currency zone. The risk it identifies is that governments may suppress the free functioning of the single market commensurate with a desire to regain control over their funding conditions and escape the market discipline that suddenly reappeared in the sovereign debt crisis. Continued reliance on peer pressure rather than federal powers is unlikely to be sufficient to counter market repression, fiscal protectionism and renationalisation of financial markets.

The euro was the European response to the 'monetary policy trilemma' (in international economics also known as the 'impossible trinity') which states that the combination of perfect capital mobility, fixed exchange rates and autonomous monetary policy is not feasible: countries need to drop one of the three elements of this "holy trinity" (Rose, 1996). Since the liberalisation of international capital flows after the breakdown of the fixed but adjustable exchange rate system of Bretton Woods, advanced economies have preferred corner solutions, adopting either fixed or floating exchange rates with the associated implications for monetary policy (White, 2013). By building a monetary union, Europe established its own holy trinity: a single market with a single currency and a single monetary policy.

Member countries abandoned the use of monetary policy (using inflation and/or devaluation) as a last resort without getting back a replacement at the eurozone level or a mutual bailout system, "because it was regarded as superfluous" (Thygesen, 2013, p. 28). Hence, member countries in principle faced a "hard budget constraint" (McKinnon, 1994) and government default became the only way to resolve a fiscal crisis (Sims, 2012). This architecture implies that the participating nations are bound to observe sound macroeconomic, fiscal and financial policies. This discipline is imposed by the open market economy and expected by common rules of behaviour. As it turned out, governments in practice faced few incentives and weak enforcement to maintain sound public finances, a healthy banking sector and a competitive and flexible economy. Such fiscal strength, financial buffers and economic resilience were, however, all the more necessary to deal with asymmetric shocks, given that the eurozone was no optimal currency area (Jager and Hafner, 2013; Mongelli, 2013).

As the crisis struck, credible corrective policies were necessary to convince markets that their holdings of government bonds were still safe and to avoid damaging spillovers. Where adverse shocks led to a crisis of confidence, notably among foreign creditors, stabilisation mechanisms were not available. The mirror image of the eurozone's holy trinity in tranquil times was the impossible trinity facing euro area members in distress: the exclusion of inflation, devaluation and a bailout was incompatible with avoidance of a sovereign default. As a default was not only costly but also contagious, and endangered the integrity of the eurozone, some alternative last resort remedy for sovereigns under market stress had to be found, provided that they were in principle solvent upon implementation of an adjustment programme.

Recent studies have examined the scope for trade-offs between the corner solutions given by the monetary policy trilemma. Several emerging market economies have been searching for ways to deal with speculative capital flows and exchange rate volatility and their impact on domestic monetary conditions, opting for example for targeted capital controls or managed floats (see Obstfeld et al. 2005; Aizenmann et al., 2010; Klein and Shambaugh, 2013). Similarly, advanced economies concerned about competitive devaluations in a global context of ultra-easy monetary policies may be looking for administrative instruments that could provide them with some policy autonomy, such as financial repression and capital restrictions (White, 2013, p. 80).

The eurozone is no exception to this global trend. Some member countries seek to "round the corners"[1] of the eurozone's holy trinity and look for their own safeguards against economic, fiscal and financial instability, for example, by establishing captive sovereign debt markets and soft capital outflow restrictions as a precaution against a retreat of foreign investors. Such protectionist tendencies were common before financial markets were liberalised in the 1980s. The renationalisation of markets observed in the crisis could reflect a more inward-looking attitude among citizens and the wish of their governments to hold on to national sovereignty over macroeconomic, fiscal and financial matters as much as possible and as long as possible.

Yet, this means continuing with an incomplete EMU characterised by fragmented authorities, policies and markets. Financial market fragmentation, for example, constrains bank credit supply, frustrates market-based credit intermediation, hampers monetary transmission and undermines the effective conduct of the single monetary policy. This may even force the ECB to target specific non-standard monetary policy measures at restoring the flow of credit to distressed economies in order to preserve price stability across the whole eurozone. On balance, EMU is bound to move towards a more optimal currency area only in those policy areas where national leaders are willing to transfer their sovereign powers to a supranational institution and to move away from an optimal currency zone where they are not willing to do so.

[1] The expression "rounding the corners" is taken from Klein and Shambaugh (2013), who discuss the scope for targeted capital controls or managing exchange rates in the context of the monetary policy trilemma.

The paper is organised as follows. Section 2 recalls how the Maastricht Treaty of 1992 established the euro as a currency without a unitary state. Section 3 looks into the implications for member countries of their participation in EMU, notably, the role of the eurozone's holy trinity in imposing tough market discipline and the reasons why – contrary to most expectations – markets did not pose serious policy constraints in the first 10 years of the euro. Section 4 discusses the three main fault lines in the institutional design of EMU, as they were exposed by the triple crisis that hit the eurozone during the next five years. Section 5 provides an overview of the main governance reforms and the steps towards a banking union that enhanced the institutional framework of the eurozone, noting that elements of a fiscal union are still missing. Section 6 reviews how some member countries attempt to 'soften the sharp edges' of the eurozone's holy trinity after sovereign debt markets had turned vigilant and vicious. One typical reaction was the use of 'non-standard' public debt management techniques to create a more captive investor base. Section 7 argues that the optimal solution to counter such fiscal protectionism may well be a higher level of market-preserving fiscal federalism which limits the ability of member countries to encroach on markets. Section 8 concludes that market repression undermines the efficient functioning of EMU by fuelling moral hazard on the part of governments, reducing financial integration, hampering monetary transmission and complicating the task of the single monetary policy to maintain price stability in the whole eurozone. A transfer of fiscal sovereignty to the eurozone level to address these risks, however, requires a social consensus about the appropriate limits of the state and the economic and political reforms necessary to underpin the long-term viability of the euro.

2. The euro: from currency without a state to currency beyond the state

The creation of the euro was driven by the political process of European integration, using economic integration as the means to reach that political objective (Issing, 2008). The single currency thereby served both as the "peacemaker" for a permanent reconciliation between Germany and France as well as the 'pacemaker' towards a political union. The intermediate goal of establishing a European monetary union reflected the view that the benefits of a single market could only be fully exploited with a single currency. Moreover, it had the advantage of shielding the single market from excessive exchange rate movements between Member States that distorted competition. For participants the building of a monetary union also required working towards meeting the criteria of an optimal currency area, following a theory pioneered by Mundell (1961), McKinnon (1963) and Kenen (1969). This theory also offered a new perspective on the role of the state in the evolution of money, as it allowed seeing a common currency as a supranational public good that with appropriate 'market-preserving' political arrangements at the union level did not necessarily require a federal state but only a common central bank.

Looking at history, currencies developed in line with the state's powers to issue money, as this allowed the sovereign to collect taxes to be paid with the currency denoted as sole legal tender as well as to earn seigniorage that could be used for financing public goods and services (Graeber, 2011). Apart from using these powers for the good of the economy, the ruler often also abused them for personal benefit, for example, by debasing the currency or imposing an inflation tax. A key role of money became thus to support the state. While this was vital in times of crisis and war, this monetary support in fact became a convenient way for the sovereign to finance public expenses also in tranquil periods.

As discussed by Goodhart (1998), many scholars in history have instead argued that the evolution of money was driven by the development of market economies, closely associated with the desire to facilitate trade. These writers stressed the intrinsic value of money in serving the needs of commerce rather than the interests of the state. On normative grounds, they advocated a 'denationalised' currency and a separation of money-issuing powers into an independent central bank. This was required to protect a sound currency from political abuse and establish a superior monetary system.

This discussion came back in the run-up to European monetary union (see James, 2012, Chapter 1). A key question was whether the common currency needed a unitary state behind it, or whether it should develop from market principles through a private sector process of minimising the costs of trade (Goodhart, 1998). Most other monetary unions in history had aligned their common currency with supranational political powers, i.e. the common currency for a group of countries was created and supported by a federal state. This had the advantage of being able to control the policies of subsidiary governments at the supranational level. Moreover, by its authority to impose taxes and make transfers, the federal state was able to absorb exceptionally large asymmetric shocks. Combined with its capacity to issue money the federal state also had the "deep pockets" that were needed in turbulent times to credibly safeguard the stability of the common currency. An evident risk was that this supranational authority could be abused to interfere in free markets and to create inflation for purely political benefits.

The Maastricht Treaty established the euro as the sole legal tender of EMU, as successor of the national legacy currencies. Contrasting with historical examples, the euro became a "currency without a state" (Padoa-Schioppa, 2004; Issing, 2006), grounded in the EU institutions and the "society of member states" (Trichet, 2013). By irrevocably fixing their bilateral exchange rates the participating nations transferred their monetary policy from 1 January 1999 to the supranational level, while retaining their sovereignty in all remaining areas (except competition and trade policies). The ECB was given a strong independent mandate to ensure price stability for the euro area as a whole, accountable only to the European Parliament. This was perceived as the safest way to keep monetary policy out of the hands of politicians.

The transition towards the euro was marked by two divergent views (Issing, 2008). The so-called 'economists' argued that deeper economic integration was necessary, as implied by the optimal currency area theory, before the euro could be introduced in a final step. This view resulted in economic convergence criteria that prospective members had to meet on a sustainable basis before being able to adopt the single currency. By contrast, the so-called 'monetarists' thought that the creation of a single currency would itself enforce the economic adjustments that would make the euro an optimal currency zone. This view placed great trust in the many institutional changes that would accompany the introduction of the euro, not least the establishment of the ECB as the sole monetary authority and the EU rules for economic and fiscal policies.

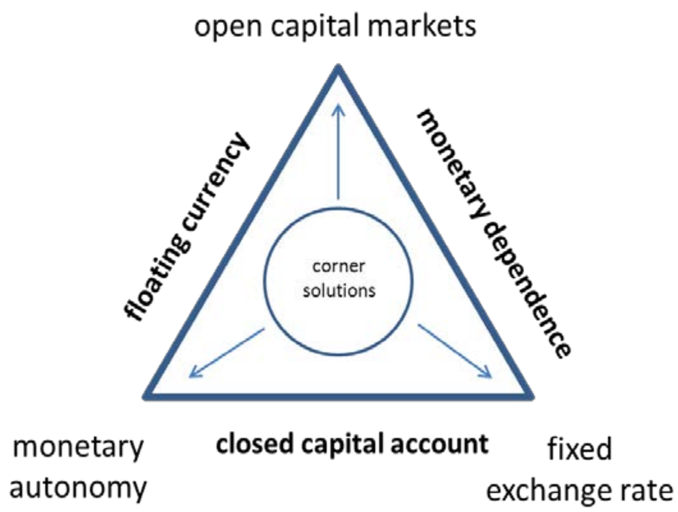
The founding members of the euro were willing to hand over monetary control to the ECB, but they were not ready to surrender their sovereign powers in non-monetary policy areas, not even in the field of financial regulation and supervision. This architecture left the question unanswered how far and how quick political integration would evolve. Spolaore (2013, p. 136) mentions that the long-term vision of the integration process was ambiguous, as Europe could be regarded as a "federation to be completed" or a "post-federation". Correspondingly, was the euro "a currency without a state *yet*, or … a currency without a state *ever*?"

As pointed out by Hoeksma and Schoenmaker (2011), after the Constitution for Europe had been rejected in French and Dutch referenda in 2005, the earlier expectation that the EU would eventually develop into a federal state could no longer be maintained. The subsequent Lisbon Treaty of 2009 conceived the EU as a democratic polity of states and citizens in which sovereignty is shared and resources are pooled to achieve common objectives. Hoeksma and Schoenmaker (2011) argue that this confirmed the EU and the euro area Member States as the joint sovereign behind the euro, which should therefore be regarded as a "currency beyond the state". As a consequence, the 'deep pockets' necessary to ensure its stability are to be found at the national level, requiring a coordination mechanism to pool these resources.

3. The eurozone's holy trinity: market discipline over national policies

The euro was the political response to the monetary policy trilemma associated with the Mundell-Fleming model for an open economy. According to this trilemma a country wishing to maintain free capital movements as well as exchange rate stability cannot simultaneously pursue an autonomous monetary policy (Figure 1). One of the three elements of this "holy trinity" (Rose, 1996) has to be given up.

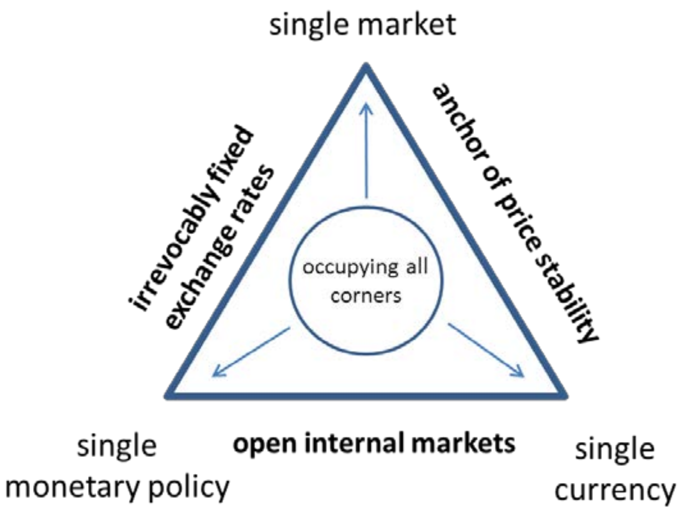
Figure 1 – The monetary policy trilemma



Note: A country can occupy only two of the three corners and the line in between that connects them.

The founding members of the euro created their own 'holy trinity': by complementing the single market with a single currency and a single monetary policy, all outside the realm of national sovereignty, they enjoyed the benefits of open internal markets, irrevocably fixed bilateral exchange rates, and a credible anchor of price stability (Figure 2). As noted in Section 2, this is a unique configuration, as in history the currency was always aligned with a state to serve the interests of the economy as well as those of the sovereign. While the euro was expected to offer large economic benefits to its members, it was not to be used as an instrument to ease government financing constraints in turbulent times. If anything, euro area sovereigns were expected to use their own 'deep pockets' to jointly support the stability of the euro rather than use the single currency to support them in a crisis. This EMU architecture left the challenge of countering asymmetric shocks and of dealing with potential crisis conditions to the member countries.

Figure 2 – The holy trinity of the eurozone



Note: Eurozone countries together occupied all three corners of the 'holy trinity and each one of them thereby realised open internal markets, irrevocably fixed bilateral exchange rates, and a credible anchor of price stability.

Market discipline was supposed to play a key role in promoting the sound fiscal policies and structural reforms necessary for successful participation in EMU and its transition to an optimal currency area. The Maastricht Treaty required the Member States and the EU as a whole to act in accordance with the principles of an open market economy with free competition. Furthermore, a privileged access of the public sector to the funds of financial institutions (other than for prudential purposes) was prohibited. The ECB's legal independence in the conduct of monetary policy and its statutory focus on price stability secured the ban on financing governments. Moreover, the 'no bailout' rule forbid EU countries to take over each other's commitments and the same prohibition applied to the EU institutions. This was also vital to avoid entering into a transfer union, whereby stronger members could be called upon to support their weaker partners by equalisation payments (Issing 2008).

These legal provisions ensured that governments must fund their debt in the open capital market, compete for savings in a way that supports an efficient allocation and spend the resources on enhancing economic performance and competitiveness (cf. McKinnon, 1994). One could even argue that subjecting national policy makers to the market mechanism was one of the normative objectives of EMU, namely to prevent that unsound national actions could destabilise the single currency (Goodhart, 1998). Governments were thus well-advised to generate positive market expectations about their creditworthiness by building confidence in their stability-oriented policies and the economic performance of their country. This should enable both the public and private sectors to attract savings at affordable, market-determined (real) interest rates.

Governors of European central banks were aware, well before the Maastricht Treaty was concluded, that market discipline may at times be ineffective. The Delors Report (Committee for the study of economic and monetary union, 1989, p. 24) had already highlighted that free access to a large capital market facilitates the financing of budget imbalances and "the constraints imposed by market forces might either be too slow and weak or too sudden and disruptive". As documented by James (2012, p. 297), when drafting the Statute of the ECB in 1990-91, governors also realised that public entities could still enjoy a privileged access to financial markets as a result of national fiscal, banking and prudential regulation. They were further aware that market participants could expect that eurozone governments will ultimately be bailed out by their partner countries when encountering funding difficulties (and that these governments could expect the same, leading to moral hazard). As a result, markets would not set the correct interest rate on public debt. Hence, governors were sceptical that market discipline would be sufficient to avoid excessive budget deficits and prevent that the ECB could then become subject to political pressure to pursue a more accommodating monetary policy and thereby ease government financing constraints.

Such doubts about the effectiveness of market constraints motivated the introduction of EU fiscal rules and surveillance in the Maastricht Treaty as additional safeguards against excessive budget deficits and too high public debt. The ability of governments to draw on a much wider euro-area pool of savings and the risk of adverse spillover effects from fiscal laxity on other members supported further detailed fiscal policy provisions, which were laid down in the Stability and Growth Pact of 1997.

As euro area countries lost control over the currency in which they issued their bonds they in principle replaced a ‘soft’ budget constraint for a ‘hard’ one (no devaluation, no inflation, no bailout). Their situation became comparable to subsidiary governments like American States or developing countries unable to issue bonds in a currency under their own monetary control (McKinnon, 1994, Goodhart, 2014; Turner, 2014). This made the funding of euro area governments dependent on the willingness of domestic and foreign investors to roll over the already accumulated sovereign debt that henceforth was characterised by higher default risks. The adoption of the euro should therefore have fundamentally raised the risk profile of public debt (Arnold and Lemmen, 2001; Gros, 2012). The pre-EMU distinction between sovereign credit ratings for domestic currency debt and foreign currency debt indeed disappeared. One might have expected that the apparent higher default risk would trigger an upward shift in market interest rates for all euro area countries, with the most risky members seeing the largest increase. Several factors worked against this plausible expectation.

One was the positive convergence effect of a country adopting the euro and anchoring itself to a stability union. The ECB’s credible guarantee of price stability made it possible for governments to issue more debt at longer maturities than previously, thereby reducing roll-over risk. These securities also attracted demand from investors residing elsewhere in the eurozone, using the new opportunity to diversify their country risk without in parallel having to accept exchange rate risk. Moreover, EU banking regulation allowed banks to assign a zero-risk weight to their assets held in the form of central government bonds issued in the domestic currency, i.e. the euro, also when these originated from other participating countries. Government securities were furthermore exempted from the large exposure limits that apply to private assets on bank balance sheets (Arnold and Lemmen, 2001). In addition, market participants may initially have felt reassured by the Stability and Growth Pact, considering it to be a suitable device to secure fiscal discipline in normal times. During turbulent times, they may instead have counted on a bailout of distressed countries, given the dangers of contagion in an integrated capital market and the presumption that EU institutions and euro area partners would have little choice but to step in in order to ensure financial stability and preserve the euro (den Butter and Segers, 2014). As became evident during the sovereign debt crisis that threatened the integrity of the eurozone, this market belief was largely confirmed.

Once the euro was in place, banks and other financial institutions thus had every incentive to accumulate government securities on their balance sheets and to select in particular the higher-yielding bonds of those euro area countries that were priced in the market as subject to higher credit and liquidity risk. As these bonds could now be purchased without currency risk, a 'hunt for yield' helped to virtually remove the credit risks and contain the liquidity risks. This policy-induced market response compressed sovereign bond yields towards the low levels of safer members.[2]

With the benefit of hindsight, sovereign credit risks appear to have been systematically underpriced before the financial crisis. Under these circumstances, the view that markets would discipline national policies was refuted by reality. For the previous high-interest rate countries the adoption of the euro in fact relaxed budget constraints rather than tightening them, thereby creating moral hazard. However, market pressure returned with a vengeance following the collapse of Lehman Brothers in September 2008.

4. Three fault lines in the design of the euro: does a currency need a state?

EU countries that adopted the euro gained the advantage of being able to expand their trade with partner countries and allocate capital to the most profitable projects in the eurozone without distorting exchange rate fluctuations. Moreover, EMU offered the benefits of access to a wide pool of savings allowing for diversification of funding and a more efficient absorption of national shocks. But member countries also became more vulnerable to shocks from abroad as contagion effects could spread quickly.

The past five years of a triple crisis in the eurozone were triggered by the global financial crisis which revealed how fragile the single currency's initial stability was. Over the first 10 years, several member countries allowed a series of profound

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2 Buiter and Sibert (2005) argue that this market failure was also partly due to the fact that the Eurosystem allocated all euro-denominated central government securities in the highest liquidity category without regard to differences in the market's valuation of default risk. This artificial liquidity enhancement would have suppressed government bond yields of weak euro area sovereigns. As explained by the ECB (2006, pp. 91-93), the Eurosystem has consistently applied a minimum credit standard when accepting assets as collateral since the introduction of the euro. This was made explicit in 2005 as part of the development of a new Eurosystem credit assessment framework that guarantees that all eligible collateral has a high credit quality. Moreover, collateral from public sector issuers is treated equal to that originating from private sector issuers.

macroeconomic, fiscal and financial imbalances to accumulate, as reflected in persistent current account deficits. Why were these growing imbalances not detected and corrected in a timely manner? Thanks to the easy access to foreign credit, the unified short-term interest rates determined by the single monetary policy and the excessive convergence of long-term interest rates many euro area countries enjoyed much more favourable financing conditions than before. The massive private capital inflows that external deficit countries required were, moreover, to a large extent invested in debt rather than equity, fuelling a credit-driven domestic demand and real estate boom in economies characterised by supply rigidities and weak competitiveness (Lane, 2013; De Rougemont and Winkler, 2014). Market participants were led to believe that euro-denominated government debt was risk-free. They also operated under the assumption that systemic banks were 'too big to fail' and would always be rescued by taxpayers, and that an overburdened government would somehow be bailed out.

Many euro area countries subject to this moral hazard also failed to abide by the EU governance framework for economic policy coordination, sound fiscal policies and prudential supervision. As predicted by Sims (1999), the too low cost of borrowing created incentives for fiscal free-riding, whereby individual countries enjoyed the benefits of a fiscal expansion at the expense of all other eurozone partners. Apart from fiscal policy, the danger of free-riding also applied to the national setting of other non-monetary policies where effective union-wide constraints were missing, such as those related to labour markets and bank regulation (Chari and Kehoe, 2008). According to Fernández-Villaverde et al. (2013), the easier financing conditions had political economy implications as this windfall relaxed constraints to undertake economic reforms and weakened the response to credit bubbles. As a result, current account adjustment was slower for EU countries participating in EMU than for those in floating or fixed exchange rate regimes (Herrmann and Jochem, 2013).

The foreign financing of persistent current account deficits translated into rapidly rising net external liabilities. This set the stage for sudden private capital outflows in a balance of payments crisis. As noted by Blundell-Wignall et al. (2013), the expansion of trade and greater integration of financial markets had positive welfare implications. However, the greater interdependence in the financial system (especially when based on debt rather than equity) also carried risks for financial stability and complicated national policy responses to financial crises. Without effective policy coordination or euro area-wide intervention powers, this might push nations subject to extreme market pressure to (re)introduce (hidden) trade barriers and capital controls. As dysfunctional markets undermine the cohesion of EMU, it was to be expected that EU institutions including the ECB could then ex post come under strong pressure from member countries to establish mechanisms to support them in a crisis.

Looking at the institutional factors in more detail, the euro crisis exposed three main fault lines in the design of EMU signalling that the founding members may not have sufficiently internalised the implications of creating the euro as a currency without a state.

The <u>first fault line</u> of EMU was the lack of an effective economic governance mechanism that enabled the centre to impose policy adjustments on member countries that went seriously astray. Although the Maastricht Treaty spoke of an Economic and Monetary Union, the economic axis was missing (Delors, 2013; Trichet, 2013). Given the single market, the Treaty described the economic policies of Member States as "a matter of common concern" that required coordination in the Council of Ministers. However, in practice, the country-specific broad guidelines for economic and employment policies as endorsed by the EU Council were to a large extent ignored. Since they were also not enforced, there was no effective prevention or correction of macroeconomic imbalances.

Since exchange rates between euro area countries had been irrevocably fixed, cross-country differences in competiveness could only be corrected through adjustments in relative prices and costs, or through non-price factors. This assumed a high degree of economic flexibility. Where prices and costs were downward rigid and structural reforms to address supply rigidities slow to be implemented, output and employment had to bear the brunt of the adjustment, without any 'federal' facilities (other than EU cohesion funds) that could assist them. As competitive member countries enjoyed a better growth performance, this also fuelled macroeconomic divergences within EMU (Landmann, 2011; De Rougemont and Winkler, 2014). Looking back, Delors (2013, p. 176) admits to have underestimated "that a single market with a single currency could exacerbate, to such a point, the divergences between Member States". When the financial crisis broke out, countries with excessive private and/or public debt, weak competitiveness, persistent current account deficits and other macroeconomic imbalances proved to be particularly vulnerable to market volatility. As private capital flows reversed, they were partly replaced by official sector funds (Lane, 2013).

Only for fiscal policies the Maastricht Treaty went further by placing an obligation on Member States to avoid excessive deficits (both in terms of the budget balance and the gross debt of general government), which ultimately could lead to sanctions for eurozone members in case of repeated non-compliance. This was specified in more detail by the Stability and Growth Pact (SGP) of 1997 that defined common rules and procedures for preventing and correcting excessive deficits. However, only very few countries ever achieved the medium-term objective of a close to balanced budget or a surplus position which would have been a sound starting point to let automatic fiscal stabilisers work freely to accommodate cyclical shocks (see Koester et al., 2012). The correction of excessive deficits was slow and the upward impact on debt not reversed, because peer pressure was weak and enforcement with sanctions avoided.

The credibility of EU fiscal governance suffered, in particular, as in 2003 Germany and France – supported by the EU Council – resisted to take the steps recommended by the European Commission necessary to correct their excessive deficits. The subsequent overhaul of the SGP in 2005 introduced more elements of flexibility to respond to mitigating country-specific circumstances. This further undermined incentives to preserve sound public finances. At the start of the global financial crisis many euro area countries thus had a high level of public debt, which rose even further due to bank rescues, economic recession and fiscal stimulus. Some of them subsequently faced liquidity stress as market volatility spread to vulnerable countries, leading to soaring sovereign bond yields and solvency concerns.

The <u>second mistake</u> was to leave the organisation of banking supervision and resolution in EMU in national hands, thereby ignoring the trade-offs associated with the financial trilemma (Schoenmaker, 2011). The incomplete nature of financial integration, in particular in retail banking, allowed banks to accumulate short-term and debt-based interbank liabilities from abroad while concentrating their assets with domestic real estate borrowers rather than diversifying the associated risks (Draghi, 2014). This mismatch made bank balance sheets vulnerable to asymmetric shocks and contagion effects from abroad, with the burden of rescue operations falling on national governments. At the same time, the cross-border financial interactions complicated the task of national financial authorities to preserve financial stability and would have demanded a common financial authority. Instead, the competent national authorities in the eurozone followed their own rulebook for the oversight of banks in their jurisdiction, applied the EU banking regulation with local discretion and decided for themselves whether to exercise forbearance in dealing with non-performing loans and how to recapitalise overleveraged banks.

Keeping financial policies in national hands in a single financial market relied on a close coordination between euro area countries in dealing with international banks. However, this proved sub-optimal during the financial crisis when distressed cross-border banks had to be broken up or restructured at short notice in order to maintain financial stability. Moreover, several member countries lacked the fiscal space for substantial bank rescue operations. Some with an over-indebted private sector and excessive external liabilities were heavily exposed to a large number of unviable savings banks, whereas in other over-banked countries the size of the banking sector far exceeded GDP. These characteristics fuelled a vicious feedback-loop between troubled banks holding a large amount of sovereign debt on their balance sheet and vulnerable governments with limited fiscal room for manoeuvre to (once again) socialise their rescues. The attendant rise in national borrowing and lending rates caused a serious fragmentation in financial markets across national lines of creditworthiness (ECB, 2012). To break the 'doom loop' between banks and their sovereign at least the systemically important cross-border banks in the eurozone had to be made subject to supranational supervision, recovery and resolution and include a common deposit insurance system, i.e. a fully-fledged banking union was required.

Also, national or coordinated macro-prudential policies were virtually non-existent. The lack of tools to manage cross-border capital flows and prevent regional credit booms that the single monetary policy could not address, but which could turn into a systemic risk for financial stability, became evident during the global financial crisis. While an early draft of the ECB's Statute prepared by the Central Bank Governors in 1990 gave it the task to support financial stability as well as responsibilities related to prudential supervision, the Maastricht Treaty in the end only provided the ECB with a mandate to contribute to the smooth conduct of such policies by the national regulators and supervisors (see James, 2012, pp. 18-19, 291-292 and 302). A supranational approach to prudential policy was relegated to the future.

The <u>third fault line</u> was the absence of built-in financial backstops at the EMU level to assist governments facing unbearable liquidity stress and a mechanism that would allow insolvent sovereigns to organise an orderly debt restructuring. As alredy mentioned (Section 3), euro area countries had surrendered their monetary autonomy to address episodes of severe fiscal stress and market volatility. The Maastricht Treaty explicitly forbids the ECB to finance governments (making an exception for supplying central-bank reserves to public credit institutions in order to treat them the same as private credit institutions). Moreover, it prohibits measures (not based on prudential considerations) that would force financial institutions to finance governments in a preferential manner. The European Union or its Member States also cannot be liable for or assume the public sector commitments of a particular Member State. A facility for balance of payments assistance only existed for EU countries outside the eurozone.

As it turned out after 2008, this EMU architecture provided for a ‘fair weather’ euro which was not sustainable under stormy conditions. Thygesen (2013, p. 30) admits that it would have been better “to design a crisis mechanism for the situation when, despite all good intentions and rules, a country falls into severe difficulties and loses access to international financial markets”. As observed by Kopf (2011), many eurozone countries had heavily financed themselves abroad in the first 10 years of EMU and thereby became vulnerable to a “sudden stop” in capital inflows (Calvo, 1998). As soon as a government faced soaring interest rates and funding stress it could get trapped by self-fulfilling default expectations (Calvo, 1988).[3] While a sovereign has the power to tax, this is only an illiquid longer-term asset of little use in a liquidity crisis when investors refuse to roll-over their debt (Gros, 2012). Moreover, the distortive effects of higher taxes for potential growth and competitiveness suggest that this option could also aggravate debt sustainability.

As popularised by De Grauwe (2012), the single currency was thus characterised by a “systemic fragility”, since all member countries exposed to fickle capital flows could be vulnerable or affected by contagion. Without a federal state that might support them in times of need, without the option to ask partner countries or the European Union for a bailout and without access to a central bank that might print all the fiat

[3] The uncontrollable default under EMU conditions compares with the earlier partial default due to inflation during EMS crises, when participating countries still had their monetary autonomy and tended to devalue their currency in order to escape market tensions (see Gros, 2012).

currency required to repay their debt, euro area governments were at the mercy of market expectations whenever a big shock would hit them. Hence, for countries confronted with a sudden stop in foreign funding, a credible “sudden backstop” of official funding was required (Richter et al., 2013, p. 8). Also, an agreed procedure for removing unsustainable sovereign debt while preventing contagion to other euro area members turned out to be necessary.

Looking back, the euro crisis was a crisis of confidence in the ability and willingness of governments to “do whatever is required” to ensure fiscal sustainability, contain private debt and promote competitiveness, and thereby the credibility of their “sovereign signature” (Trichet, 2013). While the single monetary policy was successful in maintaining price stability at the eurozone level, the stability of EMU was undermined by complacent national policy makers, accommodative national supervision of the financial industry and the absence of macro-prudential tools to counter a credit-driven boom in overheating economies. The importance of observing the rules of the single currency area were clear to every country, but the enhanced access to cheap financing fuelled moral hazard. Under these circumstances, the surveillance of national policies at the EU level was too weak and too narrowly defined to prevent and correct serious macroeconomic, fiscal and financial imbalances. The fall-out from the financial crisis of 2008 exposed these weaknesses.

5. A more perfect EMU: enhanced governance and a banking union

To regain confidence, euro area leaders set out to remedy the three design failures of EMU and the weaknesses in EU multilateral surveillance by establishing a more effective and powerful governance framework, in particular for the euro area. Among the key objectives was to prevent the build-up of excessive public and/or private debt and high external liabilities, and if a banking and/or sovereign debt crisis would still occur, to have adequate crisis management and resolution tools at hand.

As regards new <u>preventive instruments</u>, a first response to the financial crisis was to strengthen prudential supervision of securities markets, banks and pension funds in order to return to financial discipline. As from 2011 the European Systemic Risk Board (ESRB) and three European Supervisory Authorities (ESAs) came into operation to better monitor and address prudential risks at the macro and micro level, respectively.

In addition, the European Semester offers since the start of 2011 a new umbrella under which the EU Council undertakes an annual review of medium-term fiscal, macroeconomic and structural policy plans of the EU, the euro area and the Member States in a coordinated and consistent framework, leading to ex ante guidance and possible policy recommendations. An important improvement is also that Eurostat has been given more powers to ensure the quality and integrity of all statistical data relevant for economic and budgetary surveillance.

A new EU surveillance procedure to prevent and correct harmful macroeconomic imbalances entered into force in December 2011. This should become an effective tool to address a range of economic and financial vulnerabilities, as would for example show up in deteriorating price and cost competitiveness and large current account deficits (or excessive surpluses). To improve the effectiveness of EU budgetary surveillance, in particular for euro area countries, since December 2011 the SGP has been reinforced (see Koester et al., 2012). This included inter alia a new expenditure growth rule, a renewed focus on a steady decline of high government debt towards 60% of GDP and new financial sanctions to address non-compliance (which Trichet, 2013, sees as reducing fiscal sovereignty). Moreover, a new EU Directive was adopted which sets minimum requirements for national budgetary frameworks. Euro area governments have committed to comply with this directive by end-2013. Another new EU regulation strengthened from May 2013 the budgetary surveillance mechanisms in the euro area even further. They gave new powers to the European Commission to assess the draft budgetary plans of euro area countries and request a revision if necessary, as well as to secure the timely and durable correction of excessive deficits.

As a further new legal element, the Treaty on Stability, Coordination and Governance in EMU (TSCG) entered into force on 1 January 2013 for the signatory parities (all current 28 Member States except the Czech Republic and the United Kingdom). This Treaty enshrines a ‘Fiscal Compact’ asks countries to introduce in national legislation with effect from January 2014 a structural balanced-budget rule and an automatic mechanism to correct deviations (see Koester et al., 2012). Moreover, the TSCG enhances the excessive deficit procedure, in particular by introducing more automatic steps when a euro area country breaches the Maastricht Treaty’s deficit ceiling of 3% of GDP. The TSCG also gives the new government debt reduction rule of the reinforced SGP the status of primary law and asks for a more timely and comprehensive ex ante reporting of public debt issuance plans at the EU level. This should lead to a better coordination of national public debt management strategies.

The TSCG also calls for stronger economic policy coordination to promote growth and foster the smooth functioning of EMU. To make this operational a ‘Compact for Growth, Jobs and Competitiveness’ with indicative targets was agreed in June 2012 to complement the TSCG. Political discussions are ongoing on the usefulness of offering financial support to Member States that sign up to country-specific growth- and job-enhancing policies as laid down in mutually agreed contracts.

Following the outbreak of the sovereign debt crisis in early 2010, several euro area countries faced distressful conditions. Given evidence of financial contagion across EMU there were growing risks for the macro-financial stability of the euro area as a whole. To improve crisis management and resolution EU and euro area leaders have created new jointly guaranteed financial stability mechanisms to provide a ‘firewall’ against the spreading of sovereign default concerns.[4] These fiscal backstops can be activated on a precautionary basis (either with more relaxed or no policy conditions attached) and as ultimo ratio to provide financial assistance (with strict policy conditionality). Although the financial resources available are subject to a ceiling, they offer troubled countries protection from undue market pressure and help to ring-fence them against cross-border contagion to the rest of the eurozone. A credible monetary backstop was established in mid-2012, when the ECB expressed its commitment under certain conditions to undertake unlimited interventions in impaired euro area sovereign bond markets, if this was required for monetary policy purposes. In addition, new EU legal provisions in force since May 2013 made policy surveillance of euro area countries in financial distress or receiving financial assistance more intrusive, as initially this was being practiced on an ad hoc basis by the ‘troika’ of European Commission, IMF and ECB.

Euro area countries that are virtually insolvent, as shown by an examination of their debt sustainability, will be expected to negotiate a debt restructuring with their private creditors in order to remove a public debt overhang. The introduction as from January

[4] The fiscal backstops in the eurozone created during the sovereign debt crisis consist of the temporary European Financial Stability Facility (EFSF) and European Financial Stability Mechanism (EFSM) and the permanent European Stability Mechanism (ESM). They are complemented by the financing facilities of the International Monetary Fund (IMF).

2013 of collective action clauses in new euro area sovereign bond contracts seeks to facilitate an orderly default procedure in the future, although euro area leaders marked the example of Greece in March 2012 as “a unique case”. This contractual recognition of the possibility of a sovereign default in EMU should be expected over time to raise the credit risk premia in government bond yields to more realistic market levels and make foreign investors more cautious when placing their money with sovereigns abroad (see Goodhart, 2014).

Faced with the need to break the vicious nexus between banks and their sovereign, euro area leaders further took the historical decision in June 2012 to move towards a banking union. The ECB will assume from November 2014 the responsibility for supervising all the 128 significant banks in the eurozone (after a comprehensive health-check of their balance sheets) and ultimate intervention powers for the 6000 less significant banks which remain under national supervisory control following a single rulebook. Given its independent powers as single supervisor, the ECB will be able to address excessive risk-taking of individual banks and take account of the related cross-border externalities. The ECB has also been entrusted with new macro-prudential tasks and tools provided for under EU law, enabling it, if needed, to apply stricter measures to counter financial imbalances than the national authorities.

Furthermore, the EU bank recovery and resolution directive provides the competent national authorities with common powers and instruments to pre-empt banking crises, intervene early in troubled banks and resolve them orderly in the event of failure. The provisions for restructuring distressed banks will enter into force in January 2016. They require the national resolution authorities to first write down the claims of shareholders and then convert the claims of unsecured creditors and, if needed, eligible bank deposits into equity, before granting access to the national bank resolution fund (that must be built up over 10 years by bank levies). Among some other liabilities, deposits covered by retail deposit guarantees are excluded from such bail-in operations.[5] The priority given to a bail-in of the private sector rather than a bail-out by the public sector should give market participants a stronger incentive to keep a close eye on the risk exposure of banks in which they have invested. Subject to the EU’s state aid rules, in exceptional circumstances the government could inject

[5] An EU directive for the harmonisation of national deposit guarantee schemes (covering retail deposits up to EUR 100,000) is underway.

temporary capital into solvent banks that cannot access sufficient private funds. In addition, in emergency situations when financial stability is in danger, the government is allowed to use taxpayer funds for capital injections. For the period until 2016, the state aid rules updated by the European Commission in August 2013 have created a harmonised EU framework for bank rescue operations financed by Member States.

As from January 2015 the decisions on whether and how to restructure a significant bank should be taken and implemented by a new single resolution authority. According to the position of the EU Council of Ministers in December 2013, the single resolution authority should be able to draw upon a single resolution fund (in which the national resolution funds are progressively merged over a 10-year period) and national fiscal sources that are ultimately funded by bank levies (to be developed into a common backstop that is to be operational after at most 10 years). If needed, governments could borrow from the ESM to recapitalise troubled banks, in line with existing procedures. However, a clear political commitment to a common euro area fiscal backstop for failing banks was a bridge too far.

European leaders have given some thoughts to the idea of promoting further political integration, as demonstrated by the Four Presidents Report offering a vision of and a roadmap to a ‘genuine EMU’ (see Van Rompuy, 2012a,b). This report highlights the main requirements to ensure the stability and integrity of EMU, extending the monetary union with integrated frameworks for financial, budgetary and economic policies that are subject to democratic control and accountability at the level where the decisions are taken. The idea was that this should lead in three stages to a financial market union, a central fiscal capacity to facilitate adjustment to country-specific shocks, and systematic coordination of major economic reforms to address structural rigidities. However, no political agreement could yet be reached on the transfer of national sovereignty in these policy areas, other than what was necessary to take the above-mentioned steps towards a banking union.

Altogether, this adjusted governance framework for the euro area constitutes the most far-reaching institutional enhancement since the euro was born. Obviously, a “more perfect” EMU than in the past requires that the new EU institutions are fully effective and the enhanced rules are strictly implemented and rigorously enforced. The new steady-state also demands mutually consistent national policies to ensure EMU-friendly outcomes (Buti, 2014). However, EU institutions cannot correct the policies of sovereign nation states that – despite their commitment when they adopted the euro – are unwilling or unable to internalise the requirements of an optimal currency area.

As already observed by Issing (2006), the challenge for Europe has always been to find the right balance between economic, monetary and political integration, i.e. the triangle between one market, one money, and many states. He sees further steps of integration as an evolutionary process whereby competencies are assigned as appropriate, relying on the policy makers' willingness to make EMU work and "our ability to knock heads together when tough solutions are required".

Indeed, as they frequently stated since the sovereign debt crisis started in late 2009, the EU and the euro area Member States stood ready to "do whatever is required" for ensuring the stability of the euro area as a whole.[6] As discussed above, this was demonstrated by the establishment of euro area financial backstops operating under joint (but not several) guarantees, solidarity with crisis-affected member counties subject to conditionality, a major overhaul of the euro area governance framework and steps towards a banking union. Separately, by the words of its President, the ECB expressed in July 2012 its commitment to "do whatever it takes to preserve the euro" within its mandate.[7] This shows that the euro as a currency beyond the state in the end could count on significant stability support from the authorities concerned, which was also a clear sign of solidarity among participating countries.

Yet, the limitations of this solidarity also became visible, as euro area leaders acted with reluctance and only after lengthy ad hoc meetings under intense crisis-related pressure from volatile markets. As expected by Sims (1999) and (2012), fiscal coordination to place a floor under the value of the euro was challenging in crisis conditions and could be more credibly achieved with the required speed in a unitary state with a single fiscal authority. While in the end the participating countries were willing to share responsibility for the stability of the euro, the thorny questions of how to distribute the costs and reach a unanimous decision repeatedly delayed urgent crisis measures. Moreover, the new conditional fiscal backstops that were put in place by the EU and the euro area members are subject to ceilings and only guaranteed by pro-rata burden sharing. This made them vulnerable to members whose credit rating was

6 See for example the statement by the Heads of State or Government of the euro area and the EU institutions in the context of the European Council meeting on 16-17 December 2010.

7 See the remarks made by M. Draghi at the Global Investment Forum in London on 26 July 2012

downgraded and distressed members requiring assistance stepping out. In addition, the bank-sovereign 'doom loop' is not (yet) fully broken and a rescue operation for a systemic bank may still strain the fiscal capacity of the country concerned. The euro area fiscal backstops are probably also insufficient to address serious liquidity problems in the larger member countries or when the authorities have to resolve systemic banks that are 'too big to rescue'. This suggests that EMU will continue to be a house under construction that is susceptible to new storms and politicians might once more put the onus on the ECB to save the euro from falling apart.

From an economic point of view a relevant question is therefore whether and to what extent continued national autonomy over key policy areas is compatible with building a more resilient and integrated eurozone. The issue at stake is best illustrated by the fiscal/financial trilemma put forward by Obstfeld (2013): maintaining financial integration, financial stability and fiscal autonomy are mutually incompatible in a context where the health of the banking sector and the creditworthiness of sovereigns are closely intertwined. One of the three desiderata has to give way and moving to some kind of fiscal union appears to him (and others) as the most logical choice.[8] A euro area fiscal capacity in combination with a "hard budget constraint" on euro area countries would also bring them closer to the position of subsidiary sovereigns like American States (McKinnon, 1994).

The conclusion is that the long-term stability and integrity of EMU may only be guaranteed by changes in the Lisbon Treaty, leading to a further transfer of national sovereignty to the eurozone level. Should this not be feasible, as appears to be the case right now, it will be ever-more important that market discipline is preserved as a complement to peer pressure on member countries.

6. Rounding the corners of the holy trinity: reducing national constraints

The aforementioned inherent fragility of EMU required a policy response when in September 2009 the new Greek government disclosed much higher fiscal deficit and

[8] Pisani-Ferry (2012) draws the same conclusion in favour of a fiscal union on the basis of the new impossible trinity of a national banking system connected to the sovereign, a strict ban on monetary financing and the rejection of co-responsibility for public debt. Beck and Prinz (2012) see a single monetary policy by an independent ECB and the no bailout clause as mutually inconsistent with national fiscal sovereignty. The Tommaso Schioppa-Group (2012) calls for a single currency area that combines the single market with a banking union and key elements of a fiscal union. Bindseil and Winkler (2014) argue that a monetary union like the eurozone must have a strong underpinning by a banking and fiscal union in order for the common central bank to be able to deal with solvency issues that might arise when it fights a liquidity crisis.

debt figures than was known before. Since the financial crisis broke out, public debt-to-GDP ratios had steadily increased for most euro area members, reaching values far above prudent levels. Growing market concerns about the sustainability of public finances led for several countries to a rapid increase in their bond yields as default risk premia were adjusted upwards, in combination with declining sovereign credit ratings and cross-border contagion effects. High-debt governments with a weak economy and exposed to a fragile banking sector became especially vulnerable to these sudden shifts in market sentiment, especially among foreign creditors.

The spreading of the sovereign debt crisis in the eurozone closely corresponds to what Kaminsky et al. (2003) describe as the "unholy trinity of financial contagion" in the context of sudden stops in foreign funding: a surprise negative announcement sets off a broad-based reversal of capital inflows as leveraged common creditors reduce their exposure to the sovereign as well as private borrowers in euro area countries perceived to be vulnerable. As there was no federal government to assist them and the Maastricht Treaty explicitly excluded a bailout by other member countries, the financial sector or the ECB, countries concerned were in principle left to their own devices to break self-fulfilling default expectations. As a consequence, national authorities looked for ways to 'soften the sharp edges' of the eurozone's holy trinity, in order to 'buy time' for undertaking the necessary policy reforms and potentially as a more permanent arrangement for easing market pressure. To generate more national policy freedom euro area members may have studied in particular how some countries under alternative exchange rate arrangements have sought to address their economic policy challenges since the global financial crisis.[9]

As already mentioned, theory suggests that countries can only occupy two of the three corners of the monetary policy trilemma and have to give up their autonomy over the third (see Figure 1). This impossible trinity can be extended to an impossible quartet when free trade is added. Historical analysis largely confirms that the monetary policy

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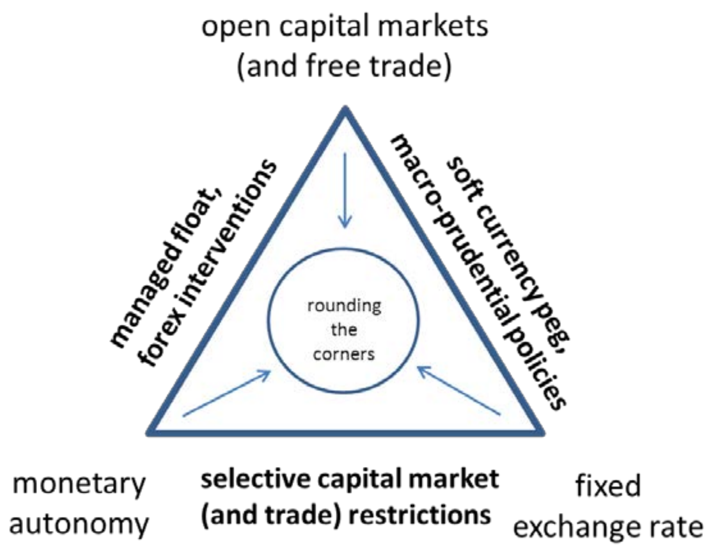
[9] The experience of distressed euro area countries over the past 15 years looks similar to that of emerging market economies which liberalised financial markets and adopted a fixed exchange rate without conducting sufficiently cautious macroeconomic and prudential policies and then faced macroeconomic instability and 'sudden stops' in capital inflows. As Diaz-Alejandro (1985, p. 15) writes with reference to Chile and other Latin-American countries: "The combination of a pre-announced or fixed nominal exchange rate, relatively free capital movements, and domestic and external financial systems characterized by the moral hazard and other imperfections … set the stage not only for significant microeconomic misallocation of credit, but also for macroeconomic instability, including the explosive growth of external debt, most of which was incurred by private Chilean banks, followed by abrupt cessation of capital inflows. That macroeconomic instability would occur even assuming tranquil circumstances, but it is of course exacerbated by external shocks hitting economies made particularly brittle and vulnerable by that combination of policies and institutions."

trilemma tends to hold and is a useful guidepost for policy makers (Obstfeld et al. 2005). However, recent studies suggest that emerging market economies in particular face more nuanced trade-offs (Aizenmann et al., 2010; White, 2013). These are present in the scope for intermediate policy choices that – using the words of Klein and Shambaugh (2013) – "round the corners" of their monetary policy trilemma (as illustrated in Figure 3) and allow them some room for manoeuvre to tackle specific national policy dilemma's. The appropriateness, feasibility and effectiveness of such middle-of-the-road policies are widely debated.

For example, when the exchange rate has been fixed and the central bank still wishes to conduct its own monetary policy this in principle requires closing the capital account. A relaxation of this latter constraint may be feasible by slightly opening the door for capital inflows, for example, to relieve a scarcity of savings and reduce the spread between domestic and foreign interest rates. If not, an alternative monetary policy regime may be adopted that allows for cross-border capital movements while either giving up monetary autonomy or the exchange rate peg.

Figure 3 – Rounding the corners of the monetary policy trilemma



Note: A country that occupies two of the three corners and the line in between that connects them can still achieve some extra room for manoeuvre on the implied policy constraint if it is able to 'round' the third corner.

When the country decides to maintain a fixed exchange rate in a context of full capital mobility and, hence, 'imports' the foreign monetary policy stance, the central bank could employ macro-prudential tools to manage domestic credit growth and target both macroeconomic and financial objectives (Hahm et al., 2012). Observing such a monetary policy regime, the central bank may also use selective or time-bound capital inflow restrictions as a macro-prudential instrument (equivalent to a Pigouvian tax) to drive a wedge between foreign and domestic interest rates, address financial fragility and smoothen macroeconomic volatility (Jeanne and Korinek, 2010). Or it may be able to gain some autonomy over domestic monetary conditions by maintaining a soft currency peg (Klein and Shambaugh, 2013).

When the country instead pursues an autonomous monetary policy and respects the free flow of capital, it may search for alternatives to the implied floating currency regime. The central bank could in that situation implement a managed float or foreign exchange interventions, thereby accepting some loss of monetary autonomy. As another option, a tightening of micro-prudential regulations could have the effect of introducing hidden capital restrictions targeted at safeguarding national banking systems and securing credit supply.[10] To create price differentials between connected markets the government may take the slippery slope of trade protectionism (despite international trade agreements) or 'murky' forms of beggar-thy-neighbour policies that are difficult to detect (ECB, 2013). As reported by Evenett (2013), in many nations both forms of protectionism have picked up since the start of the crisis.

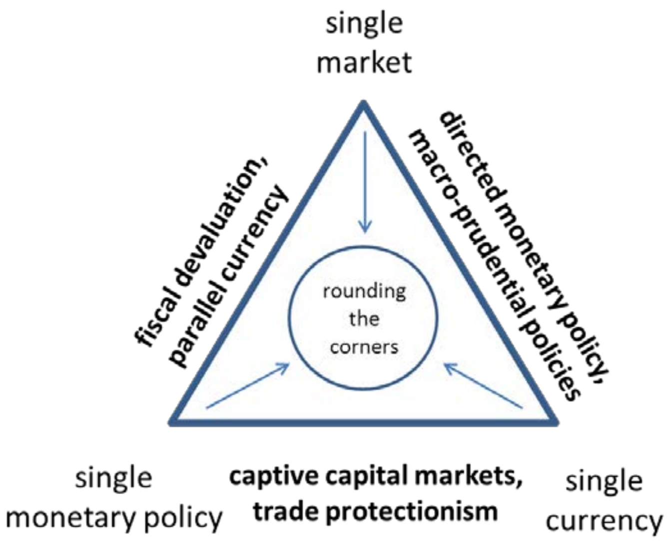
As regards countries in the eurozone there is a clear possibility that they will also try to exploit the trade-offs in integrated and interdependent markets in order to restore some margin for national policy manoeuvre in response to asymmetric shocks within EMU (see Blundell-Wignall et al., 2013; White, 2013). Especially during a crisis, eurozone countries have an incentive to search for national stabilisation tools that could help them in dealing with market turbulence and removing the sharp edges of the eurozone's holy trinity (see Figure 4).

As discussed above for market economies in general, possible tools include quasi-fiscal, regulatory, prudential and exchange rate policies. They could be adopted both to prevent and manage domestic imbalances inside the eurozone. For example, (coordinated) national macro-prudential policies (such as a maximum loan-to-value ratio for mortgage loans), could be used to counter heterogeneous business and financial cycles within EMU, where the single monetary policy is unable to prevent or

[10] This regulatory reaction appears to be a global phenomenon, leading to financial protectionism and a 'balkanisation' of banking (*The Economist*, 23 November 2013, pp. 18 and 74). Rose and Wieladek (2011) report evidence that nationalised banks and those benefiting from public sector support after the 2008 financial crisis reduced foreign lending to counterparts in the United Kingdom or charged them higher interest rates.

address these in the affected member countries (Houben and Kakes, 2013; Kincaid and Watson, 2013). To assist a rebalancing of current account positions, some authors have proposed a fiscal devaluation as a national substitute to the inability of euro area countries to devalue (Keen and de Mooij, 2012). This policy reduces the relative cost of tradables through a shift in the tax base away from social contributions on labour to taxes on consumption or property. A radical suggestion for regaining room for exchange rate manoeuvre is to introduce temporarily a parallel currency in distressed countries, which could fluctuate against the euro (Richter et al., 2013).

Figure 4 – Rounding the corners of the eurozone's holy trinity



Note: Eurozone countries may seek to 'round' all three corners of the 'holy trinity by trying to relax the constraints implied by open internal markets, irrevocably fixed bilateral exchange rates, and a single monetary policy stance.

Constraining the free functioning of the single market could also gain momentum. Concerning ways to ease competitive pressures in trade, governments may try to gain artificial comparative advantages in the internal market by continuing to shield the provision of services from foreign competition, provide state aid to tradable sectors or impose administrative requirements that amount to trade protectionism in disguise. The European Commission's Single Market Acts of October 2011 and April 2012 also show that there is still a lot of scope to deepen the internal market.

As regards financial markets, various governance reforms at different levels could contribute to a more "effective management of capital flows" (see the policy agenda proposed by Lane, 2013, p. 16). During the crisis, national supervisors reportedly placed restrictions on banks' capital and liquidity outflows and demanded repatriation of assets held in other euro area countries, so as to safeguard their domestic banking systems and secure local credit supply (van Riet, 2012). Euro area governments also used their fiscal capacity to subsidise weakened banks in order to prevent that capital flight could cause a sharp increase in their own borrowing costs (Valiante, 2014). Furthermore, several public debt agencies appear to have applied 'non-standard' debt-management techniques, both on the supply and demand side, to make government debt sustainable (van Riet, 2014). Their actions sought to make sovereign bonds more attractive for domestic audiences or aimed to create a more captive domestic investor base in order to reduce the vulnerabilities associated with a large foreign ownership of government bonds. With the same effect, Koo (2012) proposes to agree at the euro area level to limit the sale of government bonds to citizens and exclude foreigners, while leaving investments in private sector financial assets free for non-residents. He sees this 'nationals-only rule' as an alternative to a fiscal union, which could enable the government to run more flexible fiscal policies to fight a recession, as domestic creditors could be more likely to accept the necessary higher budget deficits.

Such middle-of-the-road policies reflect attempts of national authorities to relax the constraints imposed by the eurozone's holy trinity and reclaim some control over the impact of the single market, the single currency and the single monetary policy on their domestic economy. Some of the above interventions appear sensible, such as (coordinated) national macro-prudential actions to deal with a credit boom or a (budget-neutral) fiscal devaluation to support a recovery of competitiveness. A correction of capital market failures and improper incentives in the financial industry that fuelled the external financing of a credit-driven boom in the crisis-hit countries is also warranted. Many other interventions, however, represent market repression, protectionism and undue government privileges. They contribute inter alia to an unwinding of economic and financial integration and a renationalisation of markets. Such policy-induced market fragmentation complicates the conduct of the single monetary policy and might even oblige the ECB to repair monetary transmission with non-standard tools specifically directed at economies starved of credit (Figure 4).

EU law permits, within limits, taking measures at the European or national level to support the proper functioning of markets, the soundness of financial institutions and the stability of the euro. However, such interventions may also distort incentives and undermine the ability of financial markets to exercise discipline over national fiscal authorities. Where they are aimed at correcting externalities and protecting countries against large and volatile capital flows leading to interest rates well above 'fair' levels justified by fundamentals, they may be characterised as stabilising. Where the interventions go beyond correcting market failures and introduce new distortions, for example, government funding privileges, they amount to financial repression and risk to destabilise the euro.[11] Before the crisis, market discipline was weak and the ample availability of financing created political incentives to delay necessary reforms and to free-ride on the euro; following the crisis, the close market scrutiny made financing more expensive and could again fuel political incentives, this time in favour of protectionist measures that undermine the proper functioning of the eurozone.

7. The benefits of market-preserving fiscal federalism for EMU

The ability of euro area countries to engage in market repression jeopardises EMU by moving it away from an optimal currency area. This shows the relevance of the observation by McKinnon (1994) and Weingast (1995) that a welfare-enhancing monetary union needs "market-preserving fiscal federalism". This is a governance structure which places credible restrictions on discretionary economic policy-making at the union and national level and simultaneously protects property rights, enforces contracts, promotes efficient competition between member countries, prevents that political forces encroach on open markets, subjects all governments to a hard budget constraint without access to the printing press or unlimited credit, provides financial stability safeguards, and contains credible incentives to honour the rules.

Building on the criteria put forward by McKinnon (1994), Weingast (1995) and Montinola et al. (1995), an optimal currency area with market-preserving fiscal federalism has five main characteristics that govern the political system:[12]

1) there exists a *hierarchy between an area-wide authority (or federal government) and subsidiary authorities* in which each level of government is autonomous in its

[11] Many of these destabilising market interventions may be perceived as modern forms of government repression of the financial system, returning from the past (see Reinhart, 2012; van Riet, 2013). They cause an income and wealth transfer from savers and creditors to taxpayers and debtors without democratic legitimation.

[12] They support the conclusion of the Tommaso Padoa-Schioppa Group (2012, p. 5) that "the single currency requires as much fiscal federalism as necessary for its appropriate functioning, but as little as possible". See also Allard et al. (2013) for a discussion of the elements of a fiscal union that would be required as a minimum to make future euro area crises less severe. However, the focus here is more narrowly on the institutions required to preserve open and integrated markets in the presence of a hard budget constraint rather than on the steps towards a fiscal union.

own jurisdiction and *the allocation of their tasks and responsibilities is durably institutionalised* by a common political agreement anchored in primary legislation;

2) area-wide (or federal) institutions provide those *common public goods and services that are essential for the efficacy and stability of the monetary union*, notably a single monetary policy, a banking union comprising single surveillance, resolution and deposit insurance, a capacity for centralised macro-prudential interventions, a judiciary to police the common market and enforce competition law, and a common fiscal backstop as an insurance against area-wide stability risks;
3) the area-wide (or federal) authority has a *moderate central budget* to fulfil its tasks fully backed by revenues and it manages *a common fiscal backstop* for last resort temporary assistance to troubled banks and subsidiary governments;
4) subsidiary governments have to maintain a *structural balanced budget for current spending*, whereas their borrowing for cost-effective capital expenditure is rationed by the capital market;
5) subsidiary governments have *primary responsibility for their own economy*, drawing on the common fiscal backstop is only allowed to absorb exceptionally large asymmetric shocks and excessive financial market reactions, whereby any temporary liquidity support is subject to strict policy conditions that constrain sovereignty, and otherwise a bailout by area-wide (or federal) institutions or other subsidiary governments to address solvency issues is strictly forbidden.

Weingast (1995) argues that political institutions have an economic role to play in providing a secure system of economic and political rights that form the basis for the common market and for economic policy-making. However, a political system may give the central government too much discretionary authority to promote its own interests by restricting economic freedom and reallocating income and wealth, or it may allow subsidiary governments too much scope to overspend by borrowing against the future, to overtax citizens in an arbitrary way and to provide distortionary state aid to favoured industries.

As Montinola et al. (1995, p. 54) have put it: “In the absence of credible limits on governmental behaviour, nothing prevents the government from taking away wealth from its citizens for its own purposes. This behaviour may take many forms: an outright confiscation of wealth, onerous taxation, or inflationary financing by printing money”. They argue that a market-preserving federal system with the right checks and balances between the national and subnational governments is superior to either complete centralisation with a unitary government or a complete decentralisation with each region being an independent state. The reason is that in both alternative corner solutions the central government retains the discretionary power to encroach on markets and create inflation when it is looking for ways to circumvent its budget constraint.

This analysis is also relevant for the ongoing discussions on the appropriate degree of political integration in the eurozone: it shows that a fully-fledged political union may be neither desirable, nor necessary. For a sustainable EMU it should be sufficient to have durable and effective euro area institutions for safeguarding economic freedom and market discipline in the context of a hard budget constraint for all governments. The eurozone does have a number of European institutions to provide the common public goods that a viable euro requires and, as discussed above, its governance framework has been substantially reinforced (see Sections 4 and 5).

The ECB is since 1999 in charge of the single monetary policy with an independent mandate to maintain price stability in the eurozone. The authority of the European Commission to police the EU internal market and of the European Court of Justice to enforce competition law is well-established; they secure the cross-border mobility of goods, services, capital and labour. The Single Market Acts of 2011-2012 contain initiatives to further develop the EU internal market. Since 2011, the ESRB and the ESAs have a mandate to issue recommendations to EU governments about macro-prudential and micro-prudential concerns, respectively, and thereby to preserve financial stability. The new powers of the ECB as the single supervisor of significant banks in the eurozone should from November 2014 onwards remove a ‘home bias’ in banking supervision and the risk that major banks could be pushed into investing in the sovereign bonds of their country of residence. Moreover, in future, bank resolution will follow harmonised procedures. The ECB will also have at its disposal the macro-prudential tools foreseen in EU law, which enable it to go beyond national measures when it sees a risk of financial imbalances. Furthermore, the Treaty enshrining the Fiscal Compact entered into force in 2013 and introduced a structural balanced-budget rule to be laid down in national legislation. Since mid-2013, EU countries also face more intrusive surveillance and stronger enforcement in the event that their economic and fiscal policies would go astray. New euro area rescue funds provide a common fiscal backstop for countries in liquidity stress and, possibly, for troubled banks, subject to strict policy conditions. Finally, known to private investors, collective action clauses in new sovereign bond contracts should in future facilitate in exceptional cases an orderly public debt restructuring for insolvent countries.

Yet, this wide range of market-preserving rules and institutions may not be sufficient and effective in countering (hidden) market repression by euro area sovereigns that seek to escape their hard budget constraint. For example, public debt management strategies aimed at inducing a captive domestic investor base are market-distorting, create moral hazard on the part of governments, prevent domestic creditors from spreading their risks, reduce private incentives to save and invest, constrain economic growth and undermine the efficient functioning of EMU. Anti-European sentiments, euro scepticism and falling popular support for a free market economy could trigger further protectionist measures that damage eurozone growth prospects (Crafts, 2013).

This suggests that the principles of economic freedom and market discipline in EMU may not yet be sufficiently anchored in what Weingast (1995, p. 26) calls "a social consensus about the appropriate limits of the state". Such a consensus is nevertheless vital as it should lead citizens to withdraw their political support for a euro area government that violated these principles and refuses to internalise the negative externalities for other union members. The biggest challenge for the eurozone may well be that of "finding a consensus on, and support for, new social contracts among national constituencies" that guide the economic and political transitions that are required to ensure the long-term viability of the euro (Mongelli, 2013, p. 7).

8. Conclusion: an imperfect monetary union may entrench fragmentation

This paper discussed the future of the euro at 15 and examined the role of financial markets in disciplining national policy makers and driving EMU towards an optimal currency area. European leaders adopted the euro as a solution to the monetary policy trilemma known from the international economic literature. They established what they thought would be a 'holy trinity' that would offer them the triple benefits of a single market with a single currency and a single monetary policy. The price to pay was that national policy makers in principle became subject to strong market discipline. The SGP was introduced as a complement to these market forces in order to add EU surveillance and peer pressure in support of sound public finances.

The euro crisis revealed the design flaws of EMU, showing that the area-wide control mechanisms to counter complacent national policies were ineffective and that a rescue mechanism for distressed sovereigns was needed as a ‘last resort’. Moreover, markets had exercised insufficient discipline over national policy makers before the crisis erupted, which was at least partly due to policy-induced expectations of government bonds being ‘safe assets’ by definition and the low credibility of the ‘no bailout’ clause. Acknowledging that the euro is a currency beyond the state for which they have a shared responsibility, European leaders have put in place an enhanced euro area governance framework that should be more effective in preventing and correcting unsound national policies and providing a financial backstop for distressed members. In addition, they took steps towards a banking union to break the vicious nexus between sovereigns and banks. The question is whether this will be sufficient.

Governments kept their national fiscal sovereignty and may try to use this leeway to ‘round the corners’ of the eurozone’s holy trinity, i.e. to circumvent the hard budget constraint that they face in EMU. Some high-debt governments appear to suppress market forces by targeting more captive sovereign debt markets, as a fiscal insurance against the retreat of foreign investors and rapidly rising interest rates in turbulent times. These countries in effect turned inwards by favouring financial repression and renationalisation as a complement to their adjustment policies.

This fiscal protectionism may serve them well as a transitory stabilisation tool, but the longer it is sustained, the more it frustrates the efficient allocation of capital in EMU. The fragmentation of financial markets moreover hampers monetary transmission and complicates the effective conduct of the single monetary policy. The government funding privileges associated with captive sovereign debt markets feed moral hazard in the public sector, increase bank exposure to national shocks, crowd out private investment when financial frictions apply and, hence, undermine long-term growth.

The optimal solution to stabilise EMU and ensure its integrity may well be to establish a higher level of market-preserving fiscal federalism – involving a transfer of fiscal sovereignty to the eurozone level – which limits the ability of member countries to encroach on markets. This, in turn, requires that the principles of economic freedom and market discipline are underpinned by a social consensus about the limits of the state and that there is national ownership of the economic and political reforms necessary to underpin the long-term viability of the euro.

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