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The Survivability of the Euro Part I: Reform, Relevance and Robustness

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The Future of Europe series

Invesco's Future of Europe series aims to address some of the most pressing questions surrounding the euro, the eurozone (EZ) and the European Union (EU). Grounded in economic and political reality and drawing on both theory and experience, it seeks to provide investors with an informed and practical framework for assessment and decision-making.

Co-authored by Jacek Rostowski, a former Deputy Prime Minister and Finance Minister of Poland, and Arnab Das, a Global Market Strategist and member of Invesco's Global Thought Leadership team, the series examines Europe's troubled past, uncertain present and possible future. The second paper in the series, The Survivability of the Euro, comprises three parts, of which this is the first. Naturally, the planned development of the series as a whole is subject to the evolution of European affairs:

- A Map for the Future of the Euro: Navigating Political Conflicts
- The Survivability of the Euro, Part I: Reform, Relevance and Robustness The Survivability of the Euro, Part II: Analysis, Analogies and Antecedents The Survivability of the Euro, Part III: The Architecture of EMU
- The Internal Politics of the EU: Protest, Populism and "Peak Europe"
 Geopolitics: Economic Giants, Political Pygmies and the Scope for a "Money
- for Muscle" Deal in the EU
- From Brexit to the Balkans: Peripheral Perspectives on the Eurozone

The euro, the EZ and the EU arguably represent a unique experiment in the annals of economics and politics. The Future of Europe series is intended to shed light on the challenges and opportunities presented by this unprecedented and ever-contentious effort to achieve integration across a continent whose history has been one of almost continuous political competition and conflict.

1. Executive summary: towards "ever-deeper" or "forever diverse" Economic and Monetary Union?

The Survivability of the Euro, the second white paper in our Future of Europe series, offers a framework for assessing efforts begun in the past decade to strengthen the euro. The paper is presented in three parts:

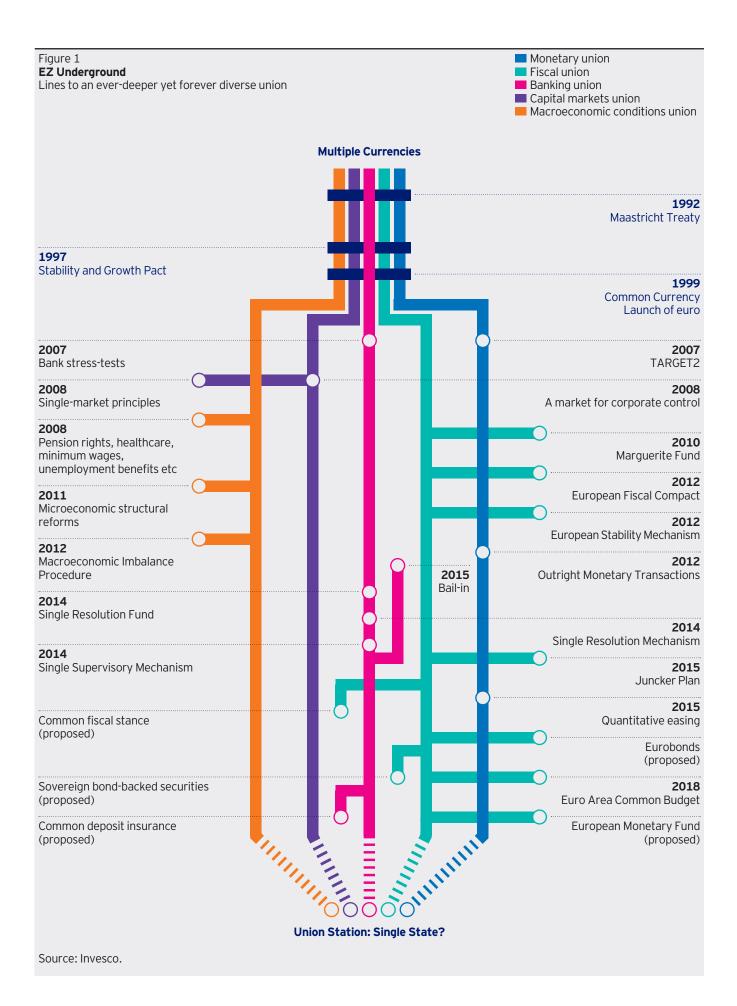
- 1. In part I, Reform, Relevance and Robustness, which we present here, we analyse the many unions that are being built or fortified to buttress Economic and Monetary Union (EMU). We assess each on its own merits and demerits and consider its contribution to the euro's viability.
- 2. In part II, Analysis, Antecedents and Analogies, we place the euro within the theory, history and current context of monetary unions.
- 3. In part III, The Architecture of EMU, we organise the myriad macroeconomic and microeconomic reforms to help assess their overall contribution to the strength and resilience of the euro.

The implications of our assessment of the euro's survivability are profound:

- The survival of the eurozone (EZ) cannot be taken for granted. If anything, it is likely to be questioned, as is the continued participation of member states in distress. The euro seems likely to continue to comprise a federal money and central bank juxtaposed with political confederation, with structural and fiscal policies that will be at most quasi-federal or even largely national.
- Potential growth rates and factor prices, including per-capita incomes and country risk premia, seem more likely to be diverse and variable than to converge, given persistently divergent economic policies. However, fully-fledged divergence is unlikely, given economic union and a single, federal monetary policy and federal central bank.
- Even so, we expect the euro to last because of the very high economic and financial costs of disintegration for all member states (and the wider world), as well as strong political commitment to the European project.

The investment implications are equally significant:

- 1. In the absence of a fiscal union, the bond market will remain riven along national lines rather than serving as a unified EZ government bond market though the "decorative" effort to establish an EZ budget is a symbolic step in the right direction.
- 2. Banking union will remain incomplete without a common fiscal backstop for deposit insurance. Capital markets union will remain handicapped without a combination of a more complete banking union, common rules of corporate governance and a common market for corporate control.
- 3. A multiplicity of bond, credit and equity markets will therefore persist some serving as pro-cyclical markets for risk-taking and others as countercyclical safe havens substantially on a national rather than cyclical or sectoral basis. Thus the euro may continue to complement but cannot supplant the dollar as a global reserve currency.
- 4. EZ equities may be better approached as a matrix of distinctive country and sector asset classes rather than as a single index of growth, value, defensive or technology sectors. Such a structured and discriminatory approach may be appropriate for index-level, passive and active stock-picking strategies rather than a top-down, beta-led approach.



Our analysis is based on the following considerations and arguments, which we explore in detail in parts I, II and III:

Exchange-rate regimes span a continuum from free floats to a single currency, via managed floats, pegs, currency boards and gold standards. Associated institutional arrangements run from political, fiscal and monetary autonomy, via degrees of integration and pooling of sovereignty, all the way to the full political, fiscal and monetary union of a single state, whether federal or unitary.

The debate on the choice of currency flexibility versus currency union conventionally hinges on the idea of an "optimal currency area" (OCA). Monetary union is judged superior if economic shock absorbers for general, sectoral or regional downturns are created thanks to (1) the constituent parts of the union forming a single market, giving mobility and flexibility to goods, services, labour and capital (economic union), and (2) risk-sharing mechanisms across regions (i.e. the various instruments of a fiscal or "transfer" union).

We see the OCA paradigm as excessively "economistic", with inadequate emphasis on the role of political economy. In fact, single states often first adopt a single currency and only then evolve towards an OCA rather than the other way around. Indeed, not all long-surviving or thriving currency unions are OCAs, fullblown fiscal federations or single states. By way of example:

- Switzerland is a single-state, multinational federal currency union that has very limited fiscal federalism yet is clearly long-lasting and thriving.
- Currency boards in fiscally and structurally flexible economies have survived for decades, despite being subject to the monetary policy of an anchor country (e.g. Hong Kong), whereas inadequate commitment can undermine the same arrangement (e.g. Argentina). The same applies to monetary unions (e.g. CFA franc) or dollarisation (e.g. Panama).
- Many long-running single-state currency unions arguably do not fully qualify as OCAs (e.g. Canada). A few single-state monetary unions have been dismantled or have experienced partial exits for political reasons in peacetime (e.g. the UK/ Ireland upon Ireland's joining the euro; Czechoslovakia), yet some survive and thrive.
- Yet successful quasi- or non-federal, multi- or transnational currency unions tend to be few and far between and relatively small. Furthermore, currency unions that are coterminous with strongly unitary or federal states, whether multinational (e.g. the UK or India) or national (e.g. Japan), tend to survive longer and absorb shocks better than multistate currency unions or fixed exchange rate systems (e.g. the gold standard or prior European monetary unions, such as Latin Monetary Union).
- US history is instructive. The United States began as a confederation, not as a political or fiscal union. Within a decade a debt crisis in one state precipitated contagion in others, threatening to destroy the new republic. The solution: political and fiscal federalism to complement the dollar; a new federal treasury assumed all the states' debt. The result: US Treasuries. We have come to call this more perfect union the United States no longer these United States.

- The EZ may never become an OCA, a federation or a single state. As a peacetime effort by disparate sovereigns to share a fiat currency and financial, economic and political stability and growth while retaining large swathes of national political, fiscal and structural autonomy, it is perhaps the most complex currency union ever created. Though capital was expected to flow from higher-productivity to lower-productivity regions within EMU, thereby replicating some aspects of an OCA, it was considered politically infeasible and unnecessary to construct the full architecture of an OCA or a single state.
- Can the euro survive, given that the EZ is not an OCA and lacks the key features of other currency unions that have withstood the tests of time and the tribulations of political and economic shocks? Our view is a qualified yes. As demonstrated during the European sovereign debt crisis, sufficient political commitment can ensure the survival even of a suboptimal currency union in the face of an existential threat - partly because the alternative would be so catastrophic.
- EZ architecture is riddled with design flaws and is arguably intrinsically crisis-prone; but fortifications, battlements and firefighting systems keep being designed and some of them constructed. Such reinforcements rest on foundations that are least common denominators acceptable to key member states. Many are decorative; others are follies; but some are structural buttresses capable of strengthening the edifice. Yet these bulwarks may not prevent or even contain crisis. With few exceptions, they are built to improve resilience or facilitate adjustment to shocks mainly at member-state (rather than at EZ) level, and this is the main source of their weakness.
- Crisis prevention and management in the EZ has become increasingly rooted in what European law describes as "strict conditionality". All the various types of aid to EZ countries in financial distress since the European sovereign debt crisis have been made contingent on the recipient member state fulfilling far-reaching conditions. These might pertain not only to fiscal consolidation but to the restructuring of public systems (e.g. pension, tax etc) and private business, as well as the acceptance of close monitoring of compliance. Our view is that much of this "strict conditionality" has not worked as it should.
- A properly functioning market in corporate control is also crucial. Restructuring of failed or failing businesses (both financial and non-financial) should proceed on the basis that the highest bidder be allowed to prevail. Insiders should be in no doubt that weak performance will result in their removal, that new brooms will be permitted to sweep clean and that legacy problems will be resolved in ways and under rules that discourage their recurrence.
- The euro's viability may be repeatedly questioned. Individual member states may well stand out as default or exit candidates. Yet it remains extremely difficult for both debtor and creditor countries to leave the euro. Debtors would very likely suffer significant capital flight, a loss of credit and financial crises. Among creditors, Germany is widely seen as the arch-opponent of meaningful EZ integration, but it has also been a major beneficiary of the euro since the onset of the global financial crisis. Furthermore, Germany would face massive appreciation of a new Deutschmark were it to abandon the project, with very grave consequences for its export-led model, as currently configured, as well as immense credit losses from its ongoing exposures to the rest of the EZ.

3. Introduction: the euro as an "eternal work in progress"

- "If all economists were laid end to end, they still would not reach a conclusion." George Bernard Shaw, 1933
- "Today every problem has several alternative solutions... and every answer raises several questions."
- John Fitzgerald Kennedy, 35th President of the United States, 1963
- "Europe shall be forged in crisis and will be the sum of the solutions adopted for those crises."
- Jean Omer Marie Gabriel Monnet, a founding father of the EU, 1978
- "Economists are people who wonder if what works in reality can also work in theory." Ronald Wilson Reagan, 40th President of the United States, 1986

Milton Friedman, doyen of monetarism, was among the first high-profile sceptics of Europe's quest for Economic and Monetary Union (EMU), warning in 1997 that "the euro has been motivated by politics, not economics". Leading neo-Keynesian James Tobin, often seen as Friedman's philosophical foil, shared this concern; Joseph Stiglitz, another of Friedman's fiercest critics, would go on to author a whole book about the euro's shortcomings, while Stiglitz's occasional sparring partner, Paul Krugman, once described the introduction of EMU as "a disastrous decision".

To provoke the doubt of one Nobel laureate may be seen as unfortunate. To attract the scorn of four, not least when they see eye to eye on so little else in economics, is no small feat.

In the event, the global financial crisis and the European sovereign debt crisis shattered the assumptions of self-regulation, competitive structural reform between member states and market-based fiscal discipline upon which the EZ had been premised. Yet, despite these disappointments, the common currency survives and has expanded to include more countries, while myriad repairs and reinforcements have been undertaken - if with mixed results and incoherently.

So what is really being done – and what might realistically be done – to safeguard the euro? In this paper we analyse the vital issue of imbalances between member states and explore the conflicts that they generate. We look at the importance of factors such as conditionality, moral hazard and regime change. We assess the competing perspectives that shape the policy preferences of key players such as the European Central Bank (ECB), whose centrality to the euro's survival was famously encapsulated in Mario Draghi's pivotal "whatever it takes" speech; France, whose vision of "l'Europe qui protege" has found renewed fervour – but little additional efficacy – under the leadership of President Emmanuel Macron; and Germany, whose national obsession with the dangers of free-riding by other member states, we believe, stands in the way of integration rather than guarding against disintegration.

Crucially, we consider the multifarious initiatives aimed at strengthening the architecture of EMU against what we call the common currency matrix.¹ This can be thought of as a continuum of currency arrangements stretching from freely floating currencies to a "common currency" ranged against non-currency institutional arrangements from full fiscal, monetary and structural autonomy all the way to the fully integrated monetary, fiscal and structural economic construct of a "single state".

We give our thoughts on which initiatives are genuinely structural, which are merely decorative and which are nothing but follies. In short: we examine where the euro stands today, how it has got here, where it is going now and where it could - not just should - go eventually.

4. Reform, relevance and robustness

4.1. Overview: the quest for reinforcement

The table below is our rendering of blueprints for fortifications to fix the EZ's design flaws. We divide these fortifications into five pillars - monetary union, fiscal union, banking union, capital markets union and macroeconomic conditions union. Each creates EZ-wide or even EU-wide mechanisms that are supposed to achieve "resilience through integration".

Figure 2

Assessing the Robustness and Relevance of the Many New Unions Underpinning Economic and Monetary Union

Monetary union	Structural	Decorative	Folly
	 TARGET2 Quantitative easing 	- Outright Monetary Transactions	- n/a
Fiscal union	Structural	Decorative	Folly
	 European Stability Mechanism Strict conditionality European Monetary Fund Common Fiscal Stance Eurobonds Sovereign bond-backed securities 	 Euro Area Common Budget Juncker Plan Marguerite Fund 	- European Fiscal Compact
Banking union	Structural	Decorative	Folly
	 Single Supervisory Mechanism Single Resolution Mechanism Bank stress-tests Common deposit insurance 	- Single Resolution Fund	- Bail-in
Capital markets union	Structural	Decorative	Folly
	- A market for corporate control	 Single-market principles 	- n/a
Macroeconomic conditions union	Structural	Decorative	Folly
	- Stability and Growth Pact preventive arm	 Microeconomic reforms Macroeconomic Imbalance Procedure Country-specific recommendations Pension rights, healthcare, minimum wages, unemployment benefits etc 	- n/a

Source: Invesco. Note: Proposed measures appear in italics.

We rank the various innovations and initiatives in three levels: structural, decorative and folly. This preserves an established trope – as illustrated, to take just two examples, by Jacques Delors' role as "draughtsman"² and William Hague's condemnation of "a burning building with no exits"³ – of framing Europe's journey from common currency to federation in architectural terms.

We classify a development as structural if we deem it the policymaking equivalent of a steel joist or, in cases where the effect is intended to be only temporary, a wooden prop. We classify a development as decorative if we consider it the policymaking equivalent of gold leaf on a Rococo balcony - impressive at first glance but in reality merely ornamental. We classify a development as folly if we think it is the equivalent of a spiral staircase to nowhere or, more alarmingly, a feature that tends to undermine rather than enhance the stability of the whole structure - such as the removal of a "carrying" pillar in order to improve the symmetrical appearance of a lower floor.

A difficulty in this exercise lies in the fact that the architecture of EMU has become labyrinthine, even Byzantine - albeit somewhat less easy on the eye. Indeed, Kennedy's remark that "every problem has several alternative solutions... and every answer raises several questions" echoes through the architecture of EMU, for these multiple developments - all ostensibly geared towards furthering EMU - sometimes arguably add considerably to the stability of the structure, sometimes add very little and sometimes may even subtract from its durability.

In making our distinctions - that is, in deciding whether an innovation or initiative is structural, decorative or folly - we therefore keep in mind the enormous distance between survivability and optimality. A system that reels from one shock to another, staggering through but managing to do so only at significant cost, is clearly far from optimal, as is one that seems to work well at the best of times but whose viability or integrity is questioned repeatedly from one shock to the next. The appetite for mere survival is liable to wear thin over time as crises and cycles come and go; and if parliaments or electorates tire sufficiently of such a scenario then the ability even to survive may be questioned by firms, by households or in financial markets, with such doubts themselves maybe eroding survivability. We place most emphasis on the initiatives and innovations that we think are relevant and robust enough to help deliver what is needed: an EZ that is more resilient and able to withstand future shocks.

Here we consider the key component reforms that are being created or strengthened to support EMU, assessing each on its own merits and demerits. In The Survivability of the Euro, Part III: The Architecture of EMU we organise our overall assessment of a far wider set of institutional innovations by classification - structural, decorative and folly - so as to highlight at a glance whether the impact of reform is genuinely positive, practically non-existent or worryingly negative.

4.2. Monetary union

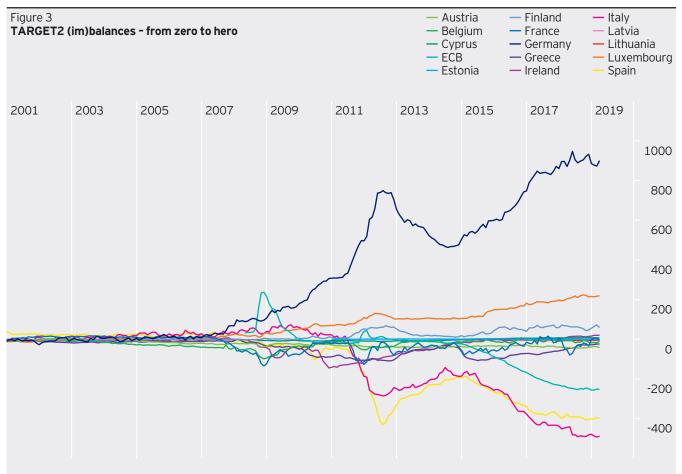
Monetary union	Structural	Decorative	Folly
	TARGET2Quantitative easing	 Outright Monetary Transactions 	- n/a

The internal plumbing of EMU arguably represents the most important structural element of EZ architecture. **TARGET2**⁴ is a mechanism of the payments system by which central banks can generate and accumulate credit and debit balances with each other. Interestingly, this vital structural pillar of EMU is not a reform but part of its normal operation. It helps hold the euro together, and exiting it would be highly contentious should the euro ever be undone.

Similarly, the potential capacity for **quantitative easing** (QE) was implicit in the creation of the ECB, even though the predominant ideology at the time was generally hostile to its use. Like TARGET2, QE has provided a substantive bridge across a shark-infested creek while other potential solutions are conceived, negotiated and implemented. Its impact is still fiercely debated, with Germany remaining particularly sceptical.

We regard both TARGET2 and QE as vital foundations of EMU. Crucially, however, neither can strictly be regarded as a reform. We therefore discuss them in much more detail in The Survivability of the Euro, Part III: The Architecture of EMU.

Outright Monetary Transactions (OMT), the programme that followed Draghi's "whatever it takes" speech, was a precursor of QE. It is still with us today, but it has never been used. If activated it would allow the ECB to buy EZ countries' short-term bonds through the secondary market and so temper the market interest rates faced by member states subject to speculation that they could leave the euro - thereby restoring the "singleness of monetary policy", to use Draghi's words once again.



Source: ECB; Euro Crisis Monitor, Institute of Empirical Economic Research, Osnabrück University.

Whether to classify OMT as structural or decorative is a challenge. Folly can be ruled out, since OMT has clearly had the desired effect - at least on market psychology. Of potentially unlimited scale yet described by Paul Krugman as "a bluff", it has successfully helped to calm markets through mere threat alone - a successful instance of what US Treasury Secretary Hank Paulson characterised as a bazooka so powerful that it would not have to be used.⁵

The genius of Draghi's conditional formulation of OMT may well give it a joint decorative and structural character: OMT would require a country to enter into a programme with specific macroeconomic conditionality in the first place. The resources in the European Stability Mechanism (ESM - see section 2.3) are necessarily finite, designed as they are to prevent moral hazard and induce adjustment by a member state in distress; yet if a country whose needs would very likely exceed the resources of the ESM were to enter into a programme - we might take Italy as an example - then OMT could be triggered, obviating the impact of the inadequacy of ESM resources. Thus, pending resort to an ESM programme, there would be market pressure through bond yields, asset prices and the entire national economy; and a lot of this pressure - especially with regard to government bond yields - would alleviate once a country entered into a programme.

So OMT may well suffice as a commitment device, as long as a government would rather enter a programme than risk or trigger exit. To be credible, of course, OMT must become and remain an institutional commitment of the ECB rather than a Draghi brainchild that may not outlast his term at the helm, which is due to end on All Hallows' Eve (Halloween) 2019...

For now, then, we locate OMT at the structural end of decorative. We reserve final judgment until we can assess the ECB's longer-term commitment to it and its practical impact in operation – if we are ever to witness it.

4.3. Fiscal union

Fiscal union	Structural	Decorative	Folly
	 European Stability Mechanism Strict conditionality European Monetary Fund Common Fiscal Stance Eurobonds Sovereign bond-backed securities 	 Euro Area Common Budget Juncker Plan Marguerite Fund 	- European Fiscal Compact
Note: Proposed measures appear in italics.			

Fiscal union in the EZ can be viewed as a potentially powerful combination of the extant and the possible. Along with banking union, which we deal with next, it would offer the most structurally sound aspect of EMU.

Key to the overall process of EMU evolution is the need to create other forms of backstops while building some degree of fiscal capacity. The most significant of the numerous measures introduced in a bid to address these issues during the past decade is the **European Stability Mechanism** (ESM), a Luxembourg-based "permanent firewall" with a lending capacity of €500 billion.

Intended to provide loans "to safeguard the financial stability of the euro area as a whole and of its member states", the ESM is a paragon of the **strict conditionality** that has come to dominate crisis prevention/management in Europe. Each of the six instruments in its "lending toolkit" - of which just two have been used to date - can be deployed only if a member state meets and/or agrees to specific requirements. Countries that have received loans, for example, have had to implement macroeconomic reform programmes prepared by the European Commission, the ECB and, in some cases, the IMF. Critics (and even some enthusiasts!) have argued that the emergence of an "aid for adjustment" model has taken the EU farther from its own ideals and closer to those of the IMF.

Under consideration now is the establishment of a **European Monetary Fund** (EMF), which would replace the ESM and draw even more obvious comparisons with the IMF. As ever, the devil is in the detail. In this instance loans would be provided "to safeguard the financial stability of the EZ or of its members". Replacing "or" with "and" here is a subtle yet significant reworking of the original text, implying that the EMF could be activated in the event of an idiosyncratic crisis that threatens a single member state rather than the EZ in its entirety.

Other fiscal measures that have been proposed - but not implemented - include adopting a **common fiscal stance**, a vital purpose of which would be to split the macro stabilisation functions of fiscal policy from its transfer functions - that is, to separate dealing with symmetric crises from dealing with asymmetric crises; **Eurobonds**, which would have obvious Hamiltonian parallels with the introduction of US Treasuries; and **sovereign bond-backed securities**, a form of centralised debt obligation that the European Commission believes could help to break the "doom loop" between banks and sovereigns. All can be regarded as structural in nature.

The same cannot be said of some of the fiscal initiatives that have actually been adopted, such as the **Euro Area Common Budget**, the **Juncker Plan** and the **Marguerite Fund**, all of which may be worthy and well-intentioned but are conspicuously inadequate in their scale and scope. Meanwhile, the **European Fiscal Compact**, an intergovernmental treaty that obliges signatories not to have deficits over the business cycle, represents a clear case of institutional regression – one that has been all but ignored beyond Germany, where a 2014 Federal Constitutional Court ruling judged it "compatible with Germany's constitution" and claimed that it "strengthens credibility and creates confidence".⁶

4.4. Banking union

Banking union	Structural	Decorative	Folly
	 Single Supervisory Mechanism Single Resolution Mechanism Bank stress-tests Common deposit insurance 	- Single Resolution Fund	- Bail-in
Note: Proposed measures appear in italics.			

4.4.1. Justification

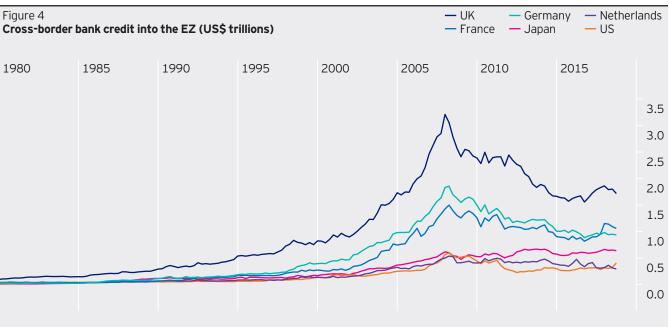
Along with capital markets union, which we discuss in section 2.5, banking union is central to EZ plans for financial integration. It comprises a host of issues - many of which we deal with below and also explore in more depth in The Survivability of the Euro, Part III: The Architecture of EMU - but all boil down to depositor confidence in a given bank or in a given banking system of a member state and, if and when there are truly eurozonal banks, of the EZ as a whole. The EZ will need universal deposit insurance, which in turn translates into fiscal and political union in the final analysis, if it is to have a union-wide banking system like most other currency unions.

There are methods and mechanisms for short-circuiting such differences and preventing or even breaking the so-called doom loop.⁷ However, short of a eurozonal fiscal backstop for the banking sector – as exists in the US, the UK, Japan and many other monetary unions that are coterminous with states – these would all take the shape of a coordinated, transnational crisis-management effort rather than the more direct, automatic approach of these other currency unions.

It is this direct link between the financial fragility of highly leveraged, systemic entities like banks - which continue to hold the bulk of money and the wider monetary aggregates in a monetary union - and the stability of the state that makes it possible to avoid the collapse of banks leading to runs on banking systems, currencies and a country as a whole. It is also this link that allows the US Federal Deposit Insurance Corporation (FDIC), for example, to close an insolvent bank over a weekend and move the deposits, other liabilities and assets with minimal risk of that insolvency triggering a wider panic.

The FDIC is funded from the insurance premiums of US deposit-taking banks in the first instance, but ultimately it has a call on the resources and borrowing capacity of the US Treasury. This link was amply and repeatedly demonstrated during the global financial crisis, when the US sharply raised deposit insurance ceilings in response to individual depositors spreading their risk exposure to specific banks across the entire system when the markets precipitated a wholesale run on banks. While this helped stabilise banks, further official US backstops were required to prevent a cascade of runs across the US and global financial systems – for a cumulative US\$14 trillion of contingent US Treasury guarantees, by IMF calculations.

Similarly, in the UK, when the run on Northern Rock started to precipitate a run on other banks and depositor queues began forming, Prime Minister Gordon Brown gave a verbal guarantee that all UK bank deposits would be insured by HM Treasury. Few could have answered whether this assurance had the force of law, much less whether the UK had that much borrowing capacity, but the trick worked to restore confidence – not unlike Draghi's commitment to do "whatever it takes" to save the euro.



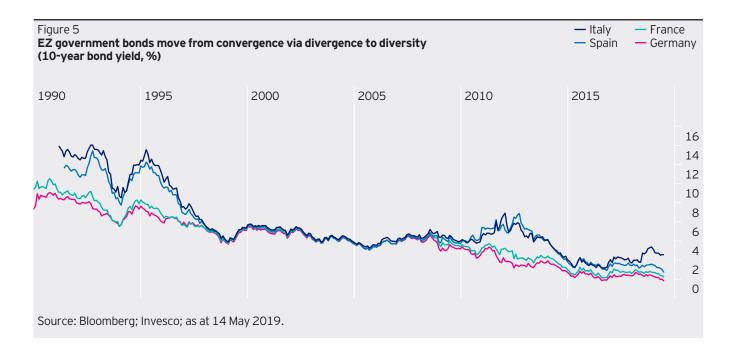
Source: BIS. Note: Cross-border flows by country of origin, excluding said country.

As long as distinctions prevail between government bonds of different countries, there will be differences in the cost and extent of deposit insurance that can be credibly provided ex ante and in extremis – until and unless there is a common, credible cover for deposits. The direct consequences would be as follows: (1) persistent differentiation between the funding costs of banks of different countries; (2) differentiated costs of bank credit between countries; and (3) a potential recurrence of the doom loop between banks and sovereigns in the event of crisis.

However, substantial cross-border financing of banks across the EZ - whether via capital markets, interbank lending or deposits - would help significantly by bringing about far more diversification and less concentration risk on both sides of bank balance sheets. Asset quality risks would be reduced, as would the risk of withdrawals or runs on deposits, interbank funding or equity. In addition, direct capital-markets-based financing of businesses, households and even sovereigns would assist portfolio diversification. Therein lies the crucial link between banking union and capital markets union.

The potential for contagion from one bank to another, from a bank to a sovereign or vice versa is by now clear, as all occurred during the first EZ crisis; but in future such runs could conceivably metastasise into a more pronounced flight out of the EZ. On the face of it, this would imply severe risks of EZ exits or disintegration, and this represents one of the major avenues for resumed questions about the viability of the euro.

Though such a scenario is quite possible in the event of a major idiosyncratic, countryspecific shock or contagion, existing firefighting mechanisms would be capable of stopping the rot if small countries were hit. But if such a crisis were to strike a major country in the Periphery or even the Semi-Core - say, Italy or even France - such a shock might breed the mother of all runs. The markets or households might fear that neither the sovereign itself nor the ESM would have adequate resources to stop the run; or that the ECB could not be called in to save the day (say, because OMT would require a programme to which the country concerned would be unwilling to commit).



4.4.2. Existing and proposed institutions

Any in-depth discussion of banking union in the EZ might usefully begin with the **Single Supervisory Mechanism** (SSM), the legislative and institutional framework that grants the ECB ultimate licensing authority over all banks in member states. One of the major aims of the SSM when it was implemented in 2014 was to constrain what Gordon Brown referred to as "financial protectionism"; another was to prevent different levels of "regulatory forbearance" between countries. In the past, on supposedly prudential grounds, national supervisors could in effect forbid their domestic banks from facilitating cross-border flows of capital and liquidity; today, at least in theory, they can no longer do so.

In the wake of the global financial crisis, for example, many regulators fiercely protected their own interests by closing financial borders to outflows by banking groups that sought to transfer funds to countries that most needed them. Perhaps the most famous illustration of this non-existence of banking union in extremis came when the German regulator, BaFin, refused to let Italy's UniCredit repatriate money from its German partner, HVB, leaving the former starved of liquidity and the latter awash with it.⁸ One would expect such behaviour by a national supervisor to be much harder now that the SSM exists, and this was one of the key motivations for the countries of the south to sign up to the initiative.

The problem is that the quality of inputs determines the quality of outputs. The SSM will not function as needed if national supervisory bodies are less than accurate – or, worse still, less than scrupulous – in what they report to the ECB. There is some evidence that progress is being made, with the SSM directly supervising institutions when it perceives such a need, but more is required before the SSM can conclusively be judged a success that has passed the test of time.

Closely tied to the SSM, the **Single Resolution Mechanism** (SRM) is the process by which ECB-supervised entities are "resolved" in the event of being identified as failed or failing. Overseen by the Single Resolution Board, it has been used just once to date, when the ECB sold Spain's struggling Banco Popular for €1 to Banco Santander - which had sufficiently liquidity to save it - in a procedure that the European Commission duly hailed as "effective and rapid action" but whose legal repercussions, not least in relation to disgruntled shareholders, are still to become clear.

There are two more banking union innovations and initiatives that we deem structural. The first, **bank stress-tests**, represent an obvious and existing complement to the SSM and the SRM. The second, **common deposit insurance**, has been described by the ECB as "the last part of banking union that is still missing". Germany in particular has made plain its opposition to EZ-wide common deposit insurance, claiming that some countries would be less inclined to police their banks properly if they could be confident that a pooled system could bail out their depositors; yet this fixation on free-riding may discourage integration and even induce rather than prevent disintegration. Germany itself has been the main beneficiary of the euro since the onset of the global financial crisis; the massive appreciation of a new Deutschmark would mean that the current export-led model would be unsustainable if the euro were to disintegrate; and the process of disintegration would almost certainly lead to huge recession, as well as major geopolitical destabilisation. The underlying reality is domestic opposition to pooling Germany's hard-won reputation for fiscal and more general prudence, rules-based behaviour and overall creditworthiness, which many German people and politicians fear would be diluted by deeper union.

Yet such a stance ignores an alternative interpretation, which is that Italy, say, might be less susceptible to the siren call of anti-European politics if ordinary voters could feel more secure about the safety of their bank deposits. Furthermore, once it has proven its effectiveness, the SSM will dispose of this objection. We believe that common deposit insurance would not only help cement banking union but, more widely, would also serve as a powerful counterpart to a shared fiscal backstop: mutualisation would bring further strength and certainty to the euro, even in the absence of a common European fiscal stance or Eurobonds.

Linked to the SRM, the hitherto unused **Single Resolution Fund** (SRF) strikes us as a decorative measure. The SRF is available to finance the restructuring of ECBsupervised entities in a way that aims to minimise the cost to taxpayers and the real economy. The problem here is the small size of this particular "bazooka" (to return to Hank Paulson's term), which is currently only around €25 billion and will reach a plateau of €60 billion in 2023.

The **bail-in** system, whose use in tackling the banking crisis in Cyprus set a significant precedent, inspires even less confidence. Bail-in allows policymakers to sidestep the political issues associated with taxpayer-funded bailouts and should also guard against the moral hazard of institutions operating in the belief that they are "too big to fail"; yet it could pose serious problems from the perspective of the markets. Its approaching use might trigger a run by short-term creditors eager to avoid losses, further aggravating an institution's liquidity problems,⁹ while bondholders are likely to demand more yield for lending to troubled institutions, with higher interest rates in turn affecting solvency and equities. Unfortunately, only a full-blown banking crisis - at least at a national level, if not at a European level - could properly stress-test such a system, and it may well be too late to take remedial action once this has happened.

4.5. Capital markets union

Capital markets union	Structural	Decorative	Folly
	 A market for corporate control 	 Single-market principles 	- n/a

The basic idea behind capital markets union is that it should serve as a substitute for an inadequate or incomplete banking union. As such, it is better viewed as a prop than as a pillar. The principal aim, in our view, should be to create **a market for corporate control** - one that is EZ-wide (or even EU-wide) rather than merely national.

Truly effective capital markets union should reduce the amount of debt on banks' balance sheets and encourage a much more market-and-equity-based corporate financing model. It should further fracture the nexus between banks and national or regional politics. It should facilitate the cross-border involvement of activist investors. As a result, ideally, it should deliver more resilience, more scope for adjustment and more growth. By extension, it should provide more – or better – financing in the event of a shock; and this financing should not necessarily fund the very same people, practices and systems as in the past.

The latter point is significant, because it is not easy to gauge the success to date of attempts to broaden and deepen the EZ's capital markets. There are signs of large corporates shifting their balances from bank loans to bonds. However there is as yet no obvious evidence of the emergence of a market for corporate control in the shape of a noticeable increase in equity finance, or significant increase in cross-border mergers and acquisitions, whether friendly or hostile, to boost Eurozonal corporate or financial sector profitability, productivity or general performance.

Interestingly, many of the earliest measures implemented with capital markets union in mind were particularly designed to enhance London's access to the continent and vice versa. In the era of Brexit, of course, London's status as the financial capital of the EZ is altogether less clear. Yet nobody is forbidden from buying equity, and it remains feasible that corporate control could be exercised from outside the EU.

It is also important to note what is not capital markets union. Many of the current efforts described as being geared towards capital markets union are in reality cut from a different cloth: they are in fact merely extensions of **single-market principles** around competition, consumer protection, regulatory concerns, labour-market flexibility and other engines of harmonisation with which European policymakers are comfortable and familiar.

Such uniformity is useful and may increase savers' confidence in capital markets and therefore the funds available to them. But it amounts to tinkering at the margins and does not meaningfully further the euro's journey along the common currency continuum.

4.6. Macroeconomic conditions union

Macroeconomic conditions union	Structural	Decorative	Folly
	 Stability and Growth Pact preventive arm 	 Microeconomic reforms Macroeconomic Imbalance Procedure Country-specific recommendations Pension rights, healthcare, minimum wages, unemployment benefits etc 	- n/a

Microeconomic reforms¹⁰ are a potentially important component of wider efforts to reduce the inequalities and imbalances that have come to characterise the EZ. At present the most structural means of encouraging such reforms is the **Stability and Growth Pact's preventive arm**, which uses a range of objectives, benchmarks, programmes and "convergence procedures" to try to "set parameters for member states' fiscal planning and policies during normal economic times".

The preventive arm requires each EU country, whether an EZ member state or not, to keep its government deficit within 3% of GDP; to keep (or recover) its government debt within the Maastricht Treaty's limit of 60% of GDP; and to reach or at least move towards a medium-term budgetary objective (MTO), which is usually updated every three years and aims to take into account the extent to which economic cyclical conditions are favourable.

Figure 6

Diversity in public finance: gross general government debt, deficits

Eurostat, Government Deficit/Surplus, Debt & Associated Data, General Government, Government Consolidated **Cross Debt, percent of GDP**

Eurostat, Government Deficit/Surplus, Debt & Associated Data, General Government, Net Lending (+)/Net Borrowing (-), Percent of GDP



Source: Eurostat; Macrobond; Invesco; as at May 2019.

A Significant Deviation Procedure is initiated when a country is judged to be clearly falling short of these expectations. This provides, in the European Commission's own words, "the opportunity to return to a more prudent fiscal policy". Beyond this lies the Excessive Deficit Procedure, part of the SGP's long-established corrective arm, which can result in fines if a country remains unable or unwilling to address its problems although to date no such penalty has ever been imposed.

In tandem, the Macroeconomic Imbalance Procedure (MIP) aims to "identify, prevent and address the emergence of potentially harmful imbalances that could adversely affect economic stability in a particular EU country, the euro area or the EU as a whole". Introduced in 2011 as part of the Six-Pack directive, which built on the SGP, the process includes a "scoreboard" of 14 headline indicators that gauge various economic factors - including net international investment position, debt in the public and private sectors, unemployment rates, exports and house prices - against set thresholds.

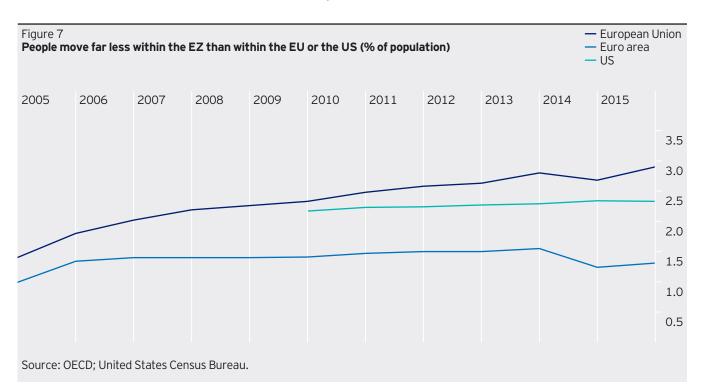
Like the SGP, the MIP bears many of the hallmarks of the conditionality that now increasingly defines EZ crisis prevention and management. It underlines the belief among some member states that coercion and enforcement must be regarded as crucial to stability. However, while the basic notion of monitoring individual nations and advising them of their shortcomings appears sound, there are reasons for suspecting that the MIP does not function as it should and is therefore largely decorative in nature.

First, there is nothing clearly binding about it. The scoreboard thresholds are not treated as legal limits and instead serve only as triggers for a review, which is in turn likely to shape country-specific recommendations (CSRs). Even a country that is deemed to have excessive imbalances and which is consequently made the subject of a "corrective action plan" faces nothing worse than a fine in the event of non-compliance; and to date, again, no such penalty has ever been imposed.¹¹

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 Italy France - Spain - Germany Second, there is evidence that even nations that grasp the nettle should not expect an immediate transformation in their fortunes. Spain offers a salutary illustration of how a reputation is easy to lose but tough to regain: despite intensive efforts to fix its microeconomic problems, it is still struggling to restore its credibility and attract capital – as can be seen by its TARGET2 position.¹²

Third, the imbalances that trigger CSRs are almost invariably of the sort associated with nations that have liabilities, while the imbalances associated with nations that have conspicuous surpluses very rarely attract policy advice. Such basic asymmetry means that there are plenty of ideas about how Italy might reduce its deficit but precious few about how Germany might reduce its surplus. This is indicative of a system that has been cobbled together ad hoc in reaction to crises.



Attempts to encourage convergence on issues such as **pension rights**, **healthcare**, **minimum wages** and **unemployment benefits** have proven similarly ineffectual, fuelling claims that creditor nations are ever more determined to dictate unpalatable terms to their debtor counterparts as part of an IMF-style "aid for adjustment" policy agenda. Such initiatives and innovations represent a key part of the EZ's roadmap to "single state", but their present implementation is divisive, dysfunctional, inequitable and inadequate. In the end it is not a question of striving for the unnecessary or the unattainable: it is a question of applying functional, broadly acceptable policies that rein in divergence by encouraging similarly flexible (or inflexible) labour markets and labour mobility.

Figure 8

Assessing the Robustness and Relevance of the Many New Unions Underpinning Economic and Monetary Union

Monetary union	Structural	Decorative	Folly
	 TARGET2 Quantitative easing 	 Outright Monetary Transactions 	- n/a
Fiscal union	Structural	Decorative	Folly
	 European Stability Mechanism Strict conditionality European Monetary Fund Common Fiscal Stance Eurobonds Sovereign bond-backed securities 	 Euro Area Common Budget Juncker Plan Marguerite Fund 	- European Fiscal Compact
Banking union	Structural	Decorative	Folly
	 Single Supervisory Mechanism Single Resolution Mechanism Bank stress-tests Common deposit insurance 	- Single Resolution Fund	- Bail-in
Capital markets union	Structural	Decorative	Folly
	- A market for corporate control	- Single-market principles	- n/a
Macroeconomic conditions union	Structural	Decorative	Folly
	- Stability and Growth Pact preventive arm	 Microeconomic reforms Macroeconomic Imbalance Procedure Country-specific recommendations Pension rights, healthcare, minimum wages, unemployment benefits etc 	- n/a

Source: Invesco. Note: Proposed measures appear in italics.

Where might the euro stand in our common currency matrix today? It has achieved much - if not all - in terms of monetary union on the currency continuum but is arguably only close to the midpoint between autonomy and "single state"; more concerningly, it is moving neither very quickly nor very far. In this chapter we briefly reflect on the chances of its journey accelerating and/or assuming a more positive direction of travel.

Revisiting our single snapshot of all the innovations and initiatives discussed in this paper clearly shows that most can be categorised as **structural**. In other words, they can be thought of as important – and even conducive – to the euro's resilience and survival. This being the case, why does the EZ's progress towards "single state" remain agonising?

One explanation lies in the fact that many of the structural components of EZ architecture that are already in place do not function as well as they should or have yet to pass the test of time. The European Stability Mechanism, the Single Supervisory Mechanism and the Single Resolution Mechanism are among the measures whose potential remains unproven. This is why some are still better regarded as props rather than as pillars.

In addition, many of the innovations and initiatives that we deem structurally needed have still to be put into practice. These include the common fiscal stance, Eurobonds and common deposit insurance. In many cases their introduction hinges on settling familiar disputes between creditor and debtor countries; on a die-hard disinclination to acknowledge that "legacy problems" would become secondary were it possible to ensure that the same mistakes cannot occur again; and, relatedly, on a refusal by some member states to accept that where the euro goes from here depends less on the past than it does on the present and, above all, the future.

It is in these circumstances that **decorative** measures are able to endure. This is especially the case within what we have called the macroeconomic conditions union and, to a lesser extent, the capital markets union. Decorative policies do very little - if anything - to move the EZ nearer to "single state" and instead typify the sort of crisis-forged responses that the clamour for answers has generated during the past decade. It is essential to recognise that merely tinkering around the edges, however well-intentioned it might be, plays no meaningful part in resolving the systemic and structural problems of a common currency.

Finally, few existing or proposed components of EMU architecture qualify as **folly**; yet this does not make them any less dangerous. The European Fiscal Compact stands as a monument to ineffectiveness and inertia, and it would actually send the euro's journey into reverse were it not for the comforting reality that only Germany has paid the slightest attention to it. The bail-in system, at least under certain conditions, could precipitate and worsen banking crises rather than help to deal with them. Given the challenges that threaten it, the EZ can ill afford further "solutions" of this ilk.

Branching out: unravelling the euro's journey towards "single state"

As we have seen, the euro's journey from "common currency" to "single state" has long since ceased to be linear. Instead it has descended into the economic and political equivalent of a map of the London Underground. Here, building on our analysis of the numerous innovations and initiatives intended to improve the euro's architecture, we again represent this plight visually.

We assume that all five forms of "union" that we have discussed - monetary, fiscal, banking, capital markets and macroeconomic conditions - can trace their roots to the formative treaties, agreements and legislation underpinning the EU and the EZ. Over time, as shown, each union has witnessed numerous developments - not all of which have kept the euro on track for the desired destination of "single state".

The picture is in reality considerably more complicated than this - too complicated, indeed, to depict in all its complexity. This being the case, for the sake of simplicity, we represent established structural measures as stations on the direct lines between "common currency" and "single state"; we represent proposed structural measures as deviations from these lines but ones that still take the euro forward towards the right; we represent decorative measures as branch lines that bring unnecessary diversions off to the sides; and we represent follies as backward-bending loops (please see Figure 1 on page 04).

6. Conclusions and investment implications

Drawing inspiration from Shaw's quip about economists, what would happen if we were to take all of the initiatives and innovations surveyed in this paper and lay them end to end? Would the story of the euro reach a conclusion? Would Europe's long march along the common currency continuum at last be complete?

As we have seen, many of these measures are likely to move us no closer to a genuinely stable and "federal" currency. Others might provide only the most incremental steps in the desired direction. Yet some could bring real progress.

At this stage it is not easy to say how far the genuinely promising measures might take us or, even more importantly, how far is likely to be far enough. Countries like France and Belgium retain their enthusiasm for wide-ranging economic government, and the history of currency unions seems to support their view that nothing short of a federal approach ensures long-term sustainability; meanwhile, Germany and its allies, with their focus on avoiding contingent fiscal liabilities, remain reluctant to travel the entire continuum. It might just be that, like Shaw's economists, the architects of EMU will never actually arrive at a definitive resolution; and yet it would be foolish - not to mention extremely dangerous - to suppose that obstinacy, confusion and a willingness to muddle through can serve as the EZ's guiding principles indefinitely.

As we noted in our introduction, it was Jean Monnet, one of the EU's founding fathers, who famously predicted: "Europe will be forged in crises and will be the sum of the solutions adopted for those crises." His words, written in 1978, have proven prophetic. The EZ's inadequate underpinning architecture has already been reinforced in response to both the global financial crisis and the European sovereign debt crisis, and now the vital task is to add further strength in anticipation of crises yet to come. Unfortunately, the "sum of the solutions" at present is less a proactive blueprint for the future and more a reactive patchwork quilt of design-by-committee compromises.

By and large, the structural initiatives and innovations that we have identified here ought to be defined by two goals. First, they should instil resilience to shocks - whether asymmetric or systemic. Second, they should encourage sustainable convergence based on real economic progress - rather than the illusory, credit-based kind that has so obviously been reversed over the decade since the collapse of a credit boom, precipitating sharp adjustment, deep recession and destabilising austerity.

Surveying the theory of monetary unions and OCAs, the real-world experience of successful, surviving and failed monetary unions and the specific institutional and political constraints and solutions in the EZ,¹³ we come to a few key conclusions about the survivability of the euro and attendant investment impact:

- 1. Monetary unions need not be full "optimal currency areas" or fiscal federations to survive, though it clearly would help to move in this direction. Despite its intrinsic design flaws and probably immutable political limits, the euro is therefore capable of surviving given the political will to deal with crises.
- 2. The "optimal" institutional architecture for a multi-state, multinational, large and complex monetary union fiscal and political federalism is very likely beyond the political reach of the EZ. The euro's viability and the continued participation of member states under pressure are therefore likely to come into question in downturns and crises, perhaps repeatedly.
- 3. The costs of leaving the euro outweigh the benefits for both creditor and debtor states, and such a calculus is likely to be entrenched over time. This is confirmed by the level and trajectory of TARGET2 imbalances; the development of firefighting mechanisms such as the ESM; the building of various aspects of monetary, fiscal, financial and macroeconomic unions; and the ECB's commitment to OMT which provides insulation against speculative attack, even if it does not alter the underlying economic fundamentals of countries in crisis.
- 4. The domestic political logic in creditor and debtor states is analogous. Creditor states cannot bring themselves to concede to transfers, insurance or bailouts without extreme conditionality because of internal fear of moral hazard and dilution of the quality of their own liabilities and credibility. Equally, in an overall EZ environment mainly tailored to the preferences of creditors, debtor states cannot shoulder the full burden of adjustment, austerity and reform without risking their own domestic political legitimacy.

- 5. Compromises must be found in due course, not least because it is a generally observed fact that creditors and debtors tend to end up sharing the burden of their mutual excesses. In the meantime, however, central aspects of both monetary union and fiscal union especially TARGET2 balances and the ESM/EMF construct essentially seek to stabilise an excessive debt problem with additional/new debt or contingent liabilities instead of the transfers, defaults and debt workout mechanisms that serve as burden-sharing devices within most other monetary unions. It is true that this approach has worked during the EZ crisis and probably can continue to work as long as the political will to maintain it persists, but it must also be recognised that this is more like the state of play between creditors and debtors in different jurisdictions than between the constituents of a union.
- 6. All the foregoing strongly suggests that the EZ will remain in a halfway house, comprising only partially pooled sovereignty with federal, quasi-federal and national arrangements coexisting unhappily:
 - a. a federal money and central bank, which can and already does dominate the sub-federal financial and real economies of member states;
 - b. quasi-federal rules and institutions of economic management, which can strongly influence but cannot be guaranteed to dominate the policy choices of member states;
 - c. continued national authority within limits over fiscal policy and structural economic issues.

Future crises may well move the needle towards deeper integration – such crises have generally led to more Europe, not less, in the past – but only the high risk of further existential threats can be taken for granted, not their successful resolution. It will remain conceivable that a sufficiently profound shock could precipitate the political will to break the union, despite all the evident downside risks and enormous costs that this would entail.

The economic and financial market implications are at once clear, shocking and profound:

- Economic convergence among EZ constituents is far from guaranteed. This implies that EZ trend growth will be lower than if there were a fully functional currency union promoting rapid "catch-up" for its poorer members: imbalances between regions will be limited by home bias, spurred by doubts among private economic agents that claims on other countries are the same as claims on the home country. EZ member states will maintain a diversity of economic performance - of limited, variable, reversible convergence.
- 2. The EZ is poised to remain a substantial surplus region/capital exporter for the foreseeable future (to the extent that borders in the rest of the world remain largely open for trade and investment). This is because high-savings countries in the Core will continue to shift their investment from the Periphery of the EZ to the rest of the world. Moreover, the Periphery will continue to save more than it invests in order to reduce its debt burden, in part to repay the Core. Overall, the EZ current account has shifted from balance to surplus, with almost every country moving into surplus. In effect, the EZ is saying to the world that it judges risk-adjusted returns in the rest of the world to exceed those inside the EZ.
- 3. This very diversity implies that the euro cannot compete with the dollar as a global reserve currency. This is because there are very few sources of reserve assets that are sizeable, deep and liquid essentially Bunds only.¹⁴ This is not to say that the euro cannot continue to be a reserve currency and offer reserve assets to the world, but these are issues that reserve managers and large private institutional investors need to factor into their asset allocation strategies.
- 4. That said, this structural diversity within a single currency area with a single monetary policy is a unique combination in a world composed of other monetary unions that are essentially complete. Whereas most other large economies offer sovereign debt with yields driven by growth, inflation and policy, the EZ will continue to offer a diversity of relatively sizeable, liquid sovereign credit markets countercyclical reserve assets like Bunds and pro-cyclical credit assets like BTPs, as well intermediates like OATs with characteristics of both all of them, uniquely among credit assets, with a role in the ECB's monetary policy toolkit, limiting their credit risk (albeit without eliminating potential sovereign credit or redenomination risks).
- 5. EZ equities may be better approached as a matrix of distinctive country and sector asset classes rather than as a single index of growth, value, defensive or technology sectors. Such a structured and discriminatory approach may be appropriate for index-level, passive and active stock-picking strategies rather than a top-down, beta-led approach.

7. References and suggested further reading

References

- ¹ Our concept of a common currency matrix comprising a currency continuum and an institutional spectrum is discussed in depth in The Survivability of the Euro, Part II: Analysis, Analogies and Antecedents.
- ² See, for example, Architects of the Euro: Intellectuals of the Making of European Monetary Union (2016).
- ³ Hague first made this remark in 1998, when he was leader of the UK's Conservative Party. He revived it in 2011, when he was Foreign Secretary, adding that the euro would "be written about for centuries as a kind of historical monument to collective folly".
- ⁴ TARGET is an acronym for Trans-European Realtime Gross Settlement Express Transfer system. TARGET2 was introduced in November 2007, replacing the original TARGET system of largevalue central bank payments.
- ⁵ Whereas Draghi's has remained unused, Paulson had to lock and load his bazooka - which still proved inadequate for the task at hand. TARP was authorised to spend up to US\$700 billion less than 3% of taxpayers' total bailout exposure, which the IMF calculated at US\$14 trillion.
- ⁶ Notwithstanding Germany's enthusiasm, the European Fiscal Compact is perhaps unique in actually taking the EZ farther away from "single state", as it would make a common European fiscal stance impossible in the absence of a common treasury or at the very least Eurobonds. Critics have suggested that Germany and other stronger member states, knowing that countries with sizeable debts cannot comply, have seized on the treaty as an excuse for avoiding essential but politically unpopular steps towards robust monetary union - foremost among them a common budget and a redistribution of resources.
- This phrase has become almost common parlance for the vicious circle that locks banks that become illiquid or insolvent and that are systemically important to their national financial systems in a dance of death with their sovereigns. The downward spiral recurred during the EZ crisis as several such banks lost market access because their NPLs were too big for their national sovereigns to manage in any recapitalisation effort - hence a banking system could take a sovereign and a nation down.

Nowadays the spiral could also work in reverse. A strict interpretation of EU state aid prohibitions would rule out sovereign bailouts of banks, yet such exercises continue to happen. But just as damaging would be a doom loop that started from systemic banks and a national banking system being heavily exposed to its national sovereign, should that debtor become overburdened and face rising refinancing risks. The resulting capital losses could drive up the cost of funding for these banks, choking off credit and precipitating a slowdown or recession. If such a circuit is not broken expeditiously then a doom loop could well be restarted.

This is by no means purely hypothetical, as Italy's recent budget battle with the EU illustrates. In late 2018 Bloomberg described Italy's 2019 fiscal budget as "an exercise in smoke and mirrors of which Harry Houdini would be proud", featuring "inflated growth figures and frankly incredible future budget adjustments". Italy pencilled in 1.5% GDP growth in 2019; other forecasters expected 1% or less, still higher budget deficits, still higher bond yields, still higher bank funding costs and so on. In the event, Italy and the European Commission compromised, helping to reduce market fears: but since then the economy has contracted, Italy has revised its deficit forecast upwards, and a mini doom loop has taken its toll on Italy, the wider EZ and the wider world economy.

One potential method of breaking a doom loop would be to sell failing banks to foreigners. This would require a legal environment in which (a) such banks could be purchased at a reasonable price and (b) buyers would have a fair chance of successfully implementing restructuring and improvement, with government stepping back from management and instead focusing on creating suitable business conditions.

- ⁸ Ironically, UniCredit and HVB described their 2005 merger as creating "the first truly European bank".
- ⁹ In Cyprus, where events became critical over the course of only a few days, banks were closed to prevent precisely such a run.
- ¹⁰ Microeconomic reforms sometimes called structural reforms - are intended to improve macroeconomic fundamentals over the long term.
- ¹¹ Such a fine, imposed annually, would amount to 0.1% of national GDP. A fine for non-compliance with the terms of the SGP would initially amount to 0.2% of national GDP, with a "variable component" added to this in the event of repeated failure to take corrective action.
 ¹² Meanwhile, Italy carries on all but regardless
- ¹² Meanwhile, Italy carries on all but regardless.
 ¹³ See The Survivability of the Euro, Part II: Analysis, Analogies and Antecedents for a comprehensive exploration of the notion of an optimal currency area and an analysis of surviving and failed monetary unions.
- ¹⁴ It may well be that the renminbi is a more viable alternative to the dollar because of the greater vigour, alacrity and determination with which China is pursuing policies to open up domestic capital markets to non-residents - and because it is a more complete monetary, fiscal and political union than the euro. This question is discussed in another Invesco white paper, Central Bank Reserves Management and the Currency Composition of Foreign Currency Reserves (2019).

Suggested further reading

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