THE EURO CRISIS: TEN ROOTS BUT FEWER SOLUTIONS

ZSOLT DARVAS

1. Introduction

The euro faces an existential crisis. While shortly after the collapse of Lehman Brothers, which led to an unprecedented disruption in the functioning of the modern global financial system, the euro seemed to be a shelter for its members (Wyplosz 2009), attitudes regarding the euro changed completely following a series of events that began with the Greek fiscal crisis in early 2010. Despite a number of attempts by various European institutions, the crisis continues and the outlook is bleak. Why is it so difficult to resolve the euro-crisis?

The typical answers to this question are that the euro-area does not constitute an optimum currency area or that monetary unions were traditionally combined with fiscal and political unions. These generalisations of course have some validity, but given the status quo and the complexity of the euro-area's legal and institutional arrangements, they are not very helpful in providing solutions or determining the fate of the euro.

In this article we summarise ten major roots of the euro-crisis and assess the policy responses (if any) to these issues. This is followed by a more in-depth examination of the most pressing problem that also constitutes the most serious threat to the integrity of the euro-area: the dreary economic outlook of southern euro-area member states. We conclude that instead of exiting or breaking-up the euro, the common interest lies in discovering ways in which these countries can be offered improved prospects for the future. A great deal of homework needs to be accomplished in these countries, but other euro-area partners, as well as European institutions, will also have a decisive role to play in supporting the process. In the medium term, additional intuitional changes will be necessary to complement the currently planned overhaul of the euro-area's institutional framework.

2. Ten major reasons behind the euro-area crisis and the EU's policy responses to date

The euro-area has deep-rooted problems. We follow Darvas (2011c) in categorising ten important issues – the first four relate to pre-crisis developments, while the other six relate to issues highlighted by the crisis.

2.1 The failure of the Stability and Growth Pact

First, the rules-based Stability and Growth Pact (SGP), which was the cornerstone of fiscal prudence in the European Union, failed. In Darvas (2010b), we calculated the number of violations of the euro-entry criteria, which also include the two fiscal criteria of the SGP: the 3% of GDP budget deficit criterion and the 60% of GDP government debt criterion.[1] We found that between 2001 and 2006, i.e., after the euro was introduced but before the global financial crisis erupted in 2007, approximately one-third of euro-area member states had violated the SGP. Such violations have greatly diminished the trust in the effectiveness of European rules-based surveillance systems and resulted in high public debt, especially in Greece and Italy, at the start of the crisis.

A number of new agreements have been reached to strengthen the SGP. The new agreements include the so-called "Six-Pack" (five regulations and one directive approved by all 27 Member States and the European

[1] To be more precise, the exact definitions are as follows: (a) the budget deficit should not be larger than three per cent of GDP, unless "either the ratio has declined substantially and continuously and reached a level that comes close to the reference value, or, alternatively, the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value"; (b) government debt should not be greater than 60% of GDP, unless "the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace". To calculate the number of violations of these criteria in Darvas (2010b) we used the three per cent benchmark for the deficit and the following definition of meeting the general government debt criterion: a country is considered to meet the criterion if either the debt/GDP ratio is below 60% or, if it is above this figure, then projecting the average change in the debt/GDP ratio over the latest three years 20 years ahead will lead to a ratio below 60%. Note that the "Six-Pack" reforms adopted in 2011 operationalised this criterion exactly the same way (just the wording differs): the gap between the debt level and the 60% reference should be reduced by at least 1/20th annually (on average over three years); see European Commission (2011).

Parliament in October 2010), [2] the "Euro Plus Pact" (signed by 23 countries in March 2011), [3] the so-called "Fiscal Compact" (Treaty on Stability, Coordination and Governance in the EMU, signed by 25 countries in March 2012). [4] Furthermore, a new proposal called the "Two-Pack" drafted by the European Commission in November 2011 is currently under negotiation.[5] These new agreements fundamentally reform fiscal coordination, surveillance and enforcement in the EU, and in particular, in the euro-area. Fiscal rules will be stronger, they will be enshrined in national constitutions and non-compliance will be sanctioned in a quasi-automatic way. These agreements, if implemented and properly employed in practice, could help to sustain healthy fiscal positions once the current crisis is solved. However, they are less helpful in resolving the current fiscal crisis in the euro-area. Although the so-called structural budget balance (i.e., a budget that is balanced once the impact of the economic cycle and one-time expenditures and revenue measures are removed) will receive greater emphasis, the new agreements lead to a strong contractionary bias, i.e., pro-cyclical fiscal policy during the current downturn. Moreover, the current situation could only be made worse by forcing Spain to pay an immediate fine.

An alternative solution, a form of Eurobonds (i.e., pooled national debt issuances), is unfortunately not yet on the table. The proposal by Delpla and von Weizsäcker (2010) of splitting debt issuances into a senior component of up to 60% of a member state's GDP (called "Blue bonds", guaranteed by all participating countries) and a junior component above the 60% threshold ("Red bonds", guaranteed by the issuing country alone), would stabilise government financing (via the Blue bonds) but at the same time would expose governments to market discipline (via the Red bonds). At the current juncture, Blue bonds should be phased in through complete pooling of new issuances, in which a member state can participate until its share of the stock of Eurobonds reaches 60% of its GDP (Darvas 2011b). Such a phasing in would provide struggling countries with a long period of time to put their fiscal houses in order, while benefiting from a low interest rate. Unfortunately, talks for any sort of Eurobonds are not on the table, partly due to the mistrust between euro-area nations, and partly due to the very complex institutional framework that would be required to make the

[2] See European Commission (2011).
[3] See European Council (2011).
[4] See European Council (2012b).
[5] See European Commission (2012a) for a concise comparison of the "Six-Pack", the "Fiscal Compact" and the "Two-Pack".

common bond issuance function properly, in the absence of an adequate level of political and fiscal integration.

2.2 Neglect of private-sector vulnerabilities

Second, there was a sole focus on fiscal issues – and a consequent neglect of private-sector behaviour. This resulted in unsustainable credit and housing booms in countries such as Ireland and Spain (Ahearne et al. 2008) and the emergence of structural imbalances such as high current-account deficits and eroded competitiveness. Divergence within a monetary union, such as divergence in current account balances, is not necessarily a bad thing. Capital flows across regions and the ensuing current account deficits and surpluses may reflect the improved utilisation of resources when capital moves to fast-growing regions to the benefit of the entire monetary union. However, the booms and busts in the Irish and Spanish housing sectors (Ahearne et al. 2008) exemplify capital misallocation. Additionally the accumulation of "excessive" regional debt is undesirable, and there are good reasons to conclude that the external debt of Greece, Portugal and Spain became excessive (Darvas 2012b). Figure 5-1 depicts changes in current account balances in five main geographical regions of the EU since 1995 and the projections of the IMF until 2017. In southern European countries, the median current account balance exceeded ten per cent of GDP before the crisis and the pace of adjustment is slow, especially in comparison to the rapid adjustment in eastern European countries. While private capital inflows halted and even reversed both in southern and eastern Europe, in southern Europe banks received massive liquidity support from the European Central Bank (ECB), which has offset the sudden stop in private capital flows. Such support has contributed to financial stability, but at the same time, has made it possible for these countries to delay the adjustment, as noted by Sinn (2011).

The crisis was a bitter proof that not only fiscal issues matter. The "Six-Pack" and "Euro Plus Pact" also include regulations to prevent and correct of private sector imbalances, such as weak competitiveness positions and high private debt. A new procedure, the so-called Macroeconomic Imbalance Procedure (MIP), was introduced with the aim of assessing these private sector vulnerabilities and assisting countries in designing remedies (European Commission 2012b). Undoubtedly, this procedure is a major innovation in the EU's economic governance framework. However, their effectiveness needs to be tested, and in any

case adjustment within the euro-area could take a long time and hence quick improvements are not expected.

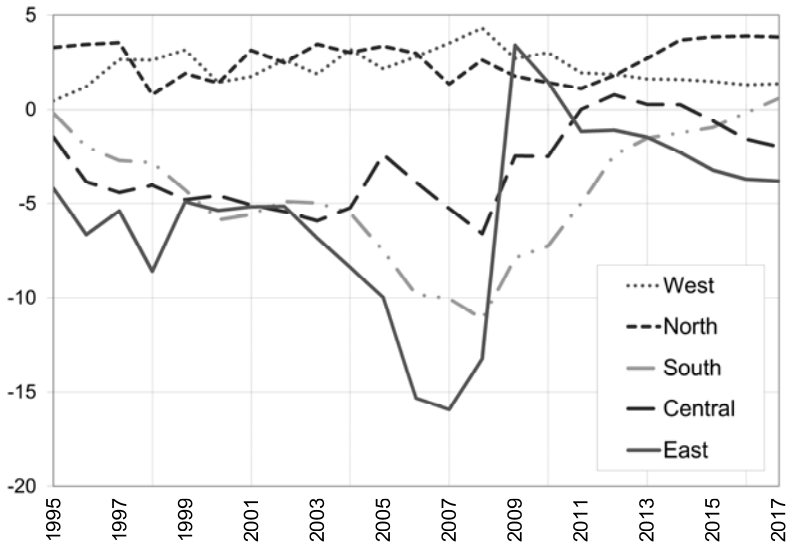

Fig. 5-1 Current account balances in main geographical groups of the EU (% of GDP), 1995–2017
Source: Author's calculations using data from IMF (2012) data
Note: median values are indicated for the groups, which have the following composition:
West: Austria, Belgium, France, Germany, and the Netherlands;
South: Greece, Italy, Portugal, and Spain;
North: Denmark, Finland, Sweden, Ireland, and the UK;
Central: the Czech Republic, Hungary, Poland, Slovakia, and Slovenia;
East: Estonia, Latvia, Lithuania, Bulgaria, and Romania.

2.3 Lack of structural adjustment

Third, there were no proper mechanisms to foster structural adjustment. Some countries, such as Germany, were able to adjust within the euro-area on their own (i.e., Germany's competitiveness improved considerably from the mid-1990s until the onset of the current crisis; see, e.g., Darvas 2012a), but others, such as Greece, Italy, Spain and Portugal, were not. While Germany, Italy and Portugal had the worst growth performance among euro-area member states before the crisis, Germany boosted its competitiveness during this period, but not Italy and Portugal.

Booming domestic demand contributed to rapid economic growth in Spain and Greece before the crisis, which obscured the more serious structural problems. Following IMF (2010) and Allard and Evaraert (2010), in Darvas and Pisani-Ferry (2011) we studied certain aspects of growth that could be improved with structural reforms. We found that southern European countries are severely lagging behind in all criteria.

Fostering structural adjustment is one of the aims of the MIP. The so-called "European Semester," a yearly cycle of mutual assessment of fiscal and structural issues was introduced in 2010, which encompasses all new instruments, including the MIP. This is also undoubtedly useful, yet the jury is still out on its effectiveness. By studying the first European Semester, Marzinotto et al. (2011) conclude that member states are only slowly internalising the new procedure and the Semester has thus far lacked legitimacy due to the minor role assigned to the European Parliament, the marginal involvement of national parliaments and the lack of transparency at some stages of the process.

2.4 Lack of a crisis-resolution mechanism

Fourth, there was no crisis-resolution mechanism for euro-area countries. The series of sovereign debt crises in the euro-area came as a surprise and euro-area policymakers had to improvise. It is important to highlight that in other federations, such as the US, there are no crisis-resolution mechanisms for sub-central governments either (Darvas 2010a). When studying the conditions required for a fiscal union to function smoothly and successfully, Bordo et al. (2011) conclude "The first and probably the most important condition is a credible commitment to a no-bailout rule." In the euro-area at present, the reluctance on the part of the citizens of economically stronger countries such as Germany, the Netherlands and Finland, to extend loans to economically weaker countries, such as Greece, highlight the validity of this conclusion. However, it also must be recognised that public debt levels in certain euro-area member states are much higher than sub-central government debt in other federations, and due to the reasons discussed in the next two sections, an uncontrolled default could be more harmful for the rest of the euro-area than a similar default of a sub-central government in other federations.[6]

[6] This conclusion remains valid even though a properly designed debt restructuring inside the euro-area should not cause a major contagion, as we argued in Darvas (2011a), and as the subsequent Greek experience has shown.

The lack of a sovereign debt crisis resolution mechanism was initially addressed through some temporary arrangements: bilateral lending from euro-area partners (in partnership with the IMF) to Greece in May 2010, and the establishment of two financing mechanisms, the EFSF (European Financial Stability Facility)[7] and the EFSM (European Financial Stability Mechanism)[8]. The European Stability Mechanism (ESM)[9], a permanent rescue fund with €500 billion in resources, will likely be introduced later in 2012. The resources, even if augmented with IMF lending, would not be sufficient if Italy were to require assistance. Moreover, it would be much more preferable to design an institutional framework in which member states did not have to lend money to each other.

2.5 Interdependence of banks and sovereigns

Fifth, the national bank resolution regimes and the large home country bias in banks' government bond holdings imply that there is a lethal correlation between banking and sovereign debt crises. When a government gets into trouble, so does the country's banking system (e.g., Greece), and vice versa (e.g., Ireland). Merler and Pisani-Ferry (2012a) demonstrated that most continental euro-area countries were characterised by the large size of their banks' portfolios of domestic government bonds, which were markedly larger than in the UK or the US. Moreover, during the crisis this vulnerability has increased, as all countries for which concerns about state solvency arose have observed a reversal in the previously steady increase of the share of government debt held by non-residents. Germany, by contrast, has seen an increase in the share held by non-residents.

The lethal correlation between banking and sovereign debt crises could be best addressed with a so-called "banking federation" or "banking union", whereby bank resolution and deposit guarantees would be centralised at the euro-area (or preferably the EU) level, which would also require the centralisation of regulation and supervision. This is because when bank resolution in a given country is not the responsibility of that country's government, but bank recapitalisation, when needed, would be financed using a common fund, then banking fragility would not lead directly to sovereign debt problems for that government. The opposite case, where the fragility of the government is transmitted to the banks of a given country, could also be better managed when regulation and

[7] See EFSF (2012).
[8] See EFSM (2012).
[9] See European Council (2012a).

supervision are centralised at the euro-area level. The notion of a banking union was not on the agenda until late spring 2012, despite numerous calls by economists (see, e.g., Véron 2011). However, the intensification of the euro crisis brought euro-area policymakers back to reality, and perhaps the call for a banking union seemed a politically more acceptable alternative compared to a more rapid move towards a full-fledged fiscal union. Consequently, the European Council on 28–29 June 2012 called for a banking union and the European Commission proposed its first element, a single supervisory mechanism for banks on 12 September 2012. It was agreed that once banks come under the control of the joint supervisor, the ESM would be able to recapitalise banks directly. The willingness of member states to relinquish national sovereignty over major banking issues is clearly an important development in crisis management. However, the formation of the banking union will be an extremely complex process, and many open issues need to be negotiated and agreed upon, as discussed by Pisani-Ferry et al. (2012), including the means of providing financing for the banking union, which is studied by Pisani-Ferry and Wolff (2012).

2.6 Interdependence between countries

Sixth, there is a strong interdependence between countries – much stronger than was generally perceived during the good years before the crisis. The collapse of a small country can create a contagion and the collapse of a large country would lead to a meltdown. Italy, for example, cannot be allowed to go bankrupt, as it would bankrupt the Italian banking system, which in turn would cause a meltdown throughout the rest of the euro-area banking system through high-level linkages and would also have disruptive effects outside the euro-area. This channel remains important even if financial integration were reversed to a significant extent, as argued by the ECB (2012a).

The strong interdependence between countries should primarily be addressed via limiting the scope of the fiscal and private sector vulnerabilities of member states. Once the crisis is over, the European Semester and all the instruments included in it could help in this regard – to the extent of course that the Semester will prove to be effective. A properly designed banking union as discussed above is the best means of addressing banking interdependence. Furthermore, a type of Eurobonds, such as the Blue bond discussed before, would help to limit the spread of a sovereign debt crisis from one country to another.

2.7 Lack of a lender of last resort for sovereigns

Seventh, the strict prohibition on the European Central Bank/Eurosystem providing monetary financing means that euro-area governments borrow as if they were borrowing in a "foreign" currency, as highlighted by De Grauwe (2011). This is because a central bank can in principle act as a lender of last resort for the sovereign, i.e., print money and buy government bonds (as the Federal Reserve, the Bank of England and the Bank of Japan did during the crisis). The lack of a lender of last resort for sovereigns of individual states of a monetary union is not a substantial problem when the level of debt is low. For example, in the US, the Federal Reserve does not buy the debt of states such as California or New York but only buys federal bonds. Although California has been in deep financial trouble since 2007, its eventual default would not cause a major disruption to the US banking system. The reasons are that the debt of the State of California is small, approximately 7% of California's GDP (the debt of local governments in California represents an additional 13% of the state's GDP); moreover, this debt is not held by banks, but mainly by individuals. However the default of Italy would be a game changer in Europe.

The lack of a lender of last resort for sovereigns could be remedied by establishing a stronger political and fiscal union that could provide the basis for changing the statutes of the ECB. Absent such a change, the ECB can act within its current mandate. The ECB has already purchased the sovereign bonds of member states under the so-called Securities Market Programme (SMP) beginning in May 2010, which was terminated on 6 September 2012, and a new programme called Outright Monetary Transactions (OMT) was introduced (ECB 2010, 2012b).

The SMP only had temporary effects on government bond yields for a number of reasons. First, the ECB itself communicated that these operations will remain limited, and even introduced a weekly cap. Second, the ECB claimed senior creditor status with respect to other bondholders, and therefore ECB purchases increased the eventual losses of other bondholders in the case of a default. Third, the modalities of the SMP were unclear: the ECB started and ended bond purchases without known guidelines. Fourth, in the case of Greece the SMP attempted to temper the government bond market in a country with a fundamentally unsustainable fiscal situation (Darvas et al. 2011). Finally, the SMP was subject to moral hazard, exemplified by the Italian government's backtracking on promised reforms in the summer of 2011, after the ECB began purchasing Italian bonds.

The new OMT differs from the SMP in major respects. First, it will be based on strong conditionality (i.e., compliance with a full or a precautionary

macroeconomic adjustment programme by the EFSF or the ESM). ECB intervention will not be automatic, but the Governing Council will decide on a case-by-case basis when and to what extent it will intervene. Second, it will be unlimited in principle. Third, the ECB will be treated *pari passu* with other creditors, i.e. the ECB will not have any preferential treatment in the case of a credit event. Furthermore, transparency of OMT holdings will also be higher (the breakdown by country and the average duration of holdings will be published). Moreover, there is clarity on the maturity of eligible bonds, i.e. between one and three years, which is the relevant horizon for monetary transmission. These characteristics likely constitute the outer limit of what is feasible within the ECB's mandate.

The initial reactions in the markets (until the completion of the manuscript for this article in mid-September 2012) were positive. For example, the 2-year Spanish government bond yield fell from a 15-year record high of 6.9% in late July 2012 to below 3% in early September 2012. Longer maturity yields have also fallen somewhat.

It was wise for the ECB to introduce the OMT, as otherwise the euro crisis may have escalated in mid-2012. By preventing a self-fulfilling crisis, the OMT may help to reduce government bond yields, and thereby also lower private sector yields, which will help the economy. However, the OMT operations can only buy precious time, but cannot solve the euro crisis and cannot fully eliminate the risk of an eventual euro-area exit, as these are dependent on the answers given to the other more fundamental problems of the euro-area we discuss.[10]

2.8 Downward spiral and negative feedback between the crisis and growth

Eighth, there is a downward spiral in adjusting countries: i.e., fiscal adjustment leading to a weaker economy, thereby reducing public revenues and creating additional fiscal adjustment needs. It is extremely difficult to break this vicious circle in the absence of a stand-alone currency. In the US, automatic stabilisers, such as unemployment insurance, are operated by the federal government, which also invests more in distressed states – but in Europe such instruments do not exist. An economic stabilisation tool is badly needed for the euro-area, which should work as automatically as possible and be financed from a euro-area wide tax. It should be confined to economic stabilisation only, but not making a platform for permanent transfers between euro-area member states.

[10] See Darvas (2012c) for an assessment of the various criticisms of the OMT.

The negative feedback loop between the crisis and growth does not only exist in southern European adjusting countries, but in all euro-area countries. Uncertainty over the future of the euro, and the risk of economic hardship that an eventual break-up would bring, makes corporations and households more hesitant to invest and consume. Corporations in the economically stronger countries are also directly affected by the deteriorating situation in economically weaker countries through trade and financial links.

Furthermore, the funding constraints in the banking sector, the increasing credit risks for banks due to the weakening economic outlook, and the efforts to raise banks' capital ratios lead to a reduction in credit supply. Reduced credit availability further dampens economic growth. Without effective solutions to address the crisis, growth is unlikely to resume.

The EU did not have a powerful response to the growth crisis. The main goals of the "Compact for Growth and Jobs" agreed to at the 29 June 2012 summit (European Council 2012c), such as structural reforms, completing the restructuring of the banking sector, growth-friendly fiscal consolidations, addressing the social consequences of the crisis, and deepening the single market, are all correct. However, few new tools were mobilised to achieve these goals. Providing fresh capital to the European Investment Bank (EIB) in the amount of €10 billion (which would increase lending capacity by €60 billion) and launching a pilot phase for Project Bonds up to €4.5 billion are welcome, but these would have a limited impact on growth in the EU. Moreover, while mobilising idle structural funds, which was also agreed on at the summit, is also crucial, this does not constitute new funding.

2.9 Lack of a euro-area fiscal policy

Ninth, no institution is responsible for managing the overall fiscal stance of the euro-area. Member states implement the policy deemed appropriate for their own economies, subject to the constraints of the European fiscal governance framework. However, on aggregate, such decentralised fiscal policy is unlikely to produce optimal fiscal policy for the euro-area as a whole. For example, while the aggregate fiscal position of the euro-area is much better than that of the US (Figure 5-2), and while the economic outlook is arguably more fragile in the euro-area, there is a much stronger consolidation bias in the euro-area as a whole than in the US. Certainly, states in the US are also independent in setting state-level fiscal policies (all but one has a balanced-budget constitutional rule), and the second major conclusion of Bordo et al. (2011) concerning the conditions

necessary for a fiscal union to function smoothly and successfully is "a degree of revenue and expenditure independence of the members of the fiscal union reflecting their preferences." However in the US the federal government dispenses approximately half of the total tax revenues and considers the US economy as a whole when setting fiscal policy targets (Darvas 2010a). In other federations, such as Canada or Switzerland, the circumstances are similar.

Unfortunately, the euro-area has not yet reached a point where a discussion can be begun on the overall fiscal stance of the euro-area and the way it could be aligned to the situation of the euro-area as a whole.

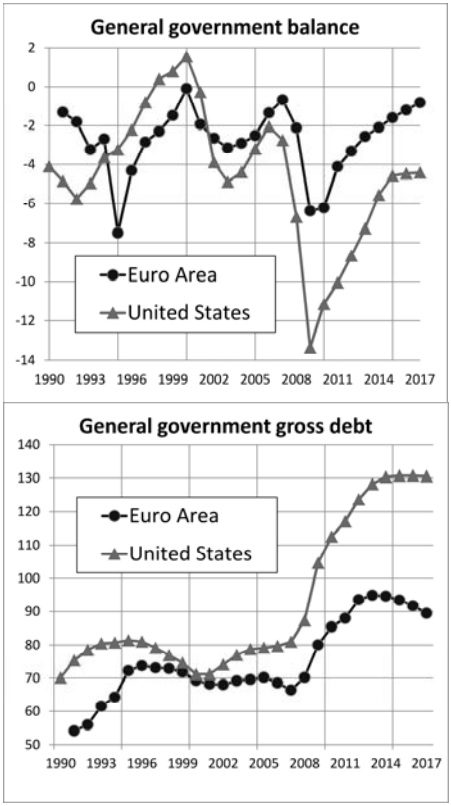

Fig. 5-2 The aggregate fiscal positions of the euro-area and the USA (% of GDP), 1990–2017
Sources: Euro-area balance and debt – IMF (2012); US balance – AMECO database up to 2000 and IMF (2012) for 2001–2017;

US debt: USGovernmentSpending.com (2012) up to 2012, for 2013–2017 we assumed that state and local government debt will remain at the 2012 value as a per cent of GDP and federal debt increases as projected by IMF (2012).
Note: US general government debt also includes the debt of states and local governments (IMF and European Commission data only report federal debt, even though they call it, erroneously, "general government gross debt").

2.10 Executive and democratic deficit

Tenth, the current crisis is not just a sovereign debt, banking and growth crisis, but is also a governance crisis. In most cases the response of European policymakers has been partial, inadequate and belated, and they have thereby lost trust in their ability to resolve the crisis. Some observers have concluded that agreeing on a comprehensive solution is technically and politically beyond reach. Compounded with the lack of democratic accountability of various European decision making bodies, Véron (2012) places the "executive and democratic deficit" at the centre of the lingering euro crisis and argues that some of the most important problems, such as Europe's banking crisis, the Greek sovereign debt saga, or the weak growth outlook of southern European member states, could have been addressed earlier and in a decisive way, had proper European decision making processes existed.

Regarding the political constraints, overcoming executive and democratic deficiencies is a truly fundamental issue. Nigel Lawson is most likely right when he claimed: "There is no wish among the people of Europe … for a full blooded United States of Europe political union".[11] Therefore, any progress towards a more effective and legitimate decision making and executive system will be, at best, piecemeal.

3. Southern Europe and the euro's future

The combined impact of all the factors discussed thus far drives down the economic outlook in the euro-area, and in particular, in Southern Europe. Figure 5-3 takes a historical perspective on changes in GDP per capita in the main geographical areas of the EU. After World War II, European countries embarked on a rapid convergence with the US in terms

[11] Nigel Lawson was the Chancellor of the Exchequer in the government of Margaret Thatcher during 1983–1989. He also claimed that "The whole thing [i.e. the euro] is a nonsense, and the sooner the whole thing can be dismantled in an orderly way, the better", with which I disagree. Source of the quotes: Mullholland (2011).

of GDP per capita, which was in part based on the rebuilding of the capital stock lost during the war, in part on technological catching-up and in part on economic integration efforts (Darvas and Pisani-Ferry 2011). By the late 1970s, however, convergence with the US had stopped in most countries of the "older" Europe – although with significant exceptions, such as Ireland. However, in the years ahead, according to the world economic outlook of the IMF, European countries are expected to fall behind, especially in southern Europe. Moreover, the IMF outlook must be interpreted as a baseline scenario and the risks are on the downside.

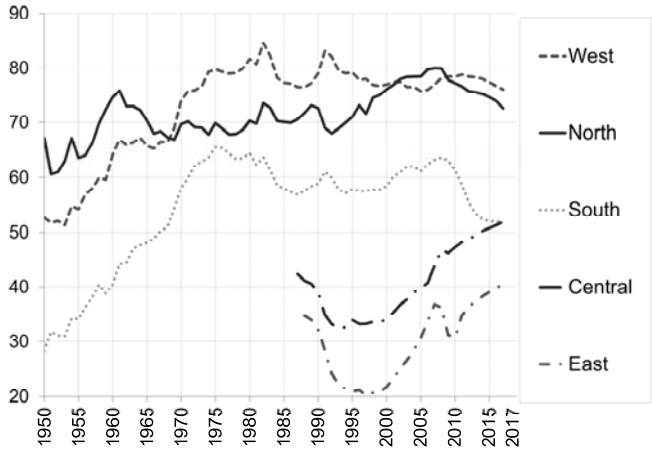

Fig. 5-3 GDP per capita in major geographical regions of the EU (USA = 100), 1950–2017
Source: Author's calculations using data from IMF (2012), PENN World Tables and EBRD
Note: GDP is based on purchasing power parity dollars; median values are shown for the country groups defined in the note to Figure 5-2.

The single most important threat to the integrity, and perhaps also the existence, of the euro is the bleak economic outlook for southern European member states. Without the problems of economically weaker countries in Southern Europe (for which western and northern members also bear responsibility), western and northern members would be able to overcome their baking woes, and the other issues we identified as the roots of the euro crisis would be much less relevant.

Economic growth in Southern Europe would gradually help to improve the unemployment situation and ease social tensions. It would help to

improve public finances, thereby lessening the need for fiscal consolidation. It would help to stabilise asset prices, and in particular, housing prices, which in turn would improve the balance sheets of banks, thereby also reducing recapitalisation needs. Increased trust in banks and the hope of an economic recovery would slow or even reverse capital outflows from these counties. As a consequence, economic growth in Southern Europe would greatly diminish the exit risk facing some southern euro members.

But growth is not coming, and in fact the recession deepens. Several commentators concluded that southern euro members have no hope for growth inside the euro-area and an exit from the euro is the only viable option. While undoubtedly it would be much easier for southern euro members to solve their problems outside the euro-area, I disagree on both counts: there is some hope, at least in some southern members on the one hand, and on the other hand an exit would likely be so disastrous that it would take a very long time to recoup the output that would be lost during the exit process. An exit would cause devastating consequences for economically stronger countries as well, thereby creating existential risk for the euro, with severe implications for the EU as well.

- Hope: Since 2008, Spanish exports are performing the best among the EU-15 countries, i.e., the pre-2004 members of the EU (Darvas 2012a). Spain is followed by Germany, Ireland and Portugal. Spain and Portugal even outperform the UK and Sweden, two countries that benefitted from significant currency depreciation during the crisis.[12] While their tradable sectors remain small, solid export performance is an indication the tradable sector is able to expand. Additionally, the World Bank (2012) found that large and internationalised firms in Southern Europe are as productive as large firms in Western and Northern Europe, and the main issue is that there are far fewer large firms in Southern Europe, due to various barriers. Altomonte et al. (2012) arrived at a similar conclusion. This suggests that while the business conditions are unfavourable and there are barriers to firm growth, properly managed firms are able to achieve a high level of efficiency even in Southern Europe.
- Disastrous exit: It is impossible to provide an accurate estimate of the cost of an exit from the euro, but it would most likely be huge. UBS (2011) have concluded that an economically weak country leaving the euro-area would lose approximately one half of its GDP

[12] However, the export performance of Greece is very weak.

in the first year. If they are correct, it is unclear how many years it would take to compensate for the lost output, even if growth were to increase from this halved level of output. The huge decline in output would necessitate even harsher fiscal austerity, as it is not very likely that in the event of a messy exit from the euro other euro-area partners would be happy to lend to the country that left the euro – without such support, the government could spend only tax revenues, which would be dramatically reduced by the collapse of GDP. Moreover, there would also be longer term consequences, as the low credibility of the newly stand-alone central bank of the exiting country would likely lead to much higher real interest rates and a period of high inflation, which are bad for growth. Additionally, a euro exit may be accompanied by an EU exit and thereby the country would lose huge transfers form the EU. It is also in the best interest of euro-area partners to keep these countries in the union, and not just because of the direct losses that would arise from financial and trade relations with the exiting country. Even more importantly, the exit of a country would open Pandora's box: it would be very difficult to safeguard other economically weaker countries and a wave of exits would be even more disastrous for the economically stronger euro-area countries.[13]

However, the good news we highlighted and the fears of disaster do not guarantee that the deep economic slump in these countries will end anytime soon. If the recession continues to deepen, social tensions could escalate, which may lead to domestic political paralysis. Under such circumstances, cooperation between euro-area partners and the country in question, including financial assistance that has already been granted to some southern euro members, would halt, leading to an accelerated and possibly uncontrolled exit from the euro-area, with all the consequences we described above.

Therefore, ending the recession and offering improved economic prospects for southern euro members is pivotal, and actions will be required at both the national and European levels – well beyond the Compact for growth and jobs:

- The southern euro-countries should engage in a number of efforts: we have highlighted that they suffer from huge structural weaknesses, which are impediments to growth. Moreover, while

[13] And the euro is not just about economics but has major historical and political roots as well.

productivity has improved and unit labour costs have fallen, e.g., in Spain since 2008, this was mainly the consequence of reduced employment, which has adverse social consequences. Wages proved to be downwardly rigid (Darvas 2012a). Structural reforms to improve the functioning of labour markets are also inevitable, yet it will take a long time for these reforms to take effect.

- There is a strong case for calling for unit labour cost (ULC) increases in "western" and "northern" euro-area trading partners (see for example Wolff (2012) and Merler and Pisani-Ferry (2012b)). To some extent wages have begun to increase in Germany, but in any case this process will take a long time. Moreover, higher average inflation in the euro-area may also help to correct pre-crisis intra-euro divergences in prices and wages, but such a policy would be clearly unacceptable to the economically stronger countries of the euro-area.
- Fiscal expansion in northern members of the euro-area, or at least a significant slowdown in the pace of fiscal consolidation, would facilitate the economic adjustment of the southern members (Merler and Pisani-Ferry 2012b), but unfortunately, the relaxation of fiscal targets in Northern Europe does not seem to be on the agenda.
- A weaker euro would also greatly facilitate the adjustment of southern euro-area members (Darvas 2012b), which would be fostered by further interest rate cuts and quantitative easing by the European Central Bank. A weaker euro would help southern economies to improve their trade balances with non-euro countries and would also boost German exports. This in turn would help to address intra-euro imbalances, since increased exports would likely translate into greater wage increases in Germany, due to the country's tight labour market, but not in Spain, due to its high unemployment. Thus, Spain's competitiveness vis-à-vis Germany would also improve. Without a weaker euro, Spain would need to enter a deflationary period, which on the one hand is difficult to achieve and on the other would make debt sustainability even more difficult.
- Euro-area partners should also recognise that public debt at least in Greece is still too high. Even if the austerity programme is implemented as planned, it is very unlikely that Greece will be able to repay all of its public debt. Prolonging the recognition of this issue simply prolongs the uncertainty about Greece's future, thereby also negatively impacting the economy. However, as European partners have lent money to Greece to repay private

lenders and therefore 'socialised' Greek public debt, further significant public debt reduction cannot be accomplished without some involvement by the official sector. This is the price that euro-area partners have to pay for their mistakes in managing the Greek crisis in 2010 and 2011.

- Finally, to help break the downward economic spiral that southern euro-area member states face, a very significant European investments programme is needed for southern members. Note that investments are different from aid and lending.

4. Concluding remarks

The euro suffers from a large number of flaws, which were cast in stark relief during the crisis. For some of these flaws, solutions were provided, even if belatedly, and member states exhibited a willingness to improve the functioning of the euro by agreeing to relinquish national sovereignty in some important dimensions. However, the single most pressing issue, which threatens the integrity and perhaps the existence of the euro, is not yet well addressed: the deepening economic recession in southern member states. Most of the major policy measures that would help to stop the economic misery of these countries and offer the prospect for improved economic conditions are not yet on the agenda. Only time will tell the economic and political denouement of southern euro member and what progress will be made in addressing the ten main roots of the euro crisis that we have identified.

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