The origins of the euro crisis and the need for economic coordination in a currency union

EUIJ-Kyushu, First Annual International Conference – European Challenges for Overcoming the Crisis,

3 March 2012

F. Rawlinson, Kwansei Gakuin University

Origins of crisis, need for economic coordination - contents

- Origins of euro crisis

1. Starting point of Emu v. theoretical optimum, governance system, unforeseen risks
2. Practice of governance, rules revision
3. Onset and spread of the crisis: reassessment of risks in markets, rising interest rates, contagion, banking crisis
4. Lessons for economic governance

Origins of crisis, need for economic coordination - contents

- Need for further economic coordination

1. Macroeconomic surveillance, action on imbalances, structural measures to enhance competitiveness,
2. Fiscal coordination, reduction of debt burden
3. Facilitation of fiscal discipline through markets, banking regulation/ recapitalisation
4. Crisis management, restructuring

Origins of crisis, need for economic coordination - contents

- Further questions and observations

1. Will austerity work?
2. Is gap between core and periphery too great for a currency union?
3. Role of economists and commentators
4. In defence of the euro and eurozone leadership

Origins of euro crisis
1. Starting point of Emu not optimal

- ❖ Monetary union without fiscal/political union
  1. No taxing powers, no treasury, no spender/borrower of last resort
  2. Insufficient powers of economic/fiscal policy coordination
- ❖ Limited labour mobility; labour market rigidities
- ❖ Disparate economic structure between core and periphery countries

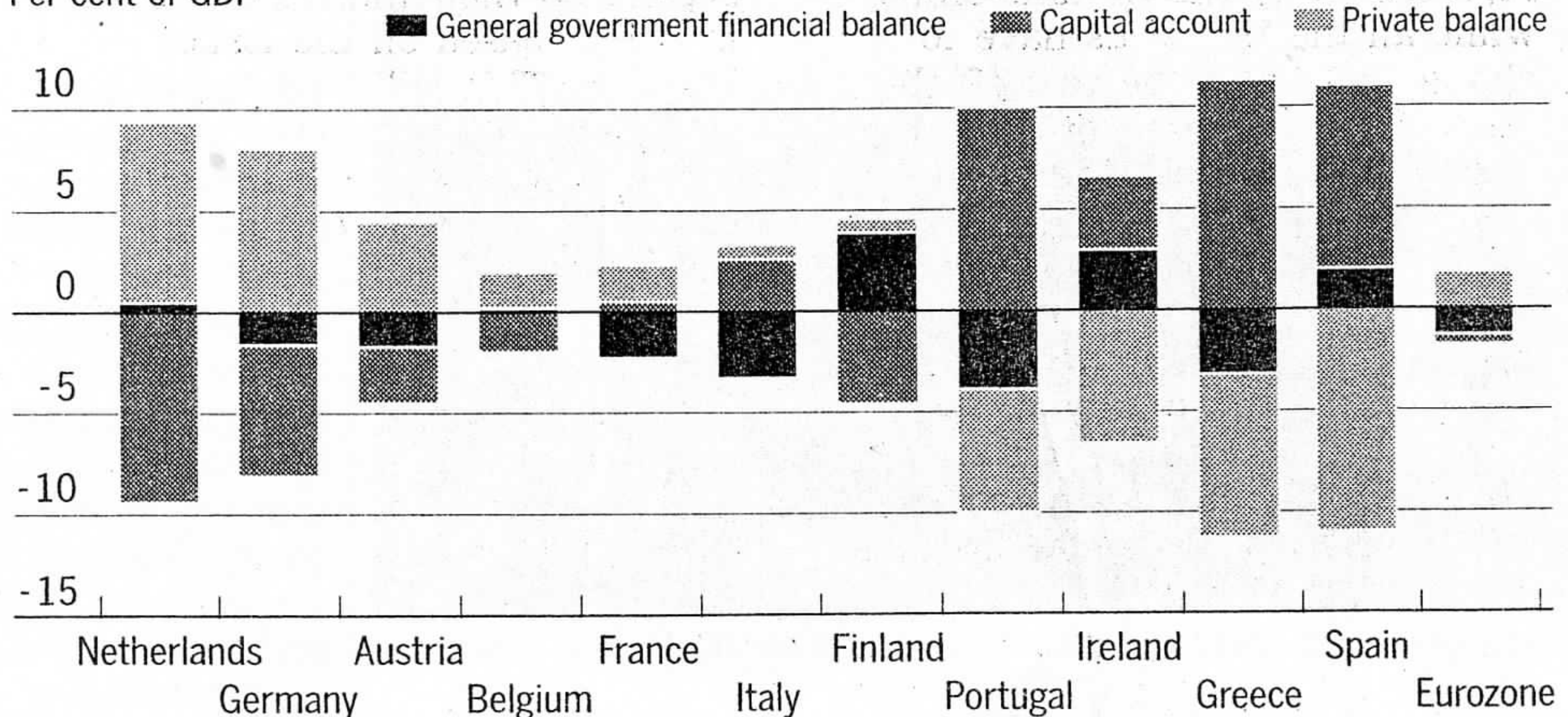
Origins of euro crisis
1. Governance system

- Excessive deficits procedure focused on deficits, not reduction of debt burdens
- No differentiation of capital/consumption spending, or according to debt burden
- Lack of emphasis on structural economic reform and competitiveness
- No crisis resolution mechanism
- Political enforcement

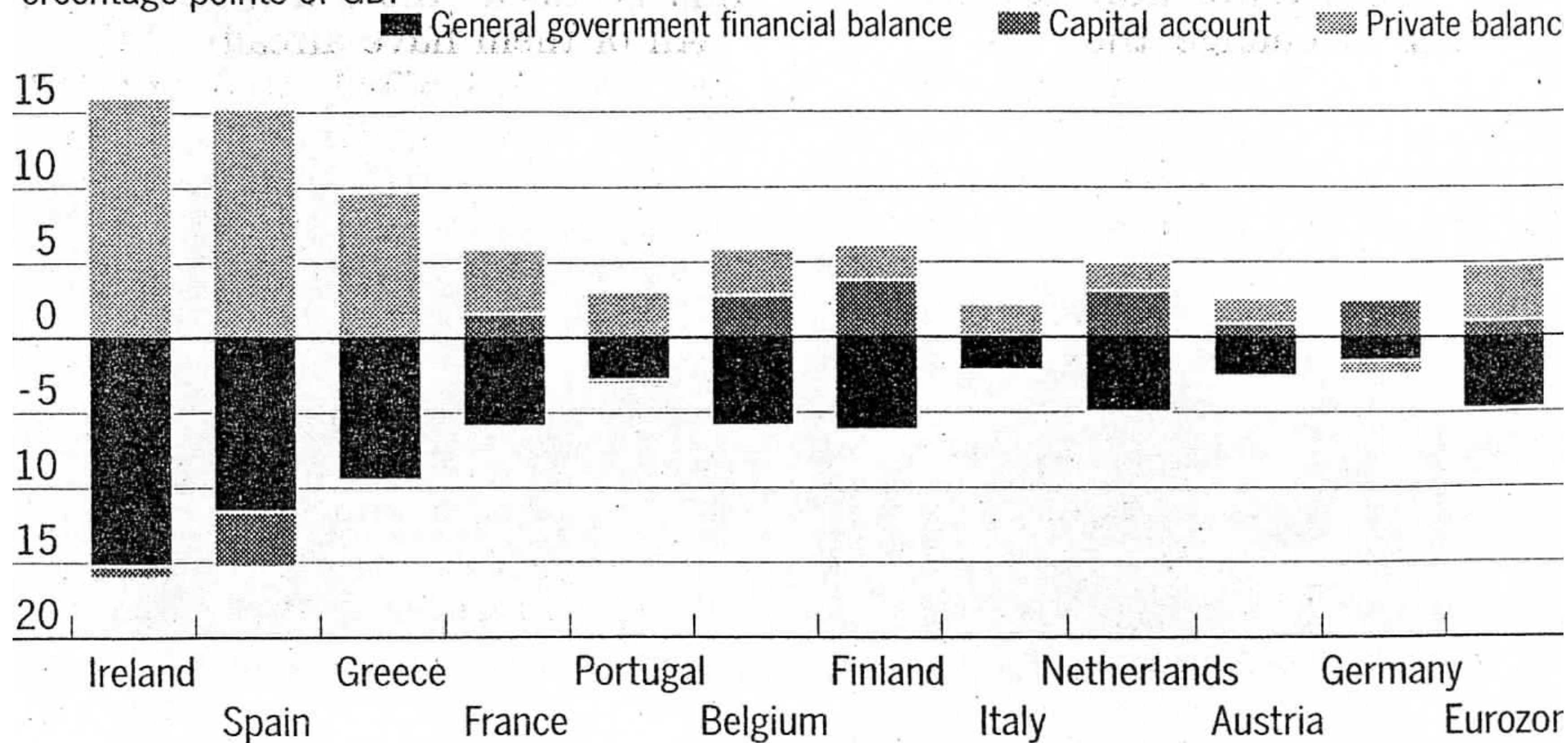
Origins of euro crisis
1. Unforeseen risks

- Low interest rates and equal treatment of bonds by ECB could lower the risk perceptions of markets
- This could encourage large private-sector imbalances to build up beween core and periphery. Government spending sprees and credit-fuelled booms in the periphery were financed by the recycling of the core countries’ surpluses.
- When the inevitable correction came, these imbalances would create risks to public finances in the periphery and to banks of core countries.
- Unsustainable financing of the private sector leads to unsustainable fiscal positions.

Origins of euro crisis
1. Private imbalances



Origins of euro crisis
1. Private imbalances (2)



Origins of crisis
2. Practice of governance 2000-08 – Stability and Growth Pact

- Political decisions to avoid sanctions, even on countries in repeated breach (Greece, Portugal)
- Insufficient scrutiny of public accounts data
- Insufficient macro-economic coordination to counter the risks caused by private sector imbalances

Origins of crisis
2. Practice of governance 2003-05 – Revision of Pact

- Revision "sent the wrong signal" (H. van Rompuy)
- Sensible adjustments to improve flexibility, but also missed opportunities for improvement: differentiation capital/consumption spending, greater attention to debt sustainability, inducing market differentiation of interest rates

Origins of crisis
3.Onset of crisis: reassessment of risks, rising interest rates

- Revelation of true size of Greek deficit
- Bursting of bubbles in Ireland and Spain and rapid re-emergence as public deficits; Irish bank guarantee
- Markets reassessed risks on peripheral countries' debt - constantly rising interest rates and yields, credit rating downgrades
- Shutting out from markets, need for bail-outs and ECB market support (bond-buying, bank liquidity loans)

Origins of crisis
3.Contagion, banking crisis

- Contagion: expression of market dynamics (readjustment to risk perceptions)
- Natural correction, controllable only by action that restores market confidence (but what?) and faces the inevitable (defaults)
- Euro crisis was always partly (mainly?) a banking crisis, caused by unwise lending (recycling of surpluses of core countries) and undercapitalisation of European banks

Origins of crisis
4. Lessons for economic governance

- Deeper economic policy coordination, including macroeconomic surveillance and action on private imbalances (trade deficits and surpluses, borrowing and credit), not just public finances
- Deeper economic integration (single market)
- Link to banking/financial market regulation
- Provision for default
- More independent enforcement
- Crisis management tools

Economic policy coordination
1.Macroeconomic imbalances

- Surveillance of and action on private-sector imbalances in conjunction with fiscal positions
- Coordinated across eurozone as a whole
- Issues:

1. What action by surplus countries?
2. To start when? (after end of current crisis – when austerity/deflation in peripheral countries will have worked (?) - or before?)
3. Growth
4. Sovereignty, means of coercion, decision-making structures
5. Eurobonds as *quid pro quo*?

Economic policy coordination 1.Competitiveness

- Internal structural reforms : more flexible labour markets, entepreneurship, reduction of public sector, productivity, pensions
- "Europe 2020" strategy
- Single market
- Issues:

1. Will Greece (Portugal?) ever catch up?
2. Sovereignty, coercion?
3. Need for prior debt relief?

Economic policy coordination
2. Fiscal coordination, debt reduction

- ❖ Focus on debt reduction
- ❖ Coordination of fiscal policy across eurozone as a whole
- ❖ Regard to type of spending, existing debt burden, economic cycle
- ❖ Issues:

1. Sovereignty, coercion (prerogatives of national parliaments, coordination of individual fiscal positions, inclusion of taxation/social policies?)
2. Decision-making structures
3. Eurobonds as *quid pro quo*?

Economic policy coordination
3. Facilitating discipline through markets

- No false signals on risk
- Avoid placing excessive restrictions on markets
- Transparency (e.g., bank stress tests)
- Unity in policy statements, candour about disagreements
- Issues:

1. Governance machinery facilitating strong leadership

Economic policy coordination
3. Banking regulation

❖ Recapitalisation of exposed banks
❖ European-level regulation, including systemic risks
❖ (Bank-funded?) resolution mechanism, emergency funding provision
❖ Issues:

1. Split of mainstream banking serving real economy from own-account securities dealing (to avoid “too big to fail” situations)
2. Enforcement of regulatory authority decisions

Economic coordination
4. Crisis management, restructuring

- ❖ Permanent crisis management fund
- ❖ Provision for restructuring/default
- ❖ Issues:

1. Crisis management vehicle to take over liquidity funding, market support from ECB, to become lender of last resort?
2. Restructuring of debts of further peripheral countries (Ireland, Irish bank guarantee)
3. Terms of rescue loans, fiscal transfers

Further questions and observations
1. Will austerity work?

- Need for a foreseeable exit (light at end or tunnel)
- Need for *quid pro quo* : action by core countries to alleviate problems of periphery (eurobonds, a strong enough "firewall", commitment to unlimited bond purchases, economic stimulus)
- Issues:

1. Growth
2. Risk of democratic breakdown, inability to complete austerity programme

Further questions and observations
2. Is the gap too great?

- ❖Will Greece (Portugal?) ever catch up?
- ❖Can (temporary) exits be managed?
- ❖Issues:

1. Need to learn from successes of other countries in modernising their economies, adjusting to crises
2. Need for temporary help, fiscal transfers

Further questions and observations 3. Role of economists and commentators

- Irritating but useful (M. Wolf, W. Münchau, J. Pisani-Ferry, P. Kruger, P. de Grauwe, “The Economist”)
- Include respected establishment figures (P. Sutherland, M. Monti, G. Soros)
- A complex, intractable problem needs many heads to help find a solution

Further questions and observations
4. The euro and eurozone leadership

- ❖Euro avoided even worse turmoil in financial crisis
- ❖Has provided ten years of relative calm and prosperity for eurozone
- ❖Eurozone leadership simultaneously facing recession and fiscal deficits in their economies already weakened by financial crisis
- ❖A simultaneous fiscal and banking crisis

Thank you for your attention

Francis Rawlinson, Kwansei Gakuin University

The origins of the euro crisis and the need for economic coordination
in a currency union

EUIJ-Kyushu, First Annual International Conference on

'European Challenges for Overcoming the Crisis', 3 March 2012

Introduction

My talk will be about the origins of the euro crisis and the need for further economic coordination in the eurozone if it is to be able to avoid and cope with such crises more easily in future.

First I deal with the origins (Slide 2). The starting point of economic and monetary union was not ideal. The European Union is not sufficiently integrated in a number of areas compared to the optimum situation for a monetary union. In hindsight, the design of the governance system was flawed, the implementation was lax, and the revision of the system in 2005 showed complacency and sent the wrong signal to markets, which had yet to awaken to the risks created by the imbalances that had developed. When the crisis broke, the reaction from markets was as violent as their previous behavior had been placid. Deficit countries faced rising interest rates on their borrowing, debt downgrades and were rapidly shut out of markets. There was contagion, a domino effect, with one country after another being affected. And the nature of the crisis became more and more clearly a banking crisis, rather than a debt crisis, caused by unsustainable private imbalances within the eurozone.

I try to draw together some lessons from these events. The main thing we need for the currency union to survive is wider and deeper economic coordination.

Next (Slide 3), I will deal with the ingredients of that economic coordination: more extensive macroeconomic surveillance and coordinated action to deal with private imbalances reflecting differences in competitiveness; deeper and more subtle coordination of fiscal policy, seeing the eurozone as a whole and focusing on longer-term reduction of debt burdens more than on deficits; using the markets to induce fiscal discipline, and banking regulation including recapitalization; and finally crisis management tools involving the possibility of debt restructuring.

I will end my talk (Slide 4) with some reflections on current key questions, which other speakers will no doubt take up later, such as: will austerity work without fiscal transfers to the countries currently in the "intensive care ward"? Are some countries realistically capable of adjusting their economies sufficiently to remain within the common currency without it becoming a transfer union? The role of economic commentators and the media: helpful or just irritating? Finally, I offer some reflections on the benefits of the euro and in defence of the eurozone leadership, which is widely criticized for its efforts to solve the crisis.

Starting point – insufficient economic integration; an inadequate governance system

The starting point of economic and monetary union (Slide 5) was not optimal judging by the criteria developed in the optimum currency area theory. First of all, it was a monetary union without fiscal union, which means in effect political union. The EU has no taxing powers. Its budget – customs duties and direct contributions from Member States – is around 1% of GDP, far less than the USA, whose federal budget is 18% of GDP. It has no treasury to provide fiscal transfers to states in crisis. It has no spender or borrower of last resort. If the European Central Bank has reluctantly begun to fulfil that role, it was and is not in its mandate.

The EU has insufficient powers of economic and fiscal policy coordination. Member States have been determined to hang on to their sovereignty in these areas. We only have a common VAT system; the rest of taxation is uncoordinated and subject to unanimous voting in the EU Council. Social security systems are still a national preserve. This means that progress on integrating tax and social security systems is painfully slow. Member States jealously guard their sovereignty over fiscal policy changes. It is one of the few areas where their sovereignty is almost untouched by integration. But greater coordination of fiscal policy is vital for monetary union.

Labour mobility between countries of the European Union is very limited, largely due to language and cultural differences. So that is not an answer to recessions. And there are rigidities in labour markets in some countries, which make it difficult for them to regain lost competitiveness through labour cost reductions. There is a north-south divide in this area: the north, led by the UK, with flexible labour markets; the south – Spain, Portugal, Italy and Greece – with rigidities.

The economic structure of eurozone countries is disparate. Most are modern and competitive with a varied economy, but a few on the periphery (Greece and Portugal) are relatively one-sided (primary production competing with developing countries, textiles and tourism).

Speaking of course in hindsight, the governance system for the euro (Slide 6) was flawed in several respects. It focused overly on deficits (the 3% of GDP limit) and not enough on reduction of the overall debt burden, which in some countries was well over 60% and, after the introduction of the euro, was increasing again. The nature of deficits, for spending on capital or consumption, was not taken into account; nor was account taken of the debt burden – if this was low, arguably bigger deficits should be tolerable. There was little emphasis on competitiveness and structural reform. There was no crisis resolution mechanism – no provision for emergencies and no bail-out fund (indeed the rules forbade bail-outs). And, above all, sanctions were to be enforced by the very politicians whose countries' policies were to be subject to the sanctions.

Private-sector imbalances

There were major risks totally unforeseen by the governance mechanisms (Slide 7). Firstly, the uniformly low base interest rates in the eurozone set by the ECB could dull the sensitivity of the markets to differences in economic performance, reflected in

balance of payments deficits. Commercial banks could refinance their holdings of peripheral countries' government bonds at the discount window of the ECB and regulators treated such bonds as risk-free. The low interest rates could lead to unsustainable borrowing, by the public or private sectors, or both, in the less competitive countries that had balance of payments deficits. This could result in big private sector imbalances developing. And it was not anticipated that the private imbalances would switch to fiscal imbalances when bust followed boom and the financial markets woke up.

Data assembled by the IMF and reported in the Financial Times early in 2010 show the size of these imbalances in 2006 (Slide 8). Germany had a current account surplus of 6.5% of GDP and the Netherlands a current account surplus of 9.4%, while Spain, Ireland, Greece and Portugal had deficits. Spain's deficit was 9% of GDP. In Spain and Ireland in particular, credit-fuelled private property bubbles had developed. Note that, unlike Germany and France, which had budget deficits, Spain and Ireland's government budgets were in surplus. Thus, the later troubles of Spain and Ireland were not caused by fiscal deficits, subject to the rules of eurozone governance, but by private imbalances, which were not monitored by the eurozone. Portugal and Greece, however, had budget deficits as well as current account deficits.

After the crash, there was a sharp change in the private sector spending-income balances in the peripheral countries. Spending was reduced and the private balances became positive. And what happened to the previous private-sector imbalances? These resurfaced as large public sector deficits (Slide 9), as a result of lower tax receipts and increased public spending on benefits after the crash.

Operation of the governance system in practice; revision of the Pact

How did the governance system (the Stability and Growth Pact) work in practice? (Slide 10). First, the enforcement of the pact was lax, because it was left to politicians of the countries that were supposed to be the subject of possible sanctions. Member States were reluctant to apply the Excessive Deficits Procedure to their colleagues. So the procedure never led to actual sanctions being imposed on any Member State for breaching the rules of the Pact. Secondly, there was insufficient scrutiny of public accounts data. This allowed the chronic misreporting by Greece, which sparked the euro crisis in late 2009.

Thirdly and most importantly, the degree of macro-economic coordination in the eurozone was insufficient to counter the risks posed by private-sector imbalances due to divergent economic performance. When the spending bubbles burst, these risks would materialize as large fiscal deficits in the peripheral countries themselves and as non-performing loan books held by banks, for the most part banks of the core countries. At the end of 2009, banks headquartered in the eurozone had a total of $1,579bn in exposure to Greece, Ireland, Portugal and Spain. French and German banks accounted for no less than 61% of that. And 84 % was lending to private individuals; only 16% was public sector debt (Financial Times, 22 June 2010).

The revision of the pact in 2005 (Slide 11), according to the European Council President, Herman van Rompuy, "sent the wrong signal" to the financial markets. It reinforced their complacency about differences in economic performance, gaps in

competitiveness, and the build-up of imbalances. The revision made a number of useful improvements to the rules to improve flexibility, such as the extension of deadlines for adjustment. But it ignored other important improvements that were suggested at the time. One of these was the differentiation of deficits between capital and consumption spending or according to a country's overall debt position. Another was introducing variation in the treatment of government bonds by the ECB according to country's debt position. For example, the ECB could have announced that it would guarantee a lower proportion of the bonds of countries with high debt burdens. This could have been a useful signal to markets, inducing them to revise their risk perceptions about peripheral countries' debt and start raising their interest rates.

Onset of the crisis

The crisis had already begun with the bursting of their property bubbles in Ireland and Spain (Slide 12) in the wake of the financial crisis in 2008-9. Recessions also began in Greece and Portugal. The peripheral countries' fiscal positions sharply deteriorated. Ireland guaranteed the liabilities of six Irish banks in September 2008. This increased the contingent risk to its public finances.

A reassessment by the financial markets of the risks attaching to peripheral countries' debt was thus well under way when the incoming new government in Greece revealed the true state of its public finances in late 2009.

The reassessment of risks had predictable consequences: constantly rising interest rates and yields on government bonds, credit rating agency downgrades, and the shutting out of the peripheral countries from financial markets. The yields on their bonds rose to 6 % and more above those on German bonds, an unsustainable level. The peripheral countries' governments and their banks quickly became dependent on liquidity support from the European Central Bank. The ECB replaced the crisis resolution vehicle which the eurozone system lacked. And more visibly, the peripheral countries Greece, Ireland and Portugal successively required emergency loans from the EU and IMF or from the hastily established European Financial Stability Fund.

The spread of the crisis, or contagion (Slide 13), was a natural expression of market dynamics, not the result of "speculation". Risk perceptions had been complacent; the reassessment entered successively new areas as risks became clearer, particularly those concerning the banks. The halting reaction of the eurozone leadership did not help, but there were mitigating circumstances for their lack of immediate action, which I will go into later. Contagion can only be halted by action that restores market confidence and faces unpalatable facts. Such facts were the undercapitalization of the banks that had funded the credit booms and the need for a restructuring of Greek debt. Unfortunately, the initial response to the crisis was not decisive or realistic enough with regard to these facts to restore market confidence. The underlying banking crisis and the need for a restructuring of Greek debt were not admitted until a year and a half later in mid 2011.

Lessons for economic governance

What lessons has the crisis taught us regarding the system of governance required for the currency union to work? (Slide 14)

First, we need deeper economic policy coordination in the eurozone – "economic governance" not just monetary governance. The economic governance must cover destabilizing macro-economic imbalances between eurozone countries, reflected in current account surpluses and deficits and in lending and borrowing balances. The previous exclusive focus on public finances proved insufficient.

Second, the economic structure of some peripheral countries compared with the advanced core is difficult to accommodate within a currency union. There is no system of fiscal transfers in the eurozone and there are no automatic stabilizers (lower tax transfers, bigger receipts from federal programmes) like in the United States. So the peripheral countries with chronic competitiveness problems like Greece and Portugal need to catch up to the standard of development of the core in order to stay in the currency union. This also applies, to a lesser extent, to Spain and partly to Italy. Ireland is a special case; its problems are largely due to the banking crisis.

The only way the problem countries can improve their competitiveness is through deeper economic integration with the markets of the core countries through market opening, restructuring and modernization.

Some of the eastern European member countries also have relatively backward economies that at present would be incompatible with sharing a single currency with Germany and France. Presumably, however, the eurozone leadership will be more careful in future about admitting such countries in the first place.

Third, the economic governance of the eurozone must be conducted in close cooperation with banking and financial market regulation. The crisis has shown that sovereign debt and banking problems are inseparable and must be treated together.

This leads on to the fourth requirement, the provision for default on eurozone government bonds. Markets can act as a strong discipline on governments' behaviour. But this is only the case if they are induced to make responsible risk assessments as to the security or otherwise of their investments. They will only do so if the implicit guarantee of all government debt is removed.

Fifth, enforcement should be made less political and more independent. This is one of the most difficult requirements. It requires a change in mentality towards a consciousness of the interdependence between one's own country's economic decision-making and that of one's partners and a willingness to adjust preferred policies to prevent or alleviate problems in partner countries.

Finally, permanent crisis management tools are needed to restore calm on financial markets through emergency liquidity help and market support.

Another issue that emerges in the discussion of several of these requirements is the question of eurobonds.

The ingredients of economic coordination: macroeconomic imbalances

I will now go into each of these requirements in turn and highlight certain questions that they raise. I am not going to try to pass judgment on whether the measures already adopted or proposed by the eurozone leadership fulfil these needs.

First, concerning macroeconomic imbalances (Slide 15), we must be realistic about the fact that collective, coordinated action on imbalances is going to be extremely difficult to achieve. It requires a fundamental change in the mindset of governments and national parliaments, used to determining economic policy in almost total independence. Here are some of the difficulties:

1. It is difficult for Germany to admit that its current account surpluses and unwise lending by its banks have been a contributory cause to the crisis. On the other hand, Germans may be persuaded by the argument that they have benefited from the euro and the euro is therefore worth saving and that therefore some further sacrifices in the economic sphere should be made. These will include action to reduce surpluses through stimulation of domestic demand and possibly accepting losses at German banks through further debt restructuring of peripheral countries' debt to make their debt burdens sustainable.

2. This raises the question of whether the action on imbalances can wait until the current austerity programmes in peripheral countries have run their course. Many outside commentators doubt whether in some of these countries the austerity programmes can work. They think further action to alleviate their debt burdens is necessary.

3. It is also the prevalent opinion outside the eurozone leadership and governments that there is unlikely to be significant growth in the eurozone periphery in coming years. This will make it difficult for them to put their finances back on a sustainable footing under the present austerity programmes, without further help and economic stimulus by the core countries.

4. The ingrained habits of national sovereignty make genuine coordination of policy and shared sacrifices hard to achieve. This raises the question of the decision-making bodies and procedures. How independent of national governments will they become?

5. The governments of the peripheral countries, the opposition in Germany itself, and economic commentators, want the German government to express its solidarity with its partners by agreeing to the issue of common eurobonds. This could be a kind of compensation for the pain of austerity, could calm the markets and could help peripheral countries through the crisis.

Structural reform in the periphery

Internal structural reforms are needed in the peripheral countries for them to regain competitiveness (Slide 16). They need to reach the standards of labour market

flexibility, productivity, efficiency in the public sector, and pension arrangements found in the core countries. Several parts of the Europe 2020 Strategy can help them improve competitiveness. I would single out the targets for raising the employment rate to 75% and the share of renewable energy to 20%. More determined application of single market rules to liberalize energy and other markets and in the public procurement field can also help.

The issues here are: Can Greece ever catch up? With great respect to my Greek ex-colleagues in the Commission, the Greek administration has often been the odd man out in the EU, finding it very difficult to adapt to disciplines accepted by all the other members. Secondly, the sovereignty issue arises again, for example with regard to changes in the legal and tax system that hamper competitiveness. How can Greece be forced to speed up reforms? Finally, I come back to the question whether Greece can survive the current austerity programme without further help (or will it have to leave the euro altogether?). The same doubts and considerations apply to Portugal and, to a lesser extent, Spain.

Fiscal coordination

The future fiscal coordination in the eurozone (Slide 17) should focus on debt reduction. It should also be more subtle and intelligent, regarding the purpose of deficits, the point in the economic cycle and debt reduction goals. As genuine coordination of the policies of countries bound by a common currency, it should look at the eurozone as a whole.

This would mean a real possibility of bringing about adjustments to national policies where the interests of the common currency require, possibly against the will of national parliaments. A real transfer of sovereignty is involved. Taxation and expenditure are one of the few remaining areas over which national parliaments still have virtually exclusive control. In the Member States there is already a feeling that national parliaments are unable to assert proper control of EU action. To avoid aggravating this, very sensitive handling will be required. Again, concrete advantages in return, such as eurobonds, might sweeten the pill.

Discipline from financial markets; banking regulation

The crisis would have been less serious if financial markets had played their role in disciplining private and public spending in the early years of the euro's existence (Slide 18). Future eurozone governance should harness the markets to perform their proper role. Therefore, different levels of risk should be made clear, and reassuring but false signals should be avoided. There should be transparency of information regarding risk. An example of the opposite policy was the initial reluctance to publish the bank stress tests, for fear of unsettling the markets. Politicians should not hide their disagreements but there need to be greater efforts to speak with one voice once decisions have been taken. The governance machinery should facilitate strong leadership and summits between the "Merkozy" duo should avoid pre-empting decisions by the established decision-making bodies.

Banking regulation should move hand in hand with fiscal and economic coordination (Slide 19). The recapitalization of the most exposed banks, based on stress tests using

reasonable risk assumptions, is under way. New European-level regulatory machinery, including on systemic risks, has been set up. But decisions are still needed on the channel for emergency liquidity funding for banks, if the ECB is no longer to fulfil this role, and on the resolution mechanism for bank failures and how it is to be funded. A European solution to the "too big to fail" situation of mega-banks comparable to the Dodds-Frank Act in the US would be preferable to piecemeal national legislation. Finally, there is the question of the enforcement of banking regulatory authority decisions on banks.

Crisis management

Permanent machinery for crisis management with adequate "firepower" is needed (Slide 20). This is already underway with the enlarged European Financial Stability Facility and the European Stability Mechanism. They are eurozone treasuries in embryo. The agreement on building the risk of restructuring into future bond issues seems reasonable, but this risk should be minimized by a governance system that is more effective in preventing default situations. There still seems to be much work to do done on the division of labour between the crisis management facility and the European Central Bank. Should the crisis management vehicle take over liquidity funding and market support from the ECB? Should it have a bank licence and offer unlimited support, be a lender of last resort?

The question of whether a restructuring of the debts of further peripheral countries (Portugal, Ireland) will be necessary is still open. So is the question of the terms of rescue loans – are the IMF-style conditions too harsh and will they ultimately be self-defeating? Will further help be needed?

Final remarks

In conclusion, I would like to repeat a few of the messages I have tried to give in my presentation.

1. Will austerity work?(Slide 21) The countries in the "intensive care ward" need to see some light at the end of the tunnel of austerity, some foreseeable exit when the pain will be over. The core countries that are imposing their discipline on the peripheral countries should offer something in return to ease the peripheral countries' plight: eurobonds, a strong enough firewall to reduce the liquidity difficulties of the solvent but illiquid countries, a commitment to unlimited bond purchases for these countries, and economic stimulus in the core countries. There needs to be action to restore growth. And the risk of a breakdown of democratic institutions in the periphery and their inability to complete the austerity programmes must be taken seriously and contingency plans (for example, for exiting the euro) made.

2. Realism is needed when assessing the chances of success of the austerity programmes and the chances of Greece, for examples, ever bridging its competitiveness gap (Slide 22). Can exits from the euro-zone be managed? Could such an exit be temporary? I have no doubt the European Commission is thinking hard about this. Personally, I am optimistic that most of the countries now in difficulties can pull through, provided the core countries play

their part in helping them to adjust. The Baltic states are often cited as examples of how small countries can adjust to crises. There are many other cases of countries radically modernizing their economies. The "Celtic Tiger", Ireland, used to be referred to as an example to emulate, before the euro crisis.

3. Economic commentators have, in my opinion, played a useful role in the euro crisis, although their criticisms have no doubt been irritating to the eurozone leadership (Slide 23). Among the most strident of critics has been the British "Economist" magazine, but arguably it has mostly been proved right. The British "Financial Times" has offered a wide variety of views and has invited respected elder statesmen to comment. The lesson that has emerged is that many heads are needed to solve such an intractable and complex problem

4. In defence of the euro (Slide 24), the existence of the single currency avoided even worse turbulence during the financial crisis of 2008-9. The euro provided ten years of relative calm and prosperity. It can in my opinion continue to do so, provided the right decisions are taken by the leadership. In defence of the leadership, they were faced with a simultaneous sovereign debt and banking crisis, coming hard on the heels of the financial meltdown of 2008-9 which had severely weakened their economies. Their populations were themselves suffering austerity and reluctant to help. However, arguably the eurozone leadership has been at fault in failing to impress sufficiently on their populations the benefits the euro has brought to Europe.