Taking European integration seriously: competitiveness, imbalances, and economic stability in the Euro Area

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The Euro crisis presents a challenge nor only to policy makers, but to economic theory as well. The explanation of a problem often traces already the path for its remedy. But if the diagnosis is mistaken, the medicine could kill the patient. Economic theory plays, therefore, an important role in overcoming the Euro crisis, in preserving stability, and in keeping Europe together. Five years of unabated crisis have eroded the trust of citizens that the euro will improve their prosperity and welfare. The rejection of the euro and of European integration is gaining ground in public opinion. Hence, if Europe has failed to end the crisis, it may have erred in explaining it. It is therefore time to review the theory that has guided policies so far.

In this chapter I will first look at the link between competitiveness and macroeconomic imbalances and in section 2 discuss the fallacies of this approach. Section 3 proposes flow of funds analysis as an alternative to the current account based theories of the Euro crisis. Section 4 concludes.

1. Competitiveness and imbalances in the Euro Area

Economic models explaining financial crises in general and the Euro crisis in particular abound. Many deal with money, foreign debt, exchange rates, and contagion in global financial markets; some deal with domestic institutions, banks and local debt; but increasingly the focus is on competitiveness, or rather the loss of competitiveness in Europe's south.[1] Unfortunately, most of these explanations are mixing foreign and domestic aspects from different theories into inconsistent policy advice. This amalgam reflects the complex governance of the Euro Area, where governments act as if they were fully independent nations without considering the external effects of their policies on citizens living in other member states. Competitiveness is a prime example for such interdependence, for the competitive gain of one party is the loss of another. Reforms improving competitiveness in one country will inevitably deteriorate relative conditions in another. Because policy makers are ignoring the systemic changes and interdependencies caused by monetary integration, they are unable to adopt coherent strategies for overcoming the crisis. The shortcomings in the way governments have handled the crisis throw a shadow on the future of the euro and European integration. This chapter is an invitation to reconsider one important dimension of the crisis explanation: competitiveness.

Macroeconomic imbalances in the Euro Area are related to competitiveness. At first, blame for the Euro crisis was put on public debt and fiscal irresponsibility, in particular on the violations of the Stability and Growth Pact. Greece was the paradigmatic case. But soon a new aspect emerged: in some countries, notably in Ireland and Spain, private debt, granted by commercial banks, had been excessive, and when the economy slowed down banks got into trouble. Governments needed to bail out their banks to preserve financial stability and private debt spilled over into public debt. When the sum of public deficits and private investment exceeds national savings, the gap has to be financed by borrowing from non-residents and this is recorded by national current account deficits. Because it

[1] The "South" covers Italy, Spain, Greece, Cyprus, Portugal and when data available Ireland

was observed that most crisis countries had accumulated large current account deficits, the emergence of excessive imbalances became the prominent explanation of the crisis.

Deficits increase the stock of outstanding debt; current account deficits increase foreign debt. The sustainability of foreign debt requires, therefore, that the discounted value of all future current account positions be equal to the outstanding value of foreign debt today. Hence, according to standard international macroeconomics, countries with large foreign debt must generate current account surpluses in the future, because that is how they earn the foreign currency necessary to service foreign debt. Following this logic, the European Commission has designed a new policy procedure aimed at reducing what it calls *external* imbalances *within* the Euro Area. It argues that "nominal exchange rate devaluations are not an available policy tool for the correction of external imbalances in EMU", so that various "internal devaluation" measures must "mimic the effects of nominal devaluations by reducing domestic prices and encourage expenditure-switching effects" (European Commission, 2011:21). In practice this means that austerity is the main tool for correcting "external" imbalances and promoting net exports from southern states.

Austerity means cutting public expenditure, reducing wages or lowering statutory wage costs by tax and welfare reforms. Whether current account imbalances are corrected by cutting aggregate demand or changing relative costs and prices may depend on where one sees the causes of the imbalances, but in any case different policies must be applied in deficit and surplus countries. Eurosceptics have always insisted that with respect to monetary policy "one size does not fit all", and even the German Chancellor Merkel seems to have been convinced by them.[2] The Walters' critique had argued long ago that in high inflation countries the unified nominal interest rate in monetary union would lower real interest rates below the Euro average and thereby fuel local demand booms and re-enforce relative price distortions. Mongelli and Wyplosz (2008) have rightly objected that this disequilibrium would be corrected by the negative effects on competitiveness, because rising prices will bring the demand boom to an end. A better explanation for diverging booms and busts in the Euro Area is, therefore, the convergence of nominal interest rates that has followed the creation of monetary union. It has made credit cheap in the south which has caused the over-accumulation and waste of capital resources (Sinn, 2013; Giavazzi and Spaventa, 2010) and the excess demand that has pushed inflation over and above the Euro average (Wyplosz, 2013). A variant of this argument focuses on the cost side and especially on unit labour costs and wage bargaining. "Irresponsible" and "uncoordinated" price and wage setting behaviour is then blamed for the crisis (Flassbeck and Spiecker, 2011). The boom was not sustainable because the deteriorating competitiveness and the slow growth during the crisis have widened budget deficits. However, regardless of what kind of explanation one favours, both approaches share the idea that current account deficits are a good indicator for emerging macroeconomic imbalances within the Euro Area.

The recent re-consideration of current account imbalances between member states of the Euro Area represents a significant shift in political thinking. In the early years of monetary union, rising current account deficits were actually seen as beneficial, because they reflected deeper financial integration and the more efficient allocation of resources across the Euro Area (Blanchard and Giavazzi, 2002).[3]

[2] http://www.faz.net/aktuell/wirtschaft/europas-schuldenkrise/vor-ezb-zinsentscheid-merkel-fuer-deutschland-muessten-zinsen-hoeher-sein-12161702.html

[3] Of course, markets are not perfect, as monopolies, politics and institutions may also generate waste and misallocated resources. The point is, that lifting the foreign exchange constraint *opens the possibility* to more efficient allocation of resources and, as the European Commission (2012b:11) recognizes: "Current account

Capital markets could allocate savings to where they would yield the highest return within the single currency area, and the Euro Area was seen as an integrated monetary economy. After 2009, this interpretation was abandoned. Member states were again represented as separate jurisdictions, in which local governments had to minimize risk exposure for local tax payers rather than maximise the welfare of all citizens. The resulting lack of political coherence is one of the main causes for the continuous deterioration of the crisis.

The European Commission took the lead in this new interpretation by inventing the *Macroeconomic Imbalance Procedure* (MIP), modelled on the Stability and Growth Pact. It aims "to prevent and correct the harmful macroeconomic imbalances by identifying potential risks early on".[4] The so-called surveillance mechanism starts with the *Alert Mechanism Report*, which uses a scoreboard of indicators to identify where and when an "in-depth review" is necessary. If the situation is deemed unsustainable, the *Excessive Imbalance Procedure* sets up rules for member states to remedy the situation. The score board indicators combine stock and flow data to capture deteriorations of imbalances, but the main focus is on correcting current account deficits and external debt caused by distortions in relative prices.[5]

In principle, having a tool for avoiding excessive imbalances is progress in the Euro Area's economic governance. If properly used, it could have helped to prevent the overaccumulation crises in the south. In practice, however, the new procedure's focus on current accounts and external debt is harmful and misleading. Today's adjustment policies in the Euro Area stand in the context of optimum currency area (OCA) theory, which has influenced debates on European monetary union for a long time.[6] This theory interprets a currency area as a fixed exchange rate regime and calculates its benefits as the balance between gains from lower transaction costs and the loss of the exchange rate as an adjustment tool (de Grauwe, 2007). It argues that if a country is hit by a negative shock, say a recession or deteriorating competitiveness, and it has its own currency, it can use the exchange rate to adjust the country's relative prices. This depreciates domestic wealth relative to the rest of the world, but at least the economy can maintain domestic demand and add to it additional demand for exports. By contrast, in a fixed exchange rate regime, one cannot use the exchange rate to devalue; with inflexible prices and wages, a prolonged recession with high and persistent unemployment would follow. Furthermore, the higher external debt levels of a country are, the steeper should be the real depreciations in order to "put the price watch back" (Sinn, 2013). Hence, giving up the possibility of correcting the exchange rate is costly. The negative effects of regional recessions could be mitigated by a Transfer Union, where the surplus countries subsidise the deficit countries; but this solution is resisted by voters in the prosperous north of Europe. Hence, prices and wages are the main adjustment tool in the Euro Area, and OCA theory has made labour market flexibility the principal criterion for judging the optimality of currency areas. In this model, the net benefits of monetary union will become negative if labour markets are rigid and shocks are large. However, the role of financial markets and the central bank is rarely discussed in this context. I will show below

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deficits and surpluses are not necessarily macroeconomic imbalances in the sense of developments which are adversely affecting, or have the potential to affect the proper functioning of economies, of the monetary union, or on a wider scale."

[4]See: http://ec.europa.eu/economy_finance/economic_governance/macroeconomic_imbalance_procedure/index_en.htm

[5] See: http://ec.europa.eu/economy_finance/economic_governance/macroeconomic_imbalance_procedure/mip_scoreboard/index_en.htm

[6]Collignon and Schwarzer (2003) have shown how OCA theory became influential among academics, and politicians who used it to keep member states out of the euro, but less so among policy makers and the business community, who were interested in solidifying the single market.

that the existence of a single lender of last resort makes monetary union much more robust than an ordinary fixed exchange rate regime.

No doubt, macroeconomic imbalances must be corrected. The question is how this can be done with minimal welfare losses. If current accounts are the target, austerity is inevitable because "excessive" domestic expenditure must be cut back. However, the burden of such welfare losses depends on who is doing the adjustment. Member states with current account surpluses favour asymmetric adjustment, where the brunt of the correction must be borne by "non-competitive" deficit countries, while they themselves can continue with their "competitive" performance as before. Of course, the reduction of deficits in the south is incompatible with the maintenance of surpluses in the north, but few policy makers seem to notice the inconsistency of their demands. By contrast, deficit countries seek more symmetric solutions, where surplus countries increase spending on goods from deficit countries, hoping to soften thereby the adjustment pain. Sinn (2013:2) has summarized the argument by saying that "Europe needs austerity in the south and inflationary growth in the north to improve the competitiveness of the south and to structurally improve the current account imbalances". Similarly, Flassbeck and Spiecker (2011:186) have argued that "wages in Germany have to rise for a considerable amount of time by more than is warranted by the traditional wage rule (national productivity growth plus the common inflation target) and the Southern European countries must pursue the opposite strategy." While leaning towards asymmetry in the official policy documents submitted for approval by the Council, the European Commission has favoured in its analytic studies a more balanced approach.[7] However, whether symmetric or asymmetric and whether based on aggregate demand or relative prices, most policy recommendations end up with proposing the correction of member states' current accounts.

The focus on current accounts implies that national investment must be financed by national savings. There is no good reason for such a proposal in a currency union. It violates the basic principles of a single market and creates financial fragmentation. The prevailing policy consensus has the unintended consequence of unravelling the European edifice. Furthermore, balancing current accounts between member states also means that adjustment must work through the tradable goods sector. A real depreciation shifts the competitive advantage in favour of exports, so that the trade balance improves. When countries have their own currencies, a nominal devaluation can support adjustment at least in the short run, but we know from a long history of adjustments in the global and European economies that such policies often cause substantial welfare losses. Nominal devaluations seem initially less painful, but over time they will import inflation, which will annihilate the competitive cost advantage. By contrast, shifting relative prices in favour of tradable goods without adjusting nominal exchange rates may be initially more painful, but might be more sustainable in the long run. Europe's experience with flexible exchange rates from the 1970s to the 1990s has shown that exchange rate flexibility is not compatible with a fully integrated internal market in Europe (Collignon and Schwarzer, 2003; Padoa-Schioppa, 1987). Furthermore, a nominal devaluation will reduce the value of domestic assets, liabilities and income and that makes residents poorer. Hence, it is not surprising that southern member states resist leaving the euro as this would reduce their welfare.

However, if prices are not flexible and devaluations are ruled out, adjustment seems impossible and monetary union may be doomed. Referring to fixed exchange rate systems like Bretton Woods,

[7] For the first see European Commission 2012, for the second 2012b.

Flassbeck and Spiecker (2011:181) have argued: "persistent divergences of inflation rates inside the monetary union are fatal because the differences in the cost and price level among the member countries accumulate over time and produce real exchange rate appreciation and depreciation, or, in other words, unsustainable over- and undervaluation for currencies that no longer exist." Sinn and Wollmershaeuser (2011) also compare the Euro Area with the fixed exchange rate system of Bretton Woods and then talk of inexistent currencies, namely "German" and "Irish euros". This is odd. Why should anyone bother about ghost currencies that no longer exist? Clearly, there is a theoretical inconsistency in these models.

I will now argue that a currency area is not a fixed exchange rate arrangement and imbalances between members of the same currency union must not be treated like "external" imbalances in international economics. Shifting incentives in favour of exports is less important in a monetary union than in international economics, because growth in the non-tradable sector can compensate some of the welfare losses. Instead, the primary economic policy objective must be balanced growth as already postulated in the Treaty on the European Union, article 3.3. Investment is a crucial variable in this context and a better indicator for imbalances are the flow of funds between institutional sectors of the Euro Area.

2. Fallacies in the debate on macroeconomic imbalances in the Euro Area

It would be a mistake to believe that because it emerged from the European Monetary System where exchange rates were fixed but adjustable, European Monetary Union is nothing else but a permanent locking of national currencies to a common currency. This view, widespread as it is, does not take into account how a monetary union works. I will therefore first review how a currency area functions and then discuss the role of the often neglected non-tradable sector, before drawing the conclusions for the macroeconomic adjustment programs in the Euro Area.

1.1. Monetary union as a payment union

A currency area is a payment union. It is defined as the territory where credit contracts can be enforced and extinguished by paying the legally defined and generally accepted currency.[8] In other words, everyone has to use the same currency for making payments. The Euro Area functions exactly like any other currency area. When European Monetary Union started on 1 January 1999, the euro became legal tender in the participating member states (TEU, art. 3.4). Previously existing monetary laws in member states were abrogated and the European Central Bank (ECB) was set up as the directive organ and head office for the conduct of monetary policy. The existing national central banks (NCB) were merged with the ECB to form the Eurosystem.[9]

The central bank is the bank of banks. Money, i.e. legal tender, is created by the central bank when it is granting credit to the domestic banking system or buying foreign assets. The central bank's assets

[8] The IMF (2009: 44) defines: "For an economy, a domestic currency is distinguished from foreign currency. Domestic currency is that which is legal tender in the economy and issued by the monetary authority for that economy; that is, either that of an individual economy or, in a currency union, that of the common currency area to which the economy belongs. All other currencies are foreign currencies."

[9] See Collignon, 2012. The IMF (2009:261) distinguishes between centralised (African and Caribbean currency unions) and decentralised currency unions (Euro Area). Their main variance consists in whether the central bank has a single balance sheet or a consolidated balance sheet with national monetary agencies, but from an economic point of view there is little difference between the two.

are therefore claims against domestic and foreign economies. Central bank money is credited to the accounts in which commercial banks hold their reserves with the central bank; money is therefore a *liability* by the central bank, but also a claim (an *asset*) by banks[10] on the central bank. Against their reserve holdings, banks can also draw bank notes which they put into circulation among their clients, but this fact is analytically less interesting and we can concentrate our discussion on central bank money. Thus, in the Euro Area, domestic money, i.e. the currency of the currency area, is the liability of the Eurosystem.[11] Contrary to the assumption of ghost-currencies, there is no "national" euro. Money proper is central bank money, also called narrow money. *Broad money* is defined as currency and bank deposits held by non-financial agents (corporations and households). It consists essentially of liabilities of commercial banks. Commercial banks hold reserves of central bank money in accordance with legal requirements (minimum reserves) and their own liquidity preferences, and they create broad money when they give credit to the other economic sectors. When economic agents make payments in the Euro Area, they transfer these liabilities to each other.[12]

By contrast, payments outside the currency area are made in *foreign* currency. Foreign currency cannot be created by the domestic central bank. The money readily available for making foreign payments consists therefore of *reserve assets* held by the central bank in foreign currency.[13] As the name indicates, these reserves are recorded as assets in the central bank's balance sheet. Thus, there is a clear categorical distinction between domestic money (a *liability*) and international money (an *asset*). It follows that a currency area is defined by the fact that it has a central bank whose liabilities serve for making payments and extinguishing debt. The abrogation of national monetary laws has lifted the distinction of monetary jurisdictions and turned the Euro Area into an "economic country". To analyse monetary transactions between residents of different member states in the Euro Area as if they took place between independent "foreign" countries is therefore no longer appropriate.[14] Within a monetary union, trans-border payments have the same status as payments within a nation state.

[10] The official denomination is monetary and financial institutions (MFI), but the name "banks" or "commercial banks" conveys the underlying function more intuitively.

[11] "The effects of the Eurosystem's monetary policy operations appear on the balance sheets of a number of central banks. Given that the Eurosystem conducts a single monetary policy, its financial statements should reflect the financial impact of, and describe, the operations conducted by all euro area central banks as though they were one single entity. Consequently, the preparation of the Eurosystem's financial statements requires the consolidation of all NCB and ECB data." ECB *Monthly Bulletin* April 2012: 88.

[12] "The currency issued in a CU [currency union] is the domestic currency of the CU. It should always be considered a domestic currency from the viewpoint of each member economy, even though this currency can be issued by a nonresident institution (either another CUNCB [CU national central bank] or the CUCB [central bank]). One consequence is that, in a CU, from a national perspective, holdings of domestic currency can be a claim on a nonresident." IMF, 2009:257.

[13] Foreign exchange reserves are the equivalent of narrow money in the international context. Of course, economic agents can also draw on foreign assets they own, which is a form of "broad international money".

[14] The wide-spread confusion of economic countries and member states of the Euro Area results probably from the fact that as juridical entities member states still record national balance of payment statistics which summaries the economic relationships between residents and non-residents of an economy, while currency areas with a centralized government do not do so. However, even this convention has some arbitrariness. The System of National Accounts (United Nations, 2008:17) defines residency in non-jurisdictional terms: "The concept of residence in the SNA is not based on nationality or legal criteria. An institutional unit is said to be a resident unit of a country when it has a center of predominant economic interest in the economic territory of that country; that is, when it engages for an extended period (one year or more being taken as a practical guideline) in economic activities on this territory." The difficulties of allocating all payments to regional

Intra-currency area payments

The distinction between payments within the monetary union and the rest of the world (RoW) can be shown by a stylised example.[15] Let us assume our currency area consists of only two countries, Germany and Italy. It operates through the Eurosystem, in which the European Central Bank (ECB) is integrated with national central banks (the Bundesbank and the Banca d'Italia). The ECB decides on monetary policy and manages the foreign reserve assets for the Union. National central banks act as intermediaries that hold the deposit accounts of commercial banks[16] and have a net claim on the ECB's reserve assets.[17] Now imagine someone in Italy imports goods from Germany for an amount of €120.[18] The transaction is settled in domestic currency through the banking system. The importer's local bank makes a transfer to the exporter's bank through the payment system of the Eurosystem: the Italian bank's account with the Banca d'Italia is debited by €120, while the German bank's account with the Bundesbank is credited by the same amount.[19] Hence, the claims of the German economy on the Eurosystem increase by €120 and the net claims of Italy decline as a result of debiting the Banca d'Italia accounts. For Germany,[20] the reserve asset claim on the ECB increases and as a balancing item bank deposits (i.e. the broad money component held in German banks) increase as well; by contrast, in Italy, the claim by Banca d'Italia on the ECB is reduced and so is local money supply.[21] However, the transaction is neutral for the Eurosystem as a whole; the overall amount of foreign reserve assets and money supply does not change. See Table 1. This is how payments are made within a currency area.

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residents within the currency area are substantial, and while they can possibly be solved for trade flows (IMF, 2009), they are literally impossible for movements of cash (Jobst, 2011). Balance of payment statistics are much more reliable for international payments between territories with different currencies, because commercial banks acquire foreign currency for their clients from the central bank and these transactions are well documented.

[15] The following is based on IMF, 2009:265-268.

[16] According to the ECB, there are three main reasons for having a "system of central banks" in Europe instead of a single central bank: (1) The Eurosystem approach builds on the existing competencies of the NCBs, their institutional set-up, infrastructure, expertise and operational capabilities. Several central banks also perform additional tasks beside those of the Eurosystem. (2) Given the geographically large Euro Area and the long-established relationships between the national banking communities and their NCB, the credit institutions should have an access point to central banking in each participating Member State. (3) NCBs are better suited to deal with the multitude of nations, languages and cultures in the Euro Area instead of the supranational ECB. See: http://www.ecb.int/ecb/educational/facts/orga/html/or_002.en.html

[17] National central banks are remunerated for these claims.

[18] The same logic would apply if we consider the net purchase of German securities by Italian investors.

[19] These claims show up in the ECB balance sheet as "intra-Eurosystem claims" which are netted out in the consolidation of the Eurosystem balance sheet. Sinn and Wollmershaeuser (2011) have interpreted the claims by national central banks on the TARGET2 payment system as reflecting current account payments. In our simplified example here, where no autonomous financial transactions are taking place, this would be valid, but when one takes cash payments (Jobst, 2011) and autonomous credit and payment flows between banks (Collignon, 2012) into consideration this is no longer correct. It is also worth noting that intra Eurosystem claims can only be interpreted as potentially risky if the commitment by political authorities to sustain monetary union is put into question. Economically, they have no significance.

[20] It is useful to recall that all transactions are made by individual actors; *Germany* or *Italy* do not exist as actors. These are simply names for a group of actors who happen to live in the jurisdiction of a state.

[21]

Table 1. Intra-Euro Area payments

Bundesbank opening balance sheet				**Banca d'Italia opening balance sheet**				**Eurosystem opening balance sheet**			
Assets		***Liabilities***		***Assets***		***Liabilities***		***Assets***		***Liabilities***	
Net claim on ECB	200	Banknotes	1000	Net claim on ECB	200	Banknotes	600	Net claim on	400	Banknotes	1600
(reserve asset)				(reserve asset)				(reserve asset)			
Domestic assets	950	Bank deposits	150	Domestic assets	550	Bank deposits	150	Domestic ass	1500	Bank deposit	300
(claims on German residents)				(claims on Italian residents)				(claims on Italian residents)			
Total	*1150*	*Total*	*1150*	*Total*	*750*	*Total*	*750*	*Total*	*1900*	*Total*	*1900*
Balance of Payments											
	Germany			***Italy***							
	credit	*debit*			*credit*	*debit*					
Current account				***Current account***							
goods	120			goods		120					
Financial account				***Financial account***							
reserve asset		120		reserve asset	120						
Bundesbank closing balance sheet				**Banca d'Italia closing balance sheet**				**Eurosystem closing balance sheet**			
Assets		***Liabilities***		***Assets***		***Liabilities***		***Assets***		***Liabilities***	
Net claim on ECB	**320**	Banknotes	1000	Net claim on ECB	**80**	Banknotes	600	Net claim on	**400**	Banknotes	1600
(reserve asset)				(reserve asset)				(reserve asset)			
Domestic assets	950	Bank deposits	**270**	Domestic assets	550	Bank deposits	**30**	Domestic ass	1500	Bank deposit	**300**
(claims on German residents)				(claims on Italian residents)				(claims on Italian residents)			
Total	*1270*	*Total*	*1270*	*Total*	*630*	*Total*	*630*	*Total*	*1900*	*Total*	*1900*

Inter-currency area payments

Next, we look at international payments into a different currency area. Assume Germany exports goods worth €150 to the United Kingdom. The transaction is settled in GBP, which implies that the German exporter sells his foreign exchange receipts to his German bank and his account is credited €150. The bank sells now the foreign currency to the Eurosystem and its account with the Bundesbank is credited by the equivalent amount. Thus, the ECB increases its reserve assets and the account of the Bundesbank with the ECB is credited by €150. Net claims by Germany on the ECB have increased and so has broad money supply in Germany. Nothing has changed in Italy, but for the Euro Area as a whole reserve assets and money supply have increased. See Table 2. Of course, a net import from the rest of the world into the Euro Area would have the opposite effect of reducing reserve assets and money supply, assuming that the ECB does not sterilise the variations in reserve assets. However, if the ECB had reasons to be concerned about price stability, it would tighten monetary policy by selling domestic assets equivalent to the foreign assets it bought. In that case, monetary tightening would negatively affect growth in the non-exporting member states. For our argument here we can assume that prices remain stable and the ECB accommodates the growth-induced demand for liquidity. Export-led growth in Germany is then compatible with relative stagnation in Italy.

Table 2. Outside Euro Area payments

Bundesbank opening balance sheet				**Banca d'Italia opening balance sheet**				**Eurosystem opening balance sheet**			
Assets		***Liabilities***		***Assets***		***Liabilities***		***Assets***		***Liabilities***	
Net claim on ECB	200	Banknotes	1000	Net claim on ECB	200	Banknotes	600	Net claim on	400	Banknotes	1600
(reserve asset)				(reserve asset)				(reserve asset)			
Domestic assets	950	Bank deposits	150	Domestic assets	550	Bank deposit	150	Domestic ass	1500	Bank deposits	300
(claims on German residents)				(claims on Italian residents)				(claims on Italian residents)			
Total	*1150*	*Total*	*1150*	*Total*	*750*	*Total*	*750*	*Total*	*1900*	*Total*	*1900*
Balance of Payments											
	Germany			***Italy***							
	credit	*debit*			*credit*	*debit*					
Current account				***Current account***							
goods	150			goods		0					
Financial account				***Financial account***							
reserve asset		150		reserve asset	0						
Bundesbank closing balance sheet				**Banca d'Italia closing balance sheet**				**Eurosystem closing balance sheet**			
Assets		***Liabilities***		***Assets***		***Liabilities***		***Assets***		***Liabilities***	
Net claim on ECB	**350**	Banknotes	1000	Net claim on ECB	200	Banknotes	600	Net claim on	550	Banknotes	1600
(reserve asset)				(reserve asset)				(reserve asset)			
Domestic assets	950	Bank deposits	**300**	Domestic assets	550	Bank deposit	150	Domestic ass	1500	Bank deposits	450
(claims on German residents)				(claims on Italian residents)				(claims on Italian residents)			
Total	*1300*	*Total*	*1300*	*Total*	*750*	*Total*	*750*	*Total*	*2050*	*Total*	*2050*

This analysis throws an interesting light on the role of balance of payments for the Euro Area: if Germany is the export champion into the rest of the world, it earns the foreign currency which other net importers in the Euro Area can spend without running into balance of payment crises. This is clearly a win-win situation, for it allows to allocate resources efficiently (buying cheaply abroad) in deficit economies, while it increases net financial wealth in surplus countries. Hence, by lifting the foreign exchange constraint on deficit countries, European monetary union is trade-creating in the global economy. These benefits are a major reason why small countries have an interest in joining and staying in the monetary union. One may argue, however, that the export strength of Germany is keeping the euro-exchange rate against the rest of the world higher than is advantageous for the deficit countries. However, that raises again the question of how adjustment within the Euro Area affects member states.

This analysis does not imply that member states in the currency area are able to run deficits without constraints. If regional economic growth slows down below the rate at which the debt service can be assured, the risk of debt defaults increases rapidly. Once the solvency of debtors in stagnating regions is in doubt, financial markets will massively shorten their exposure to private and public debtors residing in these states. The resulting financial outflow will aggravate the problems of economic growth and cause a negative feedback loop. Thus, fundamental factors and market expectations may mutually reinforce each other and political conflicts will further enlarge these effects. There is evidence that in the Euro crisis financial markets have responded more to political news and uncertainties than to economic fundamentals (Collignon et alt. 2013). This fact points at the need to reform the governance of the Euro Area, but it says little about the need for adjustment within a currency area.

1.2. The role of the non-tradable sector

The truth is that monetary union provides its own adjustment mechanism, which is robust in economic terms, but likely to create political problems. This mechanism is often overlooked in the literature and in public policy discussions. As we have seen in Table 1, the effect of a regional current account deficit without a compensating capital inflow is an outflow of money from the deficit into the surplus area. Ceteris paribus, this reduction in money balances will endogenously generate

macroeconomic adjustment. The money outflow will depress demand and reduce prices and wages in the deficit economy; the inflow of money into the surplus economy is stimulating growth there.[22] Thus, current account imbalances will not last for ever, although the adjustment process may be slow. This built-in adjustment mechanism is at work in all currency areas, whether nation states or monetary unions, but not in fixed exchange rate systems. This is precisely why multi-currency systems, contrary to monetary unions, need the "exchange rate instrument" of nominal devaluations, while currency unions do not.

Yet, this built-in adjustment mechanism is not pleasant. It causes what Olivier Blanchard once called "rotating slumps". These slumps may have disruptive social consequences, which, given that member states retain authority for policies, may lead to anti-European backlashes.[23] Furthermore, recessions in member states will raise the probability of the regional cumulation of debt defaults. The conventional policy response is to blame deficit countries and to impose internal adjustment policies on them; but austerity and drastic real exchange rate depreciations through lower wages are unlikely to improve regional growth at least in the short and medium run. Germany, to take a prominent example, has gone through nearly a decade of slow growth when pursuing such adjustment strategy. The European Commission's (2012) has acknowledged that European adjustment policies have weakened economic growth, but it claims that "progress in re-balancing will open up the way for growth and convergence". In other words, adjustment is painful, but once the "external" balance is restored, growth will return.

We now know that this policy view is extremely costly in welfare terms. The medicine could actually kill the patient.[24] The reduction in wages and in private and public spending will in the short run reduce effective demand below the growth potential, and in the long run it will slow down the potential growth rates themselves, because there will be more bankruptcies, less investment, and rising unemployment.[25] All this makes servicing debt more difficult. If the response to increasing default risks is more austerity, the economy will collapse in a negative feedback loop, as one has witnessed in Greece. The question is whether other policy options are available. This is where the distinction between domestic and foreign currency becomes crucial. If a currency area runs out of foreign reserves, its external debt will become unsustainable and a real devaluation must shift the incentives toward generating net exports and attracting foreign investment. In monetary union, this is certainly one policy option, but not the only one. What is needed is generating economic growth out of which the debt can be serviced and it does not matter whether it originates in the tradable or non-tradable sector. An alternative to "internal adjustment" is therefore to stimulate internal demand in the non-tradable sector. I will now show that economic growth in member states can be sustained by investment in the non-tradable sector without risk for price stability.

Because aggregate demand is related to the growth of money supply, the effects of stimulating demand in the non-tradable sector can be shown by including the non-tradable sector into Table 1.

[22] This mechanism resembles the classical specie-flow-mechanism of the pure Gold Standard.

[23] For the destabilising effects of the crisis see Mongelli, 2013.

[24] Interestingly, Dawson (2004: 246) has noted similar mistakes during the Asian crisis: "tight monetary and fiscal policies and immediate, radical restructuring of financial markets turned out to be the wrong medicine. Fund programs did not quickly restore confidence, and exchange rates continued their decline". What seems to have helped to restore growth was "expanded flow of bank credit" and "the policy of credit ease pursued by the monetary Authorities" (p251). In Europe, political authorities under German leadership are killing the patient, while the ECB keeps him alive.

[25] For econometric evidence that negative output gaps reduce long run growth, see Collignon, 2013.

By definition, this sector does not affect the balance of payments. For simplicity, we assume that the Italian government borrows from commercial banks to finance local services. Commercial banks then need to refinance themselves by obtaining liquidity from Banca d'Italia. Let this demand for increased central bank money be €120. Referring back to Table 1, we see that domestic assets in Banca d'Italia's balance sheet will increase from €550 to €670 and Bank deposits will grow by the same amount from 30 to 150. Ceteris paribus, domestic assets, as shown by the integrated balance sheet of the Eurosystem, increase also by €120 and money supply in the Euro Area goes up to €420.

So far, this is a standard model of expansionary monetary policy. However, let us assume that monetary policy is committed to price stability. As in the case of a current account surplus with the rest of the world, the central bank has to decide whether it is willing to accommodate the increase in money supply. If it considers this to be incompatible with price stability, it will raise interest rates and credit demand will slow down. Given that public spending is less sensitive to interest rates than private credit demand, we now assume that domestic assets and bank deposits will fall in Germany by the same amount (€120) as they have increased in Italy, so that Euro Area money supply and prices remain constant over the medium term. In this case the combined effect of an Italian trade deficit plus stimulus in the non-tradable sector increases bank deposits in Italy to €150 (see Table 3) and leaves Germany with bank deposits of €150, which was exactly the original position in the balance sheets of Banca d'Italia and the Bundesbank shown in Table 1. Of course, in reality the adjustment may not be as symmetric as in our example, but the point is to show that, in principle, it is possible to compensate the depressive features of negative regional trade balances by stimulating demand in the non-tradable sector without jeopardising price stability and the sustainability of debt in deficit countries of monetary union.

Table 3. Balance sheet position after non-tradable credit expansion in Italy

1. Ater the initial credit expansion														
Bundesbank balance sheet					**Banca d'Italia balance sheet**					**Eurosystem closing balance sheet**				
Assets		***Liabilities***			***Assets***		***Liabilities***			***Assets***		***Liabilities***		
Net claim on ECB	**320**	Banknotes	1000		Net claim on ECB	**80**	Banknotes	600		Net claim on ECB	**400**	Banknotes	1600	
(reserve asset)					(reserve asset)					(reserve asset)				
Domestic assets	950	Bank deposits	270		**Domestic assets**	**670**	**Bank deposits**	**150**		**Domestic assets**	**1620**	**Bank deposit**	**420**	
(claims on German residents)					(claims on Italian residents)					(claims on Italian residents)				
Total	*1270*	*Total*	*1270*		*Total*	*750*	*Total*	*750*		*Total*	*2020*	*Total*	*2020*	
2. After tightening money supply														
Bundesbank balance sheet					**Banca d'Italia balance sheet**					**Eurosystem closing balance sheet**				
Assets		***Liabilities***			***Assets***		***Liabilities***			***Assets***		***Liabilities***		
Net claim on ECB	**320**	Banknotes	1000		Net claim on ECB	**80**	Banknotes	600		Net claim on ECB	**400**	Banknotes	1600	
(reserve asset)					(reserve asset)					(reserve asset)				
Domestic assets	830	Bank deposits	150		**Domestic assets**	**670**	**Bank deposits**	**150**		**Domestic assets**	**1500**	**Bank deposit**	**300**	
(claims on German residents)					(claims on Italian residents)					(claims on Italian residents)				
Total	*1150*	*Total*	*1150*		*Total*	*750*	*Total*	*750*		*Total*	*1900*	*Total*	*1900*	

For economists who believe that Italy and Germany are still separate economies - as they were until 1999 – this may look like voodoo economics. How can a country accumulate foreign debt without paying it back by future surpluses? The miracle is possible because the debt is repaid not in foreign, but in domestic currency available anywhere in the Euro Area. The sustainability is not assured by gaining sufficient foreign currency, but by each debtor fulfilling the solvency constraint whereby future discounted income matches the outstanding debt. In other words, debtors are responsible for their liabilities not as a community but as individual borrowers. This is a fundamental difference between a monetary union and a fixed exchange rate system. If a currency area would not work like an integrated payment union in this way, no nation state would ever have survived. Italy's north and south would have separated, the United Kingdom would have split into England and Scotland, and Bavaria would have introduced its own currency.

A common objection to this view is that nation states and federations are sustained by the solidarity of fiscal transfers, which citizens are willing to pay within their nation, but not for others. Yet, the cohesive power of solidarity quickly fades when economic benefits are in doubt, as one can witness in Flanders, Lombardy, Scotland, Catalonia or Bavaria. More importantly, as Fatás (1998) has shown, the stabilising effects of automatic interregional transfers are grossly overvalued. If this is so, the monetary adjustment mechanism explains how the payment union is sustained.

1.3. Implications for economic adjustment

We can now sum up how macroeconomic imbalances work out in a monetary union: a current account deficit within the currency area shifts the distribution of wealth and money supply from the net importer to the net exporter, but does not affect macroeconomic aggregates of the area. The distributional effects are not banal: surplus countries increase their financial net wealth, while deficits countries become financially poorer – although they may gain from the more efficient allocation of resources and capital that over time could narrow the gap between high and low income countries. Nevertheless, the monetary union is robust, because deficit countries cannot run out of reserves. Foreign reserves are irrelevant for the transactions between member states. For domestic transactions, money balances are needed and they are obtained either by borrowing from commercial banks in the surplus countries, or from the Eurosystem, which guarantees equal access to liquidity for all solvent banks in the Euro Area. As long as this is compatible with the money supply polices, the outcome is Pareto optimal; if the ECB tightens monetary policy in order to preserve price stability, export-oriented economies have a comparative advantage. Hence, the fragility of the Euro Area is not in the economics, but in the politics of monetary union: distributional conflicts may undermine the popular acceptance of the euro and the policies by which it is ruled.

While one may agree that current account deficits are irrelevant for the payment mechanism within the monetary union, one could argue that the accumulation of large "foreign" debt positions will become problematic. Indeed, a large negative net international investment position, which reflects the accumulation of past current account deficits, may not be sustainable. However, liabilities within the Euro Area are not "foreign" debt and should not be counted as a component of the international investment position. We have seen that intra-Euro Area deficits do *not* build up *external* indebtedness, because they are domestic borrowings, which are repaid by transferring domestic money. The only international investment position that matters is the foreign debt of the Euro Area. This makes a huge difference for the adjustment mechanisms.

The overall purpose of adjustment within a currency area is to guarantee the stability of the financial system. Intertemporal solvency requires that the discounted value of future income is equal to today's debt. Domestic debt solvency requires income in domestic currency, while liabilities to the rest of the world must be paid in foreign currency. Hence, intra-Euro Area debt is settled by drawing on deposits in local banks and it makes no difference for the sustainability of domestic currency debt *where* the source of future domestic income is located.[26] Domestic income may be generated by exporting to other member states (improving the trade balance) or by economic growth originating in the non-tradable sector. But as long as the domestic solvency constraint is met, there is no need to switch expenditure from the non-tradable to tradable goods sectors. For example, Italy may have a

[26] However, the loss of deposits may destabilise banks in the region, as they become more dependent on liquidity borrowed in the interbank market or from the Eurosystem. We cannot pursue this logic here, but is a powerful argument for a banking union in Europe.

fast growing non-tradable service sector, which imports capital equipment from Germany. If this investment is financed by bank credit, it will at first increase money supply in Italy, while the payments to German suppliers will reduce money holdings in Italy again. Thus, the credit-financed investment in the non-tradable sector can compensate the outflow of money balances from the deficit country. As long as profits in the non-tradable sector are sufficient to service the debt, solvency is assured.

In aggregate, this logic requires that the economic growth rate in the region is larger or equal to the average interest rate in order to fulfil the solvency constraint. But this means also that, contrary to the claims by new mainstream orthodoxy, *one cannot judge competitiveness by developments in the tradable sector alone*. Instead, competitiveness must be measured by the overall profitability of the national capital stock, because that determines whether the region is able to attract new investment, and whether the contracted credit liabilities are sustainable. How to use this criterion for assessing competitiveness empirically will be shown in the next chapter. Here, we need to insist that balance of payment accounting is not the appropriate instrument for detecting imbalances in the Euro Area. The proper tool for analysing payment flows in a monetary union is flow-of-funds analysis which gives a more differentiated picture of macroeconomic imbalances in the Euro Area. By using flow of fund analysis we will also discover that simply comparing returns to capital is not sufficient for a full picture of competitiveness.

2. Flow of funds in European monetary union

Flow of funds analysis measures payment flows across the economy and presents the financial assets and liabilities of all *institutional sectors* in the Euro Area, i.e. households, financial and non-financial corporations (NFC), government and the rest of the world. Similar to profit and loss, cash flow and balance sheet statement in business accounting, flow of funds accounts provide a coherent and integrated picture of the financial wealth of an economy and its variations. They are tracking funds as they move from sectors that serve as sources of capital, through intermediaries (such as banks, mutual funds, and pension funds), to sectors that use the capital to acquire physical and financial assets (Teplin, 2001). Because changes in competitiveness will inevitably affect payments, the flow of funds is a useful tool for analysing imbalances in the Euro Area.

2.1. The conceptual framework

One distinguishes between economic and financial accounts. The *economic accounts* record "real" economy transactions in accordance with the European System of Accounts (ESA)[27] and show how various categories of income (GDP) are first allocated as primary income to labour and property (national income) and then reallocated through the secondary distribution of transfer payments. Disposable income (retained earnings for the corporate sector) is either spent on consumption and investment or saved and lent to other agents, which means savings are used to purchase financial assets. The *financial accounts*, on the other hand, are a picture of the financial wealth and record the balance sheet positions of assets and liabilities in the different sectors and their variations over a period of time. These variations are split into *changes due to transactions* which reflect the balance of the economic accounts, and *other changes* which represent write-offs or changes in values of assets and liabilities. The financial transactions indicate, therefore, how the financial net wealth of

[27] See United Nations, 2007 and also any of the General Notes in the ECB's Monthly Bulletin.

institutional sectors and economies change. The link between the economic and financial accounts is the *capital account*.

Because transactions are recorded as net purchases (or net sales) at the current market prices, exchanges *within* a sector—for example, the sale of equities by one corporation and the corresponding purchase by another corporation — cancel each other out and do not show up in the sectoral accounts. Transactions *between* sectors, on the other hand — such as the sale of equities by a household to a mutual fund or the purchase of government bonds by households or banks — are recorded as a negative value for the sector selling the instrument and a positive value for the sector purchasing the instrument (Teplin, 2001:433). For the same reason, transactions within the same aggregate sector but between different national sectors, say between Italian and German non-financial corporations, may appear as imbalances in national accounts, but they cancel out in the Euro aggregate. Hence, nationally disaggregated flow of funds statistics can reveal macroeconomic imbalances not only with respect to borrowing or lending between different member states (i.e. current account positions), but also between institutional sectors within the currency area. However, most importantly, flow of funds accounts present a fully integrated picture of an economy, because the lending of one sector must have a borrower in another sector as its counterpart. To clarify the principles, we will first concentrate on the Euro Area as a whole.

The transaction balances between institutional sectors are easily derived from the standard national income identity, whereby income reflects expenditure on consumption, investment and net exports:

$$Y = C + I + X - M$$

Amalgamating first for simplicity the financial and non-financial corporate sector, we show in Table 4 how the four institutional sectors of the economy interact.[28] The bottom line is the sum of all sectors of the economy. Y_1 is the factor income earned by households (wages, rents, etc.). Y_2 stands for corporate profits plus rent, Y_3 for the same by government enterprises. After the generation of primary income by the factors of production, income is redistributed between sectors by the payment of transfers (T), which increases or reduces disposable income in the sectors. For example, the corporate sector pays social security contributions, which benefit households. Obviously, the sum of all transfers is zero. C_1 and C_3 are consumer expenditure by households and government and the difference between income and consumption is gross savings. The I's reflect investment in the different sectors, but usually the corporate sector is driving investment.

Table 4. Basic accounting identities of national income

	Income	Transfers (net)	Consumption	Investment	Trade balance	= Financial surplus / deficit
Households	Y_1	$+T_1$	- C1	$-I_1$		$=F_1$
Corporate sector	Y_2	$+T_2$		$-I_2$		$=F_2$
Government	Y_3	$+T_3$	- C3	$-I_3$		$=F_3$
Rest of the World	Y_4	$+T_4$		$-I_4$	- X + M	$=F_4$
Total	***Y***	***0***	***- C***	***- I***	***- X + M***	***0***

Reading across the rows of Table 4, it is apparent that individual sectors may have a surplus or deficit of savings over investment. In the flow of funds statistics of the European Union the financial

[28] This exposition is based on Fleming and Giugale, 2000. Later we will separate financial and non-financial corporations.

surplus/deficit is called net lending (+) or net borrowing (-) of the different sectors. Because saving is income minus consumption, the financial balance of a sector is in surplus if its savings exceed investment. Wealth owners will then acquire financial assets (claims on other sectors or cash) instead of real resources for productive purposes.[29] The mirror image is net borrowing (incurring net financial liabilities) by a sector where investment exceeds savings. However, for the economy as a whole, domestic and foreign savings must be equal to total investment.

The transactions in the fourth sector are entered from the point of view of the rest of the world, and not from the point of view of the domestic economy. ($Y_4 + T_4$) is income and transfers claimed by the rest of the world, while (X – M) is net exports. Thus, if the foreign sector is in surplus ($F_4 > 0$) , the domestic economy must make payments to the rest of the world that are larger than the earnings from net exports; thus, the rest of the world is lending and the economy's current account balance is in deficit. In that case, part of GDP will be owned by non-residents. On the other hand, if the trade balance is positive and few external liabilities exist ($F_4 < 0$), the domestic economy is lending to the rest of the world and building up financial claims against non-residents. This is why current accounts in surplus are often associated with high competitiveness.

3.2 Financial flows in the Euro Area

Standard text books assume that households' revenue exceeds their expenditure, so that they are net lenders to the rest of the economy. Non-financial Corporations are supposed to be borrowers because they do not cover their investment out of cash flow. They must therefore finance at least part of their investment by borrowing from other sectors. Financial corporations are intermediaries, which lend out the resources they borrow. Ideally, the government and the external sector are in balance. However this is rarely the case. In Europe, governments usually borrow (i.e. run deficits), and the Euro Area in aggregate has at times been a lender and at others a borrower vis-à-vis the rest of the world.

Figure 1 shows the evolution of the financial surplus/deficit for the four domestic sectors of the Euro Area and for the rest of the world.[30] Before the crisis, balances were relatively stable. When the so-called dot.com bubble in the IT sector burst and the attacks of September 11 destabilised financial markets worldwide, monetary policy became very accommodating. However, the excess liquidity then generated the next credit boom which crashed in 2007-8. During that early easy money period, Euro households were saving less and many borrowed to invest in the real estate boom, especially in the south. Non-financial corporations, which had previously cut down on their investment, now started to borrow again. By contrast, governments reduced their deficits, although arguably not enough to bring their debt levels significantly down.

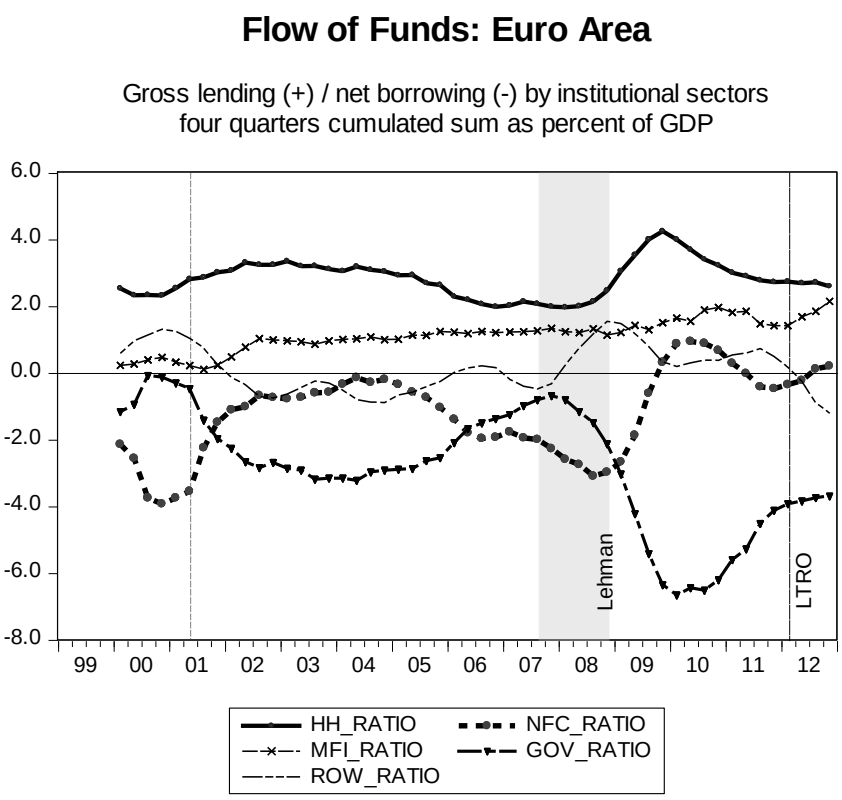
The global financial crisis started with liquidity problems at Bear Sterns in August 2007 and fully erupted with the Lehman bankruptcy in September 2008. After this event, all economic agents changed their behaviour. In Europe, households' savings increased strongly, reflecting their risk-averse behaviour in a climate of general uncertainty. Companies stopped borrowing instead of

[29] When firms are repaying debt, this can be interpreted as acquiring a debt claim from creditors against themselves.

[30] As pointed out above, the rest of the world (RoW) is the mirror image of the aggregate balances of the Euro Area. A positive value for RoW indicates lending by non-residents, which is equivalent to a current account deficit.

investing their retained earnings. In 2010, non-financial corporations even became net lenders, which means they used their profits to repay debt and deleverage their balance sheets. Governments were negatively affected by the sudden drop of GDP in the crisis; the associated loss of revenue increased budget deficits, but this fact also stabilised the Euro economy because governments borrowed the excess savings from households and NFCs. After the election of a new government in Greece in late 2009, the sovereign debt crisis pushed policy makers in the Euro Area into precipitated fiscal consolidation. With all the main domestic sectors – households, corporations, governments – increasing their savings and no one borrowing, the Euro Area fell into its second recession which translated into a prolonged depression in the southern member states. The external accounts of the Euro Area with the rest of the world (RoW) had remained largely in balance before the Euro crisis, but now they turned into surplus. Given the difficult international environment, borrowing by non-residents also remained sluggish so that foreign investment presented few alternative outlets for domestic euro savings. Instead, the combined excess savings of households, corporations and governments were used to reduce outstanding domestic and foreign liabilities. This fact may have helped to improve the Net International Investment position of the Euro Area, but when the corporate sector does not invest in the formation of domestic capital, economic growth will come to a halt (Ahearne and Wolff 2012). The question is then why did the non-financial corporations in the Euro Area stop investing and borrowing from the other sectors?

Figure 1.



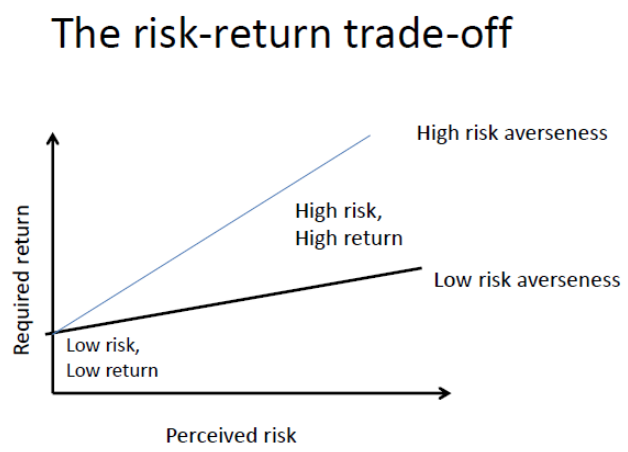
3.3 Competitiveness and investment

The classic argument for explaining investment is that companies invest in order to make a profit. They allocate funds to those projects, which yield the highest return. Thus, the capacity to earn high

returns to capital reflects high competitiveness. However, at the time a firm makes the decision to invest, the future returns are uncertain. The larger the chance that the future returns will be different from what is expected, the larger the risk. If firms are risk averse, higher returns may not automatically guarantee higher investment, employment and growth. Additional funds will only be invested, if the return to capital exceeds the cost of capital plus the risk premium. Companies have the choice of borrowing and buying real resources for productive purposes or of using their cash flow for redeeming liabilities or acquiring financial assets (including cash holdings). A comprehensive concept of competitiveness must take the effects of risk on corporate decisions into account.[31]

Figure 2 shows the risk-return trade-off in a simple stylised form.[32] The steepness of the trade-off curve indicates the degree of risk averseness. The return for riskless assets at the intercept of the required return axis reflects liquidity preference, because by definition liquid assets (money) are the least risky assets. The risk premium is the difference between this risk-free required return and point on the trade-off curve. If the expected return on capital is below the trade-off curve, no investment will be forthcoming. Thus, if the perceived risk in the firm's environment increases, or if risk averseness or liquidity preference increases, higher returns to capital are required in order to cover the higher risk premium. If the firm wants to remain competitive, i.e. maintain the firm's share in the economy's long term growth, it must increase the return to capital. The degree of uncertainty in the environment within which firms are operating is then an essential part of competitiveness.

Figure 2.



In a financial crisis, the sudden drop in aggregate demand and the increased perception of risk are raising the preference for holding wealth in liquid form rather than investing it in resources. The crisis is therefore a cause and not only the effect of lower competitiveness. With persistent uncertainty, risk-averse entrepreneurs will also seek to reduce outstanding liabilities. This deleveraging process will become the dominant corporate strategy in financial crises, because the value of assets is deteriorating while liabilities are nominally fixed, so that corporate equity will be reduced (Koo, 2002). Paying back debt will then help to restore shareholders' wealth, but it may have the unintended aggregate consequence of lower output and employment.

This places the competitiveness issue into a new context: firms may not invest because their costs are too high and profits too low (see chapter 2), but also because they operate in an environment

[31] See also Stiglitz and Greenwald, 2003: 175-182
[32] For a formal model of this argument see Collignon, 2002b

that is too uncertain to justify spending money on capital accumulation. Of course, higher risks require higher returns on capital in order to compensate for the potential losses, but at these high returns there are usually less investment opportunities available. Furthermore, if uncertainty is very high, it may be practically impossible to compensate the risk premium for investment by raising profits in the corporate sector.[33]

How can an economy become more competitive? Our analysis says that firms should increase their returns and policies should reduce uncertainty. In order to improve profits, firms could increase their gross operating surplus by cutting wages, but from Table 4 it is clear that this would be counterproductive when the reduction in Y_1 is not fully compensated by an increase in Y_2, which may result from the fact that households have less income to spend and do not reduce savings sufficiently to keep consumption stable. In that case, compensating public policies could substitute for the wage reduction by increasing public consumption and a fiscal stimulus would increase corporate profitability. Aggregate income would be stabilized as private consumption will be shifted to public consumption. However, this raises distributional issues for the tax burden and its consequences for investment.

Other than cutting wages, paying lower transfers could also increase profits in the corporate sector. Structural reforms in the system of secondary income transfers can shift net benefits from households to corporations and thereby improve competitiveness. Such reforms are typically associated with the Hartz IV Reforms in Germany (see S. Dullien in chapter 8 of this book[34]). However, while wages and gross operating surplus are key variables for the primary distribution of income, one should not forget that the cost of capital, and in particular interest liabilities, need to be serviced out of current cash flow. The balance of primary income, which takes into account the rental cost of capital, or retained earnings, which are a measure of corporate income after the secondary redistribution, are therefore better indicators for corporate profitability.

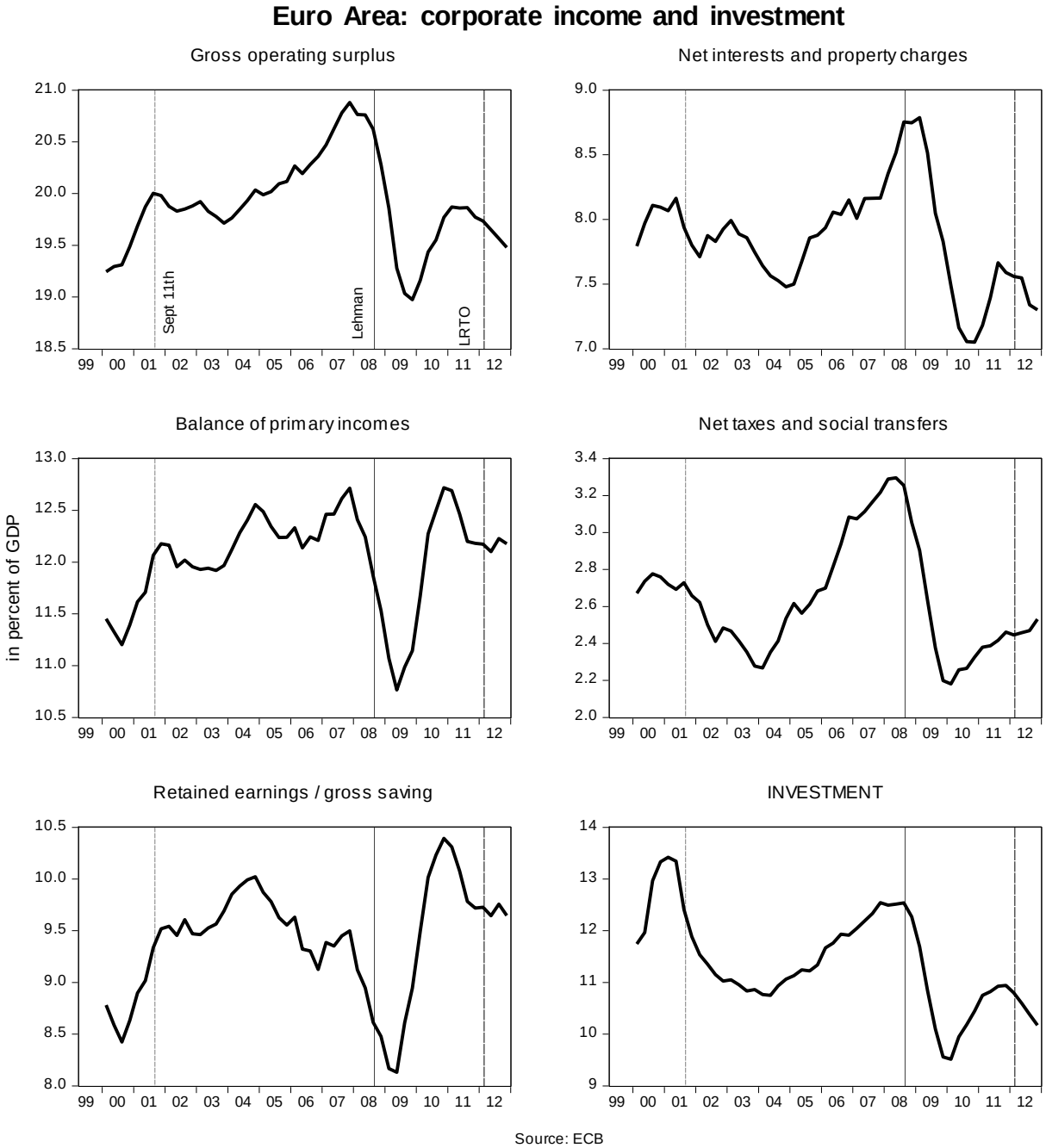
Which of these two dimensions, low profits or high uncertainty, provides a better explanation for Europe's lack of competitiveness and anaemic corporate investment performance? Flow of fund analysis allows detecting the effects of corporate strategies and their consequences for other sectors. Figure 3 shows corporate incomes and savings in the Euro Area as a percentage of GDP. The gross operating surplus has risen during the pre-crisis boom, but it fell in the crisis. In 2010 it improved, reaching levels of the early 2000s, but the austerity policy since 2011 has again reduced net income for Europe's non-financial corporations. Nevertheless, these developments were in part corrected by the strong reduction in the cost of capital and especially the reduction in interest payable, although the Euro crisis has pushed the cost of capital up again. As a result, corporate primary income is now back to the level, where it was before the crisis. Furthermore, tax and social transfer payments have also come down during the crisis, so that retained earnings of NFCs, which are a good measure of corporate cash flow, are now higher than they were before the Lehman shock. Yet, despite this improved financial situation, companies are not investing. Even the unconventional monetary policies (LTRO) at the end of 2011/early 2012, which have responded to the high liquidity preference of banks and other economic agents, did not stimulate demand for investment. The investment ratio has fallen after Lehman by 3 percentage points of GDP and although it has regained

[33] In most risk-return models, the trade-of curve is not linearly but exponentially upward sloping. See Collignon, 2002b.

[34] S. Collignon and P. Esposito, Competitiveness in Europe, Routledge, forthcoming 2013

one point, it is still well below pre-crisis levels. Hence, net borrowing in the corporate sector has not stopped because of insufficient profits or lack of competitiveness, but because in the prevailing environment of crisis and uncertainty firms have deliberately used their cash flow to pay back debt. The Euro Area is caught in a balance sheet recession.[35] Hence, Europe's crisis is less a consequence of structural weaknesses than of uncertain expectations by investors. Restoring trust and confidence is, however, the task of governments and in this they have failed miserably.[36]

Figure 3.

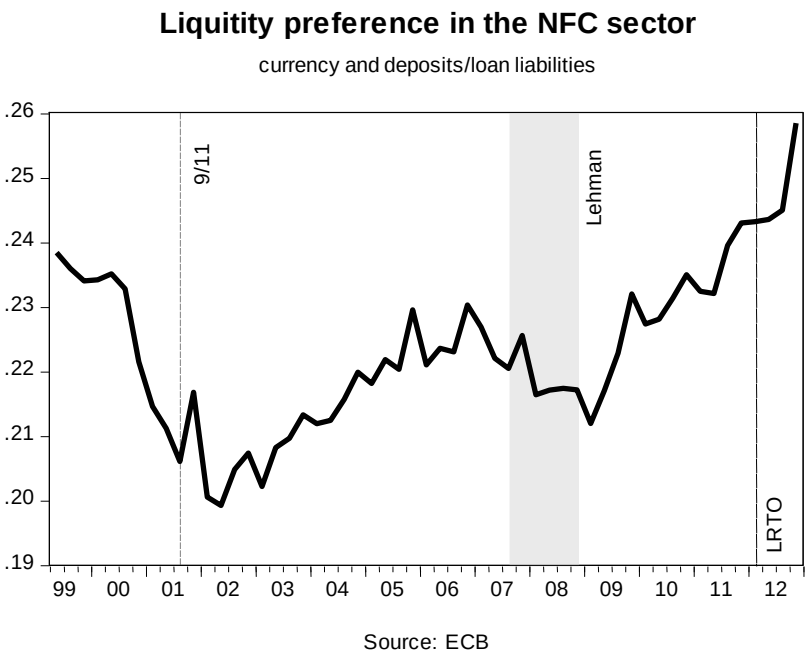


[35] For the theory of balance sheet recessions, see Koo, 2002.

[36] See for example Collignon et alt. 2012 for evidence how statements by the German Chancellor Merkel have pushed up the risk premia in bond markets.

The reluctance to invest in real capital and the massive use of cash flow to reduce debt can be explained by liquidity preference in an environment of great uncertainty. Holding cash and deposits reduces the risk of running into liquidity problems when clients default on their obligations or banks ration credit to their clients and refuse to roll over credit. Figure 4 presents the ratio of currency and deposits held by NFCs relative to loan liabilities as a measure of liquidity preferences. Since the Lehman crisis, the ratio has risen by nearly 25 percent. A closer inspection reveals that in the early 2000s and again after 2004 cash and deposits grew at a stable rate, but corporations increased their borrowings more than cash. Hence, the ratio came down in those years. By contrast, after the Lehman shock the volume of loan liabilities either stagnated or fell, while liquid assets still continued to increase at a steady rate, so that the cash/loan liability ratio rose up.

Figure 4.



The European Commission (2013) has assessed the impact of uncertainty on consumption and investment in the Euro Area. It found that uncertainty has increased not only in financial markets but also for enterprises and consumers. Furthermore, the significant negative effect of uncertainty has become stronger during the crisis. The study also found that this uncertainty is now at record high levels in the southern periphery (including Ireland), but remains much lower in the core countries. These observations explain why liquidity preference and debt de-leveraging have become such an important factor in the slowdown of investment and economic growth in the southern crisis states.

Figure 5 presents evidence for individual member states. We are using here the disaggregated flow of funds data provided by Eurostat, which aggregate to the Euro area data for all 17 member states. Remarkably, the German corporate sector has been a net lender since the early days of monetary union, although in small proportions. In France, NFCs have been net borrowing except during the crisis years 2009-10. Spain and Portugal have been the largest corporate net borrowers during the boom years; Italy borrowed before the crisis, too. But after Lehman and especially since the Greek debt crisis, non-financial corporation in all six member states have reduced their external borrowing and even started to repay their debt. Greece is a particular case, as retained earnings have always exceeded investment to a very large degree. Since the start of the Greek crisis, however, companies

have dramatically increased their profitability; retained earnings in NFCs are now nearly 20 percent of GDP compared to 10 percent in Germany. However, investment has fallen to zero, so that the cash flow of Greek companies is now nearly exclusively used to repay debt.

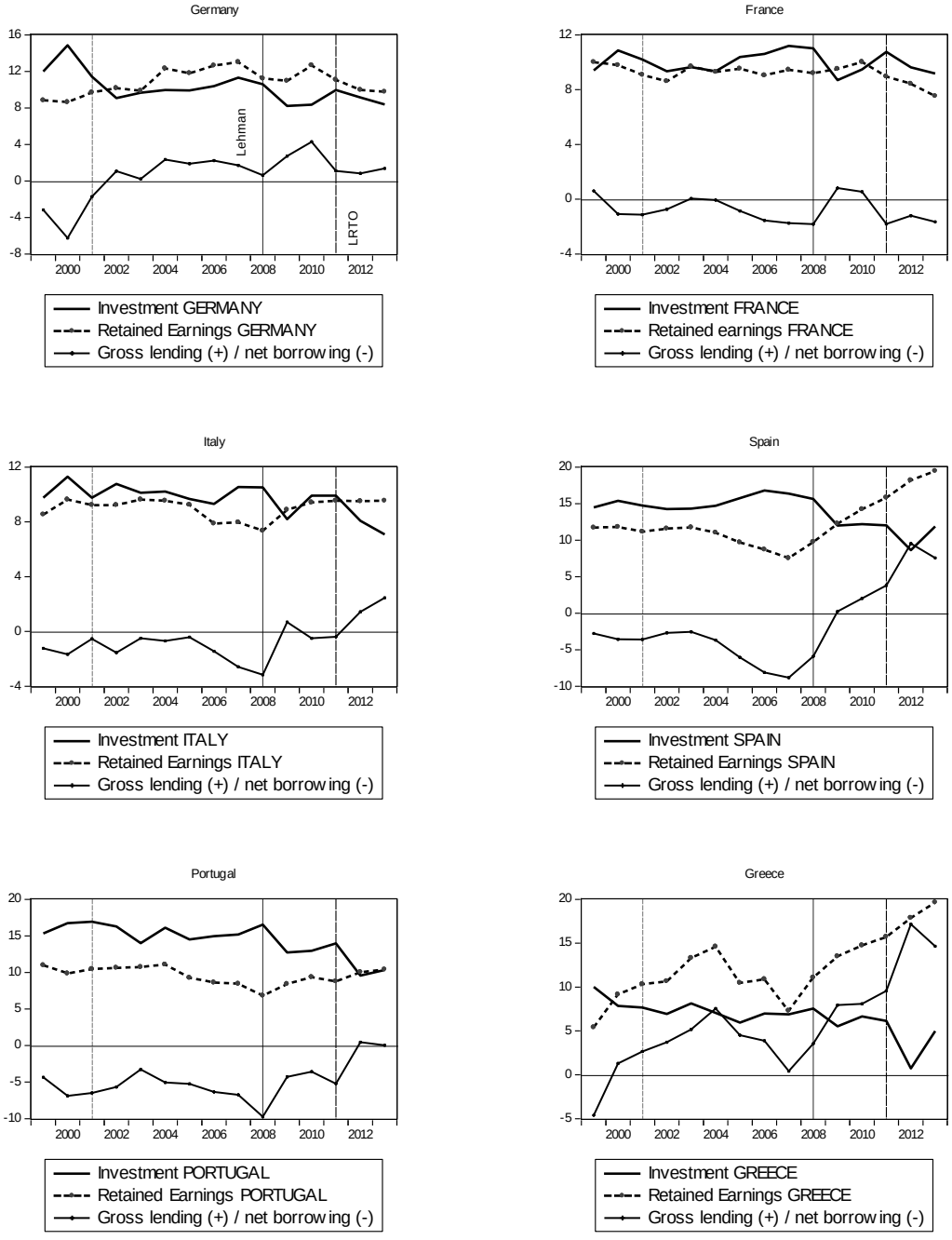
The broad picture is very similar in all member states: corporate retained earnings have improved, but investment ratios have come down. The higher cash flow is used to repay corporate liabilities. Hence, the Euro Area suffers primarily from insufficient investment and less from supply side factors like rigid labour markets which prevent higher profits.

Maybe the biggest surprise is Germany's lack of investment. The industrial hub of the Euro Area has not invested in domestic production facilities, but lent its retained earnings to the rest of the world, of which two thirds went to Europe's south. Why? An obvious explanation is that structural reforms and wage restraint have improved the competitiveness and cash-flow of German companies, but local demand was insufficient to justify the expansion of local facilities, so that lending money to the booming south seemed more attractive than real investment at home. Another explanation may be that financial innovation in the deeper and more integrated euro market has promised higher returns for financial assets than for real investment. Chapter 2 looks at the returns on capital in the Euro Area. The facts reported there confirm this analysis for the early years of European monetary union, but not for the years after the Hartz IV Reforms. By contrast, before the financial crisis, NFCs in the south have been borrowing as economic textbooks would lead us to expect. However, the rapid accumulation of capital generated diminishing returns, which has increased the pressures to deleverage once the crisis had erupted and – unintentionally – pushed Europe into a balance sheet recession.

Figure 5.

Retained Earnings, Investment and Borrowing in some Member States

in percent of GDP



Source: Ameco and own calculations

3. Conclusion

The Euro crisis is a challenge on many fronts. Mistaken analysis causes bad policies and bad policies make the economy worse. By putting competitiveness at the centre of the Euro crisis explanation, the mainstream was not wrong. Competitiveness matters. But interpreting competitiveness exclusively through the lenses of macroeconomic imbalances or relative cost distortions does not go far enough. Because the European Commission largely identifies macroeconomic imbalances with

current account deficits it neglects the imbalances between other institutional sectors in the Euro Area. This leads them to recommend excessive austerity policies, which have made the crisis worse. Fringe economists on the left and the right, by contrast, focus on relative price and cost indicators, which are arbitrary in their construction and devoid of an equilibrium theory as benchmark (for further evidence, see chapter 2). They therefore do not shy away from recommending a break-up of the Euro Area. Both these approaches are not sustainable and risk destroying 50 years of European integration.

The idea that current account positions member states of a currency area need to be balanced violates the logic and undermines the functioning of an integrated European internal market for goods and capital. It ignores that deficits within a currency area may reflect efficient resource allocation; it also leads to the imposition of austerity policies, which not only undermine the cohesion and support for European integration, but also threaten the stability of the financial system. Amalgamating intra and extra-European current account balances in the Euro Area is sloppy accounting, bad economics and dangerous politics.

Similarly, structural reforms of the welfare system and massive wage cuts to restore supposedly unsustainable cost divergence, as has been advocated by some, are also counterproductive in today's European environment. Lower wage cost may improve the return to capital, but if economic and political uncertainty is high, higher profitability will not necessarily translate into higher investment. In fact, the mismanagement of the Euro crisis by national governments, which only considered their narrow tax payers' constituency instead of the common welfare, has pushed the risk premium up to levels at which the volume of profitable investment has shrunk considerably. Cutting wages and transfers to bring actual rates of return to the point where they would compensate entrepreneurs' risk premia would reduce aggregate demand to levels of unbearable unemployment. These policies make the crisis worse. They are the kind of policies, which have thrown Europe into turmoil before. As Feldman (1997:854) concluded in his thorough study of the German economy in the 1920s:

> "Germany's leaders between 1930 and 1933 obviously miscalculated what massive unemployment, a rollback of the social welfare system, and measures creating even more extreme misery than 1923 and 1924 would bring. They also failed to realize that the undermining of parliamentary democracy would create an unprecedented social and political crisis and unleash forces and tendencies in the political culture quite beyond their control".

Germany's leaders seem to miscalculate again the damage austerity and disrespect for European democracy could cause.

As an alternative to such misdirected policies, this chapter has suggested to take European monetary union seriously and to analyse it for what it is: an integrated economic area with a payment union. It was always clear that the single market would not survive without monetary stability in space and time and the creation of the euro was the only feasible response to the desire of fully integrating the European economy.

If this is properly understood, the policy discourse must change. It does not make sense to ponder whether member states with severe debt and growth problems should leave the Euro Area, not even temporarily. Private and public debt sustainability is to a large degree dependent on economic growth and large growth differentials threaten the solvency of financial and non-financial

corporations. The primary objective for economic policy in monetary union must, therefore, focus on maintaining balanced growth. Competitiveness in terms of cost and price differentials has a role to play in maintaining stability, but it is not the only one. A number of important consequences follow.

First of all, stimulating growth in the Euro economy, especially in the peripheral regions, requires that non-financial corporations start to borrow again in order to invest in real resources rather than repay their outstanding debt. No doubt, the expectation of higher returns to capital would be an incentive to invest, provided everything else remains unchanged. However, during the crisis, everything else has changed. Uncertainty has lowered the propensity to invest and increased liquidity preference. Improving the competitiveness of the European economy would, therefore, require to restore financial stability as well and not only to focus on profitability and related structural reforms. The European Union has privileged austerity as a tool for restoring confidence, but it has underestimated the damage this has created in peripheral member states, where the slowdown of growth has threatened the sustainability of private and public debt. By contrast, member states have been dragging their feet with respect to the banking union, which could strengthen trust and confidence in the European economy. The hesitations and the back and forth in negotiating positions are prolonging uncertainty and block the way to recovery.

Second, the Euro crisis is not a balance of payment crisis because member states cannot run out of foreign currency. Nor is there a problem of "sudden stops" (Calvo, 1998) of capital inflows into southern member states, although there is a problem with money outflows. True, during the first decade of the euro, the corporate sector in the north has lent to the south directly or through the banking system, and these transfers have financed investment and consumer demand and enabled huge current account deficits. It is also true that this large volume of lending has come to a halt during the crisis (Merler and Pisani-Ferry, 2012). However, in a monetary union, the reduction in lending from other member states could be compensated by lending from domestic banks which refinance themselves through the Eurosystem – provided there is sufficient demand for borrowing in the corporate sector. This is the quintessential difference to separate currency regimes, where the expansion of domestic credit and the "printing of money" are causing the immediate depreciation of exchange rates.[37] The main problem of the Euro crisis has been the credit crunch and balance sheet deleveraging. The crisis was, therefore, not caused by national balance of payments problems, but by the fragility of the European banking system combined with excessive austerity, which has killed the appetite for investment.

Third, macroeconomic imbalances in the Euro Area are not correctly represented by current account positions, but by growth differentials. These divergences point at significant structural distortions, which certainly need to be addressed. However, the harsh austerity policies imposed on deficit countries have compounded the supply side problems, because the lack of demand has lowered the willingness to invest (Collignon, 2013). Economic policies for the Euro Area must therefore concentrate on *balanced* economic growth. Balanced growth is also a necessary condition to restore a sense of social justice and fairness among European citizens. It would therefore sustain the politics of monetary union.

[37] For example during the Asian crisis, the "sudden stop" of foreign capital inflows led to domestic credit expansions in Thailand and Korea and drastic depreciations.

Forth, balanced growth implies balanced demand, even when lending from other member states ceases. The automatic adjustment mechanism in the Euro Area is the outflow of money, unless new credit is generated in the non-tradable sector. This reduction in money balances can cause "rotating slumps". Because monetary policy aims at maintaining price stability for the Euro Area as a whole, the distribution of money balances becomes a zero-sum game. If Germany pursues an aggressive export-led growth strategy toward the rest of the world, the burden of adjustment falls on the other economies. On the other hand, if member states suffer from negative money flows and seek to stimulate domestic demand by fiscal policy, they are constrained by Europe's fiscal rules. The Euro Area's present fiscal policy framework is not sufficiently developed to deal with these issues. Instead of imposing identical debt and deficit ratios on each member state, as stipulated by the Stability and Growth Pact, a more diversified approach is recommendable that would take into account the developments in the individual member states as well as the aggregate situation in the Euro Area (Collignon, 2004). Yet, reform of the fiscal framework would need accrued powers at the European level, which can only happen if European citizens could also exercise their democratic rights at the European level (Collignon, 2002; Collignon and Paul, 2008).

Fifth, taking European integration seriously also has a political and cultural dimension. Because people feel emotionally attached to "their" countries, governments use this emotional bond to preserve their power, but the resulting collective action problems prevent the design and implementation of policies consistent with the functioning of a currency area.[38]

We have analysed the mechanisms which turn a currency area into an integrated economy as if it were one economic nation. But, of course, Europe is not one nation. Polities and civil societies are fractioned. Policies diverge because there is no epistemic consensus. This is the Achilles heel of the euro. Protecting the economic interests of European citizens from the disturbing interferences of national governments is the real challenge revealed by the Euro crisis. It will require a genuine European government, but that will be the subject of another chapter in Europe's history.

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[38] See also Collignon, 2002.

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