Chapter Three

EMU's Response to the North Atlantic Financial Crisis: Policymaking from Incompatible Views

Hans-Helmut Kotz

Prologue: Initial Financial Market Tremors

We now date the beginnings of the North Atlantic Financial Crisis (a term coined by Willem Buiter) to August 2007.[1] While, from today's angle this might seem evident, considerable hindsight is implied in this dating convention. In fact, contemporaneously, as the situation evolved, public talk was of turbulence or tremors. And the crisis was declared to be over whenever markets appeared to calm down, i.e. a number of times. For some time, developments were seen as difficult, but ultimately manageable by conventional means. In retrospect, two primary yet perplexing arguments were used to make the case. First, a strongly held view was that *no contagion* would arise from the implosion of the U.S. subprime bubble. This was, in light of Finance's most basic no-arbitrage principle—identical structures go ultimately by the same price—a strong proposition indeed. Second, while in late 2007 some pondered the idea that the U.S. might be facing a recession, the surprising consensus view on the other side of the Atlantic was that even if that were the case a de-coupling of European economies would happen, mainly courtesy of China.

Of course, things happened very differently. As of this writing, in the fall of 2011, Europe is seen to be in its deepest crisis since World War II. A destructive dynamic laid bare the institutional flaws in the European Monetary System, admittedly under indeed severe conditions. Sovereign debt problems in Europe's (ever increasing) periphery have come to be seen as a major threat to the recovery of the world

[1] Of course, as events unfolded, this became very much a real-economy crisis also.

economy. The financial crisis, which initially affected only a number of financial institutions substantially engaged in structured financial products, radiated through interbank markets and spilled over into the real goods- and services-producing economy in the fall of 2008 and early 2009. To limit the immediate damage arising from negative externalities, bail-outs of financial (and even some real economy) institutions became inevitable. Moreover, confronted with a very substantial widening of output gaps, public budgets came under enormous pressure. Automatic stabilizers, being particularly important in the European case, kicked in strongly. In addition, though only quite reluctantly, countercyclical (discretionary) fiscal policies were implemented. As a logical byproduct, public deficits and debt ballooned. The economic shock emanating from the financial crisis has been so devastating that in most European economies output is still below its level of Q1/2007.[2] Almost inexorably, and in line with too many historical precedents, this situation morphed in a number of cases into a sovereign debt crisis. Incidentally, average euro area public debt numbers do compare rather well with the U.S. as well as the UK. But averages of course do not count in Europe's case.

This brief chapter, written very much *al fresco*, first describes how the crisis broke. It goes on to sketch the containment response in the European Economic and Monetary Union, as EMU is officially called. Monetary as well as fiscal policy actions are evaluated. In a concluding section, written in the midst of a wide open environment, we highlight rather fundamental differences on what policies should be applied. These divergences are not at all new. In fact, such conflicting views on what policies to pursue and what objectives to achieve just reassert themselves.[3] But they now have literally become crucial.

---

[2] In the case of Greece, Ireland and Portugal it are almost 10 percentage points, Italy and Spain are some 5 percent away from the 2007 level; see IMF, *Europe. Navigating stormy waters, Regional Economic Outlook*, October 2011, p. 2.

[3] See Hans-Helmut Kotz and Wim Kösters, "Perspectives on the Policy Mix in EMU," in Rolf Caesar and Hans-Eckart Scharrer (eds.), *European Economic and Monetary Union: Regional and Global Challenges* (Baden-Baden: Nomos, 2001), pp. 13-23 where we compare in particular positions held by the German Council of Economic Experts and the French Conseil d'Analyse Économique.

The Crisis Erupts: Fragile Banks, Vulnerable Economies

Spillovers from the U.S. subprime crisis hit European economies rather unevenly. They were initially transmitted through those European banks that had significant exposures to U.S. structured products, allegedly, of course, of highest credit quality. Rather unsurprisingly they were in particular German banks, competing in a highly contested (i.e. low margin) market and from a home base with continuously accumulating current account surpluses as well as increasing net asset positions. The same holds true for Dutch-Belgian and, to a lesser degree, Austrian credit institutions. Banks from the UK and Switzerland, given the importance of the financial sector in both economies, were also, rather consequentially, implied first in line. Spanish, Italian and French banks, however, took much less of a hit, at least initially. Spanish supervisors simply refused allow putting loans, which had been taken out by banks to be immediately offloaded, into off-balance sheet constructs. In this way they blocked a very attractive path to arbitrage differential capital requirements for functionally equivalent positions. Banca d'Italia has obviously been similarly conservative.

Moreover, in both the Spanish and Italian markets, not unlike the French one, concentration ratios, as measured by the share of the largest 5 banks, are comparatively high. Quite logically, such market structures entail less compressed margins, i.e. a wider gap between marginal revenues and costs. Hence, given return on equity expectations (certainly excessive), as they prevailed in markets, there was less of an urge to move out in the risk-return space.[4]

The unraveling of the U.S. subprime market thus was initially a proto-typical asymmetric shock. Of course, and in blatant contradiction to contemporaneously confessed consensus views, the market correction, by force of arbitrage, rapidly weighed down on all structured products—as it should have, since they were engineered according to

[4] The conflicting relation between contestedness/competition and stability has been long acknowledged; on this see Xavier Vives, "Competition and Stability in Banking," *CEPR Policy Insight*, No. 50 (2010); Thorsten Beck, et al., "Bailing out the Banks: Reconciling Stability and Competition," *CEPR Report* (2009); and Adrian Blundell-Wignall, Gert Wehinger and Patrick Slovic, "The Elephant in the Room: The Need to Deal with What Banks Do," *OECD Financial Market Trends*, 2009/2, pp. 1-27.

the same principles. The shock was first felt only in a few exposed European financial institutions, in fact at the outset two comparatively small German banks were concerned (not counting quite significant hedge funds, affiliated with bulge bracket U.S. investment banks, one of them, Bear Stearns, ultimately vanishing barely more than half a year later). This suggested a reassuring interpretation: while some unsophisticated institutions always run into trouble, this is not only controllable but in particular of no systemic concern. But it became quickly public knowledge that, of course, the real problems had to do with the *cognoscenti*, among them the most sophisticated investment and commercial banks. The ensuing, unprecedented write-downs, as well as a very significant deleveraging, testify to this.

Nonetheless, the fallout for the real economy was protracted. In Europe, consequences took almost a year to become undeniably observable, again in an uneven way. These lags in the recognition of the impact become evident when one re-reads contemporaneous press articles or speeches of officials. Up until Lehman, in those economies with some distance to the financial centers, a perception dominated that this was a financial sector issue only and that one might get by without need for significant counteracting policies. If things went well, the financial crisis might turn out to be barely more than a sideshow. These economies in the second row (from a financial markets perspective), however, were then affected as much as anybody else. Being innocent bystanders only, they became nonetheless victimized. Indeed, given the strong integration of European goods and financial markets—obviously basic objectives of the European Union—anything else would have been quite rather surprising. There are simply no islands of the happy few.

Ordré Dispersé: European Crisis Response

Ultimately, highly integrated financial markets brought home this point. And they did it with exponential intensity. As structured credit products became ever more fragile, institutions deemed to be substantially involved had greater trouble accessing funds. On top of growing uncertainty about counterparties, problems arose in judging future bank-funding needs, as they resulted from contingent credit lines or the obligation to back-up tenuous off-balance sheet conduits. For those banks involved, this implied a precautionary hoarding of liquidity. In short, interbank markets became the canary in the mine. It is here where central banks were called upon to play their financial stabilization role. And the European Central Bank (ECB) responded vigorously.

The Response of the ECB

On August 9, 2007, interpreting what was going on as a run on the wholesale market (along the lines of the canonical Diamond-Dybvig-Rajan analysis) the ECB met all liquidity demand (given that it was backed by eligible collateral) at a fixed rate. At the time, this was unconventional indeed. The aim was to quell uncertainty. This was classical lender-of-last-resort behavior.

At the time, this policy was not at all well-received. There was substantial critique of an "overactive response," even of "hyper-activity" on the part of the ECB. In fact, the prevailing view internationally, which again one can easily distill from contemporaneous newspaper articles, was that such a policy would potentially provoke a major risk: it was liable to redouble the financial system's inherent moral hazard problems. This reading of the situation was only adapted, though rapidly and indeed fundamentally, when the run of retail clients on Northern Rock took place.[5] Quite obviously, the frequent images of lines of customers in front of the bank's doors were, however, only the apparent reason for a reorientation of monetary policies pursued. Later on it became evident that the decisive run on Northern Rock—the fatal loss of confidence—of course happened earlier, in interbank wholesale markets. Its high capital ratio notwithstanding, rolling-over of maturing (very short-term) debt, mainly overnight funds, became impossible for Northern Rock. This forced the hands of the Bank of England. The insolvency of the fourth largest mortgage bank in the UK would have implied a systemic risk.

Going into a bit more detail, the financial-monetary background scenario can be divided into two phases. A pre-Lehman, phase 1 began in early August 2007. At that time interbank money markets showed substantial stress (see graph: *Money market stress*). Spreads between

---

[5] Hyun Song Shin, "Reflections on Northern Rock: The Bank Run that Heralded the Global Financial Crisis," in *Journal of Economic Perspectives*, vol. 23, no. 1 (2009), pp. 101-119.

secured and unsecured interbank lending rose to unprecedented levels. These data lend themselves to two conflicting interpretations. They could be read as (a) an information asymmetry or (b) a wholesale run of banks (on themselves). This ex ante interpretative uncertainty is important to note since decision makers have to decide upon the basis of real-time data—and, quite obviously, without knowing what will going to happen. They do not have, so to speak, the information contained in the right hand part of the graph.

Both diagnoses had fundamentally differing implications. The asymmetric information/moral hazard diagnosis (a) suggested doing nothing. The silent run view (b) called for liquidity provision significantly above the banking systems needs (arising from minimum reserve requirements and cash, see graph: *MRO allotment*). The Eurosystem (i.e. including the national central banks with immediate exposure to market pressure and resulting market intelligence) was convinced of diagnosis (b) and, consequently, conducted—to calm markets—a refinancing operation with full-allotment at a fixed rate.

The second phase then began in mid-September 2008. With the demise of Lehman, things turned decisively for the worse. In the wake of the Lehman/AIG collapse, money markets almost completely ground to a halt. The increased roll-over risk translated into widening of spreads that had never been seen before, and haven't been seen since. Simultaneously trading volumes in markets, reflecting fundamental uncertainty, fell drastically, in particular in the longer durations. Markets became shallow (bid-offer spreads were wide), narrow (volumes were very low) and incapable of absorbing normal volumes (without price impact). This reflected predominantly uncertainty about counterparties in interbank markets. Their potential risk exposures was seen as obscure and difficult to decipher: Investors had to put a judgment (value) on the respective institution's risk implied in (a) its involvement in the structured credit domain as well as possibly arising from (b) feedbacks from its implication in the network with other institutions.

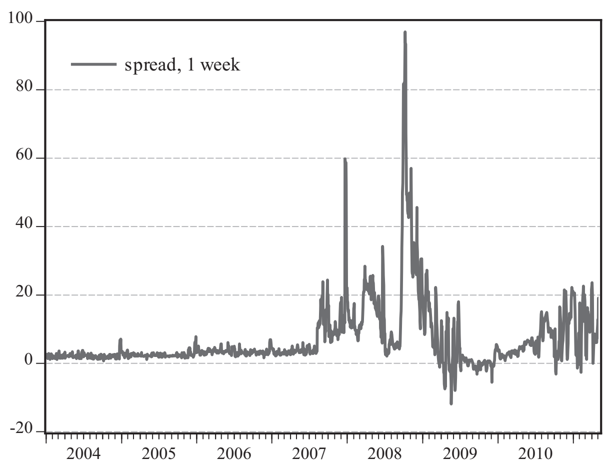
Initially, that is in phase 1, in order to keep interbank rates in close vicinity to its policy rate, the ECB frontloaded liquidity supply—but only temporarily, absorbing surplus liquidity over the course of the reserve maintenance period. In the course of the crisis, the dysfunctionality became more pertinent along the yield curve. In response, funds with longer duration were also made available by the ECB (see graph: *Liquidity provision*). Moreover, the ECB also broadened its—already large—list of eligible collateral and it also reduced the minimum required credit quality.

Essentially, the ECB was accepting an intermediary role, i.e. using its enlarged balance sheet to underwrite financial market stability—though substantially less so than the FED or the BoE did (see graph: *Central banks' balance sheets*). It was substituting a "missing market," missing for reasons of a fundamental lack of trust. These "enhanced credit support measures," as the ECB came to call them, were of course *extra*ordinary—which implied that the ECB would prefer getting back to normal (ordinary) operational procedures as soon as possible.

Fiscal Policy Reactions

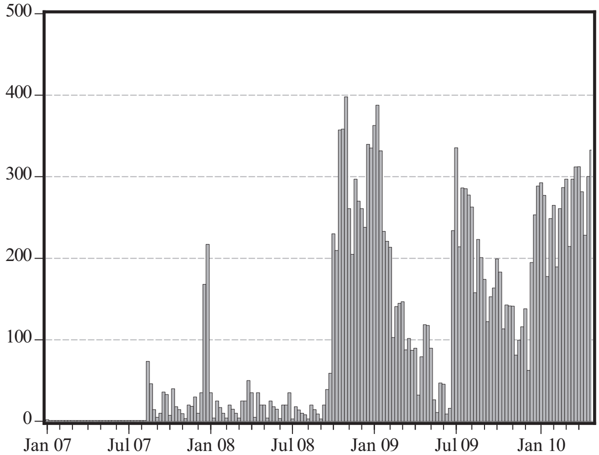
Monetary policy is, to state the obvious, Europeanized by design—fiscal policies are however decentralized in Europe, belonging to the remit of national policy makers. It is here where *ordré dispersé* comes

Money Market Tensions
Difference between secured (Euribor) and secured (Eurepo) interbank loans



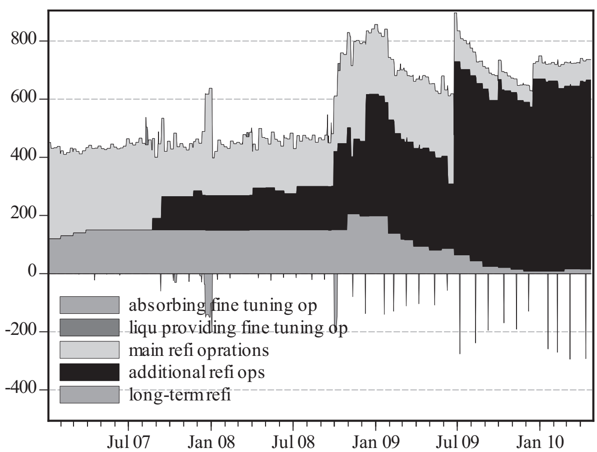
As a result of counterparty risk (or uncertainty about own refinancing needs) spreads in money markets widened out strongly in August 2007. They reached unprecedented heights in the wake of the Lehman demise.

MRO Allotment over Benchmark
Billion Euro



ECB provided liquidity substantially above the banking system's needs (arising from minimum reserve requirements and cash) ... and also relaxed conditions with regard to eligibility of collateral.

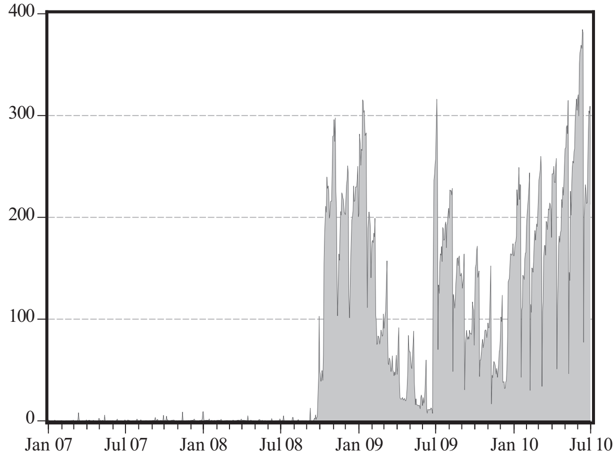
ECB: Liquidity Provision
Billion Euro



ECB's separation principle: monetary policy (= control of policy rate) is strictly separated from liquidity management. Graph shows substantial change in structure of liquidity provision towards longer-term funding.

Deposit Facility

Billion Euro

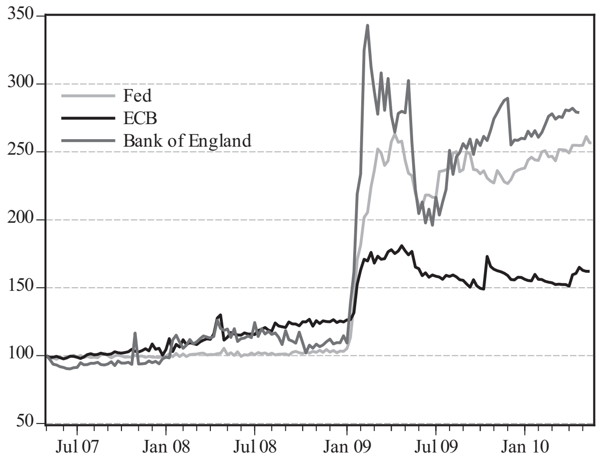


Source: ECB

Deposit facility reflects ECB's taking up an intermediation role amongst banks ... which are reluctant to lend to each other for reasons of substantial uncertainty.

Central Bank Balance Sheets

Billion Euro; Jan 2007 = 100



Sources: Federal Reserve System, ECB, BoE.

Balance sheet growth (compared to Jan 2007). Enhanced credit support vs. QE 1, 2 and 3: ECB has intervened on a substantially lower scale. Quantitative easing implies subsidies (relative to market rates). This is beyond classical monetary policy, in the realm of fiscal policy.

in. It is also here where in particular diverging views do not only exist—as they might with regard to monetary policy—but also come to bear. Budgetary policies are "negatively integrated" (Jan Tinbergen) through the Stability and Growth Pact. There is also some, not very effective, positive integration through peer-group review (Broad Economic Guidelines). But the aggregate dimension comes about only by default in EMU. Monetary policy has no explicit euro area level counterpart—on purpose. Rules were deemed to be sufficient. And any institutional counterpart on EMU-level was seen as potentially endangering the ECB's autonomy.

Hence, all the perennial issues known from international policy coordination arise. Two are particularly pertinent: They concern the interaction of fiscal policies amongst EMU members. In addition, an EMU specific dimension arises: the relationship between seventeen fiscal policies and the single European monetary policy. These questions are clearly fraught with very conflicting views, and the response to the crisis of 2007/8 is a first-hand example. First of all, national background conditions were initially quite diverse. Moreover, the asymmetric shock, emanating from the financial crisis, was mediated by a significant variety (heterogeneity) in economic structures. On impact, this led to rather different responses—without effectively accounting for cross-border externalities. When push comes to shove, national constraints dominate. This is important, since diverging national perspectives and evaluations are crucial for policy formation in EMU. The deep "structural interdependence" (Richard Cooper) notwithstanding, there was no EMU level institution which could effectively coordinate fiscal policies.

The Stability and Growth Pact (SGP) is geared at preventing unsustainable debt dynamics (via controlling annual deficits). However, it neglects short-run macro-policy coordination (as well as possible private debt overhangs or regional current account imbalances). This it does on purpose, since at the time of its conception, in the mid-1990s, countercyclical fiscal policies were seen as being of largely no avail. At best, automatic stabilizers were allowed for, as long as they remained within the SGP bounds (of 3% of deficit over GDP and 60% of debt over GDP). Betraying an institutionalized distrust in macro financial policies, one might read the SGP therefore as an immediate application of the Sargent-Wallace policy-ineffectiveness proposition of the mid-1970s.

Incidentally, from this PIP-perspective it is also much easier to understand the German government's reluctance to launch a countercyclical fiscal impulse in the fall of 2008—as it was strongly asked to do, for example, in G20 meetings. It rigorously declined such benevolent proposals because in Germany the suggested measures were seen as producing at best *Strohfeuereffekte* (flashes in the pan). And in this debate considerable references were made to academic studies that showed fiscal multipliers substantially below 1. Ultimately, however, the German government did respond in the wake of the fallout of the Lehman crisis (indeed, with the downfall gaining speed, even a second *Konjunkturpaket* was launched.) This was done at a time when the prevailing consensus view actually posited that Germany would most probably escape trouble. In fact, still in November 2008 the independent *Council of Economic Experts* held in its annual report to the government that the German economy would barely stagnate during the first half of 2009 and return to a flat growth path during the rest of the year. Only a tiny minority saw the threat of a substantial downturn. In reality, the German economy ultimately of course fell off the cliff, in line with other export-oriented economies. GDP shrank in 2009 by 5%.

It is important to acknowledge this debate in Europe's largest economy, since it would have been very difficult indeed for the German government to disregard prevailing expert opinion. While forecasters (as well as their clients) know that one should beware of the consensus, policymakers are basically compelled to go with the median view. They have to disregard skeptics, even though taking such views into account might lead to a more prudent, regret-minimizing policy.

Nonetheless (and at long last), and separately from monetary policy's crisis containment activities, fiscal policy reluctantly intervened. First, in a number of European countries there were interventions to shore up fragile financial institutions through guarantee schemes or outright bail-out activities. Staying on the sidelines, letting nature run its course, was deemed to have potentially prohibitive social opportunity costs. In the case of Germany, a *Financial Market Stabilization Fund* was established in October 2008 (with a gross volume of some 480 bn euros). As of January 2010, this fund had taken out guarantees amounting to €150 billion to financial institutions, had recapitalized a number of banks in difficulty (€28 billion) and had assumed risk positions where needed to bolster confidence in the banking system. The purpose of these measures was to support an orderly deleveraging process in those banks that had been particularly exposed to problematic assets. This specifically meant a buttressing of capital adequacy ratios, an improvement in liquidity positions, a reduction in leverage, as well as allowing for an appropriate level of write-downs. Overall, this redimensioning was to be engineered in a way that would not have too negative of an impact on the non-financial part of the economy.

Moreover, public sector budgets became highly expansionary, the second dimension in which fiscal policy was obviously involved. Deficits were run—had to be accepted—on a scale not seen for a long time. Obviously, SGP requirements were honored in breaking. The aim of these highly discretionary counteracting measures was to cope with the very substantial shock to aggregate demand that emanated from the crisis. In fact, the force of this shock came, as already mentioned, as a complete surprise. Contemporaneous forecasts at that time largely underestimated the crisis' impact. In any case, after a probably unavoidable recognition lag—things are always in doubt and politics, for reasons briefly alluded to, takes its cue from the median evaluation—substantial, large-scale discretionary stimulus programs were launched. In Germany, for example, two fiscal policy "packages" of €32 billion (equivalent to 1.5% of GDP in November 2008) and €50 billion (equivalent to 2% of GDP in March 2009) were implemented—admittedly with some reluctance, against the background of the rather positive forecasts already mentioned. But obviously given the importance in the German case of unemployment insurance and the social safety net more generally, as well as a progressive income tax system, a substantial cushioning impulse also came from automatic stabilizers.

These policies were apparently deployed effectively: while the German economy, being deeply integrated internationally (having a large exposed sector), contracted in 2009 in an unprecedented way, the recovery was almost as impressive. After shrinking by some 5%, substantially more than in most other advanced economies, growth was forecasted to be around 1.5%. As a matter of fact, it turned out that the German rebound was much more impressive. German GDP grew by some 3.5% in 2010, reflecting its strong world market focus with an emphasis on capital goods in particular.

By Way of Concluding—Rethinking EMU's Institutions

Since spring 2009 substantial, internationally coordinated (via G20 and more precisely the Financial Stability Board) reform efforts were also advanced to deal with the flaws in the regulation and supervision of financial institutions. While we here do not have the space to go into details, these efforts to increase capital buffers (self-insurance of institutions), address roll-over risk and maturity mismatches (liquidity coverage ratio, net stable funding ratio) and get a handle on the systemic dimension (macro-prudential risk) all go in the right direction. Of course, their implementation should account for the interaction between the different efforts. It should also be contingent on the economic environment. (The fall of 2011 appears to be a particularly inopportune background against which to tighten requirements and advance their implementation. But that is what is explicitly done in Europe.) Nonetheless, in principle these policies have been oriented in the right direction.

In fact, one can argue that a window of opportunity might have not been appropriately used. In any case, these regulatory efforts—as well as those to build new supervisory institutions in Europe—have been overshadowed recently by the deteriorating sovereign debt situation. In 2010, the crisis came back with a vengeance. The situation in Greece became untenable in May. This forced the ECB's hand, unless it was prepared to see a repeat of the Lehman scenario in the fall of 2008. Under such circumstances the strongest institution is always the weakest. Claiming incapacity to move, its 17 partners from fiscal policy dominated. Ireland and Portugal were forced to seek help from an institution created from scratch and against much resistance: the European Financial Stability Facility. The genesis of this (intergovernmental and not Community-based) institution is instructive. Only very protractedly was it given the instruments to make it—in view of markets—a possibly effective device for stemming a liquidity run. But only in terms of tools, not of size. All of this, again, reflecting fundamentally different views on which policies to pursue. Compromise attempts to buoy its capacity by providing insurance for a first piece of loss, instead of putting up more paid-in capital, are apparently not convincing. And how could they? Investors have an obvious interest in piercing through the veil of financial alchemy. For them, what ultimately counts, is not accounting or the ways promises are packaged but the expected value of the insurance provided in the case of default. To be convincing, investors would have to believe the assurance that a larger share of losses will be covered by taxpayers. Otherwise they refrain from rolling-over. From this angle all the talk about firepower (or more oomph), which sometimes appears to amount to the claim of getting more from less, is obviously dubious. Given the experience of private sector involvement, investors are apparently not prepared to accept such propositions at face value. In any case, the European Financial Stability Facility, with Spain and Italy in trouble, is judged by financial markets as not up to the mark.

This could lead to self-fulfilling vicious circles, sapping confidence ever more. This is particularly relevant for the case of Italy which from a rather conservative view is of course not a case of insolvency. Financial markets are however dys-synchronized from political processes. They work on a different time scale. We are therefore unfortunately entitled to some doubts whether structural reforms and austerity measures can re-establish confidence quickly enough to squeeze the premium of deep distrust as it is currently embedded in interest-rate spreads.

Against this background it cannot be taken for granted anymore that EMU will survive, although for all of EMU's members, from a purely selfish point of view, an unraveling would be prohibitively costly. As a consequence, it is not at all obvious what options are left. The German government, representing in a way the Northern European view, is in principle against (a) the pooling of sovereign risk as well as (b) the ECB taking up the role of a lender of last resort also for sovereigns (in denial of the EU Treaty) [or (c) giving the EFSF a bank license and hence access to ECB funding]. Quite obviously, given its independence, guaranteed by an international treaty, the ECB would have to decide on its own which policy to pursue. But that still leaves

EMU's future—via its weaker, but ever growing, parts—vulnerable to potentially devastating financial market dynamics.

One can of course make a strong case for both Northern European positions. Eurobonds without a commensurate degree of political union and therefore democratically legitimized conditionality are literally putting the cart before the horse. Moreover, now, after all the foot-dragging, they might be insufficient to quell the silent liquidity run that apparently is starting. The call for the ECB to take up a lender of last resort function also for sovereigns—to face the sovereign debt crisis –clearly is not only not within the ECB's legal mandate. It is explicitly prohibited. Moreover, a substantial problem would arise in terms of conditions to be attached to such support: The ECB has no legitimate role in fiscal policy. And it could not sanction misbehavior credibly. Finally, the ECB has a clear mandate: to provide price stability. This could be potentially endangered through such a role also.

But economics is about tradeoffs. Given that solvent, but illiquid EMU member governments can be driven in a self-fulfilling way into default (as the second-generation crisis models have shown) and given that the consequences of an EMU unraveling are dire indeed, insisting on principles comes at a potentially prohibitive price.

In any case, what is at this time offered as a solution—initiatives to strengthen the Stability and Growth Pact, making it more rule-based as well as emphasizing automaticity—for sure will not do. After this crisis has been contained, the euro area has to think of building a macro and financial framework that acknowledges spillovers and takes account of the aggregate impact of national fiscal policies, of financial market integration as well as regional current account imbalances.[6] The EU Commission's Excessive Deficit Procedure is a start in that direction, though one wonders how the so-called corrected arm should work.

[6] This is a very important issue to which we only refer in passing. These regional current account imbalances mirror underlying structural deficiencies in competitiveness. They have been accumulating ever since EMU's beginning in a number of Southern European economies. And they result from the appreciation of local real-effective exchange rates, i.e. of the ratio of non-tradable to tradable prices. Adjustment is inevitable but also very time consuming. It cannot be achieved on the time-scale financial markets currently request it.

Macroeconomic policies by default, as they have been conducted over the first decade of EMU's existence, are patently suboptimal. Therefore, as the Centre Cournot has argued twice before in manifestos, it is essential to think about the EU-level stance of fiscal policy. This is even more true in the wake of this crisis. Effective macro policies must go hand-in-glove with supply-side policy—a two-handed approach. This implies much more than an effective matching process in labor markets. It has to do with appropriate policies in infrastructure, education, innovation, and European networks. This is especially pertinent for the debt-burdened economies. (It is here where reference to the Marshall plan is pertinent.) In addition to that, financial regulation and its implementation have to become more effective. They have to deliver a robust, effective financial system (making finance conducive to growth). Here there are blatant flaws in the European supervisory landscape. They have to do with financial institutions engaged in a European dimension. Finally, given the lack of nominal exchange rates to absorb regional shocks, EMU also needs at least a minimal level of a fiscal insurance mechanism in addition to responsive labor markets and enhanced labor mobility.

To sum up, EMU cannot continue the way it was originally conceived, in intentional neglect of the economic script book.[7] The financial crisis has forcefully underlined this. Instability does not only arise in the public domain. Financially integrated markets call for integrated surveillance of area-wide institutions. Moral hazard is by no means a sufficient argument against effective crisis management and crisis prevention institutions. The external constraint—current accounts—matters also in monetary union. And a monetary union without a minimum, complementary level of fiscal union is a vulnerable proposition indeed.

[7] See Klaus Gretschmann and Hans-Helmut Kotz, "The Politics of EMU: Problems in Creating Wahlverwandschaften," in Hans-Hermann Francke, Eberhart Ketzel und Hans-Helmut Kotz (eds), *Europäische Währungsunion—von der Konzeption zur Gestaltung*, Beihefte zu Kredit und Kapital, Heft 14 (Berlin: Duncker & Humblot,1998), pp. 123–136.