CHAPTER SEVEN

The Euro Crisis

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This chapter is based on my book *The Euro and the Battle of Ideas*, written with Harold James, a historian at Princeton University, and Jean Pierre Landau at Sciences Po. I discuss how differences in economic thinking and philosophies made a quick resolution of the euro crisis difficult. This story ends on a positive note since these differences are not cast in stone.

First let me highlight the watershed moments in the euro crisis. Strains in the European banking system emerged in 2007–8, when the US subprime crisis spilled over to Europe. By late 2009 large budgetary gaps began to appear in some euro area members, especially in Greece. The crisis that began in 2010 involved a massive power shift in the governance of the euro area. In the spring of 2010 power shifted from the European Commission to the European Council, away from Brussels and toward the capitals of the member states of the European Union. Then, in October 2010, Angela Merkel and Nicolas Sarkozy took a famous walk on the beach in Deauville, France, and decided on a restructuring of Greek sovereign debt. This involved the private sector taking a haircut (Private Sector Involvement, PSI). From then on, everyone knew that any political move or even statement would impact the interest rates in countries on Europe's periphery. This limited the political space for initiatives in the crisis countries, and from then on France and especially Germany were in the driver's seat. Then in the summer of 2012, just prior to the Olympic Games in London, Mario

Draghi gave his famous "Whatever It Takes" speech. The outcome of the speech drastically reduced sovereign debt spreads, yet not a euro was spent by the European Central Bank (ECB). Another watershed moment occurred in the spring of 2013 with the Cyprus bail-in, involving a shift from a bailout to a bail-in philosophy. And finally, there was Brexit in June 2016.

There are four dimensions of philosophic disagreement between France and Germany, the two most powerful players in the euro area. When these two countries agree, things move forward in the euro area. If they do not agree, little happens. Moreover, many other countries in the euro area fall into this Rhine divide: the Nordic countries think more like Germany, while many countries on Europe's periphery think more like France. Indeed, the Rhine essentially divides the views of France and Germany. This is an old division going back to the work of Max Weber.

The first dimension relates to a theme of this conference: rules versus discretion. The Germans are primarily rule driven. They want to have ex ante setup of rules that must be followed, whereas the French are much more interventionistic and favor using discretion.

However, the difference between the two nations is not so simple: the French approach is much more subtle than just using discretion. When you have discretion, the time inconsistency problem arises. The policy maker promises today to do something tomorrow, but when tomorrow comes he may use his discretion to change the plan. Of course, the public anticipates this, so promises are not credible. For this reason, the French approach is much more nuanced: In certain dimensions, they go for a strict commitment without wiggle room—a straitjacket—in order to overcome the commitment problem. In other dimensions, however, they like to maintain full flexibility. In this multidimensional space, the policy maker forcefully locks in his response in certain dimensions, but in others there is great flexibility. By contrast, the Germans like a

system with rules, escape clauses, and autonomous safety values so that they do not have to intervene ex post at all. This is a very different approach.

There are some important examples of French straitjacket commitments. First, the French never want to restructure debt. No default. Recall that it was the Germans who pushed through PSI—Greek debt restructuring—at Deauville in October 2010. How can one fulfill a straitjacket commitment never to default? This leads us directly to the current heated debate on how to regulate banks' sovereign bond holdings. If domestic bonds are stuffed with their own countries' sovereign bonds, then a sovereign default will destroy the banking system. Faced with the possibility that a restructuring will bring down the banking system, it is unlikely that a government will choose that option. In a sense, domestic banks are taken hostage to credibly signal/commit that a government is unlikely to default on its bonds. This is a powerful commitment device.

The Germans, by contrast, favor a different approach to banking regulation. They favor risk weights on sovereign bonds such that banks hold an extra equity cushion for the event of a sovereign bond restructuring. In this arrangement, debt restructuring would not destroy the banking system. Indeed, a battle is going on at the moment on this issue. Should we force banks to hold an extra equity cushion? The French say, "Definitely not. This ruins our commitment not to default."

Without an extra bank equity cushion, the diabolic (doom) loop between sovereign risk and banking risk emerges. When sovereign risk increases, the banks suffer because bonds decline in value. This lowers banks' equity, possibly to such an extent that they have to be bailed out. As the bailout probability goes up, sovereign debt further declines in value, which in turn hurts the banks, and so on. In addition, there is a second diabolic loop. As banks suffer losses, they also lend less to the economy. Economic growth slows down, which then lowers government tax revenue. With lower tax revenue, the

fiscal situation worsens, and government bonds decline further. This produces further losses for the banks, and so on.

If there is a lot of risk weight on sovereign bonds and the banks have to hold considerable equity as shock absorbers, you do not have this problem. This dimension is playing out prominently.

Another example of a straitjacket commitment is the French insistence during the Maastricht Treaty negotiations not to have any rules for exit from the monetary union. Once you commit to be part of the monetary union, there is no way to get out of it without causing havoc. More generally, the French prefer pegged exchange rates. The commitment to a pegged exchange rate is of course strongest in a monetary union (without exit). By contrast, the Germans have always favored flexible exchange rates. So if you think about the old debate between pegged and floating exchange rates, the Germans were always in favor of flexible exchange rates, along with the Canadians, while the French (straitjacket) commit to low exchange-rate volatility.

In the Mundell-Fleming trilemma, you can pick two of three desired features. France favors managed fixed exchange rates and is willing to give up free capital flows. Germany favors free capital flows and is willing to give up fixed exchange rates. Both want autonomous monetary policy. In the French approach, you commit in certain dimensions not to exit from a currency union or strict peg but then have to actively manage the other dimensions with a lot of discretion. In the German approach, you do not have to actively manage the economy, so lots of flexibility is built into a self-governing, autonomous system.

The first dimension pits discretion against rules. The second dimension pits solidarity against liability. Solidarity was a central value during the French Revolution. The French favor a fiscal union with joint liability, whereby everyone is liable for everybody else. In contrast, in German Ordoliberalism, liability is paramount. If you are in charge, you are liable. You never separate control from liabil-

ity. These two elements have to be united. There will be no bailouts. Germany favors a bail-in approach and despises joint liability. The French pushed for joint liability in Eurobonds, while the Germans refused any joint liability bond structure. Angela Merkel insisted that "never in my lifetime will there be a Eurobond." Note that the French approach is not totally inconsistent: if you have a straitjacket commitment where you never default on your bonds, then you can have joint liability because participants will not default even in difficult circumstances. However, in extreme circumstances, when you really have to default, the country will be in deep trouble.

A third dimension where the two countries differ considerably involves liquidity and solvency. When faced with financial difficulties, the French say, "There is a liquidity problem. We have to intervene," while the Germans say, "There is a fundamental solvency problem. You are just throwing good money after bad." There are two types of liquidity problems. One is a multiple equilibrium liquidity problem—a situation where the economy goes from a good equilibrium to a bad equilibrium. All it takes to avoid a bad equilibrium is a "big bazooka." Just show the big bazooka, and the monetary problems will be solved. The term "big bazooka" was actually coined by then UK prime minister David Cameron, and others also argued for it. One could argue that Mario Draghi's London speech in the summer of 2012 announcing the Outright Monetary Transactions (OMT) program was such a bazooka. The OMT was ultimately specified only in the late summer and never activated. Not a single euro was ever spent on the OMT. Nevertheless, the interest rate spreads declined significantly during the summer. French observers claimed that this proved Europe was suffering from a problem of liquidity and not solvency. The Germans, however, argued that OMT was just a guarantee extended by the ECB, and that is why the spreads came down.

A second liquidity problem arises due to amplification and spiral effects. This occurs when strategic complementarities are less

pronounced, and the demand curve is not inverted or *s*-shaped, but is like an inverted integral (script *S*-shaped). In such circumstances, if one puts in an extra euro (of bailout money), one gets a benefit that far exceeds this single euro. In other words, the expected net present value of a bailout is positive—a good deal. And what is the net present value of a bailout? It is the present value of bailing out versus the present value of not bailing out. The present value of not bailing out depends on your estimates of the size of contagion, or systemic risk. If refusing a bailout leads to huge spillovers across the whole euro area, the cost of not bailing out is huge. There is considerable disagreement over this issue. From a French perspective, the contagion effects are very large, while the Germans think they are manageable.

This difference played out dramatically in the Cyprus crisis in the spring of 2013. Part of Cyprus's business model as a country was to establish a banking sector that attracted black market money from Russian oligarchs so as to develop into an international financial center. Cyprian banks held a lot of Greek sovereign debt. The restructuring of Greek debt ruined their assets. Given their liabilities—deposits owed to Cyprian citizens and Russian oligarchs—the banks were insolvent. Even after wiping out all equity holders, the assets were insufficient to cover the deposits. The Germans argued that if not bailing out Russian oligarchs is systemic, then everything is systemic. Thus the no-bailout rule enshrined in the Maastricht Treaty would become totally irrelevant, leading to bailouts everywhere. From a French perspective, bailouts would have been appropriate to avoid the contagion risk. In the Cyprus crisis, the Germans prevailed. Equity holders, creditors, and even large deposit holders were bailed in and suffered losses. Contagion was limited, since capital controls were put in place in advance. Overall, the Cyprus bail-in led to a significant shift in the rethinking in Europe. A general bail-in rule book was established. Here again, issues of solvency and liquidity arise.

The fourth dimension is the old debate between Keynesian stimulus on the one hand and austerity and reforms on the other. Everyone agrees that in a recession aggregate demand is depressed, and you do not want to create additional uncertainty by introducing reforms that further depress demand. French observers' push for Keynesian stimulus relies primarily on this argument, while Germans put forward a political economy argument. One has to use a crisis to push through reforms. Only during a crisis can a government convince the public that reforms are unavoidable for the long-term sustainability of the country. The essential difference regards timing and whether one emphasizes economic arguments or political economy arguments.

One might conclude that the situation in Europe was hopeless because the two main countries driving the process of economic and political integration have such different economic approaches. How can there be any consensus in the European Union in the long run?

I argue that there is hope. The hope can be seen if you observe that the two countries have switched sides in terms of which approach they follow. In other words, these differences are not written in stone but are actually quite flexible. At first sight, it appears that France is absolute—a centrally organized country. You can always intervene ex post. Discretion is very powerful, while in Germany you can't do this, because you have a federal structure, and thousands of little dukes will intervene. So you need ex ante rules to govern the system.

Interestingly, a historical perspective makes clear that laissez-faire reluctance to intervene is a French idea. The great free-market thinkers before the twentieth century were French. And in the eighteenth and nineteenth centuries Germany was characterized by cameralism, a strong-state tradition, and intervention. Frederick the Great intervened a lot in Prussia, as did imperial Germany in the nineteenth century. It was only after World War II that these

positions reversed themselves. In Germany, of course, it was the Nazis who were in favor of centralized power and extensive state intervention in the economy.

After the war, the Ordoliberals—an economic school with roots in Freiburg—argued against the arbitrariness in continuous government intervention. They posited that there is a need to restrain government power by ex ante rules to limit intervention. They also strongly promoted competition to avoid any concentration of power, be it political or economic. The Allies emphasized competition because it distributed power away from Berlin. Germany then had its economic miracle after World War II. Things went well, and everyone fell in love with the new arrangement.

France went in the opposite direction. There was considerable austerity in the 1930s. The government's budget was severely cut, and at that time, the biggest part of the budget was military spending. Then in 1940, after Germany quickly defeated France, it was argued that austerity measures were partly to blame for the France's vulnerability to the German attack. Thus the dirigiste, interventionist approach became much more powerful, and France switched to the other side. The overall—and hopeful—message is that the difference in economic approaches is not permanent.

In sum, the battle lines during the Maastricht Treaty negotiations before 1992 were along four dimensions, but financial stability and banking sector aspects were to a large extent ignored. When the Maastricht Treaty was negotiated in the late 1980s and early 1990s, the world had not yet lived through the Asian crisis with its huge waves of contagion. Financial stability was not at the forefront of people's minds; instead, fiscal aspects dominated. The diabolic (doom) loop—which one side sees as a commitment mechanism and the other as an amplification mechanism and destabilizer—came later. One reason the diabolic loop was so prevalent during the euro crisis was the absence of any safe asset across the euro area.

Let me outline a safe asset proposal that I, together with the Euro-nomics group, put forward in 2011. Our European safe bonds (ESBies) proposal ensures that the safe asset is provided symmetrically by all member countries in the euro area. During the euro crisis, the worsening situation led to a flight to safety from peripheral countries to core countries, because safe assets are provided by only a subset of euro area countries. Instead of having a Eurobond with joint and several liability, one can create a European safe asset via securitization. We initially called this safe asset the European safe bond. Officials now refer to it as a sovereign bond-backed security (SBBS). The idea is to first pool national sovereign bonds—say, up to 60 percent of a country's GDP. Then one tranches the pool into a senior bond—the safe asset—and a junior bond. Importantly, this is not a Eurobond since there is no joint liability. It is just simple pooling and tranching. Banks would hold only the senior bonds, not the junior bonds. When a crisis occurs, the senior bonds do not lose their value because they are protected by the junior bonds. The diabolic (doom) loop will not emerge. We are doing away with the commitment device but stabilizing the banks. A second advantage is that if there is a flight to safety, it will not go across borders, from the periphery to the core; it will go from the junior bond to the senior bond, and both bonds are European. These are bonds without a passport.

In conclusion, one reason the euro crisis was so difficult to manage was that different countries have divergent ideas on how to manage an economy. And ideas matter, not only interests. Importantly, one sees interests through the lens of ideas. There are many examples where the interests of Germany and France are aligned, but the lenses through which the two countries look at these interests are different and hence they push for different policies. In 2010, a huge power shift occurred away from Brussels and toward the European capitals, with the involvement of the IMF. Power moved

away from a supranational arrangement in Brussels toward an intergovernmental arrangement. With the famous Deauville decision in October 2010, the influence of Paris and especially Berlin was further strengthened. This is why I focus on the differences in economic approach between France and Germany—that is, along the Rhine divide. Importantly, these approaches with their many dimensions can change. Hence, there is hope for convergence down the road. The European safe bond (ESBies or SBBS) proposal bridges both approaches. It redirects cross-border flight to flows from a European junior bond to a European senior bond. As both bonds are European, flight-to-safety capital flows are less destabilizing. This program can shift Europe into a different equilibrium. In addition, with the appropriate banking regulation, ESBies/SBBS take the sovereign risk out of the banks' balance sheets and thereby switch off the diabolic (doom) loop between banking and sovereign risk.

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GENERAL DISCUSSION

VOLKER WIELAND: Markus, you mentioned the change in Germany following World War II. An important element was outside intervention, and it was a terrible experience. I'm a professor in Frankfurt. We're located nowadays in what used to be the headquarters of I. G. Farben, a big chemical conglomerate. This facility was used as the US Army headquarters in Europe and the seat of the military government after World War II. From this building in Frankfurt, the military government handed down guidelines to the heads of the German states regarding many rules and institutions of the state. For example, the so-called Frankfurt Documents influenced what became the so-called Basic Law (Grundgesetz), our version of the Constitution. Same with our new currency, the deutsche mark. So it's this combination that drove the change, the horrible experience of disaster and external intervention.

And if we move to the discussion today, the German position you describe also has a lot to do with experience. Unlike France, we have a federalist structure. There is in the population a big group that would say yes to a federal union. But the experience on the fiscal side of federalism hasn't been all that good, because unlike the United States, we haven't had working budget discipline. The focus on no bailout at the European level is influenced by the fact that we have had repeated bail-ins within Germany. Within Germany, we have the German states, that is, the German *Laender*, and among them are permanent recipients of transfers—Bremen, Berlin, Saarland. So that's where the proposals are coming from. And without going further, I think it's not going to be sufficient to just invent another financial instrument, where you have to ask yourself, Why is the market already offering that? But I think what you need is to unify control and

liability on the same level. to make this work and not have Marine Le Pen win in France. If you're in control of your budget, of your policies, you also have to be responsible, liable, for your policies. And without going to a central government, which the French want the least, as you can see from the number of votes Marine Le Pen gets, this requires reviving the no-bailout clause of the Maastricht Treaty.

MARKUS BRUNNERMEIER: I agree with several aspects. Yes, having a federal structure raises additional challenges. Our book is very detailed in outlining the importance of the United States in Germany's rethinking of its economic philosophy. On the other hand, the decision of Ludwig Erhard, Germany's first economic minister after World War II, to lift all price controls was against US wishes. This step was essential for Germany's economic miracle after the war. In addition, the Ordoliberalists were also important at the University of Frankfurt.

Should one conclude that a drastic change in economic philosophy requires an extreme and violent event, like a war? We do not think so. The euro crisis was a severe event for many of the citizens in Europe, and it led to a debate, which is the first step toward a common economic philosophy. One might argue that in certain dimensions there are first signs of convergence. A key example is the shift toward a bail-in philosophy. Of course, some of these aspects are very technical, so a rethink can take some time to trickle down to the average citizen.

The disagreement about this liability principle can be cast in the modern literature of principal-agent type models. Moral hazard limits full risk sharing, but some risk sharing, especially of tail risks, is optimal. Of course, one has to agree about whether an event is a tail event or a normal risk event. People have to come to an agreement on what events are extreme enough to warrant risk sharing across nations, since the moral hazard implications can be contained.

Additionally, the moral hazard that arises from excess fiscal debt levels and common bonds with joint liability is something Germany is familiar with historically. In the late nineteenth century, after the first unification of Germany in 1871, the federal structure was very loose—recall that Bavaria and Prussia had their own separate armies. At that time, Bismarck complained that some smaller "German member states" behaved irresponsibly in fiscal matters and simply relied on bailouts from the larger member states of Germany. It took imperial Germany several decades to unify.

Finally, I share the skepticism about Eurobonds. ESBies are not Eurobonds, but they solve specific problems without requiring active intervention. In answer to the question of whether ESBies will solve all the problems, I don't think so. ESBies are an attractive way to solve two problems without requiring joint liability. The two problems are the diabolic (doom) loop and flight-to-safety capital flow. First, with appropriate bank regulation ESBies will eliminate the diabolic loop between banking risk and solvency risk. This would also make possible restructuring of sovereign debt in extreme circumstances, but of course it also removes a "straitjacket commitment device." Second, ESBies rechannel flight-to-safety capital flows away from cross-border flows to flows across asset classes, from a junior bond to a senior bond.

DAVID MULFORD: In your presentation, the word "Brexit" appeared. You made the comment that it doesn't necessarily take a war to make change. So I wonder if you could look forward over the next couple of years of Brexit negotiations and speculate or explain how you think this might affect euro development, core ideas, and the ideas that you made in your presentation. Because I think we're entering a very significant and uncertain period here.

MARKUS BRUNNERMEIER: I agree with you that Brexit will be a challenging process, in particular because expectations, particularly

the expectations projected to the population, are not consistent. In the United Kingdom, most people believe that the transition will be smooth and the country can still enjoy the benefits of a common market. Great disappointment is likely. And the danger is significant that politicians will play the national card later on.

There are several recent developments besides Brexit that encourage continental Europeans to collaborate more closely. Donald Trump's initial indication that he would closely cooperate with Russia worried many Europeans about the security of eastern Europe. Also, Trump's initial comment that other nations should consider an exit triggered more unity on the continent than the reverse. Overall, I think it would be nice to keep the United Kingdom as closely linked as possible with continental Europe. This is important for at least two reasons: trade and geopolitical security. The United Kingdom is still an important European military power.