Postscript: money in Europe

The Eurozone crisis illustrates many of this book's arguments. In particular, it reveals that money expands our interdependence and requires trust and confidence to function. This property of money has great advantages, as described in earlier chapters, but can also create devastation, particularly when panic occurs. Panic is a correlated shock to the financial system. It has the potential to cause major economic, social and political damage. At the same time, panic can be ended effortlessly. All that is required is the utterance of an absolute guarantee. Only an entity with the ability to issue currency can make an unbreakable promise to honour liabilities. In the Eurozone's case, that power does not reside in a single country. Uniquely, the power to print money lies with a supranational institution: the European Central Bank (ECB).

The crisis in the Eurozone also makes clear that sovereignty is premised on the ability to issue currency. Money is not just one of the three spontaneous institutions of social organization: it is an essential one.

Fear of inflation

There were already early signs of trouble in the Eurozone when the first edition of *Money* was published in 2009. I argued that if the single currency did collapse, an unwillingness to print money in response to a panic would be the cause (see Chapter 1). This remains my view, and this chapter expands on this line of argument.

There are three distinct phases to the Eurozone crisis: a panic in government bond markets, which started in mid-2009 and lasted until July 2012; a period of financial calm from July 2012 onwards; and economic recession coinciding with policies of austerity, which were a direct response to the initial financial panic.

In this book, panic plays a central role, austerity less so. I never really believed that policy-makers, anywhere, would respond to a financial panic by aggressively cutting government spending and increasing taxes. History, and logic, provide too damning a verdict for us to repeat this mistake. I was wrong.

This is not the place to review the empirical evidence. Great detail is provided in Mark Blyth's superb work on the subject, *Austerity: The History of a Dangerous Idea* (2013). Not only does Blyth critique the logic of austerity, and provide a wealth of evidence in support of his case, but he also provides a unique archaeology of the idea. Martin Wolf (2013a) also provides typical clarity on the subject. More conventional econometric treatment is provided by the International Monetary Fund (Blanchard & Leigh 2013).

The interesting philosophical question is why policy-makers return to the idea of austerity when the evidence is clear that it exacerbates financial panic and is more likely to foster stagnation or depression than growth.

Two reasons are suggested by our analysis of money: the first is extreme in the case of Europe – the fear of inflation; the second is the retribution bias, discussed in Chapter 1.

We find it deeply disconcerting that something as important as money can be created out of nothing. This unease, which is mainly irrational, has played a repeated role in the policy response since 2008. Even US Federal Reserve and Bank of England officials remain reluctant to admit that they are "printing money", despite the fact that they do this as a matter of course. A similar tendency explains their reluctance to accept that QE amounts to a cancellation of government debt (see Preface).

The specifically European variant of this fear relates to inflation. It is clear that printing money in a recession or financial panic is not inflationary; indeed, if it preserves the productive capacity of an economy the opposite is true. Yet the European Central Bank (ECB), heavily influenced by the ideology of the German Bundesbank, sees inflation around every corner.

The connection between this fear of inflation and the policies of austerity in Europe is easily obscured. There is a tendency to view the cause of the Eurozone's plight as one of "too much borrowing" rather than a financial panic, because the policy response to the former is more appealing. The accepted response to a financial panic is to print money, or provide an unconditional guarantee. The simple statement that no bank will be allowed to fail eliminates the cause of the bank run, as we saw in October 2008. But the response to "over-borrowing" is belt-tightening. The German preference for austerity lies in part in a belief that it is preferable to risk deflation than inflation. This is the wrong way around, like a doctor selecting his preferred medicine to determine his diagnosis.

The retribution bias

In the early stage of the financial crisis in 2008 there was much talk of moral hazard (see Chapter 6). This is understandable. Banks were at fault, and ordinarily social stability and self-preservation require that crimes be punished. But this is not wise in a panic. By all means hold individuals to account, but threatening to allow banks to fail with a view to teaching them a lesson imposes misery on everyone else (Chapter 1).

The pursuit of austerity in the Eurozone is analogous. There is an appealing story: that profligate southern Europeans have borrowed too much. They must now repent for their sins, and suffer to repay their debts. At the heart of this is a deep human desire to believe that when something goes wrong, someone is responsible and should be punished. This betrays economic ignorance. Every economic transaction requires at least two parties: for every reckless borrower there is a foolish lender, and for every trade surplus there is a trade deficit. If southern Europe so obviously borrowed too much, northern European lenders must be dangerously incompetent. When obvious wrongdoing occurs, blame is often easy to apportion; in free and fair exchange it is rarely possible.

Sleight of hand

The pursuit of austerity in Europe makes little economic sense, but it satisfies a series of irrational biases. It is likely to be deflationary, and it metes out "punishment". Unfortunately, it also threatens a systemic collapse of the economy, causes needless misery and is likely to impair long-term growth prospects.

Many advocates of austerity confuse the size of the state with the size of the budget deficit. There are very sophisticated versions of this confusion, such as the work by Alberto Alesina, Professor of Political Economy at Harvard University. Alesina argues:

> The deficit debate is often misleading, however, because it tends to ignore a huge difference between the two kinds of deficit reduction. The evidence speaks loud and clear: when governments reduce deficits by raising taxes, they are indeed likely to witness deep, prolonged recessions. But when governments attack deficits by cutting spending, the results are very different. (Alesina 2012)

Alesina himself is employing sleight of hand. He is in fact saying nothing about deficit reduction. He argues that cutting government expenditure is better for growth than raising taxes. This may be true, but it tells us nothing about the merits of running a budget deficit or a surplus, or about the size of either. It may well be the case that cutting expenditure *and* taxes, and increasing the deficit would deliver the best growth outcome. In fact, to test the effect of changes in the deficit on growth, one should control for differences in the mix of expenditure and taxes.

The validity of Alesina's empirical results is questionable for a host of reasons, although their influence is undeniable (Blyth 2013). Regardless, he does not provide any evidence supportive of cutting deficits because this is not what he is testing. At best, Alesina's evidence suggests that reducing government expenditure as a share of GDP raises growth: a separate and complex issue. Woody Brock (2012), for example, makes a compelling case that the mix of expenditure is what matters, in particular the share going to infrastructure.

Either way, it important to be very clear on this point: debate over the size of the government (either its share of total spending in the economy or its share of production) should be kept entirely distinct from discussions over the appropriate budget deficit or surplus.

Panic attack

I received a phone call one evening in June 2012 from a relative in Dublin. She wanted to know if I had any advice for her elderly mother who had savings in an Irish bank account. Her friends in Ireland were discussing transferring their money into Swiss-franc-denominated bank accounts. They were worried about Ireland leaving the euro. Should she be doing the same?

I always try to avoid giving financial advice to friends or family, unless they're already working in the field. But my relative was worried, so I did my best. I suggested doing nothing: converting into Swiss francs is not risk-free because you don't know what the Swiss franc is going to do, and Ireland was not about to leave the Eurozone overnight. It was possible that the Bank of Ireland would freeze deposits or default on them, but I didn't think this was likely, and I would let her know if circumstances changed. Best not to worry her mother.

This was unusual. My family in Ireland are not rich people. They have never once spoken to me, even casually, about investing or finance. Rightly so, it's dull, given entertaining alternatives. So what was going on?

Financial panic and contagion is one aspect of economics that has self-fulfilling characteristics. Once a run on a currency or a banking system begins, it usually ends in one of two ways: devaluation/default or a guarantee of overwhelming financial force from government authorities. The Eurozone is no different.

Runs on banks, currencies or government bonds have similarities with the physiological condition of panic attacks. They are emotional and they build on repeated experience. A loss of confidence usually starts with the weakest link and then spreads, through repeated

episodes of fear, to bring down the strongest. The Asian crisis started in one of the most vulnerable countries in Asia, the heavily indebted Thai economy, and ended with a run on Hong Kong, financially the strongest. Most currencies in the region, originally pegged to the US dollar, collapsed, bar Hong Kong, which had huge financial resources and was ultimately a beneficiary of US policy intervention. The US Federal Reserve Board responded to the global repercussions by aggressively cutting interest rates.

The global banking crisis of 2008 started with weak mortgage banks in the United States, then medium-sized investment banks with large mortgage-related businesses, such as Bear Stearns, before bringing even the best-capitalized banks in the world to the brink of collapse. Stemming the panic required an absolute commitment in October 2008 by the G20 to prevent the failure of another major financial institution.

This pattern of starting with the weakest and ending with the strongest, which defines most panics, is also true of the Eurozone crisis. It is conveniently forgotten, as many praise the success of the German economy, that in the latter phases of Euro panic in late 2011, German credit default swap (CDS) spreads, which measure credit risk, started widening abruptly (as did all of northern Europe's), culminating in a failed German government bond auction. Eventually a coordinated response in November by the world's central banks restored calm. The ECB announced an unprecedentedly large three-year bank-funding facility, the US Federal Reserve announced a series of measures to provide additional dollar liquidity, and the People's Bank of China cut reserve requirements. The panic started with the weakest, spread to the strongest, and was halted by an implicit guarantee of support.

Emotional intelligence

Commentators and politicians often refer to "the market" as if it were some alien and independent entity, divorced from the rest of the population: "Markets will not tolerate ...", "We will not bow to market pressure...", "We have to build credibility with markets ..." Usually, when reference is made to "markets" in the popular media, there are images of traders shouting into phones, or red lines on screens showing precipitous declines. We hear about "speculators" and "hedge funds".

This language and imagery is misleading and confused. It masks ignorance of the role and function of our financial system. A more meaningful term than "markets" would be "the beliefs of the world's savers". This includes my relative in Dublin.

"Speculators" do not "attack" the Italian government bond market. The world's savers, or those they have been delegated to look after their savings, believe that the risk of default in Italy has increased. The world's savers are represented by an extremely wide group of institutions: pension funds, university endowments, charities, foundations, individual savers, insurance firms and companies of all sizes that have cash balances and treasury operations. These groups and institutions are not a narrow group of aggressive traders. Far from it. They represent anyone with a bank account, an insurance policy or a pension – which is most of us.

It would be wrong to conclude that our beliefs are not subject to emotion. They are periodically dominated by emotions. And panic or its counterpart, euphoria, is a case in point. The panic that pervaded Europe from mid-2009 to July 2012 was partly an emotional phenomenon. Citizens feared for their livelihoods, savings and, ultimately, safety and wellbeing. Panic and fear can also be rational, because it is self-fulfilling. Citizens intuitively understand that if governments are not creditworthy, why would their bank deposits guaranteed by governments be safe? And if large corporations are taking their money from

banks and depositing it outside the Eurozone or at the ECB, why should they not follow suit? In these circumstances, policy-makers should not argue with “markets”; in a panic, beliefs are reality. That is why good and bad, alike, can fail.

It is often overlooked, but banks are usually the most significant borrowers in our economies. When we make a deposit with a bank we are in fact lending to the bank. That is what a bank deposit is. Often people talk about bank deposits as if there is a safe in the bank with their name on it, holding their cash. There isn’t. You lend to the bank when you deposit your money with it, and banks profit by on-lending that money to other parts of the economy at a higher rate of interest. Banking panics occur precisely because we worry about the security of our loans to the banks. And if we worry about the credit risk of banks it increases the probability that the bank will fail: we rush to withdraw deposits and the bank cannot honour a simultaneous liquidation of its liabilities.

The run on governments in the Eurozone is a direct parallel. Governments borrow by issuing bonds to investors (banks, pension funds, insurance companies, hedge funds, mutual funds and individuals). Bonds are usually issued with a fixed coupon (an interest payment). The price that investors are willing to pay for the bonds determines the "yield", the interest costs of the government. As a matter of arithmetic, sufficiently high interest rates on government debt render the fiscal policy response redundant. Interest rates on government debt can rise in an instant if investors start to believe that the government might default. But the rising cost of debt in turn increases the probability of default. Relative to the policy options available to most governments, these shifts in interest rates in very short periods of time can dwarf all other options. That is why a loss of confidence can be self-fulfilling, and fiscal policy futile, if not reinforcing.

Italy is a good example, because the level of government debt exceeds 100 per cent of GDP. If the interest rate were to rise to 10 per cent, and stay there, Italy would have to pay the equivalent of more than 10 per cent of its GDP annually in interest payments to stop its debt/GDP ratio from spiralling out of control. In normal economic conditions, and without causing too much trauma, governments can shift their borrowing requirements by a few percentage points of GDP by cutting expenditure or raising taxes. But no government can keep pace with 5 per cent or 10 per cent shifts in borrowing costs, which occurred very rapidly in Greece, Portugal and Ireland. That is what makes a run on government bonds a self-fulfilling panic. Interest rates start to rise on fears of default, which makes default more likely.

Most pernicious of all, when things start to go really wrong, the debts of governments start to rise rapidly because governments have vast “contingent liabilities”, which arise in specific, but often unpredictable, circumstances. Unemployment is a contingent liability of government, as is the banking system itself (Blyth 2013). It is one of the reasons why austerity undermines the solvency of states. If austerity causes unemployment to rise and banks to fail, governments actually have to borrow more because they have to provide deposit insurance, pay for the recapitalization of banks and pay additional unemployment benefits, and they lose revenues from income taxes as profits and wages fall.

Halted by words

The truest test of a panic, is how it ends. The panic in Eurozone government bond markets ended with a single utterance from Mario Draghi, President of the ECB, in London, on the 26 July 2012: “Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough.”

Bringing a financial panic to a close requires unconditional and overwhelming intervention. If markets believe that another default by a Eurozone sovereign threatens an existential risk to the Eurozone – a very reasonable assumption – then a guarantee by the ECB to preserve the euro is in effect a guarantee to prevent a further sovereign default. Eurozone government bonds, overnight, become risk-free assets again!

Draghi's statement precipitated a compression of CDS spreads and a collapse in yields across all sovereign bonds across Europe, and a reversal of the capital flight from the periphery to the core, which had become acute. Words alone reversed the panic.

This very fact undermines the conventional explanation of the Eurozone crisis. If "too much" debt and a lack of competitiveness in the peripheral economies was the root cause of the crisis, how could words alone turn the crisis around? Debt levels were in fact far higher as a percentage of GDP in July 2012 than in mid-2009, when the panic started.

How much is too much?

The "too much" debt hypothesis has numerous problems. Putting a reasonably precise number on "too much" appears to be impossible, as the Reinhart and Rogoff fiasco illustrates (Wolf 2013b).

The thesis deserved suspicion right from the beginning. If public sector debt levels caused the run on government bond markets in mid-2009, why did it happen only in the Eurozone? And why did bond yields of other economies actually fall? Japan, which had a higher stock of public sector debt than any Eurozone economy, went even further in 2011 and increased its budget deficit in response to the Fukushima disaster, only to experience further declines in its cost of debt.

Not only was the panic restricted to Europe, the opposite was happening in the rest of the world. There was a huge increase in demand by savers for non-Eurozone government bonds, despite identical trends in public sector debt levels. The panic in bond markets was unique to the Eurozone.

The Eurozone panic was also odd because it had not been preceded by a boom. Ireland and Spain had property bubbles, but this was not true of Portugal or Italy. Portugal has barely grown for a decade, and Italy has relatively low levels of household debt, had no housing bubble, relatively well capitalized banks, and a very small current account deficit. Italy does have a higher public sector debt/GDP ratio than most advanced economies, but runs a budget surplus (excluding interest payments), which is rare.

Hubris

Something else happened in Europe in the middle of 2009. In Chapter 6, when discussing correlation and insurance, I argue that: "The financial market equivalent of the universe collapsing would be the US government going bankrupt. It so happens that you can buy insurance against precisely this eventuality [CDS contracts]. In fact, I would happily sell you such insurance. Because it can print money, the US government can only default if it chooses to."

Now in 2009 the ECB effectively told the financial world that it would not support Eurozone sovereigns. It made it clear that Italian government debt, or French, Spanish, or even German debt, is different from that of the United States, the UK, and Japan. Eurozone countries cannot print money. And the ECB, unlike all other central banks, does not stand behind all borrowers alike. *This is the root cause of the Eurozone crisis.*

It may seem extraordinary that the ECB would cause a panic in Eurozone bond markets. I have no reason to believe it was their intention. More likely it is the result of simple hubris.

In early 2009, all the other major central banks decided to engage in QE. As discussed in the Preface, QE involves the purchase of government bonds by the central bank through the creation of money. Central banks pursued this policy voluntarily and independently. Their objective was to fend off the threat of falling inflation, and boost demand in the economy. By purchasing large amounts of government bonds, they reason that they can reduce interest rates in the private sector and encourage investors to take more risk.

There are critics of QE, but no one argues that it is somehow "bailing out" governments. That is neither the intention nor consequence. Throughout history, central banks have bought government bonds to alter overnight interest rates. There is little that is "unconventional" about QE; the only novelty is the attempt to influence interest rates at longer maturities. The main objection is that its effects are negligible, at least once there is sufficient liquidity in the financial system. But few would argue that it does significant harm in a very weak economy, following an economic or financial crisis.

Despite almost universal support for QE in the rest of the developed world, the ECB, with considerable fanfare, declared that it would not buy government bonds. This was particularly odd. Not only was the ECB not doing what all other central banks were doing, but also officials felt the need to pointedly reject these policies. Instead of embarking on large-scale purchases of government bonds, the ECB announced, on 7 May 2009, its plan to purchase covered bonds, an obscure and relatively unimportant financial instrument issued by banks in the Eurozone.

Transcripts of the press conference at which then ECB President Jean-Claude Trichet announced the covered bond programme are revealing. The quantity of covered bonds that the ECB intended to purchase was economically trivial, at around €60bn, but the context and form of justification was very significant. Trichet pointedly rejected any inference that purchasing covered bonds was "QE": "the idea is to revive the market [for covered bonds], which has been very heavily affected, and all that goes with this revival, including the spreads, the depth and the liquidity of the market. We are not at all embarking on quantitative easing" (Trichet & Papademos 2009). Earlier during the Q&A, Trichet also took a swipe at the actions of other central banks, something the US Federal Reserve Board never does: "The public debate emerging on whether or not some central banks are paving the way at the global level for future inflation is extraordinarily counterproductive" (*ibid*.). It is also noteworthy that his concern is inflation.

Why did it matter so much to the ECB to differentiate itself from all other central banks? Independent central banks today are populated with deeply conventional academics and are making apolitical technical decisions. Parts of the media and blogosphere dramatize when they talk of "Helicopter Ben", money printing and Zimbabwe. In reality, unconventional types don't make it on to the boards of central banks. On the big issues of policy, central banks usually agree and end up doing the same thing.

For some reason, ECB officials sometimes reveal an inferiority complex, particularly with respect to the US Federal Reserve Board. When asked to justify their decisions, they repeatedly emphasize that they are different to other central banks, and, often by implication, superior. This odd disposition is unique to the ECB, at least among central banks in the developed world.

This niggling insecurity is usually irrelevant, and only influences the odd aside or pedantic differences in policy, but in this instance it contributed to a devastatingly costly error of judgement. A superficially innocuous decision – to openly reject QE and embark on a trivial

programme of covered bond purchases – may, in fact, be the precise trigger for the profound loss of confidence in peripheral Eurozone government bonds that accelerated through the end of the year and into 2010.

For many years, market participants assumed that no sovereign in Europe would be allowed to default. This was a logical extension of prevailing financial regulations, which did not require banks to hold capital against government bond holdings, implying that these bonds were riskless. It is also a reasonable assumption, because actively introducing credit risk to the sovereign bond market is an act of economic suicide. Government bonds were priced off interest rate expectations. But this bizarre policy twist by the ECB drew explicit attention to the different risk properties of Eurozone bonds.

Liquidity in the covered bond market is of no macroeconomic significance. What the ECB was unwilling to do mattered more. The subconscious message was that Eurozone government bonds were different. The central bank did not stand behind them.

Market participants started looking elsewhere for more reasoned explanations. Article 123 of the treaty governing the activity of the ECB very explicitly prohibits primary market purchases of government bonds. This involves the central bank buying newly issued government bonds directly from the government, rather than purchases in the secondary markets, which is how QE is typically implemented. The treaty also explicitly prohibits other forms of direct finance of government spending, such as overdraft facilities for governments.

Nerds

Prior to this juncture, such detail was the domain of a number of ECB lawyers, and a small community of monetary policy nerds. But given the determined rejection of QE by the ECB, market participants, press and academic commentators started to consider the possibility that the ECB was constrained by law. Was this the real reason for its exceptionalism?

In early 2009, market access was still available for Greece, Ireland and Portugal. At that time, there was no sense in which QE was a “bailout” of sovereigns. Eurozone QE would also, logically, have involved secondary-market purchases of bonds from all countries – including the “strong” ones – in proportion to their shares of GDP, for example, or their shares of the capital of the ECB. But the explicit rejection of QE, and the suggestion that it would be of questionable legality, changed all that. From this point onwards, markets started to treat the bonds of Eurozone governments distinctly.

In classic fashion the run started with the weakest link – Greece – in mid-2009, spreading first to Ireland and Portugal, then, in increasingly severe waves, to Spain and Italy. As in all panics, ultimately the mighty succumb. In November 2011, bond markets in all Eurozone countries froze and credit spreads widened rapidly on all sovereigns, including Germany. This triggered the beginning of a change in course. Draghi first guaranteed the liquidity of all major banks – with the long-term refinancing option – and eventually, in the summer of 2012, uttered those famous words.

The protagonist who caused the panic had the power to end it.

From retribution to redemption

The crisis in the Eurozone highlights many of the themes in this book. Complex interdependence is a core property of money. Despite naive impulses of retribution, we depend on each other to a greater extent than ever before. No one side can be to blame in a free and informed economic exchange. Lenders are no more moral than borrowers.

Interdependence has created prosperity and surplus. But the other side of complex mutual dependence is vulnerability to correlated shocks. Panic within the financial system is one of the most pernicious.

Our system of money and finance depends on trust. Hume observed that money is a spontaneous "institution", it is only valuable if it is accepted by others. Implicitly, this system relies on a series of government guarantees: a commitment not to issue too much money – or we will have rising inflation – and a commitment to honour two critical financial contracts on which our system rests: bank deposits and government bonds. The Eurozone crisis was caused by a breach of this second commitment. It remains held together by a promise from the current President of the ECB, which we hope amounts to a renewal of vows.

The Eurozone crisis is failure at a very human level. A story based on blame and retribution is appealing. But it does not stand up to scrutiny. A more plausible culprit is hubris at the heart of the central bank.