

3

How the Virus of Asset Price Inflation Infected EMU

The global credit bubble in the early and mid 2000s and its sequel of great financial panic and great recession have set off a long search for the culprits. The investigation has been fundamentally historical rather than criminal. The actions and flaws of institutions and individuals have come under scrutiny. The investigators have also turned to wider social and economic forces which in combination might have been responsible for the disaster.

A search for the causes of economic and financial breakdown has some similarity with the pursuit of blame for the eruption of war. The analogy is only partial because investigations into the breakdown of peace can lead to indictments of war guilt. The identified person or organization could be due for punishment (sometimes posthumously in a purely hypothetical court process) for crimes against humanity or lesser charges. Crime and punishment is not usually at issue in the investigation of economic debacle albeit that alongside the economists the prosecutors of financial fraud might well be unusually busy.

In general, blundering central bankers and finance ministers, unlike ministers of war, did not deliberately or knowingly stoke up the possibility of eventual calamity in a wager which could bring alternatively national, political, and personal gains at least in the short run. Perhaps some of the economic policymakers at a rare moment during the phase of stimulus might have had a fleeting insight as to how things could all go very wrong. Maybe they should have acted on those insights by the exercise of greater caution. Perhaps they were influenced by personal financial and political greed. Even so, unlike the war minister, there was no target for their recklessness – no designated victim to pay for the potential gains, no enemy to be vanquished.

The main purpose of the investigation into economic calamity – and this is also an important purpose in war investigations – is the exposure

of frailties and fault lines which allowed the catastrophe to occur. The hope of many investigators is that a better understanding of what went wrong can lead on to a set of remedies which will prevent anything similar happening in the future.

Historical investigations are decentralized. There is no chief prosecuting counsel. Rather, experts, politicians and commentators, undertake their own research and analysis, sometimes alone, sometimes in organized groups. In the example of such investigations into the global credit bubble of the mid-2000s and its subsequent bust, the areas of suspicion have included implementation of half-baked or downright false monetary doctrines, regulatory regimes with no safeguards against the regulators falling asleep and which inadvertently overrode and distorted automatic disciplinary mechanisms operating in the marketplace (the so-called invisible hands), financial intermediation based on systemic underestimation of risk and perverse standards of remuneration, severe inefficiencies in capital market pricing – embracing the crucial topic of how to value bank equities, Confucian tradition in East Asia and many others.

In reflective mood, investigators have raised important concerns about inherent flaws in the functioning of market forces – in particular those guiding the production and dissemination of reliable and insightful financial information, whether by stock market analysts or investigative business journalists.

Many of the eventually identified culprits and their defenders have responded by attempting to demonstrate that others were to blame.

A sampling of the literature and media on the subject of blame would reveal that ‘indictments’ handed out so far by the decentralized investigation are far-reaching. In some ‘trials’ or pre-trials, the targets (of the indictment process) have been prominent central bank officials, all the way down from Alan Greenspan and Ben Bernanke (where the charge list starts with inducing severe monetary disequilibrium).

In other trial processes, it is collective entities or groups that stand accused – the government of China (for its exchange rate policy), East Asian households and businesses for saving too much, regulators – including prominently the Securities and Exchange Commission (SEC), Bank for International Settlements (BIS) and central banks in Europe and the US – for being blithely unaware of what was occurring in the areas they were regulating, innovators for producing flawed financial products, business managers or clients who failed to spot the problems, analysts or journalists who failed to discover or uncover what was really going on (especially in terms of leverage and broader risk-taking) within

the financial sector, investors who did not look at, or were in a state of delusion concerning, the risks of leverage and who put an extraordinarily high probability on one particularly favourable scenario (without rationally making appropriately high estimates of probability weights for less favourable scenarios, or even thinking about these clearly).

A big omission in the list of potential suspect areas has been the new monetary regime in Europe which, at the end of 1998, replaced the previous regime headed by the Deutsche mark and the Deutsche Bundesbank. Correspondingly there has been no indictment either against EMU or against the ECB, or any leading euro officials. Also remarkable has been the complete silence of governments and mainstream oppositions in EMU member countries with respect to monetary failure (whether in monetary framework or ECB policy actions) and its contribution to the European debt crises that in reality were a part of the global credit bust following the preceding bubble. The Japanese publisher of this book's second edition noted that the apparent political consensus to shield the ECB from criticism put it in a position comparable to the Emperor of Japan.

The central theme of this book is that the launch of the euro unleashed forces which played a critical role together with the originating force of US monetary chaos in generating the global credit bubble. The burst was unnecessarily painful and wasteful, most of all in Europe. A succession of bad policy choices by the ECB and flaws in EMU design are an integral part of that case.

As we shall discover in the course of the narrative, structural flaws in the new monetary union – some of which might have been less severe if the founders of the union had not handed responsibility for designing the framework of monetary policy to the just-created ECB (within which the secret committee in charge of the design project, headed by Professor Otmar Issing, newly appointed Board Member and Chief Economist, was given only a few weeks to complete the task) – and policy mistakes by its operatives (including crucially those at the ECB) combined to make the outcome so much worse. The distinction between structural flaw and operating error cannot be hard and fast in that there are grey areas where the two are inseparable.

In this chapter a set of accusations is levelled at EMU and specifically its central bank (the ECB) as the prime culprits. This forms the indictment. In subsequent chapters the evidence to support the indictment is presented in full and so are the claims in defence of the accused (much of which takes the form of diverting blame to other targets). A balancing of accusation and counter-claims leads to a hypothetical judgement as

to the best way forward for monetary union in Europe. This judgement includes an outline of remedies to contain the dangers posed by EMU both during the painful continuing bust of the great bubble and far into the distance beyond.

Let us start with the summary indictment.

Summary indictment

The launch of EMU in 1998 set off a *sequence of monetary and capital market developments* in Europe that seriously contributed to the global credit bubble and subsequent bust through its first decade and beyond. The European dimension of the crash was perhaps less obvious at first than the US dimension. Whereas mainstream opinion in the global marketplaces had already adopted a plausibly harsh analysis about the extent of US damage from the bust by early 2009, the reckoning was delayed in Europe. Realistic estimates of the European fall-out from the period of virulent asset price inflation (2003–7) – the disease attacked markets in real estate, sovereign debt, financial equities and credit generally – emerged in stages well into 2010, 2011 and 2012 as the sovereign debt crises erupted amid a continuous process of market discovery. Eventually it came to light just how rampant irrational exuberance had become regarding a wide range of European asset markets during the bubble period.

Though the ECB undoubtedly faced big challenges and was handicapped by essential flaws in the architecture of monetary union, its poor design of monetary framework (even recognizing constraints due to public scepticism regarding its mission of achieving price level stability) had played a key role in fermenting the bubble and burst. The bad mistakes in its policymaking, which magnified greatly the economic damage, were avoidable.

We proceed to the charges in detail.

Faulty instrument board

The *sequence of developments* from the launch of the euro to the credit bubble-and-burst started with an almost total unreliability of the instrument board to be used by the pilots of monetary policy (the central bankers) in the newly created union.

A key problem with the instrument board was the lack of basis for confidence that any chosen definition of money supply in the new union as constructed would be a reliable guide for policymakers seeking

to achieve the aim of price level stability as mandated by the founding Treaty of Maastricht let alone aspiring to pursue the aim of monetary stability in its wider sense (to include asset price inflation) non-mandated by the Treaty.

This absence of confidence stemmed from the fact that little was known about either the extent of demand (in equilibrium) for the new money (in the form of banknotes and bank deposits) or the dynamics behind its supply (how vigorously the overall stock of bank deposits would expand for any given path of monetary base).

Even the best monetary engineers under skilful instruction could not have fully fixed that problem. We shall see later (Chapter 8), though, how enhanced monetary base control together with modestly high reserve requirements might have partially fixed it especially if this had gone along with strict free market determination of interest rates (both short and long) without any manipulation (sometimes described as 'guidance') by the central bank.

With the passage of time the problem might have been expected to become less severe as learning took place both inside the central bank and in the market-place. And it was possible to hope, not with any great confidence given overwhelming historical evidence concerning discretionary judgement of monetary officials, that policymakers would devise extra checks and balances to contain the extent of monetary instability caused by the unreliability of the instrument board and thereby the ultimate damage which might result. Such faint hopes were dashed.

Flawed monetary framework and incomplete mandate

Right at the start of the monetary union, and indeed even in the half-year before its formal start (from mid- to end-1998), the founder members of the ECB Council took a series of ill-fated decisions regarding the design of the monetary policy framework.

In seeking to understand how these mistakes occurred, we should not underestimate the difficulty of the task that confronted the founding policymakers of the ECB, especially in view of the defective instrument board.

The ECB Council, in the short time from the EU Summit of May 1998 (where the heads of state took the formal decision to proceed to the final stage of EMU) until the last date possible to have worked out a fully operational plan (autumn 1998) ahead of the euro's launch (1 January 1999), had to decide how to interpret and implement the key Article 105 of the Maastricht Treaty with respect to the new monetary union.

Article 105 states:

The primary objective of the European System of Central Banks (ESCB) shall be to maintain price stability. Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Community with a view to contributing to the achievement of the objectives of the Community as laid down [in article 2].

The treaty left it to the ECB to interpret carefully what price stability should mean and how it could be achieved. As it turned out, the feasible time for deliberations stretched only over a few weeks. All of this was unfortunate.

The treaty writers should have composed a clear set of guiding monetary principles. The guiding principles in the Treaty (the monetary clauses) should have included the goal of *monetary stability* alongside the aim of *price level stability in the long run*.

Monetary stability means that money does not become a source of serious disequilibrium in the economy (the proverbial monkey wrench in the complex machinery of the economy – or in modern idiom the source of a virus which attacks the software determining the key price signals in the capitalist economy – see p. 4).

One key aspect of money becoming a source of disequilibrium is the driving of market interest rates (as quoted for that range of short and medium maturities most relevant for business and household decision-making) far out of line with the neutral or natural rate level (distinct for each given maturity). The neutral level refers to a span of market rates (across the different maturities) which would be consistent with the economy following that path in which all markets (for goods, labour, money, capital etc.) would be in equilibrium through time (allowing for frictional costs of adjustment).

Monetary instability can form without the early emergence of any symptom suggesting the possible presence of monetary inflation in goods and services markets. Instead the symptom that first appears (and this may be with a considerable lag behind the initial emergence of monetary instability) might be suggestive of the other type of monetary virus – asset price inflation. The trained and talented analyst might detect a rise of speculative temperature in some asset and credit markets (high temperatures mean a lot of irrational exuberance and very high temperatures can bring about bubbles). As illustration, a temperature rise might be driven in considerable part by the central bank first

creating monetary conditions (including ‘forward rate guidance’) so as to steer market interest rates (across a wide range of maturities) far below neutral in a period of time when the economy is recovering (after a recession-shock) and later in similar fashion weighing down market interest rates with the intention of force-feeding the pace of economic expansion. (The *neutral* level of interest rate is the *natural* rate plus the average annual rate of price increase expected over the very long run; in the gold standard world, that rate of increase was zero, and so economists originally made no distinction between the two terms.) The tools which the modern central bank typically uses for influencing market rates (predominantly for short and medium maturities) are an official peg to short-maturity money market rates and strong hints as to how the peg is likely to be adjusted over the short and medium term.

Monetary stability and *price level stability in the very long run* are partly overlapping concepts and are sometimes not mutually achievable. The goal of monetary stability has to be missed (to a moderate degree) over some medium-term periods so as to achieve the aim of long-run price stability.

The element of trade-off between the two aims here – monetary stability and price stability in the very long-run – shares some superficial (but misleading) appearances with the trade-off in the much discussed dual mandate of the Federal Reserve, which is charged by Congress to pursue price stability and full employment. But that dual mandate is in main part phoney, based on a Keynesian notion of higher employment rates being attainable via the engineering of inflation. As we see below, the dual mandate of monetary stability and price stability in the long-run, though harder to grasp, is not phoney at all.

The friction between the requirements of monetary stability and long-run price stability is an essential and perennial source of disturbance in the modern economy. The friction arises from the fact that the aim of *price level stability over the very long run* might require the deliberate creation of some limited monetary instability. Moreover the pursuit of monetary stability is fully consistent with short and medium-term periods during which prices of goods and services are on average rising or falling significantly even though this might induce some concerns about the likely attainment of price level stability in the very long run. In a stable monetary order these concerns would not be validated.

For example, during a spurt of productivity growth or terms of trade improvement, the price level should be allowed to fall. If by contrast the central bank tries to resist the forces driving down prices it would likely fuel asset price inflation

Similarly if the central bank resists price level rises driven by real sources, such as sudden energy shortage, an abrupt fall in productivity or in the terms of trade, it would create monetary disequilibrium which would spawn a process of asset price deflation.

Moreover some price level fluctuation up and down with the business cycle coupled with expectations of price level stability in the long run is intrinsic to the benign process by which the capitalist economy pulls itself out of recession or resists being drawn into unsustainable boom. Such fluctuations should not be fought by a central bank mistakenly zealous about achieving price level stability over too short a time period. Alternatively, it may be that the price level has drifted through time well above or below the guidelines consistent with long-run stability, even though there has been no serious episode of monetary instability. For example, most of the real shocks (such as spurts of productivity growth or terms of trade improvement) may have been in the direction of driving the price level downwards.

In that case there has to be some injection of controlled monetary disequilibrium (supply of money base growing in excess of demand, interest rates below neutral) towards achieving the long-run price level target. This can be done in a context of decades rather than years – as indeed occurred under the gold standard (see Brown, 1940) where automatic mechanisms regulated the extent of controlled monetary disequilibrium. As illustration, during years when the prices of goods were depressed relative to their long-run average, profits in the gold mining industry would rise and spur production (of the yellow metal). The slowness of the monetary injection meant less danger of serious asset price inflation as a periodic side effect of pursuing price level stability in the long run.

No attempt to construct automatic money control mechanism

In our monetary world outside the golden Garden of Eden (a romanticization of a complex reality!) from which we were expelled in 1914, we have to construct a replacement stabilizing mechanism (for fine-tuning the extent of monetary disequilibrium to be created towards attaining price stability in the very long run), and one which functions as automatically as possible. The likely delicate mechanism has to be capable of allowing a limited degree of monetary instability to emerge sometimes in the form of a rise in speculative temperatures in several important asset markets so as to achieve price stability in the very long run.

The drafters of the Maastricht Treaty did not mention at all the fundamental juxtaposition of monetary stability with the aim of long-run price level stability. They did not specify how the best automatic mechanism should be designed for limiting the possible extent of monetary instability required for long-run price level stability. This big omission left the way clear for fatal errors in design of the monetary framework and in subsequent policymaking.

The Treaty should have provided for a much more comprehensive review surrounding the design of monetary framework and for this to take place in an open, not secret, forum. There should have been ample time (perhaps one year between the EU Summit deciding to proceed with EMU and on which countries would be founder members to the actual start, rather than just six months) for the design process and even longer to allow for needed institutional modifications (especially as regards reserve requirements) to occur towards creating the best possible money control system.

There was a wide range of suggestions available from the well-known literature of monetary economics for the ECB framework-design committee (under ex Bundesbanker Professor Issing) to take on board in the course of their work. The literature is of course heterogeneous in terms of its driving political philosophy and economic principles – a reason why optimally the writers of the Maastricht Treaty should have drafted a rule-based monetary constitution rather than delegating the drafting of a framework to ECB officials.

Botched output from the secret ‘Issing Committee’

No available evidence indicates that the ECB at the start undertook an appropriate review of alternative ways in which the Treaty’s albeit imperfect specification of price level stability as the ultimate aim should be made operational, even if an impossibly short time-framework for final decisions on monetary framework was amply to blame.

One possibility – choice 1 – would have been the targeting of a trajectory for money supply growth over time at a low average rate (deemed to be consistent with the price level being ‘broadly stable’ over the very long run, albeit with considerable swings possible up or down over multi-year periods and also with considerable short-term volatility). The ‘central path of the price level’ (abstracting from white noise and transitory disequilibrium) would be determined by equilibrating forces which would balance supply and demand for money as for all other goods in general equilibrium. The price level at any time would be one

variable among many to be solved in the process of achieving general equilibrium.

This monetary targeting might have been coupled with the setting of a quantifiable guideline for price level stability in the very long run (say a ten-year average price level – calculated for the present and previous nine years – which is 0–10% higher than the previous ten-year average for the period 10–20 years ago) so as to monitor that this ultimate aim is indeed likely to be achieved. (Perhaps the broadest of all price indices, thoroughly revised on the basis of new evidence about the past, the GDP or private consumption deflator, would have been used in this calculation). Signs that the price level path might be going astray relative to the aim of stability in the very long run would lead to a twigging of the monetary targeting – meaning a revision in particular to the rule specifying the expansion rate.

Monitoring signs of potential difficulties in meeting the aim of price level stability in the very long run while achieving monetary stability in the present was bound to be challenging in the new monetary union given the lack of knowledge about the nature of the demand for money (technically the money demand function). The accumulation of evidence that the aim (of long-run price level stability) might well be in danger or that monetary instability was forming would feed back to a review of the rule used to determine the targeted path for the chosen monetary aggregate. There would be the key issue of what particular definition of money to select, with the possibilities ranging from narrow to wide.

Later in this book the argument is presented that the narrowest of definitions would be best, subject to a revamp of reserve requirements (so as to foster a more stable demand for reserves which would be non-interest bearing – see Chapter 8).

In effect the target would be set for high-powered money (reserves plus cash in circulation) – alternatively described as ‘monetary base’ – and not for any wider aggregate. The revamp of reserve requirements, however, which would be essential towards the success of a monetary base targeting system, was not feasible, even if deemed as optimal, in the rushed circumstances of summer 1998. (The UK, so long as it kept open the option of being a founder member of EMU, had blocked all discussions of this issue. But in May 1998 the UK had made the final decision against becoming a founder member.)

Choice 1 (of method to make the Treaty’s ultimate aim of price stability operational) would have been consistent with the propositions of Milton Friedman (even though he did not recommend that his famous

$x\%$ p.a. expansion rule should apply to monetary base but to a wider – yet still narrow – aggregate and he would have been cool to the suggested variation of including a guideline for the price level in the long run), who in his famous collection of essays under the title of *The Optimum Quantity of Money* (Friedman, 2006) had rejected the setting of a price level target in favour of a money supply target. In technical jargon the money supply would be the intermediate target selected so as to achieve the long-run aim of price level stability.

Choice 1 might also have found favour with the Austrian School economists, even though in principle they would be opposed to any discretionary power vested in a monetary authority.

The ‘Austrians’ (see, for example, Hayek and Salerno, 2008) argue that the price level consistent with monetary stability (including money performing its function of reliable long-run store of value) can vary up or down by significant amounts over the short or medium run as for example in the situation of big shifts in productivity growth or the terms of trade. Also the price level should fluctuate in accordance with the business cycle, with a wide span of prices (most of all in the cyclically sensitive industries) falling to a low point during the recession phase and picking up into the recovery phase.

This pro-cyclical movement of prices is indeed in principle a key automatic stabilizer – inducing consumption and investment spending by the financially fit households and businesses during the recession (as they take advantage of transitorily low prices) and in encouraging some households and businesses to postpone spending in the boom phase of the cycle (in the expectation that prices will be lower during the cooler next phase). These cyclically induced changes in the price level should not be interpreted as signifying monetary disequilibrium. These key insights of the Austrian School were referred to earlier in this indictment (see pp. 40–1).

According to the Austrian School (see Hayek and Salerno, 2008 and von Mises, 1971) the overriding principle of monetary management should be that money does not become the ‘monkey-wrench’ in the economic machinery (the phrase attributed to J. S. Mill and famously re-quoted by Milton Friedman – see Friedman, 2006). This means (as highlighted in an earlier indictment above – see p. 40) in particular that monetary conditions should not shift in a way such as to cause market rates (illustratively for those maturities which are key to household and business decision-making) to get far out of line with neutral or natural levels (which in turn fluctuate through time according to such influences as range of investment opportunity or propensities to save).

Monetary stability is defined by money not becoming the source of virus attack on all the software determining the price-signals to which the invisible hands of the capitalist economy respond (see Chapter 1, p. 4).

A big question for the Austrian School is how practical policymakers should implement this prescription in a world where the automatic mechanisms of the gold standard are broken and the demand for money is unknown within wide limits. The span of neutral or natural rates (across a range of maturities) varies considerably over time and is hard for even the most gifted of policy-makers to estimate with any precision. In any case what meaning should be given to 'far out of line'? When an economy is in severe recession, ideally the normal self-recuperative forces in a capitalist economy should produce a path for interest rates which for some time would (with long-run money supply growth firmly anchored) be well below the neutral or natural level which would prevail in long-run equilibrium. The solution is to give markets as big a role as possible in the estimation of the neutral interest rate (as specified for varying maturities) and where this lies relative to long-run norm during a period marked by considerable economic disturbance. The authorities should not engage in such practices as rate pegging in the short-term money markets which might get in the way of this process.

By contrast, the well-known 'Taylor rule' stems from an attempt to discover the optimal path for a central bank in its pegging of short-term money rates. In the world of the Taylor rule there is no notion of market revelation. Instead there is the all powerful black box of econometrics (built on Keynesian principles including a trade-off between unemployment and inflation) and optimal control theory (applied to targeting inflation over the medium-term). Application of the rule requires that the monetary authority knows the normal neutral rate of interest (which fits long-run equilibrium) and the exact degree of slack in the economy. The econometrics assumes stability of the underlying relationships estimated.

Some 'Austrians' could concur with those monetary economists from other schools who argue that the most practical way forward would be to target high-powered money while allowing as much scope as feasible for markets to determine even short-term interest rates (which would be very volatile).

ECB architects destroy pivot role for monetary base

A key argument for targeting high-powered money (the monetary base) is grounded on the belief that, given a firm monetary anchor (in this

case a target for high-powered money growth), the market would do a better job of steering interest rates close to the ideal equilibrium path (and in discovery of the natural or neutral interest rate level – a crucial element in the auto-piloting process) than the monetary bureaucracies (central banks).

Very short-term money rates would be highly volatile as was the case under the gold standard regime. The volatility would stem from passing shortages and excesses in the market for bank reserves. The average level of these rates, though, over several months, should be fairly stable. Anyhow it is the rates for medium-term and long-term maturities which would have the greatest information content and would be most relevant to business and household decision-making.

Austrians and monetarists would be united in concern about possible abuse of discretionary power to twig the monetary expansion rule to take account of new information regarding the likely profile through time of the real demand for money (especially high-powered money) consistent with overall equilibrium. Yet both would be fully aware that non-flexibility has economic costs. And some deliberate controlled overshoots or undershoots of the rule could be required to attain long-run price level stability even though that means some monetary instability.

Essential to the operation of monetary base (high-powered money) targeting is first, unrestricted scope for the differential between the zero rate of return on excess reserves (beyond the legal minimum) and on other risk-free assets to fluctuate so as to balance supply and demand in the market for bank reserves. Second, an institutional structure must have been designed in which demand for monetary base is likely to be a stable function of a few key identifiable variables, including in particular real incomes.

The first requirement is achieved where the rate of interest on reserves (and excess reserves) at the central bank is fixed at zero throughout. The second requirement is satisfied by a high level of reserve requirements on the public's transaction deposits with the banks.

The ECB in its design of monetary framework jettisoned both requirements for the operation of monetary base targeting or for any fulcrum or pivot role for monetary base in policymaking. Moreover its scheme for paying interest on reserves had the potential to become an infernal destabilizing force during a severe financial crisis, as in fact was to occur in 2007–8 (see p. 131).

High reserve requirements were rejected in part to meet UK objections (see p. 43) but also in line with current fashionable views of not cramping banking industry competitiveness by imposing a tax on transaction

deposits sold by resident banks as against other near-alternative assets including offshore deposits.

In the mid-1990s the Bundesbank had reduced reserve requirements substantially already towards countering competitive pressures for German banks from Luxembourg in particular. Professor Issing has recounted how the old Bundesbankers (not including himself!) had fought a rearguard action against this reduction. Even so the Bundesbank continued with payment of zero interest on reserves right up to the end of its sovereign existence.

Such concerns about competitiveness were doubtless a factor in why the architects of EMU's operating system decided in favour of paying interest on deposits with the ECB at only a modest margin below official repo rates, albeit mitigated by Luxembourg becoming a part of EMU and thereby subject to any reserve requirements. But another factor was the concern (among members of the Issing Committee) to reinforce the new central bank's power to control short-term interest rates within tight limits of the chosen official peg (adjusted, typically by micro-amounts at a time, in line with monetary micro-policy decisions).

Professor Issing rejects advice from Vienna and Chicago

There is no evidence from any published material or from any other source that Professor Issing's secret committee designing the monetary policy framework (in summer 1998) gave weight to the Austrian School's arguments.

'Giving weight to' does not mean comprehensive endorsement. The committee could have raised important practical reservations. In particular, in view of the newness of EMU and public scepticism about the ECB's likely success in avoiding inflation, there had to be an easily understandable target to measure the ECB's success. Austrian 'poetic' concepts of monetary stability might have jarred with that purpose.

It can well be doubted whether a sceptical public would have had patience with the sophisticated argument that monetary inflation need not show itself up as rising prices for goods and services but as rising asset prices, or that a rising price level for goods and services might not be symptomatic of monetary inflation.

It would have been possible in principle for Professor Issing's Committee to include the concept of monetary stability (defined to include absence of asset price inflation) alongside a goal of long-run price level stability even though this concept had not been specified in the founding treaty.

In so far as public scepticism meant that such a dual mandate (stable price level in the very long-run plus monetary stability) was impractical, then creation of a new monetary union was likely to incur a considerable cost in terms of potential monetary instability.

The omission of an overriding concept of monetary stability along Austrian School lines played a key role in the global credit bubble-and-bust which was to follow.

Under its self-imposed code of secrecy, the ECB has never released transcripts or other documentary evidence of key discussions between its policymakers – including their chosen external advisers – in the critical months before the euro's launch. Perhaps if these officials had known that all evidence, including the transcript of the discussions, would be published, the deliberations on this key issue would have been fuller and more efficient.

The ECB's first chief economist and founding board member Professor Otmar Issing writes (see Issing, 2008) that he did discuss within his research team the concern that severe monetary disequilibrium capable of eventually producing credit and asset bubbles could coexist with observed price level stability (as defined by a target average inflation rate over say a two-year period set at a low level).

And there is also some autobiographical evidence (from Professor Issing) to suggest that there was a passing informal review of something similar to the Friedman proposal for money supply targeting without an explicit short- or medium-term numerically expressed aim for the price level.

None of these deliberations, however, which occurred in a necessarily very short period of time during summer and early autumn 1998, translated into any impressive design features of the monetary framework. Yes, there was the sketch of what was subsequently described as the 'monetary pillar', but this remained little more than a blurred section of the original architectural drawing. The main and clearest section of the architectural drawings was filled with what most economists would recognize as a system of inflation targeting even though Professor Issing repudiated that description.

Indeed, the second possible way in which to make the Treaty's specification of price level stability operational – policy choice 2 – (for outline of policy choice 1, see pp. 43–4), was for the ECB to reject definition of the ultimate aim in terms of a very long-run price parameter (as in choice 1). Instead the ECB would stipulate a medium-term (say, two years) desired path for, the overall consumer price index (CPI), expressed as an average annual rate of change. A practical problem here, amid the many

theoretical problems already discussed on the basis of Chicago and Vienna critiques, would be that the so-called harmonized index of consumer prices (HICP) hammered out in committee by the EU Statistics Office excluded altogether house prices or rents and once estimated remained unchangeable even if subsequent re-estimation revealed past error.

In seeking to achieve this two-year path for the price level, the central bank could set a target for growth in a selected money supply aggregate – choice 2a – adjusting the target on the basis of any serious new evidence concerning the relationship between money and inflation. Its tool for achieving the money target could be either strict but adjustable pegging of a key money interest rate (for example, overnight) or the setting of a subsidiary target for so-called high-powered money growth (reserves and cash) while allowing even the overnight and other short-term rates to fluctuate within a wide margin as determined by conditions in the money market.

Or alternatively the central bank (in its pursuance of the two-year path for the price level) could set no target for money supply – choice 2b – and instead rely on forecasts for goods and services inflation based on an array of econometric tools to be applied to a whole range of variables to be monitored, one of which could be money supply. In this case the central bank would repeatedly adjust the peg for very short-term rates so as to forge a path for these and for longer-term rates (in so far as these could be manipulated) that would hopefully achieve the ultimate objective for the price level (over a two-year period).

Rate-pegging is a ‘fair-weather’ operational policy. If continued during a financial crisis it becomes a catalyst to a vicious cycle of instability (see pp. 132–3).

A variation of choice 2b – let us call this 2ba – would be to give money supply a special place amid these monitored variables and set an alarm to ring if ever money supply growth estimated over a given stipulated interval strayed outside its specified range. In principle, the alarm would not be turned off even if the monitors determined that no danger existed in the form of the price level target being missed over the ‘medium-term’ (meaning in practice two years) unless they were also satisfied that there were no other dangers present (for example, inflation in the long run or a bubble in the credit market).

Response to the alarm would include a change in the official interest rate (normally specified with respect to a very short maturity in the money market), which under all versions of policy 2b is set on an entirely discretionary basis in line with policymakers’ views about how changes in short-term money market rates influence the actual inflation outcome.

The fantasy of the monetary pillar

The ECB policy board ratified the Issing Committee's proposals in October 1998 and announced 'the main elements of its stability-oriented monetary policy strategy'.

The Committee had in effect decided in favour of option 2ba above. It stipulated the price level aim in terms of the rise in the euro-area HICP over the 'medium-term' (with subsequent practice demonstrating that this meant around two years), stating that this should not be more than 2% p.a.

There was no indication that the policy board had any realization that rate-pegging under its choice 2ba would have to be suspended or implemented in an abnormal way under conditions of financial crisis (see p.132).

It was left unspecified (until spring 2003) how the ECB would respond to inflation outcomes well below 2% p.a. But early policy-rate decisions implicitly filled that gap (see p. 55).

The ECB board in reaching its decision as regards the definition of price level stability including its selection of numerical reference value betrayed the trust put in it by the founders of monetary union. Albeit that the founders were wrong to have staked such an important issue for future economic prosperity of their peoples on a small group of central bank officials holding discussions entirely at their discretion in secret and instead of bringing in a wider range of decision-makers in an open process with much more time in which to implement their architectural plan.

The announced construction (by the ECB) of an alarm system based on money supply monitoring which would be sensitive to danger over a long-run frame of reference transcending the two-year definition of price stability was largely fantasy. And in particular there was no careful specification of one such danger – speculative temperature swings in credit and asset markets which culminate in severe economic disequilibrium and related waste (sometimes described as 'asset price inflation' and 'mal-investment').

The decision on policy framework as described put at great risk the achievement of monetary stability. Serious monetary disequilibrium – full of damaging consequences for the real economy – could result from an over-strict pursuance of the price-level aim as defined.

The ECB board appears (from the evidence available) to have been at best complacent about the possibilities (as raised for example by the Austrian School) that a positive productivity shock coupled with price level path targeting over medium-term periods (say two years)

could lead to a credit bubble or that a negative terms of trade shock (in particular a big jump in the price of oil) similarly coupled could lead to depression. Nor did ECB policymakers realize that monetary instability could be symptomless in terms of statistically measured goods and services price inflation while manifesting itself already in dangerous fashion via asset price inflation. And there could be notoriously long lags between monetary disequilibrium occurring and the symptom asset price inflation (or goods and services inflation) becoming apparent in convincing form.

The evidence reveals no awareness on the part of the ECB about the possibility of benign pro-cyclical moves of the price level (see p. 44). In consequence the ECB became inclined to spot illusory threats of inflation falling 'too low' (as in 1999 and 2003) and to suffer more generally from 'deflation phobia'.

All these deficiencies in official perceptions explain how the ECB in its first decade became the engine of huge monetary instability.

No shelter from 'English-speaking' monetary instability

The ECB, in following a quasi-inflation targeting regime as instituted by the Issing Committee, was in great company. (The term 'quasi' is used to acknowledge that the ECB's formal description of its policy framework includes a 'monetary pillar' even though this never became a well-drawn component of any detailed architectural drawing).

The Federal Reserve and Bank of England were committing very similar types of errors.

That was no excuse for failure.

The ECB as a new institution driven by the idea of setting a high standard of monetary excellence and carrying out the mission of sheltering the new monetary union from 'English-speaking instability' (francophone writers use the term 'Anglo-Saxon') should have done better than its peers.

The Bank of England, after all, had been at the bottom end of the scale in terms of monetary performance during the 1970s decade of the Great Inflation. It enjoyed less independence then from the government than in the recent past, so it did not quite make history in being the worst performer (in terms of inducing credit bubbles and burst) during the debacle of monetary policies around the world wrought by 'inflation targeting'.

Professor Issing does show some possible disquiet about the company in which he found himself in stating (Issing, 2008) that his secretly

deliberating committee decided against following a monetary framework in any significant way embracing the strict inflation targeting pursued by the Bank of England. In writing about the work of his secret committee, Issing comments:

Of particular value to us (the committee) were the visits by prominent experts who combined an academic background with central bank experience. For instance, we were able to discuss the whole spectrum of issues relating to inflation targeting with one of its proponents, Bank of England Governor Professor Mervyn King. [...] Inflation targeting was well on the way to becoming the 'state of the art' in central bank policy-making. What could have been more obvious than to follow the example of these central banks (which had adopted inflation-targeting) and the urging of leading economists? There are persuasive reasons why the ECB at the time took a different course.

Professor Issing mentions UK and New Zealand by name but is too politically correct to refer to the quasi-inflation targeting of the Federal Reserve. In any case it was only four years later, in 2002, that the leading academic proponent of inflation targeting, Professor Bernanke, was appointed by President George W. Bush as Governor of the Federal Reserve Board. Six years earlier (1996) though, Professor Janet Yellen, then a Board Member, had won a debate within the Federal Open Market Committee (FOMC) in favour of the proposition that 'price stability' should mean 'inflation at 2% p.a.', persuading the initially unconvinced chairman, Alan Greenspan.

The new event from an historical perspective was that the ECB, as successor to the Bundesbank in the role of leading European monetary authority, followed by its actions (but not fully by its announcements) the crowd of popular (and deeply flawed) monetary opinion, even though its senior officials appreciated some of its fallacies (though not in terms of a thoroughgoing Austrian School refutation!). The protestations of the ECB's chief policy-architect through the early years, Professor Issing, that his institution remained distant from the crowd, were largely meaningless.

How different the ECB's performance during the monetary madness of the early twenty-first century was from the Bundesbank's stellar record in distinguishing itself from the dominant popular monetary opinion during the Great Inflation of the 1970s! Would the old Bundesbank (before bending to the imperative set by Chancellor Kohl of attaining the EMU destination on schedule), operating counterfactually

without the encumbrance of EMU, not have remained nearer to past performance?

Milton Friedman had warned long ago that setting the aim of monetary policy in terms of a stipulated price level outcome over a two-year period (or any other short or medium-term period) would reduce the accountability of the central bank (see Friedman, 1966). For the outcome in any such period could be attributed only in part to central bank policy, given the range of white noise and non-monetary factors outside the control of the central bank which potentially affects short- and medium-term measured inflation rates. Hence there would be a wide range of plausible excuses for failure to achieve the aim. Instead, central bankers should be made responsible for something over which they have a considerably greater degree of control – the path of the money supply (and in the case of the monetary base that control is 100%).

In fact the ECB had a fair degree of success in meeting its stipulated ‘medium-term’ target for the price level during its first decade, with the average rate of inflation barely above 2% p.a. And so Milton Friedman’s warning about lack of responsibility amid a plethora of excuses did not in fact become relevant during that period. It would have been better if the ECB had missed the price target (in the direction of prices under-shooting) and its officials had discovered why this should be broadcast as good news!

Indeed more relevant in practice than Friedman’s concern about responsibility was the Austrian critique that price level targeting especially over short- *and* medium-term periods, even if successful in its own terms, could go along with the emergence of serious monetary disequilibrium which would be the source of a highly destructive virus to the economic system, asset price inflation. The Austrian School economists would accept that a price level aim should be set over the very long-run (as occurred endogenously under the pre-1914 international gold standard). But their ‘very long-run’ was far and away beyond the medium-term as conceptualized by Professor Issing’s secret committee and even further beyond the medium-term as implemented in practice by ECB policymakers.

The Austrian critique leads on to a further accusation in the present indictment.

Faulty monetary framework leads to three big policy mistakes

In choosing to define price stability as inflation (measured by HICP) *at not more than 2% p.a. on average over the medium-term* (in practice

policymaking during the first decade of EMU is wholly consistent with medium-term meaning a two-year period despite the existence of many textual references in official publications and speeches to longer time-horizons) – supplemented by a further ‘clarification’ in spring 2003 that too low inflation, meaning more than a tiny margin below 2% p.a., would be contrary to the aim of monetary policy – the ECB substantially raised the likelihood of serious monetary disequilibrium ahead. This would be the source of two possible economic diseases – asset price inflation and consumer price inflation.

Indeed, allowing for ‘good’ price level fluctuations up or down related simply to the business cycle in which a recessionary phase might well last as much as two years, the notion of a two-year period for measurement purposes was palpably absurd.

In practice the ECB Board followed what was to prove disastrous monetary fashion in the UK and the US (albeit that the Federal Reserve did not yet formally adopt explicit inflation-targeting, mainly out of concern that this could become a point of leverage for greater Congressional control over its policy decisions). ECB officials who pretended that the small actual differences between their own policy framework and that of the Federal Reserve were more than technical or linguistic and that the ‘money pillar’ component of its monetary alarm system had any operational capability were at best in a state of self-delusion.

As a matter of semantics, as we have seen, the ECB denied right from the start that it was following the fashion of inflation targeting. In subsequent refinements (of its communication regarding the framework) the ECB stressed that its policy decisions were based on two pillars (first, medium-term inflation forecasts based on the highest quality of econometric work carried out by its staff and second, money supply developments considered in a long-term time frame including possible implications well beyond a two-year period) and so distinguished itself from some other central banks which targeted a given low inflation rate over a similar time-period (two years) without any separate cross-check to money supply growth.

Crucially, however, in common with all inflation-targeting central banks, the ECB stipulates a precise formulation of a stable desired average rate of rise in the price level over a fairly short period of time (it is mainly semantics whether this is a two-year period as officially for the Bank of England or the ‘medium-term’ as for the ECB) rather than acknowledging that the price level should fluctuate by a considerable amount over the short- and medium-run consistent with price level

stability in the very long-run. Indeed that is what happened under the international gold standard – when there were occasional way-out years in which the price level rose by 5% or more, as in the UK during the Boer War, and long stretches of price level rises or falls, but in the very long run, price stability reigned.

Some ECB officials, including notably Professor Otmar Issing, were undoubtedly aware of the dangers in pursuing price level targets over short-term or medium-term horizons and realized that monetary disequilibrium could indeed manifest itself in asset price inflation (including credit market over-heating) well before any goods and service price inflation might emerge (and emergence might never occur if the bubble burst first). In practice, however, ECB policymakers, including Professor Issing, were not sufficiently sensitive to these risks and apparently failed to realize that asset price inflation disease could be present in fairly virulent form for some time before any reliable diagnosis could be made.

The unreliability of any monetary indicator in the new world of EMU including the framework of monetary control designed by the Issing Committee threw the policymakers off the scent (of any credit and asset bubble in the making). This unreliability was one factor in the failure of the ECB to specify a serious long-run dimension to monetary policymaking.

In the first decade of EMU, three episodes of monetary disequilibrium – (1) 1998 Q4 through 1999 (see p. 55), (2) 2003–2005/6 (see p. 60) and (3) 2007 H2 to 2008 Q3 (see p. 131) – were to result from the ECB's adoption of a 2% p.a. inflation target (in official terminology a price level path over the medium-term).

Each episode of disequilibrium was grave in its own way, with the third entering the competition for the worst monetary mistake in European or global financial history since the early 1930s.

The monetary error of 1998–9

Right at the start of EMU, the official aim of the price level rising by 2% p.a. (or a little less) over the medium-term came in for some immediate practical clarification, in a deeply unsettling fashion. When the ECB opened its doors, inflation in the euro-area was down at 1% p.a. If seeking to minimize monetary disequilibrium, the ECB would have done better to aim initially for a continuing level of price increase around that level rather than immediately seeking to breathe in a higher rate of inflation. And if medium-term meant five to ten years rather than two, then there was nothing to worry about in inflation now being at near zero!

After all, with the information technology revolution in full swing, oil prices at a two-decade low and terms of trade improving rapidly as cheap imports from Eastern Europe and China ballooned, a policy of driving inflation back up to 2% p.a. would surely be wildly expansionary by any Austrian definition! ECB officials remained perma-bears on euro-area productivity even with the IT revolution; perhaps in part because the data available in several European countries almost certainly failed to pick up the full extent of its contemporary spurt. That statistical failure, however, did not apply to Germany in particular, where the statistics office by this point in time practised 'hedonistic accounting', according to which the prices of goods and services were adjusted downwards in line with quality improvements including those now emerging in consequence of the IT revolution.

In addition there is the general point that the price level should move pro-cyclically even under a monetary regime which specifies the aim of absolute price level stability in the very long run. This (1998) was a year of recession or near-recession in the euro-area. The German economy in particular was suffering the headwinds from the emerging market debt crisis which had erupted first in South and East Asia the previous year and then in Russia.

During the boom periods, manufacturers in the highly cyclical industries (especially automobiles) should be charging high margins to compensate in part for the loss which they incur in business recessions. Indeed in a well-functioning market economy firms in highly cyclical industries should tend to have relatively low debt and high equity in their capital structures so as to contain the danger of bankruptcy during recession. Vital equity is attracted to cyclical industries on the basic premise of extraordinarily high profit during boom-time and such equity in effect insures labour and bondholders against recession-destruction of income and capital. And during the recession, the fall of prices in the highly cyclical industries to below normal levels are an inducement to contra-cyclical spending by financially fit firms and households who take advantage of low prices now compared to when prosperity returns.

Inflation below 2% p.a. in 1998 should not have been construed by the ECB as a reason for exceptional monetary ease. Benign cyclical fluctuation of prices on its own could explain a dip of the recorded rate of price increase below the long-run average rate aimed at as the anchor to inflation expectations. The monetary decisions of the ECB at that time hinted at the extent to which the newly constructed monetary policy framework was indeed flawed.

There is some evidence (see Chapter 4, p. 59) to suggest that the ECB in early 1999 was concerned that inflation had already fallen into a 'dangerous low zone' – dangerous in the sense that if the next recession (beyond the cyclical recovery generally forecast for 1999–2000) was to become severe, the central bank would very quickly find that conventional monetary policy reached its limit to provide any stimulus (once risk-free nominal rates fell to zero).

If the ECB were indeed greatly concerned on this score, there were three ways of dealing with it boldly. The first way was to aim for a considerably higher inflation rate (say 3–4% p.a.) during the next economic recovery and expansion phases (of the business cycle). If successful, then in a subsequent severe recession deeply negative risk-free rates could be reached in real terms even though under conventional monetary policy money market rates (even risk-free) could not fall below zero.

This option (aiming for steady-state inflation at say 3–4% p.a.) is discussed in *"The Global Curse of the Federal Reserve"* (Brown 2013). Its unsuitability to the circumstances of EMU or indeed to any other currency area (sovereign state or monetary union) is detailed. And in practical terms there is surely no great likelihood of such an inflation rate being reached in just one cyclical recovery. There are several general grounds for rejecting higher steady-state inflation.

One of these grounds has been hinted at already. The higher the long-term average inflation rate that is taken as reference benchmark by monetary policymakers, the more paralysed becomes the inbuilt recovery mechanism during recession or a transitory fall in many prices coupled with the expectation that these will re-bounce in the upturn (that expectation justifies spending in the depths of the recession by the financially strong, when cyclically sensitive prices are at their lowest, – see p. 44). There is no evidence, though, that anyone in the ECB gave any attention to this mechanism, let alone believed that it could play a role in driving the economy out of the recession or near-recession of 1998.

The second bold (again not good!) option (for the ECB in confronting a hypothetical danger of monetary policy paralysis in severe recession) was to draft a contingency emergency scheme that would be on the shelf ready in time for possible use were the next recession to prove severe. This scheme would allow risk-free rates to fall to deeply negative levels in both nominal and real terms and yet be consistent with aiming for very low inflation or absolute price level stability over the very long run. One powerful criticism of this option is its bestowing of huge discretionary power on monetary policy-makers (when to introduce the

scheme, when and how to end it) which would add to the climate of monetary uncertainty.

The third bold option – and the wisest according to subsequent analysis here – was to shake off deflation phobia and realize that a pro-cyclical move of prices (reaching a low-point in the depths of the recession, then expected to rise back to normal level) could stimulate economic recovery even in the situation where the use of the conventional monetary tool (adjusting nominal interest rates downwards) were no longer feasible due to the proximity of the zero rate boundary. The ECB would help educate euro-citizens that in the new stable monetary order there could be some periods of time during which the price level would fall but that subsequently the price level would recover in line with the stipulated objective of long-run price stability. Expectations of price level recovery would mean that low nominal interest rates would become negative in real terms and stimulate spending.

No contingency planning, no boldness

The ECB did not draft any contingency plan for deep recession or financial panic. (Much later, in 2013, then President Draghi announced that the ECB had a negative interest rate scheme ‘on the shelf’, most likely to be used in the next existential crisis of EMU rather than simply a cyclical downturn). Instead right at the start of monetary policymaking (in late 1998 and early 1999) it sought bureaucratic safety in seeking to lift inflation a little from the then ‘low level’ (relative to the aim for the price level over the ‘medium-term’).

Inflation, though, running at 2% p.a. instead of 1% p.a. makes only a small potential difference to the extent that risk-free rates, especially those for the medium and long-maturities most relevant to investment decision-making, in real terms can fall below zero. So long as the zero rate barrier remains firmly in place the path followed by short-maturity risk-free market rates during a severe recession or panic could be constrained still at a well-above optimal level. The continuous state of inflation gets in the way of the key pro-cyclical price level mechanism (price cuts during the recession together with the expectation of price level rebound afterwards) which potentially plays such an important role in generating a subsequent recovery. (In general, the lower frequency of big price cuts would mean less of a spending response.)

Given the problems (instabilities) which accompanied getting inflation up from 1 to 2% p.a., it is just as well the ECB was not bolder on that particular score, aiming for a higher inflation rate than 2%!)

Monetary policy blunder triggered 1999–2000 euro crisis

A consequence of the ECB's implicit decision in 1999 to drive inflation higher towards 2% (the euro-area CPI was then rising at around 1% p.a.), which was put into operation by reducing the officially pegged money rates to very low levels and so driving short- and medium-maturity market rates well below neutral level despite the absence of any severe economic disequilibrium in a recessionary direction, was to bring about the huge overshoot downwards of the euro, fuelling a later troubling increase in inflation (to above the target level) which crippled euro-area economic recovery prospects in the very early-2000s.

ECB policymakers puffed and fumed about many subjects during the precipitous decline of the euro in 1999–2000. ECB President Duisenberg, in Don Quixote fashion, took on the title of Mr Euro shooting in all directions. But there is no evidence to suggest that the ECB's top official and his policymaking colleagues realized even in part they were largely to blame through the pursuit of a destabilizing monetary policy, that of breathing a higher rate of inflation into the euro-area economy.

At a time when the euro was a totally new currency, incipient weakness could be interpreted by anxious investors as revealing only feeble fundamental demand for the euro as a store of value given its potential flaws. Hence a monetary blunder by the ECB in triggering an initial fall (of the euro) could become the source of a confidence crisis in the new currency, which is what occurred!

ECB follows astrology (econometrics based on dubious data)

Also the speculative temperature in real estate markets in some member countries did begin to warm (most of all in Holland at this early stage of EMU but also elsewhere) around this time (1999–2000). In most cases, though, the temperature rise was from low temperate or even cool levels (as for France). In any event, the ECB in choosing to target the movement of a particularly simplistic definition of the price level (euro-area CPI), which excluded almost altogether the price of housing (whether in capital or rental terms), removed itself one stage further from housing market developments.

ECB policymakers realized the problems of definition with euro-area CPI (and how it would fail to pick up a rise of residential space occupancy costs, surely an important component of the overall price level

for goods and services) but made no urgent effort in the following years to bring about an improvement.

Yes, there were research papers, speeches and working groups (including national statistical office representation) on the issue, but no strong direction from Frankfurt to get things moving! The hesitancy to back intuition (admittedly in short supply, it seems, around central bank policymaking tables, including that in Frankfurt) about the big picture and instead to follow statistics of evident low quality (as in the case of euro-area productivity and indeed of CPI), while emphasizing the output of the 'high-quality and high-powered econometric model' constructed within the Economic Research Directorate, were flaws in policymaking by the Frankfurt-based monetary bureaucracy which appeared repeatedly (and most dramatically in 2007–8, see pp. 131–2).

Monetary error of 2003–5

Then there was the second 'breathing in inflation' error when in spring 2003 the ECB indicated its concern that year-on-year rises in the HICP might soon fall significantly below 2%. Yet considerations of overall monetary equilibrium at the time suggested that observed price level rises should have fallen well below 2% and that such a fall would still have been consistent with 'price level stability' in the very long-run (not the misleading 'medium-term' of the ECB official-speak), even where this were defined as a path where prices on average, say over a 10-year period, were around 10–20% higher than over the average of the prior 10-year period (the equivalent of an average price level rise of say 1.5% p.a.).

It is true that ECB officials remained dubious about the hypothesis of a secular increase in productivity growth. This hypothesis was an important basis of the Austrian critique that the rate of price level rise, appropriately adjusted for quality improvements as in Germany (but not in several other smaller member countries of EMU), for several years should be well below any very long-run aim for this. Another basis for that same critique was the view that the IT revolution was lowering the equilibrium level of nominal wages for performing routine-type jobs which could now be replaced in considerable part by computers and cheaper foreign labour. This downward pressure on wages in an important segment of the labour market should have gone along with the path of goods and services prices falling for some considerable time below its long-run trajectory. The attempt of the monetary authority, in this case the ECB, to resist that undershooting would fuel asset price inflation.

In sum, the big picture was still one of IT revolution in progress and even cheaper imports from China and other emerging market economies whether in East Asia or Eastern Europe. Together these should have gone along with a period of euro-area inflation below the long-run aim of 2% p.a. (though the extent of undershoot might be under-estimated in so far as statistics offices in the smaller member countries failed to practise hedonistic accounting and these latter were actually sharing in the productivity spurt so recognizable in Germany). And nowhere in the ECB analysis published at the time does there emerge the notion of a benign cyclical swing downwards in the price level (or of the rate of price level increase falling below the long-run average aim for this). The cyclical situation, though, was evolving from 2003 onwards, as the euro-area economies in aggregate started to re-bounce from the recession of 2001–3.

The spring 2003 re-affirmation and tightened specification of an explicit 2% p.a. inflation target (forward-looking over a two-year period) by the ECB coincided with dramatic monetary news in the US.

The Federal Reserve under the special prompting of Professor Ben Bernanke (appointed a governor in 2002) decided in favour of a policy of 'breathing inflation back into the US economy' for fear of inflation falling too far (towards zero rather than near the unofficial target level of 2% p.a.). This was the first time in US monetary history that the Federal Reserve shifted policy towards deliberately raising the rate of inflation (from an already positive level).

The key role of Ben Bernanke in pushing for the implementation of this policy is found in the transcript of policy discussions of that time published in full in May 2009. Professor Bernanke was particularly impressed by the 'paralysis of deflation' in Japan, evidently unaware of the possibility as highlighted later by Professor Sakakibara that this country never suffered monetary deflation (defined as a fall in the price level driven by monetary disequilibrium) at all in the 1990s. The alternative explanation – to monetary deflation – for the transitory episodes of a falling Japanese price level during the 'lost decade' and beyond was the combination of first a benign cyclical fall in prices during recession and second a good deflation driven by both rapid economic integration between Japan and China and the IT revolution.

The doomed 2003 revision of ECB monetary framework

The ECB's announcements in spring 2003 (in effect a clarification that the ECB would seek to forestall any significant dip of the price level

path as measured over two-year periods significantly below 2% p.a. and would be as vigilant in this as in preventing any rise above) got less media notice (still substantial!) than the Federal Reserve's. This was at least in part understandable as the rate of increase in the euro-area CPI was coasting at around the target level (albeit that the price level in Germany was virtually stable in underlying terms – see below). Hence the policy shift was less obvious in Frankfurt than in Washington (where it was not a question of forestalling a possible decline in inflation below its present level in line with target level – as in the euro-area – but of pushing up the rate of price level increase from a rate – around 1% p.a. – already deemed to be too low).

The ECB in effect reiterated (in spring 2003) that it would block the equilibrium forces emanating from accelerated productivity growth, terms of trade improvement, accelerated globalization made possible by information technology, business cycle weakness, which were pressing the rate of price level increase down below 2% (as would have happened if market rates were following a path closer to neutral level rather than being driven far below by present and expected future rate-pegging in the money market). Yet this was a period when the IT revolution was still in full swing, even if its effects were not being fully registered by most statistics offices in the member countries outside Germany. Hence for a second time (as in its opening formulation in 1998 as described above) the ECB, in revising in spring 2003 its monetary framework, totally failed to distance itself and tread a different path from the flawed policies being adopted on the opposite side of the Atlantic (and the English Channel).

The 2003 decision to resist any fall of inflation seriously below 2% p.a. was a critical factor in the creation of asset price inflation and its culmination in credit and real estate bubbles.

The 2003 decision was taken in a situation where on some measures (excluding the price of public goods and services) the underlying price level in Germany was indeed falling slightly. The IMF, headed by an ex-senior finance official in the German government (Horst Koehler), and advised by Chief Economic Counsellor (Kenneth Rogoff), was warning ominously about the dire state of the German economy and about 'deflationary dangers' there.

The coincidence of a dark mood concerning German economic prospects with a monetary blunder at the level of the euro-area as a whole is one piece of evidence (among many others) in support of the next point in the indictment.

ECB makes policy for Germany, not for euro-area

At several critical junctures for ECB monetary policymaking, German-centric factors have influenced decision-making to an extraordinary extent (well beyond the weight of the Germany economy in the total euro-area economy).

Professor Mundell's quip that in a monetary union policy is made for the largest member (for example, New South Wales in Australia, Ontario in Canada) applies also to the euro-area despite all the protestation of European political correctness. Further evidence is reviewed in detail in subsequent chapters to support this charge at three crucial periods. The first of these three periods was on the eve of the euro's launch and during its first year (1998–9) when one influence behind the decision to ease monetary policy despite overall solid economic expansion amid a golden low rate of inflation at the euro-area level was the underperformance of the German economy. This underperformance was in part due to the continuing slump in the construction industry following the post unification boom (bubble) and in part to the repeated upward adjustments of the Deutsche mark during the life of the now defunct European Monetary System (EMS), well beyond what could be justified by differential inflation.

The second period encompasses the reformulation of monetary framework in spring 2003 already described and the subsequent three years or so experience of over-stimulatory (non-neutral) monetary policy continuing despite symptoms of monetary disequilibrium, such as real estate and credit markets heating up in Spain, France, Italy and several smaller economies.

These events occurred when Germany was still experiencing a construction sector downturn and its real estate markets were still soft. From a business cycle perspective, Germany was in a relatively weak situation compared to the other euro-area countries. There was concern within Germany about business investment remaining weak overall due to the re-location of production into cheap labour countries to the East (most of which were soon to come into the EU). Inflation as measured in Germany was at the bottom end of the range for euro-area members. German banks were, with the benefit of hindsight, getting heavily drawn into the warming up global credit markets (both within Europe and outside), but that was not registering on any market or official monitoring device.

The third period during which German economic conditions assumed over-proportionate influence on policymaking (with the Bundesbank President, Professor Axel Weber, and the ECB chief economist, Professor

Jürgen Stark – himself an ex-Bundesbanker – both very influential) was in the aftermath of the first big credit quake of summer 2007 and continuing into almost all of 2008 (except possibly for the last few weeks of that year). It seemed then to the Bundesbank (and to the main forecasting institutes) that the German economy was still in a strong growth phase despite the big slowdown elsewhere in the euro-area (and beyond).

In the first quarter of 2008 coincident economic indicators (these lag somewhat behind reality!) suggested Germany was in a boom driven by exports to the oil-exporting countries (including Russia) and other commodity exporters (in the midst of a commodity bubble), Eastern Europe, and China in particular. (Later events and data were to show that the Bundesbankers were remarkably slow in realizing the downturn of German overall business conditions, which had set in already in spring 2008. And their concerns about the oil price bubble spilling over into wage–cost inflation – a perennial fear among the Bundesbankers – turned out to be fantasy).

It is too early to judge whether the ECB rate cut of November 2013 at a time when the Bundesbank judged the German economy to be operating at near full stretch, implemented despite the opposition of the Germans in the ECB Council (the Bundesbank president and the German board member) and their close allies (Dutch and Austrian central bankers), should be regarded as an exception to the rule or the start of a new trend. Chancellor Merkel's continued refusal to back the Bundesbank's position on EMU issues (first the Greek bail-out, later the outright monetary purchase program – see Chapter 7) might have contributed to this loss of German influence within the ECB. More generally what has been perceived by Bundesbankers, ex-Bundesbankers and their allies within the ECB policymaking council, as the best monetary path from a German-centric viewpoint has not always turned out to be so when Time has made its full revelation. And this applies in particular to the failure of the Bundesbank along with the ECB to realize the extent of the credit bubble which was building up in the euro-area from 2003 onwards, the particular role in that of the rapidly expanding inter-bank market, and the fact that German banks were becoming dangerously exposed even though the real estate market in Germany remained cool or cold.

German savings surplus swamped infant euro-credit market

It would be wrong to put all the blame for the euro-roots (there were strong US roots also!) of the global credit bubble at the door of the ECB

or even more narrowly of the Bundesbankers and ex-Bundesbankers and their allies who have sat as policymakers around its table.

Some part of the blame can be attributed to flaws in the very essence of EMU.

The coming together into monetary union in 1999 of Germany, where the savings surplus was set to bulge (a corollary of continuing construction sector wind-down and transfer of some stages of manufacturing production to the newly opened-up cheap labour countries to the East), with large countries (especially Spain) where construction activity was set to boom and savings deficits widen (households there responding to the historic opportunity of low interest rates superseding the high interest rates which had been associated with pesetas, liras and until recently French francs) was bound to create testing conditions for central bankers, bankers and financial markets. All three failed the test. The biggest failure was monetary. The invisible hands of market forces can be counted upon to distribute efficiently surplus savings in one area of a monetary union to deficit areas (whether inside the union or outside), but only in the context of monetary stability. In fact the ECB presided over growing monetary instability.

The one-size-fits-all monetary policy meant that the price level would climb fastest in those countries that were now in the swing of construction boom and where savings deficits were expanding. The rise in price level would be at a much lower rate (if even positive) in the main country (Germany) moving in the opposite direction (savings surplus rising). Correspondingly real interest rates (as measured with reference to relevant national price level expectations) in the economies in construction boom and widening savings deficits could bizarrely fall to significantly negative levels. This fall of real rates in Spain and other savings-deficit economies exposed them to the danger of violent business cycle fluctuation (at first boom, later bust) along the route to full integration with Europe.

The formation of monetary union in itself was virtually pre-programmed to increase the potential divergence of savings surpluses and deficits between Germany and the other countries. Without union, a lower level of interest rates in Germany than elsewhere (especially those European countries in big savings deficits), with that rate differential between the Deutsche mark and foreign monies reflecting both exchange rate expectations and exchange risk premium, would have kept the divergence (in equilibrium) between savings surpluses and deficits across Europe within tighter limits.

Those tighter limits are not self-evidently a 'good thing'. In terms of neoclassical economic modelling, the removal of barriers (including

exchange risk) to capital flows leads to a more efficient allocation of resources between the countries participating in the union. Scarce capital goes to a greater extent towards the biggest investment opportunities. (On the other hand such benefits might be outweighed by the costs of sacrificing monetary independence).

In practice the explosion of recycling in the form of German savings surpluses being channelled into the savings deficit countries (the largest of which by far was Spain) inside and outside EMU (especially Eastern Europe) went along with a growing potential credit problem. In principle this problem would be exacerbated by monetary instability in so far as it generated asset price inflation meaning considerable irrational exuberance at large.

Were the lenders to (including depositors), or equity investors in, those intermediaries who were active in the transfer of capital (out of the savings surplus countries, especially Germany, into the savings deficit countries) taking sufficient note of the credit risks involved (related to the capacity to service debt of the borrowers in the savings deficit countries)? Were the intermediaries charging sufficiently for assuming the credit risk and controlling their exposure to this risk adequately? And was the ECB – or any other authority with responsibility within EMU – on due alert to the dangers of potential malfunctioning, especially overheating of credit markets in the euro-area, related to this recycling process and thereby even more determined to foster conditions of monetary stability?

An important element in the flow of capital was German banks lending surplus funds (excess of deposits over loans) into the Spanish banking system – sometimes on a secured basis (via the purchase of so-called covered bonds where the loan from the German financial institution to the Spanish bank was secured by a portfolio of mortgages on Spanish real estate).

Subsequent events starting with the credit quake of summer 2007 revealed that the banks, and investors in or lenders to the banks, stimulated into varying degrees of irrational exuberance by monetary instability, underestimated the risks and overestimated the likely returns related to such ‘inter-bank loans’ within the euro-area context or indeed as between the euro-area and EU countries outside the euro-area (in the latter case this had nothing to do with the transfer problem generated directly by the coming together of savings surplus and deficit countries in monetary union). The largest of the latter group was the UK.

Under the complex rules which described the procedures for ECB money market operations, the new central bank’s secured lending

operations extended to subsidiaries in the euro-area of non-euro area banks and the security could take the form of eligible assets in any EU country, even if not a member of monetary union (by far the biggest example was the UK). Hence a British bank subsidiary in France (or any other euro-area country) could present parcels of asset-backed paper based on UK residential mortgages for discounting at the ECB.

British banks became huge borrowers in the exponentially growing euro-money markets towards financing the UK real estate and credit bubbles. They covered the currency mismatch (between euro borrowing and Sterling lending) by entering into sterling-euro currency swaps (buying pounds spot for euros and selling the pounds forward for euros).

The ultimate buyers of pounds in the forward market (from the British banks) were most plausibly in many cases the carry traders who were shorting the yen (and sometimes Swiss francs) against high coupon currencies (in this case the pound) so as to gain thereby from the large interest rate spread between the two currencies. The carry trade in the yen was booming because the Bank of Japan was steering an ultra-easy monetary policy so as to prevent its currency appreciating against the dollar in the context of the Greenspan-Bernanke Fed trying to breathe inflation back into the US economy. The counterpart sale of pounds in the spot market came to a considerable extent out of the mega-trade deficit of the UK.

No diagnosis of monetary disequilibrium despite rising credit market temperature

There is no evidence from ECB statements (including speeches by its Board members) during the years of booming euro-credit business in all its forms that officials realized the speculative temperature in euro-credit markets was climbing fast and likely to culminate in a bubble or burst. And there is no evidence that officials realized the importance of monetary stability in its widest sense towards reducing the danger of temperature rise, or the particularly high level of this danger which emanated from the starting situation of EMU.

Nor is there any evidence that the ECB was monitoring the particular credit risks which emanated from the huge savings divergence between Germany on the one hand and the countries in construction boom (and real estate boom) on the other (including the UK, via the channels described).

ECB officials could claim that monetary policymakers had no role in spotting bubbles in advance and should come in only to clear up

afterwards. That after all was the so-called Blinder doctrine followed by the Federal Reserve under Alan Greenspan and subsequently Ben Bernanke. But the doctrine was flawed. Even if central bankers were no better than anyone else at spotting possible bubbles they should by profession realize that monetary disequilibrium is the fuel to possible rises in speculative temperature many of which do not end up in bubble but nonetheless result in considerable economic waste (malinvestment and ultimately a sickness of equity risk appetite). And in the pursuance of monetary stability the central bankers should allow market forces to operate freely in determining market interest rates, without continuously hectoring as to where they intend to peg money market rates over time. The invisible hands would tend to pre-empt violent temperature rises even before central bankers or anyone else could be sure that these have occurred.

The ECB should have done better than the Federal Reserve.

One aim of the EMU was to conduct monetary policy in a way superior to that which was possible before union given the new degree of freedom from external influence (attributable to an enlarged monetary area). No independent European well-designed and well-tested monetary doctrine emerged.

Instead the ECB in practice largely copied the flawed US framework of monetary control, and to such an extent that critically it failed to react to growing symptoms of severe monetary instability in the form of temperature rise in credit and asset markets.

The ECB had no power directly to cool credit markets via raising margin requirements or minimum loan to value ratios, in contrast to some such authority (albeit very clumsy and never used in modern times) possessed by the Federal Reserve. Much more importantly (than blunderbuss control actions), the ECB could have been vigilant that the 'machinery of money' was not getting out of control, taking account of the danger that credit markets could be warming up, even though overall inflation was still running at 'no more than' 2% p.a. ECB Board Members could have given speeches highlighting the dangers of the situation and remonstrating with private capital markets to use more acumen in judging the value of bank equity and debt; or they could have remonstrated with the national central banks to raise margin requirements on risky real estate lending.

None of this happened. One reason was what we might describe as *euro-nationalism* (defined p. 71) and euro-euphoria.

ECB officials wrongly diagnosed many of the possible symptoms of rising temperature in credit markets as indications that the euro was

indeed taking off as international money and that euro financial market integration was flourishing.

This wrong diagnosis was not limited to the ECB.

Capital markets – and especially equity markets – applauded (and rewarded in terms of share price) banks which were rapidly expanding on the assumption that they were seizing the opportunities in a brave new world of euro-led financial integration, rather than realizing that hidden leverage and increasingly risky and under-priced credit positions were being assumed. Froth in capital market prices stemming from below-neutral interest rates fuelled the positive feedback loops about which the behavioural finance theorists wrote. Banks and investment houses which piled into the government debt markets of Portugal, Greece, Ireland and Spain, to earn a little extra income compared to what they could get on German government bonds, and in many cases doing so on a highly leveraged basis, gained popularity with their stake-holders (as reflected in their share market performance or in the new client business which flowed to them). There was little room in markets fired by monetary disequilibrium for long-term doubts about future solvency to affect present prices. Amid the safe interest income famine created by the Federal Reserve and ECB there was a desperation for yield.

Euro launch spurred irrational exuberance about banks

The launch of EMU did not make it inevitable that such inefficient use of knowledge and bad judgement (as just described) should occur in European capital markets concerning the apparent successes of rapidly expanding bank groups and the quality of credit. But such dangers rose with the launch.

The creation of a new monetary regime, EMU, just when the temperature in global credit markets was about to start rising under the influence of growing US monetary disequilibrium, and its accompaniment in the form of drum-beating (whether by officials, analysts, journalists) about the big new opportunities which financial market integration in Europe would bring, increased the danger of various psychological behaviour patterns becoming prevalent. These are described by behavioural finance theorists and summarized under the well-known catch phrases of speculative displacement, irrational exuberance, learning processes. They help power credit bubble formation. The ultimate source of power though is monetary disequilibrium which leads to these psychological patterns becoming prevalent.

ECB officials out of misguided pride became cheerleaders in the credit warming process. They were too ready to read euro success and broadcast this rather than first examining more sinister explanations for the apparent good news. A particular illustration of this was the unqualified praise which ECB officials gave to the outward signs of rapid financial market integration in Europe – whether fast growth in the inter-bank and wholesale overnight money markets, or the growth of a euro-denominated corporate bond market, or in the rapid diversification of government bond portfolios (for example Dutch or German investors disposing of domestic government bonds and buying slightly higher yielding government bonds issued by the periphery zone countries) together with the narrowing of yield spreads between the different government bond markets. If not cheerleading they should have been worrying why the bond markets were no longer discriminating between sound and unsound member government debt profiles through time and asking whether this was symptomatic of monetary disequilibrium.

In praising uncritically the take-off of the euro-denominated corporate bond market (on one occasion the claim was that new issues were now outpacing those in the US), ECB officials failed to realize that an extraordinarily large share of such paper was being issued by banks (flashing red as regards leverage ratios) and the extent to which the bonds were being bought by highly leveraged non-bank financial intermediaries (especially hedge funds) at remarkably low credit spreads. In effect their search for evidence of euro-success led them astray in their monitoring of speculative temperature (and solvency risks) in the euro-area financial system for signs that the disease of asset price inflation was present.

The integration of two big countries into EMU right at the start – Italy and Spain – where typically high interest rates and other restrictions had held back mortgage credit growth for decades before set the stage for financial intermediary institutions in those countries to experience rapid business growth. In turn the high profits growth for the leading banks in Spain and Italy helped fuel the speculative temperature rise in their equity markets along with their climb (by aggressive merger and acquisitions) to the top (in size) of leading euro-wide institutions.

There is no evidence that the ECB or capital markets became wary about the risks implicit in the rapid ascent to euro-area (and indeed global) stardom of Spanish or Italian banks. Instead the capital markets fell into the trap (in part created by monetary disequilibrium) of reading rapid expansion of domestic banks in Spain, Italy or elsewhere in the euro-area as evidence of a genuine renaissance in the 'European financial

space', applauding the emergence of newly efficient and profitable global players.

Such exaggerated optimism in the context of 'speculative displacement' (the term is found in the Aliber–Kindleberger analysis of bubbles followed by their bursting and refers to a big change in the economic or political environment which is followed by a jump in Knightian uncertainty which sometimes eventually stimulates various forms of irrationality), always in part fuelled by monetary disequilibrium, is a well-known feature recognized by students of bubbles through the ages (see Kindleberger–Aliber, 2005). In this case, the replacement of various second-order high-coupon currencies by a new global currency, the low-coupon euro, was the speculative displacement.

Euro-nationalists and Quai d'Orsay gain control

The excitement created by the new money and the opportunities which it could bring to financial institutions in the integrating European space was distinct from *euro-nationalism*. This latter phenomenon features in particular enthusiasm about the reduction in US hegemony – economic, financial and geo-political – which EMU might achieve.

Euro-nationalism, perhaps an inevitable outgrowth of EMU, has led the ECB into expensive errors with respect to its G-7 diplomacy and has also gone along with a systematic under-estimation of European economic vulnerability to US economic and financial developments.

In fact euro-nationalism, with its evident pitfalls, was pre-programmed as a feature within the ECB by the virtually pre-arranged appointment of Jean-Claude Trichet as the second President.

According to the deal between French President Chirac and German Chancellor Kohl at the May 1998 EU Summit, Germany's strong preference as President, Wilhelm Duisenberg, was to be succeeded by Jean-Claude Trichet with the change-over to take place well before the end of the eight-year term of office.

Already identifiable as a euro-nationalist from his long career as top French economic diplomat, it was predictable that he would use his office to push forward an agenda long popular in the Quai d'Orsay (French foreign office) of combating US monetary hegemony.

This agenda was a component of the wider French policy aim described as multi-polarity, evident for example in the special relationship – albeit intermittent – between Paris and Beijing.

M. Trichet's big opportunity to push forward the euro-nationalist agenda came with the Dubai G-7 summit in autumn 2003. In the context

of an already weak dollar against the euro (which the ECB was attributing to the US mega current account deficit and its counterpart in 'too low US savings' rather than to the fundamental source of US monetary disequilibrium), M. Trichet embraced the case (suddenly being put forward by the Bush Administration responding to protectionist pressure in Congress most of all vis-à-vis China) for East Asian currency appreciation.

The idea of breaking up the dollar bloc in East Asia was superficially attractive also from a trade viewpoint for Europe, which could gain competitiveness (in Asia) from the 'inevitable' (in the view of M. Trichet and his economist advisers at the Banque de France) appreciation of currencies there. That would help compensate for the toll on European export competitiveness from the dollar depreciation that had been occurring. And so M. Trichet formed an unholy alliance with the currency populists in Washington to demand a break-up of the Asian dollar bloc, meaning in particular that Beijing should unpeg its currency against the US dollar and make sure it climbed – far from inevitable if all exchange restrictions were to be lifted and official intervention halted simultaneously!

In dealing with China, M. Trichet had to be duly sensitive to Paris's special relationship with Beijing. In consequence, he and his colleagues in French diplomacy presented themselves as forging a middle way – advocating a milder path of currency adjustment than the path Washington neo-mercantilists were putting forward!

ECB joined fateful Washington assault on Asian dollar bloc

There is no evidence to suggest that any serious debate occurred around the ECB policymaking table about whether it would be of overall benefit to the euro-area for the Asian dollar bloc to disintegrate. And even if there had been a debate, there is no record of a strong alternative view within the ECB. No policymaker there was publicly taking issue with the mantra about global imbalances and the prescription that Asian surplus countries should take steps (including an appreciation of their currencies) to lower their savings surpluses while Washington implemented 'structural policies' to raise the US level of savings. And no one was arguing instead that the fundamental malaise (including the fall of the dollar) was US monetary disequilibrium as generated by the Greenspan Fed now under the influence of its new board member from Princeton University, Ben Bernanke. This collective failure is a big blot on the ECB's policymaking record.

What was the alternative view which could have been considered, and might well have entered the European policy debate, in an environment less closed to hostile criticism?

A robust and frictionless capital outflow between the huge savings surplus countries of East Asia and the biggest savings deficit country the US – such as would occur within the context of a dollar bloc where exchange risk was only slight – was beneficial also for Europe. The break-up of the dollar bloc in itself would introduce huge new uncertainties into the global flow of funds. In principle the emergence of exchange risk between East Asia and the US would mean a fall in the equilibrium level of interest rates in the former and a rise in the latter together with a rise in the East Asian currencies and fall of the US dollar.

Who, though, had the least idea of where the new equilibrium levels would be? In the interim there was likely to be an extended learning process in the marketplace, such as accompanies any such major ‘speculative displacement’ (in the Kindleberger–Aliber sense of a huge change in the economic, financial or political environment – see p. 71). Surely the danger loomed of this process fuelling speculative runs (especially in the dollar exchange rate)?

Was there not enough monetary uncertainty in the world already through the launching of EMU and the change of monetary frameworks announced by both the ECB and the Federal Reserve in spring 2003 without adding the break-up of the Asian dollar bloc to the list?

Dollar plunge leads ECB policy astray in 2004

The further plunge of the dollar which developed as a consequence of the ‘successful’ ECB–Washington demarche at the Dubai summit (towards breaking up the Asian dollar bloc) and of the growing US monetary disequilibrium (as the Greenspan/Bernanke proceeded to raise its interest rate peg at a glacial pace from an abnormally low level) led ECB monetary policy seriously astray and laid the seeds of a future global force of instability – an explosive bubble in the yen carry trade.

There is an accumulation of evidence to suggest that one factor at play around the ECB policy board which delayed any tightening of monetary stance already in 2004 despite evidence suggesting excess monetary ease (including the heating up real estate markets in several member countries) was the strength of the euro against the dollar, itself exacerbated by the break-up of the Asian dollar bloc.

During the episode of intense dollar weakness in 2003–4, the ECB put too much weight on the exchange rate (primarily of the dollar against

the euro) in terms of judging the overall appropriateness of its monetary stance and not enough on other factors (for example monetary data, evidence of – or perceived danger of – asset price inflation in various key credit or real estate markets).

The break-up of the Asian dollar bloc also laid the seeds of the future yen carry trade bubble. The Bank of Japan, out of fright at the super-strong yen triggered by the Dubai summit (on top of over-stimulatory US monetary stance), continued to pursue its novel zero rate and quantitative easing policies. Then in early 2006 the Bank of Japan introduced its own anaemic and abridged form of inflation targeting. This was used to justify manipulating interest rates in Japan along a sub-neutral path rather than boldly adopting a framework of monetary stability untarnished by contemporary fashion in the US and Europe. The engendering of monetary disequilibrium in Japan in turn stimulated powerfully the yen carry trade into the zone of irrational exuberance.

The overheated yen carry trade became one of the catalysts to credit market temperature rise not just in many East Asian countries (especially South Korea) but also in Europe (in hot real estate markets and private equity markets) and in particular in the emerging market economies of Central Europe.

European banks, riding a wave of enthusiasm in the equity and debt markets about their long-term profit outlooks as enlarged in particular by euro-induced financial integration in Europe, became aggressive participants in a new emerging market loan business (of which Central Europe was the epicentre, but also including East Asia), an area of business which US banks were avoiding this time round. In addition, European banks became huge participants in the US credit boom – including a whole range of what were to become ‘toxic assets’.

This was the first time since the late nineteenth century that European investors had got sucked into a US credit bubble. With no natural dollar deposit base to match, European banks became critically dependent on funding themselves in overnight and very short-maturity dollar repo markets where the lenders were in large part US money market funds desperately seeking interest income amid the famine of safe income as engendered by the Greenspan/Bernanke Federal Reserve.

There is no evidence that ECB officials during this period (mid-2000s) were aware or pointing to the dangers related to European banks’ high involvement in foreign – and especially US – credit booms. Instead they gave speeches about how in the new age of the euro, European countries had indeed gained a new degree of independence from US economic or financial shock. Exactly the opposite was the reality.

The ECB failed totally to recognize the extent of US–European financial interdependence under its watch (common exposure to a deadly asset price inflation virus of joint monetary creation). It also exaggerated the degree of economic independence that monetary union had brought.

ECB repeatedly underestimates danger (for Europe) of US recession

On the eve and into the early stages of both recessions in the first decade of monetary union (early 2001 and early/mid 2008), the ECB repeated the same error of assessing that the euro-area economy could avoid being dragged down by a sharp US downturn (disputing that the euro-area economy was subject to the same forces that were pulling the US economy down). Policy at a critical cyclical turning point fell far behind the curve.

In the case of the recession which started in the US in November 2007, heralded by the US growth recession (defined as a period of below trend but still positive growth) from mid-2006 to early 2007 and later much more loudly by the global credit market quake of July/August 2007, the ECB at first denied that the euro-area economies would follow suit. During the growth-recession phase, the ECB was firmly on the side of the economic optimists, predicting no hard landing in the US nor severe downturn in its real estate market.

In late 2007 and early 2008 there may have been some divergence of view within the ECB about the economic outlook (with the Bundesbankers and ex-Bundesbankers remaining optimistic) but key officials could agree on a continuing tough monetary stance due to their common concern that sky-high oil and commodity prices would drive up inflation. That toughness is evident from the juxtaposition of the actual risk-free interest rate (as proxied say by the one-year yield on German government bonds) rising at the same time as the credit bubble was bursting. The latter development surely meant a big drop in the equilibrium risk-free rate (together with a much wider than normal spread of risky rates above the risk-free rate).

The ECB policymakers in deciding to toughen their monetary stance through the first three quarters of 2008 completely failed to put a substantial probability on there being an oil price bubble and on this bursting endogenously. That in itself is not the most serious criticism, as we should hardly expect that monetary bureaucrats are at the forefront of identifying bubbles. More seriously they should have considered the likelihood that the spike in oil prices was a late symptom of the asset

price inflation disease whose source was earlier global monetary excess. They should have known from history that by the time these late symptoms appear strong forces are likely to be already at work creating the subsequent asset price deflation (and recession). The quakes in the credit markets during summer and autumn 2007 should have alerted them to a totally different situation of emerging financial panic and sharp temperature fall in credit markets (apparent to all).

The evidence of public statements suggests that ECB officials saw the leap to the sky of oil and other commodity prices in late 2007 and early 2008 as essentially goods and services inflation. They did not conceptualize this phenomenon as most likely a late appearance of asset price inflation in one sector of the global marketplace (commodities) which had previously in this cycle remained temperate. The most likely underlying cause of the sudden temperature was severe monetary disequilibrium in the past rather than the present. Evidence of massive financial speculation in the oil market, with US investment houses playing a lead role, should have alerted ECB officials to the likelihood that irrational exuberance under the influence of earlier monetary disequilibrium was responsible. The perennial question for monetary policymakers is whether by taking action against asset price inflation which has been long in appearing they actually make the subsequent downturn in the economy worse than it would be otherwise. Records do not show that any of this was a subject for discussion around the ECB policymakers' table.

No consideration of alternative strategies in wake of credit quake

It seems that the credit quake of July/August 2007 took ECB policymakers to a large degree by surprise, even though they appreciated that credit markets had long been warm or hot in the sense of credit spreads being abnormally low. The biggest surprise to ECB policymakers was the extent to which European banks were participants in the US section of the credit bubble and how far this participation had been hidden in off balance-sheet entities, so-called structured investment vehicles or SIVs.

As the European inter-bank markets became suddenly submerged in crisis (many banks finding it impossible to roll-over borrowings in inter-bank market except, in some cases, at lofty premiums to normal rates and in other cases not at all, on August 9 in reaction to news of BNP Paribas freezing three of its investment funds and the rescue of Europe's highest profile sub-prime casualty IKB (with the high-risk debt

in a SIV), the ECB ordered that the taps be opened wide – meaning that the ECB should offer unlimited funds (against eligible) collateral at the then overnight rate of above 4% p.a.

The ECB decision of 9 August 2007 (reached by telephone conference between the policymaking officials with anecdotal evidence suggesting that the Bundesbank played a key coordinating role) to make massive secured loans to any bank on demand at a rate near to the actual unchanged official rate appears to have been taken without any consideration of the main alternative plan of action and without any consideration of the exit strategy.

It is also obvious (with supporting evidence) that those making the decision wrongly diagnosed the source of the crisis as a liquidity shortage rather than an eruption of insolvency danger. Yet any reading of financial history should have suggested to the ECB policymakers that a liquidity crisis is usually linked to a solvency crisis. Some of the institutions suddenly unable to borrow are indeed insolvent. If the ECB were to now make loans to a range of institutions which turned out to be insolvent it could find itself in effect acting as a transfer agent taking funds from financially strong countries in the union to bail out insolvent institutions in financially weak countries. As illustration, already in summer 2007 there was widespread awareness of a possible credit bubble in Spain and ECB officials might have imagined the possibility that part of the Spanish banking system might turn out to be insolvent. If the ECB used the strength of its own balance sheet as effectively guaranteed by taxpayers in Germany, France and Holland, to make massive loans to Spanish banks, it would have turned itself into a transfer agent. That would be totally against the spirit of the Maastricht Treaty, which had created a monetary union without any fiscal or wider political union. Moreover the ECB was not at all obviously obliged under the Maastricht Treaty to act as so-called lender of last resort. The Treaty seemed to put this responsibility (of lender of last resort) on national authorities.

The alternative action plan would have been to immediately cut the rate on the overnight deposit facility at the ECB to zero (in response to the crisis in the inter-bank funding markets) while imposing a premium charge on secured lending above a given quota amount to any bank (and this charge would rise with the amount of excess over the quota subject to an overall limit related to the size of the bank). Larger premiums would apply to any extraordinary unsecured lending by the ECB, subject to limits on a case-by-case basis. Beyond the limits set for emergency lending (which would have been only modest), banks would

have had to apply immediately for emergency assistance from their own national governments. The ECB would have resisted any pressure from governments to make loans in advance of such assistance out of justifiable caution that once having gone down that route its independence would become fatally wounded and it could be attacked for in fact imposing ultimate burdens on taxpayers in the financially strongest countries, inconsistent with the Maastricht Treaty.

Under this plan, the yield on short-maturity high-quality European sovereign bonds would have collapsed simultaneously to near zero under the pressure of those banks with excess reserves seeking any alternative risk-free outlet to leaving them at the ECB (where they would now earn zero). In the wholesale money markets, there would have been an instantaneous fanning out of rates – with those banks recognized as less weak being able to attract non-insured funds at very low rates (only a little above zero) while those seen as weak (or under suspicion) having to pay rates well above the official repo rate applicable to normal size borrowing from the ECB.

Given the wide spread which would have immediately developed between rates on low-risk deposits and higher-risk inter-bank or wholesale lending, the banks with excess reserves or non-banks with an appetite for risk-arbitrage would have ploughed some funds towards the weaker banks or towards money market-type paper (on which the yields would be well above risk-free level).

There would have been a cluster of financial institutions which could not have satisfied their funding needs even at high rates in the private markets – except to some limited degree in secured repo markets where a procedure for placing collateral including paper of so-called top quality backed by mortgages was already in place (this market itself froze up at the worst point of the crisis) – and who would have been borrowers at premium rates from the ECB up to the limits which it set for such assistance.

In turn, the ECB would have had to decide (in conjunction with national authorities in the member countries) whether to continue such emergency lending to the very weak institutions or to insist on restructuring. (The options would range from an injection of government capital to a liquidation process in which a government entity would take over a bank's loan assets while selling the deposits – the goodwill element – to another stronger bank while wiping out the troubled bank's shareholders and bondholders.)

ECB officials remained in a state of denial about the extent of insolvency risk related to the European home-grown credit bubble (hot real

estate markets in Spain, UK, France, Eastern Europe, Holland) or to a more general participation in emerging market loans or private equity boom and well into 2008 continued to stress that there was a crisis of liquidity rather than potential insolvency among several major institutions. And as regards its money market operations, the ECB continued to defy any market solution in the form of allowing spreads between weak and less weak bank rates to widen (alongside a rise of rates on risk-credits to non-banks), which would have produced a profit incentive to re-capitalization.

In particular the less weak banks by issuing equity capital (a procedure which would have required full disclosure) and so reducing the riskiness of their (non-insured) deposits (in that depositors would now be protected by a larger equity cushion) would have been able to earn widened margins on their on-lending whether to other (weaker) banks or to non-banks.

Bogus separation principle

In their conduct of monetary policy from the quake of August 2007 through to the crunch of Autumn 2008 the ECB promulgated a bogus doctrine called the separation principle. This led policy far astray from an optimal position.

According to this doctrine, there should continue to be virtually only one rate in the overnight market (rather than a span of rates applying to institutions of now starkly different credit risk) and this rate should continue to be pegged closely to the announced official repo rate. This rate should be set as in normal times in line with inflation-targeting requirements.

Separately, the amount of credit support operations (sterilized secured lending to the banks) should be determined so as to maintain 'liquidity' of the money markets and the rate applied on these operations should be uniform for all and close to the official repo rate.

In fact, under the circumstances of inflamed risk perceptions and highly heterogeneous credit-risk of differing financial institutions relevant even to overnight borrowing, the separation principle aggravated disequilibrium.

In equilibrium, there would not in such circumstances be one rate in the overnight market for all institutions. In the absence of intervention to suppress differentials, there would be a wide span of rates – lowest for the strongest financial institutions, highest for the weakest.

To allow the markets to function in this way, the ECB would have abandoned the attempt to peg one overnight rate for all. Interest rates

on overnight deposits with itself would have been cut to zero. And the ECB would have added reserves (on an unsterilized basis) through open-market operation such as to meet any increased demand for excess reserves and so prevent a shortage of high-powered money developing which would have manifested itself in a wide range of risk-free rates (such as short-maturity government bonds or repo rates secured on government bonds) rising far above zero.

Quite to the contrary, at the peak of the financial crisis in September 2008, the ECB moved to narrow the band between its deposit rate (paid on excess reserves placed with it) and its marginal lending rate, re-doubling its efforts to peg one uniform overnight rate for all. Unsurprisingly this action in defiance of market forces resulted in a huge round-trip, where stronger institutions with excess reserves parked them at the ECB and the ECB in turn became the only marginal lender to the weaker institutions.

In applying the separation principle, the ECB lost total sight of a fundamental shift occurring in the pattern of equilibrium interest rates across the marketplace and so acted in a direction contrary to equilibrium tendencies, thereby intensifying the financial crisis and economic downturn.

The ECB was also acting in contradiction of the well-established monetary response during previous financial panics in history. Under the gold standard, or under subsequent paper money standards where reserves paid zero interest (the norm until the ECB's creation), the central bank would allow (unless blocked by the overriding obligation to defend the gold parity now under attack) risk-free rates on near-money assets (for example, short-maturity government bills) to fall towards zero under the pressure of funds seeking a safe haven, while pumping extra monetary base into the system so as to prevent any temporary shortage of reserves from developing (banks scrambling to increase excess reserves so as to protect themselves against panic withdrawal of funds), a manifestation of which would be a re-bounce of risk-free rates of return on near-money assets such as T-bills or short-maturity government bonds.

In the presence of heightened risk aversion and increased credit risks, the equilibrium tendency was surely for the risk-free interest rate to fall relative to risky interest rates. On top, the overall lurching of the global economy towards recession (in fact US and Japanese recession had already started in November 2007 unknown to contemporary economic observers) meant that the average cost of capital across all risk-categories should surely be falling, so as to balance an increasing propensity to save with a decreasing propensity to spend.

Even leaving that last consideration aside and taking at face value (without criticism) the ECB's intent to steer market rates above neutral level so as to defend the euro-area against 'inflation dangers', it should still have been the case that the risk-free rate as represented by short-maturity government bond yields and overnight money rates (as applicable to the least weak financial institutions) would have been falling to very low levels. At the same time the risky rates applicable say to one-month or three-month inter-bank lending or repo lending secured by non-tip-top paper would have been rising.

In resisting this tendency by pegging an overnight rate and setting a high floor to the government bill rates (by offering unlimited access to its deposit facility at near the pegged rate) – and by effecting massive intervention on a sterilized basis in the term-secured lending markets (so as to stop riskier rates rising there) – the ECB acted as a destabilizing influence on the euro-area economy.

In fact, by applying the bogus separation principle, the ECB not only acted as an economic de-stabilizer but it magnified the amount of disequilibrium in the credit markets.

By preventing a fan of market rates widening out in the context of heightened credit risks, the ECB magnified the perceived job of 'liquidity maintenance', the misnomer for the recycling of funds on a sterilized basis (by the ECB) towards the weak institutions.

If the market had been allowed to operate freely, several channels of credit flow which in fact clogged up would have been kept clear under the power of much wider spreads.

Of course, as on so many issues, the ECB could claim that it was in good company. Other central banks, including the Federal Reserve, were following versions of the same separation principle, at least until late winter 2007/8 when the Bernanke Federal Reserve embarked on further rate cuts, albeit inadequate. As already emphasized, though, in these indictments, should not the ECB, as a new institution, have aimed to be above the crowd and especially to outperform the Federal Reserve?

In fact at this time (until late autumn 2008), reserves at the Federal Reserve were still zero interest bearing and so some of the automatic stabilizing behaviour of risk-free rates did occur there (with T-bill rates in particular falling to zero). It was late in the day that Professor Bernanke resolved to follow the ECB in implementing a regime where interest would be paid on reserves so as to strengthen his institution's power to peg money rates.

There is another issue related to the flawed separation principle and the many other listed mistakes of the ECB in this indictment.

Lack of accountability

Further flaws in the construction of EMU – in particular, the weak standards set for transparency and accountability set by the Maastricht Treaty – meant that major decisions in policymaking (such as how to respond to the ‘liquidity crisis’ of August 2007 and the subsequent enunciation of the separation principle; and earlier in 2003 or 1998 the design or re-design of monetary framework) were not subject to challenge from inside or outside in any effective way.

ECB officials have boasted throughout the lifetime of EMU that monetary policymaking is transparent and accountable. They cite the press conferences that follow on immediately from the monthly policy board meeting. On closer examination these provide no serious challenge to policymakers – most of the questions are about whether a rate increase (or decrease) was discussed or not discussed; more recently since the eruption of the European sovereign debt crises there have been many questions about the details of possible bail-out plans, on the rare occasions that any difficult question is asked it is snuffed out by a filibuster of loquaciousness on the part of the President, frequently with some evidence of incomprehension of the exact point made by the questioner! There is no serious opportunity for follow-up questions and of course the President selects which journalists get to ask the questions!

Then there is the Monthly Report in which the ECB policymakers can explain the basis of their policy. That never reveals the nature of any debate or alternative policies that have been considered by policymakers around the table. Yes, there is some disclosure of the macro-economic forecasts and ECB members certainly take pride in the depth and sophistication of the econometric work. But by their nature these forecasts are mostly wrong and everyone knows they will likely be wrong. In any case, a central bank is not an economic forecasting institute (as a matter of fact their records are equally bad in general).

The interesting facts to be discovered, when it comes to transparency or accountability, are the specific alternative scenarios and risks that were discussed together with the collective thought processes (including considerations of monetary principles) which led up to the key policy decisions. The ECB has never outlined these.

There are the regular testimonies of the ECB President to the EU Parliament. But a review of all the transcripts shows no seriously critical and well-founded questions on monetary policymaking or damaging challenges for the ECB which might change the course of policy or trigger a re-drafting of the monetary framework. Has any journalist or

parliamentarian ever had the opportunity or the preparedness to ask the ECB President directly why his institution made the serious error of steering an over-easy monetary policy in 1999, 2003–5, and worst of all of imposing a monetary squeeze in late 2007 and most of 2008 when a recession had already set in the US and Japan and very likely had already spread or was spreading to Europe?

The answer is no.

More important even than these flaws in accountability is the absence of any such questions during the periods the policy mistakes were being made in the hope that the policymakers would realize their mistake or that democratic pressures would be brought on them to realize these!

ECB officials pride themselves on the transparency and accountability which stems from their annual ECB Watchers Symposium, where outside renowned economists deliver papers and partake in discussion related to live monetary issues. Apparently here is indeed an opportunity for outside challenge. Yet there is absolutely no hint of acrimony or even heated exchange to be found amid the carefully crafted summary transcripts of proceedings. The symposium is put together by a Frankfurt research institute funded in part by the Bundesbank. Participation is by invitation of the institute. The tone as judged by material available is one of deference and polite exchange within a club. There is no chance of discomfort here.

In principle there could have been a national political dimension to accountability. The French government, in particular, could have appointed an intellectually provocative head of its central bank, willing to break the ranks of silent conformity in Frankfurt, to challenge policymaking consensus (see Marsh, 2009). That has not happened to date, perhaps because there was no intention of undermining a then French President (of the ECB). Italian governments, even those headed by Silvio Berlusconi, have similarly passed up any such opportunity. In Germany there was once a tradition of appointing strongly independent and intellectually challenging heads to the central bank, but this has waned through the years under the political imperatives of first German and later EMU.

ECB abstains from key role in approving new EMU members

The ECB has strenuously sought to stay outside EU politics of any description, except to when it comes to lecturing national governments

on their budgetary policies or lack of economic reform policies (such as those to boost productivity) – neither of which are within its constitutional mandate.

Towards bypassing points of controversy, the ECB smothered one key issue of responsibility within its mandate. Under the Treaty of Maastricht, the ECB was to have an equal role with the European Commission in drawing up reports (each independent) on the eligibility of any applicant to join monetary union. Very early on, the ECB made clear that it had no intention of being drawn into such a political minefield, restricting its report to laying out the facts without any recommendation. In effect it passed the responsibility to the Commission and the EU Council.

The procedure which the ECB has ended up following on issues of new members joining EMU has been entirely cynical.

In May 2000, ECB Vice-President Noyer (later to become head of the French central bank) held a press conference to announce the publication of its convergence report on Greece (and Sweden). Noyer's comments and the report's summary on Greece was bland. The vice-president announced that the decision on whether Greece could join EMU would be taken by the EU Council of Ministers, who would have to hand the convergence report prepared by the EU Commission staff and the recommendation of the EU Commission. There was no mention by Noyer of the widespread scepticism at large about the quality or accuracy of the Greek data that went into the report. France was the main advocate of Greek entry into EMU just as it had been for its earlier entry into EU. In the event Greece joined EMU on 1 January 2001.

Five years later (2006), the ECB raised no objection to the EU Commission's verdict (2006) that Lithuania should not be allowed to join EMU despite this country just missing one entry test and then by only 0.1 percentage points on the inflation score (which was no miss at all if the inflation benchmark had been limited to other EMU countries rather than including an artificially low current inflation rate at the time in the UK). Rather it published its own bland factual summary on the matter with no conclusion. This was a bare-faced decision by the EU Commission, with no expert protest from the ECB, to allow Germany to get its way with its Russia policy (not worth hurting German interests by annoying Russia over extending the euro to the Baltics!).

As a matter of constitutional fact, according to the Maastricht Treaty the ECB could have broken from the Commission's stance and produced an expert evaluation free of politics which could have been used by those in the Council inclined to favour European liberalism and democracy over sucking up to the Putin dictatorship.

Three years later in 2009, the ECB and the European Commission might have been patting themselves on the back once the global credit crisis had erupted for having either by omission or commission obstructed Lithuania's entry into EMU, even though there is no evidence that a possible credit bubble figured in the Commission's case for rejecting Lithuania or in the ECB's refusal to challenge that rejection. The Baltics with their massive real estate cycles (relative to the size of the economy) and critical dependence on large capital inflows via the banking sector fell into deep recessions.

If Lithuania had been in the euro-area, the ECB would have had to extend its rescue mission to domestic banks or Russian linked banks there (against the collateral of dodgy domestic credit assets) to counter and hopefully pre-empt a damaging run of capital out of that country on the fear of a forced withdrawal from EMU. Even so, any such rescue would have been tiny relative to the size of any of the big EMU countries.

In the event, in early spring 2009, the post-bubble crisis in the Baltic countries deepened with intense speculation that Latvia would be the first forced to engineer a huge devaluation of its currency. As the IMF was called in, replenished with the promise of vast new financing as negotiated at the April 2009 G-20 summit (where France obtained remarkable diplomatic success in spearheading multilateral aid for this institution now with Strauss-Kahn – an ex-French finance minister – at its head with the explicit intention of bailing out the emerging market economies in Eastern Europe and implicitly the weak euro-area countries), the speculation started to fade with respect to the immediate future amid savage public expenditure cuts and fantastically high interest rates.

Again the ECB played a role (by omission) in passing up an historic opportunity for the EU to use monetary union as a means of solidifying the economic and political future of a region bordering on Russia where the menace from the Putin–Medvedev dictatorship had become only too clear a year earlier.

Instead of devoting half his press statement on 4 June 2009 to the ECB's latest forecasts on the economic outlook, almost certain to be wrong again, President Trichet could have used his platform to float the historic proposal that the Baltics should be admitted immediately into EMU, subject first to a 40% devaluation of their currencies. That would have worked most likely a miracle, in that interest rates in the Baltics would have collapsed and the devaluation would have given a big impetus to economic recovery there.

M. Trichet, despite his literary idealism on the subject of 'Europe' (see Brown, 2004) implicitly decided not to risk a confrontation with

Berlin (where ‘Russia first’ was still the leading principle at the Foreign Office) over the issue of any bold move to buttress the position of the Baltics safely outside the reach of the Putin–Medvedev dictatorship. Yet desperation of the Baltic governments to attain euro-membership had meanwhile reached a new pitch, not least in view of Russia’s war against Georgia in summer 2008. Estonia was the first of the Baltics to demonstrate that it had met all the stringent conditions for entry – leaving not even a decimal point to the discretion of its EU judges as Lithuania had done in 2006 – and duly was admitted into EMU in January 2011. Latvia followed in 2014.

Self-indictment of euro-complacency

As ECB officials showered their praise on EMU at its tenth anniversary in January 2009 in the immediate wake of the Great Financial Panic (for which the catalyst was the Lehman bankruptcy) the words of President Trichet provide the final self-indictment of complacency.

In an interview with *Le Figaro Magazine* (7 January 2009) he exclaimed:

The euro is evidently an advantage for those democracies that have chosen to adopt it. It has proven its stability, its resistance to shocks and its resilience in the face of financial economic turmoil. Once again, I would say, the euro has been a key factor in providing a shield against international turmoil. [...] We were the first central bank to react immediately when the international financial turbulence first appeared (9 August 2007). [...] Europe was able to take decisions even in the most difficult circumstances. [...] The euro is a big success.

The editor of the *European Wall Street Journal* was on M. Trichet’s side. In a lead article on 2 January 2009, he wrote:

The Single European currency, born on New Year’s Day in 1999, is a rare economic shining star of the past decade.

Evidently EMU and the ECB have had powerful officials within and friends without who would speak in their defence against any indictment. We discover in subsequent chapters how that defence could stack up and with what the prosecution could respond.