

The Monetary Policies of the European Central Bank and the Euro's (Mal)Performance: A Stability-Oriented Assessment

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INTRODUCTION

The stability-oriented macroeconomic framework established in the Maastricht and Amsterdam Treaties on European Union (TEU), especially the unparalleled status of independence and peculiar mandate of the European Central Bank (ECB), were promised to virtually guarantee price stability and a "strong" euro. Actual developments have shattered these hopes in a rather drastic way. Until October 2000, the euro lost 20 percent of its initial external value, even 30 percent against the U.S. dollar. A short-lived recovery occurred toward the end of 2000. But in 2001, the euro quickly fell back close to its historical trough. Meanwhile, consumer price inflation has *quadrupled* since the new currency's inception.

Despite these dismal monetary developments, conventional wisdom holds that neither the Maastricht regime nor the ECB might possibly be at fault. Commenting on the new regime's first year, Eichengreen (2000, 357-8) expressed rather well the conventional wisdom of then and now:

With demand growing relatively slowly and excessive capacity pervasive in Europe, a weak euro was the market's way of pricing European goods into international markets. ... This perspective suggests that the weakness of the euro during its first year does not reflect the incompetence of the ECB or flaws in the design of Europe's monetary union. Rather, it is the markets' natural response to cyclical asymmetries ... The euro's weakness does not indicate that Europe's great monetary gamble is less than a success. At the time of writing, the consensus forecast is for European economic growth to accelerate relative to U.S. economic growth. It follows that the euro should regain some of the ground lost against the dollar in 1999.

It is correct that the euro's plunge had earlier roots too. One may of course wonder why the euro was plagued right from its inception by slow demand growth and pervasive excessive capacity--after a decade of stability-oriented economic policies designed for preparing the ground for a strong euro in a prosperous economic environment. But more than the legacies of the past must have been at play. As one may also wonder why Mr. Eichengreen's predictions, following the same growth-oriented market rationale, proved so far off the mark.

The euro's performance over 2000-01 is generally seen as a puzzle. The euro has not only defied hopes all round, the conspicuous inverse interest rate/exchange rate nexus vis-à-vis the U.S. dollar has contradicted economic theory too (IMF 2001)--it appears.

This paper assesses the ECB's role in relation to the euro's (mal)performance. The main conclusion is that the ECB has been key to the "euro puzzle," propagating euro weakness and pushing up inflation. The analysis in this paper elaborates upon, and lends further support to, the "time-inconsistency hypothesis" of the euro's plunge (cf. Bibow 2001a, b) which states that a policy of aggressive interest rate hikes runs the risk of weakening the currency and pushing up inflation, rather than the intended opposite, if the policy is perceived by the markets as lacking due concern for growth risks. This paper explores the institutional setting and traditions behind the ECB's conduct and scrutinizes the rationale that inspired its interest rate policies.

The analysis proceeds as follows. Section 2 discusses the role and position of the ECB within the Maastricht regime, highlighting the institutional roots of a potential anti-growth bias in monetary policy. Section 3 identifies elements of an anti-growth attitude as reflected in the ECB's policy framework, while section 4 confirms that the ECB's interest rate policies have been plagued by an actual anti-growth bias. Section 5 then presents the time-inconsistency hypothesis of the euro's plunge. The economic consequences of the ECB's failure to conduct genuinely stability-oriented policies are assessed in section 6. Section 7 concludes.

ON THE MAASTRICHT PARADOX: UNBOUNDED DISCRETION AT THE HUB OF THE REGIME

One may be generally in favor of *an* Economic and Monetary Union (EMU) in Europe, both on political and economic grounds, but strongly oppose *the* Maastricht regime. The Maastricht regime is thoroughly flawed and exposes Euroland to risks that may prevent the potential benefits of an EMU ever to be realized, and worse than that (Bibow 2001d).

One flaw in the design of the regime's rules and institutions is the peculiar *imbalance* between the roles of flexibility and coordination in macroeconomic policymaking, on the one hand, and the overriding principle of discipline, on the other. Giving up the exchange rate and monetary policy instruments in stabilization policy renders the flexible use of fiscal policy especially valuable. Despite decentralized control over national fiscal policies, however, fiscal flexibility fell prey to fiscal discipline. Fiscal flexibility was first sacrificed on the Maastricht altar of achieving a budget deficit of 3.0 percent of GDP or less *at any price*, and then squeezed into the Amsterdam straitjacket of the Stability and Growth Pact (SGP), prescribing a budget that is "close to balance or in surplus."

Fiscal flexibility was a non-issue during the convergence process of the 1990s when "automatic" stabilizers were simply shut off--one root cause of the poor economic performance. Today, by contrast, the flexibility case is much invoked in promoting the virtues of the SGP, the argument being that by achieving a balanced budget, countries *would then* be enabled to use fiscal policy flexibly. Meanwhile, however, risks have proliferated that seem to call for ever larger margins of "safe" fiscal positions (Artis and Buti 2000, OECD 2001). The point is that as long as countries are struggling to attain whatever might be a "safe" fiscal position under any circumstances, fiscal flexibility *remains* a non-issue.

National fiscal policies are also uncoordinated. Countries are required to lay down their "Stability Programs" for purposes of coordination and multilateral surveillance on the basis of Article 99 TEU. However, with national fiscal targets bound by the overriding principle of budgetary discipline, Euroland's fiscal stance is largely a *random* outcome.

More generally, the whole issue of macroeconomic policy coordination has been treated as a non-issue throughout. As a consequence, the Maastricht regime is ill-equipped for achieving an appropriate policy mix (Allsopp & Vines 1998, Bini Smaghi & Casini 2000). Although fairly large in size and economic weight, Euroland is likely to continue behaving like a pinball brought off course by every whiff of the world economy, since establishing a policy mix geared at attaining sufficiently strong domestic demand was left to luck rather than design.

The core idea here must be that economic policy rather than the market economy itself is the ultimate source of economic instability. In this case, any need for stabilization policies would be limited, at best. Disciplining policymakers in their respective field of responsibility would be key. Beyond that, any further need for coordination of policies would seem redundant.

The importance of effective disciplining devices will not be denied. Risks of spillover effects and free-riding behavior do exist. They call for rules and incentive structures that ensure stabilizing and coordinated macroeconomic policies. Due to the *Maastricht imbalance*, however, disciplining finance ministers comes at the expense of flexibility and coordination of policies, while discipline is only enforced asymmetrically; budget surpluses can never be excessive and individual country's urge for fiscal prudence can have no spillover effects either, it seems.

These risks are magnified by another serious regime flaw: the all-important principle of discipline does not apply to the monetary policymaker. The Treaty provisions are meticulously aimed at shutting off any potential avenue of "interference" in monetary policy by the democratic institutions of the union. By contrast, there are no provisions in place to discipline monetary policymakers, no concern whatever about potential interferences with the working and objectives of the union's democratic institutions by independent central bankers. Article 108 TEU grants Europe's central bankers a maximum of independence which is not only unparalleled in the world. Effectively, the Treaty provisions have firmly institutionalized *unbounded discretion* in the conduct of monetary policy: the *Maastricht paradox*.

Admittedly, Article 105 TEU requires the ECB to support the general economic policies, and contribute toward achieving the objectives, of the Community as laid down in Article 2 TEU. But a crucial caveat states that such support should be rendered "without prejudice" to price stability, the maintenance of which is referred to as the "primary objective" of monetary policy.

It is wrong to believe that the ranking of objectives in the ECB's mandate reduces its scope for discretion as compared to, for instance, the U.S. Fed's mandate, which explicitly features both employment and price stability *on an equal footing*. In truth, the ranking of objectives together with the "without prejudice" licence and the failure to even define price stability grants the ECB a degree of goal independence (i.e. discretion) which is much greater than the U.S. Fed's. The Fed's policy priorities will tend to automatically shift together with economic conditions. For instance,

in the event of a slowdown occurring at low inflation, the Fed can hardly justify any failure of monetary easing. By contrast, the ECB is in a position to renege on its responsibilities with respect to Article 2 TEU by falling back on grounds of envisioned risks concerning its primary objective under almost any conditions.

In fact, the ECB has staked its prestige squarely on its primary objective, demanding to be held to account on nothing else but the medium-term inflation record (Duisenberg 1999, Issing 1998). A peculiar "price stability above all else" rhetoric underlines its single-minded commitment. Essentially, the ECB asserts that maintaining price stability *in itself* is always and everywhere the best contribution monetary policy can possibly make to achieve any other objective too. Nothing else but maintaining price stability should thus ever be asked from the ECB at any time and under any circumstances. Exemplifying the ECB's creativity in rewording the Treaty, during the "Monetary Dialogue" [MD] on 28 May 2001, Mr. Duisenberg asserted that "we are explicitly charged with maintaining price stability as the *sole* and primary objective" [emphasis added], arguing that this would be a "major difference" compared with the U.S. Fed.⁽¹⁾

It is *not* the ECB's power over interest rate settings which is at issue here. There may be compelling (Keynesian rather than monetarist) arguments in favor of instrument independence (Bibow 2000a). The risks of unbounded discretion are due to the ECB's extreme goal independence paired with a lack of any effective accountability on performance.

The upshot is that the Maastricht regime is not designed along prudent, but rather precarious lines. Arguably, the Community's fiscal rules and institutions (or lack of them) are both risky and inflicted by a deflationary bias (Arestis, McCauley & Sawyer 2001, Arestis and Sawyer 2001). But even if it were assumed that the overriding principle of fiscal discipline will cause no harm, a clear *potential* for an anti-growth bias in macroeconomic policy would still remain, namely, if the ECB pursued asymmetric monetary policies. In case of an anti-growth bias in monetary policy, hopes for successful fiscal consolidation (and much else) would be unjustified. In short, Euroland is at the whim of its "monetary representatives."

If there is virtue in disciplining policymakers above all else, why are monetary policymakers exempted from this principle? Starting from an overriding principle of disciplining policymakers as the foundation for stability, the ECB ended up as the "benevolent dictator" in the scheme.⁽²⁾ Not central bankers are to be blamed for the unbounded discretion at the hub of the Maastricht regime though. The regime was set up, *and can only be changed by*, the responsible political bodies of Europe's democracies. It is the duty of serious economists to highlight that developments since 1999 represent a rather formidable challenge to orthodox beliefs.

ON THE ECB'S POLICY FRAMEWORK AND (FAKE) "ORDNUNGSPOLITIK"

The ECB's unbounded discretion comprises all issues of monetary policy strategy. It was left at the ECB's discretion to clarify "price stability" and how that might be related, in its view, to any secondary objectives, design routines for setting its policy instrument in a consistent and systematic way, and devise modes of communication that coherently explain monetary policy to outside observers. Transparency in these matters affects the efficiency of conduct and might also provide a basis for (substitute) accountability on performance (cf. Buiter 1999).

The ECB adopted a "two-pillar stability-oriented" strategy as its framework to achieve price stability specified as "a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) of below 2% [to be achieved] in the medium term" (ECB 1999a). It was in the ECB's own best interest to fill this vacuum left by the Treaty to prevent anyone else from developing ambitions in this direction. The chosen definition leaves much to wish for, however, as neither the length of the policy horizon nor the lower bound of the price target have been specified.

It is hard to believe that the de facto asymmetry in its price target was not intended.⁽³⁾ The point is that the precisely defined upper bound is a highly visible trigger point that focuses public attention on the apparently required policy response when inflation is above or approaching the upper bound from below, thereby mobilizing external pressures in favor of an anti-inflationary policy orientation and tight monetary stance. By contrast, external pressures for monetary easing were declined an equally visible focal point in case of low or falling inflation. Apart from providing a biased channel for public attention and external pressures, this asymmetry greatly enlarges the ECB's scope for discretion in view of growth risks.

The price target is ambiguous in another respect too: it combines a headline inflation measure with an unspecified medium-term horizon. It would be more consistent to provide either forecasts for headline inflation over some specified time horizon, or to focus policy and public attention on some core inflation measure. Either avenue would reduce the ECB's discretionary scope. The ECB refuses to publish inflation forecasts⁽⁴⁾, core inflation measures only receive attention when it suits the ECB. This ambiguity raises the specter for *ad hoc* policymaking, and the requirements for explaining how movements in current headline inflation, owing to short-term "special factors," relate to monetary policy requirements at any particular juncture.

The chosen price target is also rather ambitious. Putting the measurement bias at, say, 0.5%, implies a mid-point for the "medium term" price target of 1.25%. Very low indeed. The aspired level of inflation would significantly outclass the inflation record of any country during the post-WWII period. For instance, Germany will have to depart from its 3% inflation record and henceforth live with an inflation trend of roughly 1% (if the Balassa-Samuelson effect is taken into account). It is very controversial in theory whether 1% inflation compared to 3% might lead to *any* improvement in economic performance. There is no empirical evidence that supports the proposition. By contrast, theory and evidence identified important risks, growth risks, that are associated with very low rates of inflation. The ECB's unbounded discretion allows it to make risky choices with vast potential welfare implications on the negative side. Apparently, the ECB perceives the incentive structures of the Maastricht regime to be such as to enforce an extraordinary degree of inflation adversity; matched with a remarkable willingness to accept risks of another kind. This *anti-growth attitude* might not bode well for economic performance.⁽⁵⁾

The ECB's dispositions and inclinations are further underlined by the first pillar of its strategy. Starting in 1999, the "reference value" for M3 was set at 4.5%.⁽⁶⁾ Derived from the quantity equation, this value assumes a trend decline of velocity of 0.5 to 1%, a trend growth rate of real GDP of 2 to 2.5%, and inflation of 1 to 2%. It is futile to quarrel about the omnibus conception velocity. I rather focus on the output and price variables in this formula.

It is one thing that the ECB's assumption about trend (potential) GDP growth are rather conservative compared to other conservative estimates by the OECD, IMF, and EC Commission etc. It is another that extrapolating the eurozone's performance of recent decades makes no sense, as this ignores the negative shocks of the 1970s and the disinflation policies deliberately pursued during the 1980s and 90s. If there is anything to the idea that low inflation makes for better performance, as the ECB notoriously asserts, the failure to actually "give growth a chance" prevents those presumed benefits from ever arising; but confirms the low growth assumption.

It also represents a breach of quantity-theoretic logic to ignore the sizable negative output gap inherited from the convergence process. Correctly applied, both money and the economy can grow above trend until full potential is reached without posing medium-term inflation risks. Not making these considerations explicit and deliberately focusing all policy communications on an downwardly-biased reference value is the very opposite of transparent conduct, but greatly increases the ECB's discretionary scope. The deliberate mis-application of an apparent "rule" is a strategic move to establish a standing excuse for hiking interest rates; reflecting an anti-growth attitude. Actually treating monetary overshoots as "excessive" and hiking rates to force monetary growth into line with the reference value *before* closing the negative output gap represents deliberate monetary tightening of an anti-growth variety.⁽⁷⁾

And the same applies to above-target price developments. Given the ECB's excuse that these have been largely due to special temporary factors, not monetary policy, a neutral policy response would require accommodation. By contrast, taking measures to bring monetary growth in line with the given reference value *before* those temporary price effects evaporate involves a deliberate monetary tightening.⁽⁸⁾

As regards the ECB's "broadly based assessment of the outlook for future price developments and risks to price stability in the euro area as a whole" (see ECB 1999, MB January), the range of indicators routinely *referred to* under the second pillar appears to be principally in line with mainstream thinking. One may wonder why M3 is not simply treated together with other financial indicators, as is the case with other central banks. A key issue is whether the *application* of the second pillar provides a coherent picture of the theoretical basis of the ECB's policymaking process and sufficiently illuminates the ECB's policy reaction function.

Overall, the ECB's strategy exemplifies rather well Milton Friedman's (quoted in Fischer 1990, 1181, n 52) vigilant observation that "from revealed preference, I suspect that by far and away the two most important variables in [independent central bankers'] loss function are avoiding accountability on the one hand and achieving public prestige on the other." Criticism of the ECB's strategy has become universal (OECD 2001). The point emphasized here is that the policy strategy itself reflects the ECB's anti-growth attitude.

Prior to investigating whether the ECB's anti-growth attitude might have manifested itself in its interest rate policies, I need to emphasize that the ECB does, indeed, set interest rates. This represents a conspicuous breach of the dominant ideology and overriding principle that markets work most efficiently if undistorted by government interference. In Germany, this breach has for long escaped any attention owing to the monetary mantra surrounding the Bundesbank and an influential conservative "Ordo liberal" tradition as its inspiration.

The Ordo liberal school distinguishes between government interference with actual market processes, on the one hand, and devising the "Ordnung" (framework) in which these processes take place, on the other. While interference of the former type is not permissible, in their view, interference of the latter type is vital. Importantly, setting up a stable monetary order is viewed as part of "Ordnungspolitik" and the very notion of the "Primat der Währungspolitik" highlights the conviction that a stable monetary order must take priority above all else (Eucken 1952). Within this vision, a separate role for stabilization policy is hard to accommodate.

The overriding German (Bundesbank) influence on shaping the Maastricht regime and the "primary" objective of price stability are well-known (Kenen 1995, Tietmeyer 1991). The ECB's emphasis on its "framework and "stability-orientation" immediately fall into place here too. Furthermore, in view of Bundesbank traditions, it is of no surprise to hear from Europe's new monetary policymaker that "activism" and "fine tuning" the economy is not among its aspirations. Beware of a serious confusion here.

For the very risk of price level indeterminacy, traditionally held against a monetary policy of actively manipulating interest rates by leading monetarists, arises if interest rates are fixed *for too long*. This led Milton Friedman (1960, 1968) to recommend that interest rates should be altogether determined by the markets, that is, central banks should not interfere with market processes.⁽⁹⁾ By contrast, from a Wicksellian/Keynesian perspective, the very task of monetary policy is to make the market rate of interest conform to the equilibrium rate as best as possible and at all time. In a changing world this requires policy to continuously respond to a moving target, as allowing deviations to emerge between the market and the equilibrium rates would set off cumulative processes that drive the economy away from its current equilibrium.

No doubt such discretion can be exercised either wisely or unwisely. The key issue in any reaction function approach is to adjust policy in line with changing economic circumstances, both in a timely (forward-looking) and well measured (medium-term oriented) way. No matter what "Ordnung" the ECB might chose for setting interest rates, the practice of actively manipulating interest rates in response to changes in the economic situation represents stabilization policy--it can never be more than "fake Ordnungspolitik."

THE ECB'S DISCRETIONARY INTEREST RATE POLICIES UNDER SCRUTINY

The view that the ECB might have done a good job in setting interest rates (BIS 2000, 2001, OECD 2000, 2001) warrants careful scrutiny. This section reviews the course of the ECB's interest rate decisions and explanations given for them. The following questions deserve particular attention: (1) can the ECB's policies be characterized as duly forward-looking and medium-term oriented; (2) can they be characterized as duly focused on the ECB's primary objective and what role, if any, do other objectives and considerations play in "the short run;" (3) how have exchange rate developments affected interest rate policies?

The Year 1999: Coping with Deflation Risks and Nourishing the Chances of Recovery

The ECB's policy instrument, (its target for) the overnight interest rate (which it steers mainly through its weekly main refinancing operations), was set at three percent at the time of the euro's inauguration. That was the level the Bundesbank had set German overnight rates at on 3 December 1998, a level then also judged appropriate for the euro area as a whole by the ECB's Governing Council on 22 December. By European historical standards during the last thirty years, three percent seemed a remarkably low rate of interest.

And yet, it is *not* clear at all that it was actually low in a Wicksellian sense; that is, *relative* to the equilibrium rate. For instance, Taylor rule reasoning (cf. Taylor 1993) implies an upper limit for the *neutral* nominal short-term rate of interest of 4%. At the time, however, consumer price inflation was 1% and falling, economic growth was moderate and weakening, a significant negative output gap and unemployment of over 11% of the labor force existed, and the prospective fiscal stance was neutral at best.

The point is that the deflationary policies of the 1990s and the Maastricht regime change have created an environment that makes high interest rate policies unviable; particularly, as it is now ruled out that fiscal policies can partly compensate for the effects of dear money, as over previous decades. To some observers the starting conditions for the euro might have appeared ideal, as inflation was practically non-existent (and inflation risks held in check by sluggish growth and high unemployment). But as the full brunt of the external demand shock was felt in early 1999, the acute overall riskiness of the situation "suddenly" became more apparent: a limited scope for further interest rate falls, inflation already close to outright deflation, and the prospect that recession would enkindle a pro-cyclical fiscal response (as over the 1990s).

In view of the situation *within* Euroland criticizing the ECB's April 1999 cut is unfounded, except that it occurred so late. For that, however, the Bundesbank's idiosyncratic response to the 1997-98 crises is largely to be blamed. But the incidence also marks the start of an emerging pattern in the ECB's conduct: to act too late in response to deteriorating economic conditions. In fact, when the ECB' belated move finally occurred, evidence indicated that the *external* situation had improved and U.S. (domestic demand-driven) growth been largely resilient to the international crises in the first place (thanks not least to the U.S. Fed's pre-emptive response that contrasted starkly with the Bundesbank's "wait and see" attitude). The ECB's Monthly Bulletins [MB] of February and March observed that the external situation was improving *relative* to the domestic one. In the April Bulletin, this was even invoked as underlying the euro's weakening *vis-à-vis* the U.S. dollar. Thus, in a way, this early episode also marks the beginning of another pattern: the ECB overestimates the degree of closeness of the eurozone's economy and *systematically* underestimates the importance of U.S. and world growth to internal developments.

The Governing Council's (summary) explanation for the 50 basis point cut reads: weighing all the relevant indicators and taking a forward-looking and medium-term perspective, the Governing Council deemed it appropriate to make a determined monetary policy response with a view of maintaining the outlook for continued price stability. One of the main considerations underlying this decision was that monetary growth cannot, at this moment, be considered to be a risk to future price stability. At the same time, downward pressure on inflation stems from the current economic situation. Also after the cut in interest rates, the Governing Council does not see a risk in the current situation that HICP increases could rise lastingly to above 2% and hence be out of line with the Eurosystem's definition of price stability. The decision of the Governing Council has to be seen in the context of the stability-oriented strategy. By adhering to this strategy, the monetary policy of the Eurosystem contributes to creating the economic conditions which are essential for exploiting the considerable growth potential of the euro area. In addition, at this juncture the significant cut in interest rates should help reduce current uncertainty about future economic developments, thereby contributing positively to restoring confidence in the economy (ECB 1999, MB April, p. 6).

Note that the ECB avoided any reference to deflationary risks⁽¹⁰⁾ (widely heard of at the time) or explicit acknowledgment of any direct responsibility for anything but price stability. Instead, (further) "downward pressures on inflation" were diagnosed and the ECB argued that downward revisions in *external* projections for growth "reinforced expectations of somewhat lower inflationary pressure arising from economic activity" (p. 5); which illustrates that economic activity plays the role of a predictor of future inflation (as in inflation targeting strategies). With inflation running at 0.8%, the cut was deemed necessary to *maintain* the outlook for *continued* price stability. But the ECB also hoped that the *large* move would help to *restore* confidence in the economy. The ECB's first move provided a foretaste for its creative explanations and commentaries on the first pillar that have become the rule, asserting that overshoots "should not be seen as signaling upcoming inflationary pressures at this juncture" (p. 5).

Overall, the ECB's move and explanations caused serious confusions and surprise about its size.⁽¹¹⁾ One confusion was that the ECB had apparently departed from its medium-term price stability orientation in favor of a short-term business cycle-orientation; which neatly illustrated the dysfunctionality of its peculiar rhetoric. Another concerned the ECB's apparently insufficient attention to the weakening euro--the very issue which has become the ECB's primary trauma.

In March, the ECB noted that "the weakening of the euro, through its effects on economic activity and import costs, could place some upward pressure on industrial and consumer prices" (ECB 1999, MB March, p. 6), representing an upside risk to price stability. On April 8, however, Mr. Duisenberg explained at the press conference that "we have no reason at all to be dissatisfied with [the euro's current] value [of USD 1.08 to 1.10]. It is about the level at which the euro had stood for more than a year [from mid 1997 until early September 1998]." Interestingly, the euro seemed to stabilize, rather than fall more steeply, following the April 1999 cut.⁽¹²⁾

But the euro soon resumed its decline and inflation breached two percent a year later in March 2000. As the ECB saw no such risk when it cut in April 1999, one might jump here to the conclusion that the cut was a clear policy mistake. Developments in Euroland were decisively influenced by the external situation and the euro's plunge though--moving the relationship between the ECB's interest rate policies and the euro's performance into center stage.

The trigger of Euroland's acute fragility in early 1999 was an external demand shock. Luckily, the shift to a more neutral fiscal stance during 1998-99, widely denounced (especially by the ECB) as reflecting a lack of ambition for consolidation, contributed to stabilizing growth. And so did the interest rate convergence process of the 1990s (rather than the policy moves of December 1998 and April 1999⁽¹³⁾). Overall, the slowdown in *domestic* demand growth in the wake of the *external* crises was limited. But key to the turnaround since mid-1999 was strong external growth: the acceleration in U.S. growth lifted not just the crisis regions, but also Euroland out of the doldrums. Export performance was further magnified by the euro's decline.

Starting with the press conference on July 15, 1999, the ECB communicated its view that a recovery was firmly underway that would make a policy tightening necessary in due course. It took four months until the ECB actually hiked interest rates. Money markets had discounted a 25 basis point hike in advance of the October meeting, when the ECB surprised by leaving rates on hold. Then, starting by late October, the ECB stepped up its tone on the tightening bias that had been creeping in over the summer and money markets discounted a 50 basis point hike, which was delivered on November 4, 1999. The ECB's summary explanation reads:

the downside risks to price stability which motivated the cut in ECB interest rate in April 1999 are no longer present. Moreover, the rising trend in M3 growth in excess of the reference value in conjunction with the broad assessment of the prospects for economic developments in the euro area confirmed the view that the balance of risks to future price stability had gradually been moving towards the upside. Therefore there was a need to adjust the stance of monetary policy with a view to maintaining price stability over the medium term (ECB 1999, MB November, p. 5).

The hike was represented as a reversal of the April cut which was retrospectively declared a precautionary move in view of "downside risks to price stability." By November, it had become clear that the April cut came rather late; as the worst had already passed. At this juncture, the ongoing M3 overshoot was invoked to warrant a rate hike because it "implied the existence of a very generous liquidity situation in the euro area which could generate upward risks to price stability in the medium term" (p. 6). Confusions as regards the first pillar soared.

Curiously, there was no mention of euro weakness in the ECB's communications on the November hike. The May Bulletin's editorial observed that "recent exchange rate developments have as yet not indicated any risk for future price stability" and the June editorial featured the clarification that exchange rate developments are taken into account under the second pillar. Questioned on the role of the euro/dollar exchange rate in the policy decision at the press conference on 4 November 1999, Mr. Duisenberg replied that "it was no issue at all."

In view of subsequent developments and communications it is also of interest that, in the June Bulletin, the ECB attributed the strengthening of the dollar to the diverse short-term economic prospects for the U.S. and eurozone economies, while noting in subsequent months that the brightening of prospects for growth in the eurozone had strengthened the euro. In the November Bulletin, however, the ECB appeared to be puzzled about the euro's renewed decline around the time of the November hike, arguing that good news about the U.S. appeared to carry greater weight in currency markets than good news on Euroland's recovery.

Perhaps not all good news on Euroland's recovery were such good news after all. Perhaps a central bank that is perceived as being keen to nip any incipient upswing in the bud does not inspire all too much confidence. The size of the hike is of interest here. The motivation for the large move of November seemed similar to the earlier one of back in April: "today's move of 50 basis points appeared to be the best way in which to avoid uncertainties regarding the future course of monetary policy" (ECB 1999, PC November 4). The ECB booked it as a policy success that the hike led to falling bond yields and implied interest rate volatilities.⁽¹⁴⁾

This rationale might have made sense in April (given the intention to boost confidence). In the light of the ECB's own commentaries on economic and currency developments, it is hard to make any sense of it in the November situation. The ECB interpreted the rise in euro bond yields and fall in the long-term interest rate differential vis-à-vis the U.S. dollar over the summer as reflecting Euroland's improving growth prospects. Neither inflation risks nor market perceptions of such risks were prevalent--apart from those *potentially* arising from euro weakness. Why were falling bond yields--at this juncture--seen as confirming the ECB's credibility? What was the sense in stabilizing or reducing bond yields in the first place? *None*. The ECB's rationale for the large hike was inconsistent with its primary objective. It makes *no* sense (to appear) to be in a tightening hurry when exchange rate movements are diagnosed to be driven by (relative) growth prospects on the one hand, while further euro weakening has clear negative effects on price stability on the other.

The prospect of a vicious circle of monetary tightening that pushes inflation up rather than down emerges here. Under the conditions prevailing at the time, aggressive tightening ran the risk of encouraging rather than stemming euro weakness. Thus, it is noteworthy that the ECB successfully communicated the November hike to the markets. As money markets discounted a larger hike, however, the euro came under renewed pressure in currency markets. Just before the hike, *The Economist* (1999), not exactly known for being soft on inflation (but quite apt at picking up market themes and perceptions in the City), featured the leader "give growth a chance." It warned that while it would be understandable that the ECB might be eager to establish its anti-inflation credentials, "acting too early can be just as bad as acting too late."

The Year 2000: The Euro's Plunge and Interest Rate Hikes to Defend the Currency

The euro's initial decline until summer 1999 was probably unavoidable (and rather conducive to starting up the Euroland economy). Mr. Duisenberg pointed out that the decline merely brought the euro back to the ECU's level of a year earlier but failed to mention that the Bundesbank's final blunders were rather instrumental in driving up the DM/ECU to the unsuitably high level from which the euro was then launched; choking off growth in Euroland's core on its way.

The euro puzzle to be explained is the further decline in its external value to a trough of \$0.82 (a 30 percent drop compared to its starting level) by October 2000. The euro's plunge entered ever more prominently into the ECB's decisions to hike interest rates, on six occasions and for another 175 basis points over the course of 2000.

The first series of interest rate hikes of February, March, and April 2000 (of 25 basis points each) essentially followed one and the same motivation⁽¹⁵⁾: addressing the perceived risk of second-round reactions of wages as *current* headline HICP inflation was approaching two percent in the context of a weakening euro. They were well anticipated by money markets as the ECB's communications continuously signaled that the "balance of risks was on the upside." At these junctures, above-reference-value M3 growth was interpreted as reflecting "generous liquidity conditions" and pointing toward medium-term price risks. The explanation for the February hike--representative for the two that followed shortly--reads as follows:

Price and cost increases recently observed ... have been larger and more protracted than earlier foreseen. Moreover the continuous depreciation of the euro has contributed to increases in import prices. Taken together, these factors point towards an increasing risk of second round effects of consumer prices. ... Against this background, a monetary policy which has a forward-looking orientation needs to respond in a timely fashion, thereby also contributing to ensuring sustainable growth in the euro area. The Governing Council's determination not to tolerate any lasting upward effects on inflation should assure wage negotiators that the prospects for maintaining price stability remain favorable. At the same time, it will be important for wage settlements themselves not to constitute a threat to price stability in the medium term. ... past movements of the exchange rate of the euro have increasingly become a cause for concern with regard to future price stability (ECB 2000, MB February, p. 5).

The hikes shifted money market rates up, but set bond yields on a decline. The ECB showed a remarkable reluctance to draw any conclusion from falling bond yields and a yield curve flattening other than verifying its anti-inflation credibility. Confirming the earlier puzzle of an inverse interest rate/exchange rate nexus, the euro resumed its decline in mid-January. The series of hikes failed to bolster the euro--which would have contained inflation.

The ECB's reasoning featured a striking paradox. The ECB stressed that the rise in inflation would be (and should be seen as) *temporary* in nature. But it justified its hikes by referring to the *risk* of second-round effects via wage inflation. Either the ECB believes that wage setters cannot properly distinguish between temporary and permanent inflation pressures, that is, the ECB doubts whether it has effectively communicated what "below 2%" headline inflation in "the medium term" is supposed to mean in practice. Or the ECB doubts its credibility in labor markets more generally. Credibility in this sphere describes the case where the *threat* to retaliate prevents excessive wage rises from arising in the first place; without any actual interest rate hike being necessary. If the feared second-round effects arise (because the threat was non-credible), a retaliating central bank would hike rates in response--punishment in the form of unemployment. By contrast, the ECB hikes rates to counter the *risk* of *potential* wage rises. Despite ongoing wage moderation, the ECB "preemptively" punished labor markets; owing to its own perceived lack of credibility. Wage moderation will then *not* pay off in terms of higher employment. At best (or at worst?), it may enhance the central bank's prestige. If independent central banks build their anti-inflation reputation in this way, is there a free lunch here?

Currency markets appear to have got the message, the euro weakened further. Its decline only stalled in May 2000, temporarily. Once again, not the ECB's own hikes, but the U.S. Fed's large hike of May 16, which was followed by the release of weak U.S. data, proved to be good news for the euro. The ECB reacted truly remarkably with another 50 basis point hike on June 8. The hike was larger than anticipated by money markets, and the surprise was intended. The ECB explained its motivation for the hike as follows:

the decision to raise ECB interest rates has been a firm and forward-looking step, taken to counter the increasing upward risks to price stability which had emerged in the months prior to the move. This should help economic agents to rely firmly on the maintenance of price stability, which is the most important contribution that the Eurosystem can make towards sustaining non-inflationary growth in the euro area in the medium term (ECB 2000, MB June, p. 6).

Instead, the June hike confirmed the ECB's backward-looking conduct. Given that the (surprise) acceleration of growth in Euroland since mid-1999 was largely due to lucky external stimuli, evidence that the U.S. Fed had achieved its intended slowing of U.S. growth in conjunction with euro appreciation barely justified expectations of firming growth in Euroland. Quite the opposite. Particularly, as the ECB's own previous hikes still had to run its full course. Or was the ECB of the view that it had fallen behind the curve, that it had previously failed to act sufficiently forward looking? While it was not clear at all that any *increasing* risks to price stability due to strong growth might justify more tightening. A clear risk was that further euro weakening would cause new price pressures.

But the ECB pushed its luck (U.S. weakening) by attempting to give the euro an extra spin to *reinforce the markets' recent turn*. This would have implied a significant tightening of monetary conditions—at a time when the source of external stimuli was drying up. Alas, the ECB was playing *against* the markets. In the May Bulletin, the ECB appeared puzzled that the euro's exchange rate was moving further out of line with Euroland's increasingly positive economic fundamentals. Growth prospects should have supported it, in the ECB's view. Amazingly, at no point the ECB showed any concern that its own hikes might (be perceived as) risk(ing) Euroland's growth (prospects). Interest rate hikes appear to be irrelevant or even beneficial to economic activity and growth prospects as long as economic agents feel that they can "rely firmly on the maintenance of price stability," which by itself seems to—*somehow*—propel growth.

Subsequent developments confirmed the picture of a central bank in a vicious circle: the euro lost its momentum and weakened again, which pushed up headline inflation, which, in turn, provoked further "preemptive" hikes from the ECB to bolster the euro (on August 31 and on October 5, of 25 basis points each). In addition, on September 22, concerted currency market interventions occurred. Their overall success proved short-lived (thanks, not least, to another of Mr. Euro's habitual public slips; cf. Barber 2000), the euro's plunge went on.

Although clear indications of an imminent slowdown in Euroland emerged by mid-2000, the ECB believed that growth in Euroland would stay at a (too) high rate and the external environment remain strong as well. The primary perceived risk was that the rise in headline inflation⁽¹⁶⁾ might encourage second-round effects. In doubt of its own credibility, the ECB continued hiking rates preemptively, as if rising interest rates could do no harm, but merely help agents to maintain confidence in price stability (with all the good things that are believed to follow from that). The explanation for the October hike reads:

It will be crucial that the longer-term inflation expectations of economic agents do not increase. This risk is all the more relevant given the currently favourable outlook for economic growth in the euro area. In this respect, the decision to increase ECB interest rates on 5 October aimed at maintaining confidence in price stability over the medium term. This confidence should continue to guide the process of formation of wages and profits margins in the euro area (ECB 2000, MB October, p. 6).

Thus, the euro's rebound had to wait until the confirmation of a drastic U.S. slowdown in October. By year end, the euro had appreciated significantly. The ECB was upbeat. As the U.S. economy was tanking, the ECB released its first GDP growth projections of 2.6 to 3.6% and 2.5 to 3.5% for 2001-02, emphasizing that the balance of risks to price stability was on the upside.

The Year 2001: As the World Economy Dives, the ECB Stands Firm—and Stumbles Again

It took until February 2001, when the ECB conceded that "the risks to price stability in the medium term currently appear more balanced than towards the end of last year" (MB, p. 5). By that time U.S. rates had been cut twice by 50 basis points each (without weakening the U.S. dollar). Curiously, the ECB saw its given policy stance as appropriate despite the drastic deterioration in the external scenery. What kind of reaction function is supposed to underlie such idiosyncratic policies? Did the ECB really believe that Euroland would be an island of stability?

During the first quarter, more evidence on the—allegedly—forward-looking nature of the ECB's decisions arose. For instance, on March 1, Mr. Duisenberg referred to the potential impact of external developments on the euro area as an element of uncertainty but seemed to suggest that to wait and see until the impact materializes presented the most appropriate policy since "at this juncture, there are no signs that the slowdown in the U.S. economy is having significant and lasting spillover effects on the euro area" (PC March 1).

If the ECB had had any credibility in financial markets, the euro should have strengthened further. Instead, the ECB's inertia did not bode well with the markets' perceptions of what the situation required: the failure to cut rates weakened the euro. Other external pressures⁽¹⁷⁾ mounted, even from unexpected sources like the OECD and IMF. Only for a couple of weeks in April-May 2001, the markets seemed to assume a more favorable view of the ECB's position. Rising inflation appeared to suggest that more than inflation paranoia might be involved.

The episode of (unwarranted) market warming was ended abruptly by the ECB itself. On 10 May 2001, a surprise 25 basis points cut occurred that was to "be seen as an adjustment of the level of interest rates to somewhat lower inflationary pressure over the medium term" (ECB 2001, MB May, p. 5). Only days before, prominent Council members had reiterated that rates were on hold in view of a balance of inflation risks and prospects of sustained at-or-above-potential GDP growth. Easing earlier on in 2001 would have supported the euro (and diminished price pressures). But the ECB once again waited too long. When the cut occurred, it caused bedlam—and the euro weakened "despite" the Fed's 50 basis point cut of May 15. In the changed atmosphere, even an element of cheating was in the air. Rather than fostering its reputation, the ECB's confusing behavior damaged it further.

Explanations for the swift change of mind led to more confusion and disbelief. Under the second pillar, a moderation of GDP growth was seen as containment of upward price pressures from the demand side while wage moderation was now held to continue, so that upward risks to price stability over the medium term "diminished somewhat." While the first pillar has generally become seen as an opportunistic and confusing rather than properly strategic and expectations-anchoring element. On this occasion, it received new prominence. The ECB suddenly declared that "monetary developments no longer pose a risk to price stability" (PC May 10).

M3 growth had not fallen to its reference value though. It was constant at 4.8% from the previous meeting. Revisions with regard to holdings of money market fund units/shares by non-euro area residents had been concluded just before the May meeting. And as a result of that, M3 growth suddenly appeared to have been *below* the reference value for some time.

Increasing global gloom prompted further cuts by the U.S. Fed, an overall easing of 275 basis points by mid-2001. Tax cuts too are under way in the U.S. to deliberately stimulate demand. By contrast, at the press conference on 5 July 2001, Mr. Duisenberg declared that the ECB's "monetary policy stance remains appropriate ... for some time to come;" exhibiting godlike knowledge of a future that is uncertain to lesser mortals. Never afraid of commenting on independent finance ministers' tasks, he also expressed concern about some slippage in the determination of some countries to reach the goal of the SGP. A few days later new slippage came from Mr. Duisenberg himself who went out of his way to brush off anxiety over euro weakness, proclaiming that "the euro is not very weak, it is very stable" (Financial Times, 10 July 2001). This occurred after a meeting of (G10) central bankers had led to public expressions of concern about dollar strength that had the effect of pushing up the euro from its recent lows. As usual, "Mr. Euro's" utterances had the opposite effect. Perhaps, then, despite "upward potential" rhetoric, actual ECB policy is to test the euro's potential in the other direction.

The Record So Far: More or Less Appropriate Interest Rate Policies?

The ECB's contention that its policies would be forward-looking and medium-term oriented must be rejected. The evidence shows a backward-looking focus on current inflation trends and obsessive focus on the short-term outlook for *upward* price risks. As regards downwards risks to growth and employment, however, a very long-term orientation has been revealed. Asymmetric monetary policy is not at all cautious, but careless. In fact, it is extremely risky, particularly in view of the ECB's low price target and Euroland's fiscal rules and institutions (or lack of them). An exclusive focus on price stability can be attested as regards the ECB's peculiar rhetoric; a rhetoric that has however not enlightened, but thoroughly confused outside observers.

The ECB's guiding principle appears to be that at-or-above-potential growth inevitably poses inflation risks and should thus be avoided under any circumstances. The ECB proved ready to hike rates because of a *perceived risk* that improving growth prospects might relax wage moderation. "Preemptive" rate hikes so-inspired are not genuinely forward-looking in nature, but reflect the ECB self-doubts about its credibility in labor markets. A preference to be "ahead of the curve" when it comes to tightening has been revealed, a hurry to impose tighter money as an insurance policy for establishing its anti-inflation credentials. When the economy weakens, by contrast, the revealed preference is to "fall behind the curve." Even worse, the ECB has proved its determination to deliberately risk recession to force price pressures down that were not due to excess demand and diagnosed as temporary in nature. Openly admitting that wage moderation was playing its part, the ECB made sure that it would not pay off in terms of higher employment.

The ECB might even believe that its mandate prescribes this kind of asymmetric conduct or that it represents the best way to establish its anti-inflation credentials and maximize prestige. However, it is far from clear that an anti-growth bias in monetary policy will necessarily prove conducive to price stability. Despite its confusing communications, the ECB's interest rate policies were clearly carried out with the intention of bolstering the euro, as the ECB must have been aware all along that euro weakness was having detrimental effects on its primary objective. These policies have not produced the intended result though. Why?

THE TIME-INCONSISTENCY HYPOTHESIS OF THE EURO'S PLUNGE, COMMUNICATION AND CREDIBILITY

The ECB's rhetoric suggests that price stability above all else cannot possibly be in conflict with any secondary objective of Article 2 TEU, not *under any condition and over any time horizon*, as long as monetary policy is "stability-oriented" (which, by definition, the ECB's policy always is).

The analysis diagnosed an anti-growth bias in the ECB's discretionary interest rate policies, which certainly heralds nothing good for growth. The point is, however, that in a market environment of general growth enthusiasm (paired with diminished inflation concerns etc.) and inhabited by participants who do not share the idiosyncratic belief that confidence in price stability over the medium term *fosters* growth no matter how aggressively a central bank might wish to raise interest rates, rate hikes might fail to have the intended effect. An obsessive focus on price stability might even prove damaging to price stability itself, by weakening the euro.

The time-inconsistency hypothesis of the euro's plunge states that attempts to bolster the euro through narrowing the current interest rate spread vis-à-vis the U.S. dollar may be counterproductive if the narrowing of the current interest rate differential is perceived as risking a widening (rather than narrowing) of the growth differential ultimately underlying any sustainable path of future interest rate differential. Under such conditions, interest rate hikes might then weaken rather than strengthen the currency--and *vice versa* in a policy easing scenario (Bibow 2001a, b).

A communication failure is an essential part of the phenomenon. The central bank fails to anchor market expectations in line with policy intentions, it fails to persuade the markets that its desired policy stance represents a *sustainable* course of policy. For instance, if the markets perceived an intended monetary tightening as too aggressive, namely, as causing growth risks, the intended tightening would appear unsustainable (involving the prospect of a future policy reversal, particularly if the markets went along with it). In this way, tighter money undermines itself by running into a time-inconsistency problem; while diminished growth prospects undermine the currency by making assets denominated in that currency less attractive to global finance. Market perceptions of a lack of credibility of either the policies pursued and/or the institution pursuing them may seriously disrupt the implementation of monetary policy.

There exists universal agreement on the ECB's "communication gap" (OECD 2001). A truly remarkable amount of criticism has been leveled against the ECB on this count. Strangely, however, most commentators seem to view policy communication (failures) as inconsequential and hence largely irrelevant. It is misguided in this context to focus on interest rate volatilities (Lorenzen and Thygesen 2000, CEPS Report 2000), or narrowly conceive of communication as the central bank's ability (or lack thereof) to convey its intentions to money markets. Signaling the next move is too easy a task to fail upon other than deliberately. The ECB stresses that its policy is *not* to deliberately surprise the markets and the surprises it caused in money markets were rare compared to irritations it stirred in the markets more generally.

The core of the ECB's communication problem resides in its opaque reaction function. One issue is that the markets appear to have serious trouble understanding the rationale behind ECB interest rate decisions and are generally left in confusion about the presumably consistent way in which they were supposedly arrived at. Uncertainty of this kind reduces steering power over expectations and financial asset prices (and hence policy effectiveness by making market reactions to policy less predictable). Another issue is that the markets do not seem to appreciate the ECB's policy bias. They remained rather unpersuaded that price stability above all else would foster Euroland's medium-term growth prospects rather than the opposite.

Market perceptions that a central bank is solely determined to keep inflation below 2% but never worried about anything else might *not* inspire confidence at all. Bond yields might be kept in check; as low growth also constrains any sustainable course of future monetary policy.⁽¹⁸⁾ But low growth constrains much else besides. And diminished growth prospects can have an immediate and general market impact, namely, by curtailing prospective returns on assets denominated in euro. In a world of global finance, bad news of this general kind undermines the euro's relative attractiveness in currency markets (Corsetti & Pesenti 1999).

The time-inconsistency hypothesis offers a coherent explanation of the euro's performance since its inauguration and the inverse interest rate/exchange rate nexus surrounding the euro "puzzle." The time-inconsistency problem behind the euro's plunge originated in the ECB's failure to persuade the markets of the growth compatibility of its price-stability-above-all-else inspired policy approach (paired with the low-growth legacies of that very kind of approach inherited from the Bundesbank). Figure 1 shows the various phases of the euro's plunge.

Phase 1 . Between January and June 1999, the euro reversed the unwarranted appreciation of the DM/ECU since mid-1998. The first leg of decline was largely owing to the deflationary policies of the 1990s and the Bundesbank's final blunder on the eve of EMU. By severely wrong-footing many investors the market started in a technically difficult position. Market psychology immediately turned against the euro. The ECB's part was to cause confusion and frustration about the role of the exchange rate in its policies.

Phase 2 . Between July and October 1999 the euro stabilized, or even strengthened, despite interest rate hikes by the U.S. Fed--as Euroland's growth prospects brightened up.

Phase 3 . Growth prospects were nipped in the bud in late October by the prospect of an aggressive rate hike from an unnecessarily hawkish central bank, and the euro resumed its decline. After a brief pause toward the end of 1999, the series of hikes of spring 2000 propelled the euro's decline, the second leg of which lasted until May 2000. It was arrested by the U.S. Fed's 50 basis point hike of May 16 followed by the release of weaker U.S. data.

Phases 4 and 5 . A brief period of relative strength lasted until June 2000. The ECB's large hike of 8 June 2000 crippled the euro's momentum. The hikes of August 31 and October 5 proved even more counterproductive, taking the euro to its all-time trough of \$0.82 during the third leg of its decline between July and October 2000.

Phase 6 . The euro's bounced back sharply up to \$0.96 between November 2000 and January 2001 as the collapse of U.S. growth became a certainty.

Phase 7 . Between February and mid 2001 the euro fell back to close its historical trough. For a few months short-term growth prospects seemed gloomier for the U.S. than Euroland. But the markets were more medium-term oriented as the U.S. Fed cut interest rates aggressively, while the ECB refused to cut at all. In late April, early May 2001 the markets briefly found some comfort in the ECB's concern about inflation risks. This ended abruptly with the ECB's surprise cut of May 10. By mid-2001, the euro dangled around \$0.85, with more gloom on either, paired with opposing approaches to monetary policy on each, side of the Atlantic being discounted. Since the euro's inception consumer price inflation has quadrupled, soaring from 0.8% to 3.4% by May 2001; a steeper rise than in the U.S. where demand pressures were more of an issue.

An alternative view stresses "structural problems" along age-old but always popular "eurosclerosis" lines. It comes in infinite and mind-boggling variations and "explains" almost anything. For instance, the CEPS (2001) Report profoundly concludes that as Euroland's potential growth rate remains between 2 and 2.5% "it is not surprising that the euro remains weak and inflation relatively high, even at modest growth rates."

Almost anything. But why should a monetary tightening relative to the U.S. undermine the euro at a time when employment growth in Europe is so strong as to see hurried downward revisions in structural unemployment (OECD 2000b)? Why should a failure to ease monetary policy undermine the currency at a time when relative growth prospects are clearly shifting in the euro's favor? The OECD (2001, p. 108) admits, "invoking [eurosclerosis] to rationalise short-run exchange rate developments is odd." The structural story does *not* explain the euro puzzle.

Sizable (net) portfolio and direct investments flows have occurred from Europe to the U.S. over recent years (BIS 2000, 2001). Proof of some structural story for sure. From a liquidity preference perspective (Bibow 1998, 2000b), these flows might be indicative of the underlying phenomenon: a relative repricing of assets. This also affects the attractiveness of adding to stocks in either location, and associated currency dealings would tend to weaken the euro (IMF 2001). But total wealth and currency (spot and derivative) market positions are relevant. Moreover, asset prices can shift sharply with barely any flows visible--and vice versa. Orthodox postulates that money cannot lastingly affect relative asset prices in line with relative (growth and) profitability prospects. Perhaps monetary policies afflicted by an anti-growth bias can.⁽¹⁹⁾

THE ECONOMIC CONSEQUENCES FOR EUROLAND: TRAPPED IN A VICIOUS CIRCLE?

It is all the more important to appreciate that Euroland has enjoyed a brief span of prosperity. Employment growth has outpaced that of the U.S. over recent years and unemployment fallen by three percentage points. These are truly remarkable achievements given Euroland's all-pervasive structural problems. They cannot be explained along structural lines. For all too long Europe's independent central bankers have conveniently asserted that unemployment would be largely structural. Their credibility has been thoroughly discredited and the structural myth debunked.

Not surprisingly, the ECB has shown itself rather determined to reign in the aggregate demand expansion driving employment growth by its aggressive attempts at monetary tightening; attempts that have failed rather dismally though. As a blessing in disguise, the euro's plunge magnified the external boost in the *short run*. Euroland enjoyed a short span of easy monetary conditions not because interest rates were "historically low"⁽²⁰⁾ but because the markets opposed, and enforced a weak currency upon, the ECB: "easy money through the back door."

The ECB's attempts at tightening were highly counterproductive all round. Just as the external stimuli were petering out, the ECB's aggressive hikes (which had continued well beyond the peak of demand growth anyway) developed their full brunt on domestic demand. It is always easy to blame some external shock. The collapse of *domestic* demand tells the true story though. Once again, an incipient economic upswing has been aborted by monetary policy, by central bankers predisposed to deliberately risk recession for the sake of their anti-inflation credentials. Seen in this light, it is easy to see why the ECB rejects any responsibility for anything else but ...

At least, this "policy success" will prevent further waste of resources directed at downward revisions of estimates of structural unemployment. And it will also relieve those who see independent central bankers primarily as a means to keeping unemployment up, so as to put pressure on democratically elected politicians to dismantle the welfare state made unaffordable by high "structural" unemployment.⁽²¹⁾ Society at large, however, has paid a truly dear price for the free lunch of hosting the world's most independent central bankers.

Crucially, the rise in inflation to well above the ECB's declared tolerance level was neither due to excess demand nor excessive wage increases. Surging energy prices and other temporary special factors are partly to blame. But these were magnified by the euro's plunge--owing to the lack of stability orientation in the ECB's monetary policies.

After first pushing inflation up the ECB then refused to ease in a timely fashion. The only relevant risk is a further demotion of its anti-inflation credentials—a plight for which the ECB has only itself to blame. The ECB is sitting in a trap, it seems, and Euroland stuck in a vicious circle. Its mandate offers no excuse for focusing on inflation in the counterproductively obsessive way seen since 1999. Europe's monetary representatives enjoy all the discretion it takes to pursue genuinely stability-oriented monetary policies. The point is: A more balanced and proactive attitude toward growth, and medium-term orientation as regards inflation, would have both kept inflation lower in the short run and improved growth in the longer run.

The markets are surely not to be blamed either, as De Grauwe (2000) wrongly suggests. A growth-oriented market climate does not necessarily reduce the effectiveness of monetary policy. The ECB has simply failed to appreciate its environment. Its anti-growth bias provoked market opposition all round—with some fortunate and some less fortunate economic consequences.

CONCLUSIONS

It is odd to view the euro's mal-performance and quadrupling of Euroland's inflation as unrelated to the Maastricht regime and the ECB's stability-oriented monetary policies, marketed --before the fact--as the guarantors of price stability and a strong euro. The Maastricht regime is flawed at its very heart by granting the ECB unbounded discretion. The ECB too is indeed at fault, namely, by applying its unbounded discretion rather incompetently.

The analysis identified an anti-growth attitude in the ECB's strategy that stands in the way of symmetry in policy conduct. The stability-oriented assessment of the ECB's interest rate policies and their underlying rationale diagnosed a clear anti-growth bias. Clearly, a central bank that makes systematic mistakes, pursues biased (rather than stability-oriented) monetary policies, sets interest rates in a backward-looking and short-term oriented manner, and manages to confuse the markets all the time--such a central bank is not doing a good job at all.

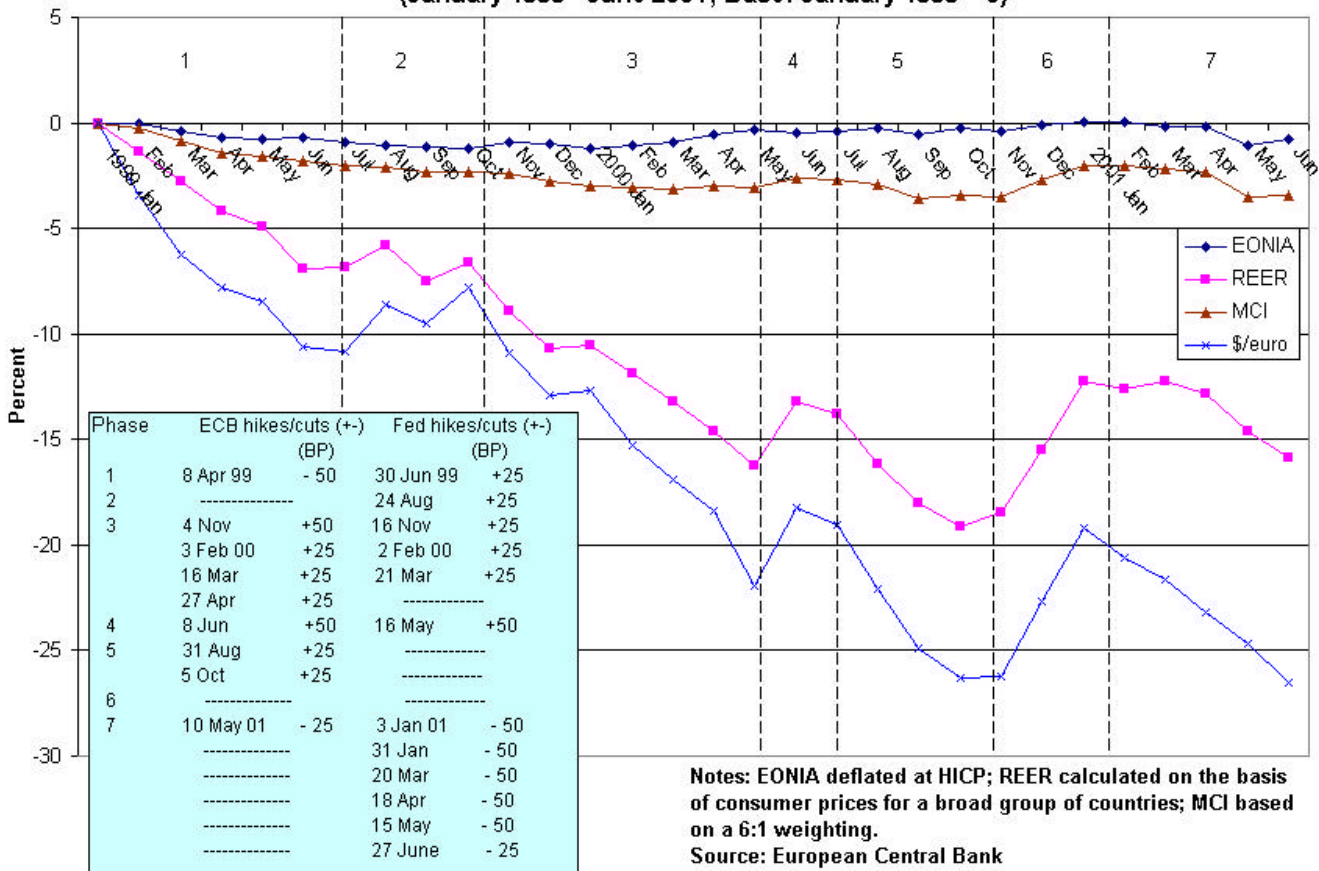
The ECB has more than just confused the markets though. It has provoked market opposition all round. As a result, the ECB has lost control over monetary stance. The time-inconsistency hypothesis of the euro's plunge provides a coherent explanation of the euro's mal-performance and its relationship to the ECB's ill-guided policies, plagued by an anti-growth bias that inspired aggressive tightening and reluctance to ease. According to the time inconsistency hypothesis, this asymmetry in conduct undermined the currency by demolishing Euroland's growth prospects. It also pushed up inflation--the ECB's declared *sole* objective and responsibility. Faced with above-target inflation and collapsing domestic demand, both due to its own making, the ECB found itself *trapped by its own idiosyncratic rhetoric*.

Due to the ECB's lack a genuine stability orientation, longer-term prospects are rather grim. A central bank enjoying unbounded discretion is in a position to make the structural story *seem to be* true. As to the short-term prospects, the "hard" (notes & coins) euro looks doomed to be launched in the spring of 2002 into a mess similar to its weak (electronic) version's habitat in the spring of 1999--a monetary policy blunder *par excellence*.

The U.S. is unlikely to pull Euroland out of the doldrums this time though, a crumbling of the strong dollar convention would hardly bring any relief either, and the fact that finance ministers stand afoot to enforce the pro-cyclical virtues of the SGP is barely reassuring at all.

Instead, Euroland's democratically-elected representatives should better take one, but only one, advice of their independent monetary counterparts very serious indeed, namely, to get rid of those burdensome structural problems. They should urgently focus on Europe's key structural problem, the one residing in Frankfurt am Main, Euroland.

Figure 1. The Dollar-Euro Exchange Rate And Monetary Conditions In Euroland (January 1999 - June 2001; Base: January 1999 = 0)



REFERENCES

Akerlof, G., W. Dickens, and G. Perry. 1996. "The Macroeconomics of Low Inflation." *Brookings Papers on Economic Activity* 1: 1-59.

- Allsopp, C., and D. Vines. 1998. "EMU and European Macro-Economic Policy." *Oxford Review of Economic Policy* 14: 3: 1-23.
- Arestis, P., K. McCauley, and M. C. Sawyer. 2001a. "An Alternative Stability Pact for the European Union." *Cambridge Journal of Economics* 25: 1: 113-130.
- Arestis, P., and M. C. Sawyer. 2001b. "Will The Euro Bring Economic Crisis to Europe." Working Paper no. 322, Levy Economics Institute.
- Artis, M. J., and M. Buti. 2000. "Close-To-Balance or in Surplus: A Policy-Maker's Guide to The Implementation of the SGP." *Journal of Common Market Studies* 38: 4: 563-592.
- Ball, L. 1997. "Disinflation And The NAIRU." In C. D. Romer and D. H. Romer, eds. *Reducing Inflation*. Chicago: University of Chicago Press.
- Ball, L. 1999. "Aggregate Demand and Long-Run Unemployment." *Brookings Papers on Economic Activity* 2: 189-251.
- Barber, T. 2000. "A Question of Leadership." *Financial Times*, October 18.
- Bibow, J. 1998. "On Keynesian Theories of Liquidity Preference." *Manchester School* 66: 2: 238-273.
- Bibow, J. 2000a. "Keynes on Central Banking and the Structure of Monetary Policy." *History of Political Economy* (forthcoming).
- Bibow, J. 2000b. "On Exogenous Money and Bank Behaviour: The Pandora's Box Kept Shut in Keynes' Theory of Liquidity Preference?" *European Journal of the History of Economic Thought* 7: 4: 532-68.
- Bibow, J. 2001a. "Easy Money Through the Back Door: The Markets Versus the ECB." Working Paper no. 323, Levy Economics Institute
- Bibow, J. 2001b. "The Markets Versus the ECB, And The Euro's Plunge." *Eastern Economic Journal* 27: 4.
- Bibow, J. 2001c. "On The 'Burden' of German Unification: The Economic Consequences of Messrs. Waigel and Tietmeyer." Working Paper no. 328, Levy Economics Institute.
- Bibow, J. 2001d. "Making EMU Work: Some Lessons From the 1990s." *International Review of Applied Economics* 15: 3: 233-259.
- Bibow, J. 2001e. "Reflections On The Current Fashion For Central Bank Independence." Working Paper, no. 334, Levy Economics Institute.
- Bini Smaghi, L., and C. Casini. 2000. "Monetary And Fiscal Policy Co-Operation: Institutions and Procedures in EMU." *Journal of Common Market Studies* 38: 3: 375-91.
- Bureau for International Settlements. 2000. *70th Annual Report*, Basle.
- Bureau for International Settlements. 2001. *71st Annual Report*, Basle.
- Buiter, W. H. 1999. "Alice In Euroland." *Journal of Common Market Studies* 37: 2: 181-209.
- CEPS. 2000. *Quo Vadis Euro? The Cost of Muddling Through*. Second Report of the CEPS Macroeconomics Policy Group, Brussels.
- CEPS. 2001. *Testing the Speed Limit for Europe*. Third Report of the CEPS Macroeconomics Policy Group, Brussels.
- Corsetti, G., and P. Pesenti. 1999. "Stability, Asymmetry, And Discontinuity: The Launch of European Monetary Union." *Brookings Papers on Economic Activity* 2: 295-372.
- Deutsche Bundesbank. 1997. "Strategy of Monetary Targeting in 1997-8." *Monthly Bulletin*, January: 17- 25.
- De Grauwe, P. 2000. "Exchange Rates in Search of Fundamentals: The Case of the Euro-Dollar Rate." Discussion Paper No. 2575, CEPR.
- Duisenberg, W. 1999. "Monetary Policy in the Euro Area." Speech, January 25, 1999.
- The Economist*. 1999. "Give Growth A Chance." October 30, 1999.
- Eichengreen, B. 2000. "The Euro One Year On." *Journal of Policy Modeling* 22: 3: 355-68.
- European Central Bank. 1999-2001. *Monthly Bulletin*; *Press Conferences*; *Monetary Dialogues*.
- Eucken, W. 1952. "Grundzüge der Wirtschaftspolitik." Tübingen, Zürich.
- The Financial Times*. 2001. "Duisenberg Brushes Off Anxiety Over Falling Euro." July 10, 2001.
- Fischer, S. 1990. "Rules Versus Discretion." In B. M. Friedman and F. H. Hahn, eds. *Handbook of Monetary Economics* 2. Amsterdam, New York: North-Holland.
- Friedman, M. 1960. *A Program for Monetary Stability*. Bronx: Fordam University Press.
- Friedman, M. 1968. "The Role of Monetary Policy." *American Economic Review* 58: 1: 1-17.
- International Monetary Fund. 2001. *World Economic Outlook*. Washington D.C.: IMF.
- Fuhrer, J. C., and B. F. Madigan. 1997 "Monetary Policy When Interest Rates Are Bounded at Zero." *Review of Economics and Statistics* 79: 573-585.
- Hesse, H., and A. Naujokat. 1998. "Zur Rolle der Geldpolitik in einem Bündnis für Arbeit." Repr. in *Deutsche Bundesbank - Auszüge aus Presseartikeln* 70, November 27.
- Hoffmann, J. 1998. "Problems of Inflation Measurement in Germany." *Deutsche Bundesbank*, Discussion Paper No. 1/98.
- Issing, O. 1997. "Monetary Targeting in Germany: The Stability of Monetary Policy and of the Monetary System." *Journal of Monetary Economics* 39: 67-79.
- Issing, O. 1998. "The European Central Bank on the Eve of EMU." Speech, November 26, 1998.
- Issing, O. 2000a. "The ECB's Monetary Policy." *Journal of Policy Modeling* 22: 3: 325-43.
- Issing, O. 2000b. "Why Price Stability?" In Alicia García Herrero *et al.*, eds. *Why Price Stability?* First ECB Central Banking Conference, Frankfurt, Germany.
- Kenen, P. B. 1995. *Economic and Monetary Union in Europe: Moving beyond Maastricht*. Cambridge: Cambridge University Press.
- Lorenzen, H., and N. Thygesen. 2000. "The Relation Between the Euro and the Dollar." Copenhagen.
- Marani, U. 1999. "The Monetary Policy of the European Central Bank and the Euro-U.S. Dollar Exchange Rate." International Economics Research Paper No. 148, University of Leuven.
- OECD. 1999. *OECD Economic Surveys: Germany*. Paris.
- OECD. 2000a. *EMU: One Year On*. Paris.
- OECD. 2000b. "Revised OECD Measures of Structural Unemployment." In *Economic Outlook* 68.
- OECD. 2001. *Economic Survey on the Euro Area, 2000-2001*. Paris.
- Summers, L. 1991. "How Should Long-Term Monetary Policy Be Determined?" *Journal of Money, Credit and Banking* 23: 625-631.

Svensson, L. E. O. 2000. "The First Year of the Eurosystem: Inflation Targeting or Not?" *American Economic Review: Papers and Proceedings* 90: 95-99.

Tagesspiegel. 1999. "Wir Laufen Nicht Mehr in die Falsche Richtung." Interview with Otmar Issing, July 26, 1999. Repr. in Deutsche Bundesbank, *Auszüge aus Presseartikeln* : 50: 2-4.

Taylor, J. B. 1993. "Discretion Versus Policy Rules in Practice." *Carnegie-Rochester Conference Series on Public Policy* 39 (December): 195-214.

Tietmeyer, H. 1991. "The Role of an Independent Central Bank in Europe." In P. Downes and R. Vaez-Zadeh, eds. *The Evolving Role of Central Banks* . Washington, D.C.: International Monetary Fund.

Viñals, J. 2000. "Monetary Policy Issues in a Low Inflation Environment." In Alicia García Herrero *et al.*, eds. *Why Price Stability?* First ECB Central Banking Conference, Frankfurt, Germany.

Wyplosz, C. 2000. "Do We Know How Low Should Inflation Be?" In Alicia García Herrero *et al.*, eds. *Why Price Stability?* First ECB Central Banking Conference, Frankfurt, Germany.

1. On other occasions, however, Mr. Duisenberg would assert that there exist no important differences in conduct compared to the U.S. Fed, an alleged similarity that seems to have so far escaped anyone else's notice. The point at issue here is a recurrent theme in the quarterly Monetary Dialogue between Mr. Duisenberg and the "Committee on Economic and Monetary Affairs" of the European Parliament (and ECB press conferences [PC] too). Questioned on the ECB's sole emphasis on price stability by the Committee's Chairperson, Mrs. Randzio-Plath, at the Hearing of 5 March 2001, Mr. Duisenberg elaborated as follows: "We pursue our secondary objective every day, Madam Chairman. Again, we do believe that maintaining price stability, and our efforts to achieve that, is the best contribution that monetary policy can make to a period of sustained economic growth. No monetary policy action to specifically influence growth could come without paying the price that we would not reach our primary objective and, therefore, you cannot and you should not expect us to do more than what we are doing, namely, maintain price stability, thereby creating the best possible conditions for economic growth."

2. Bibow (2001e) contests the popular New Classical time-inconsistency case for central bank independence which is based on dubious theoretical presuppositions and empirical evidence.

3. The ECB denied charges of asymmetry by arguing that the word "increase" would imply that deflation was considered undesirable but that a positive measurement bias of unknown size would prevent specification of a zero lower bound (implying that an *implicit* above-zero lower bound exists in practice). These reasons do not justify any failure to specify the lower bound at least *as precisely as the upper bound* . Cf. Svensson 2000.

4. Since December 2000 half-yearly Eurosystem *staff projections* are published from which the decision-making bodies are keen to distance themselves. The projected bands for inflation and growth are wide enough as to give little insight at all, so that many observers concluded that the procedure is merely a farce. If the ECB were unable to produce proper inflation forecasts over the policy-relevant horizon, this implies that it conducts monetary policy randomly. If, instead, the ECB simply prefers to keep the forecasts secret upon which nonrandom policies must inevitably be based, this would be clear evidence of avoiding accountability and constraints on its discretion.

5. The main risks associated with very low rates of inflation are, first, that this may leave too little room for relative wage adjustments in the presence of downward nominal wage rigidities and push up the NAIRU as a consequence (cf. Akerlof, Dickens and Perry 1996, Wyplosz 2000) and, second, that low inflation rates raise the chances of monetary policy becoming ineffective given the zero lower bound of nominal interest rates (cf. Summers 1991, Fuhrer and Madigan 1997). As to the second (liquidity trap) risk, a trade-off arises which encouraged Viñals (2000) recommendation that policymakers pursuing a rather ambitious price target would have to respond all the more promptly and aggressively when faced with a deflationary shock. Unfortunately, the actual asymmetry in the ECB's conduct points in exactly the opposite direction of the recommended one (see below). It is of some interest here that the Bank of Japan's performance during the 1990s probably came closest to maintaining inflation "below 2%," the ECB's declared primary and sole aspiration. Questioned on Japan's liquidity trap experience at the Monetary Dialogue on 19 April 1999, Mr. Duisenberg seemed to suggest that a liquidity trap might be avoided by not lowering interest rates in the first place. I must leave it to the reader to try to discover any economic sense in this argument. In response to concerns about the possibility of hysteresis raised by Laurence Ball, Mr. Issing (2000b) fallaciously suggested that this should actually strengthen the case for focusing monetary policy strictly on price stability as this would help avoiding 'conflicting situations' when disinflation becomes necessary. Mr. Issing failed to mention though that a "conflicting situation" arises as soon as monetary policy engineers a slowdown in view of *envisioned* inflation risks. Occurrences over 2000-01 are a case in point. If central bankers thereafter decline any responsibility for the unemployment they have deliberately caused (following Bundesbank traditions), unemployment is doomed to become "structural" (cf. Ball 1997, 1999).

6. A number of intrinsic problems are associated with the chosen monetary aggregate M3 which includes bank deposits as well as marketable instruments such as money market funds shares/units, money market paper and debt securities issued with an original maturity of up to two years, and repurchase agreements. Identifying the holders of marketable instruments who actually reside within the euro area raises one serious problem. Another problem stems from the fact that the monetary instruments included in M3 are to an increasing extent interest bearing, so that the intended depressing effects on monetary growth from interest-rate tightening may be largely restricted to the shrinking non-interest bearing share in M3. At least, the ECB has given up on the Bundesbank's pretense of actually controlling M3 growth, using the notion of a "reference value" rather than "intermediate target" (with only the latter presupposing short-term controllability). But this does not make it clear why the monetary reference value should be of any strategic use in the first place.

7. Vice President Noyer's elaborations on this issue at the press conference on 11 April 2001 illustrate the ECB's scope for discretion in these matters rather well: "We are coming from a situation where M3 developments were sizeably above the reference value and we have not shown any sign of panic on seeing the development of this kind of overshoot. ... as regards the reference value, I think we have explained clearly what was behind that. We have always emphasised that if actual growth was developing at a higher rate than what we call the 'trend potential' growth, then we could of course accept the development of M3 being higher than the reference value. And that indeed is something that has happened and, as I said, did not create any panic at the European Central Bank. Of course, we said if there can be growth 1% higher than the trend potential growth, and that leads to 1% more in M3 development than the reference value, then that is fine, it is no problem. If that creates price pressures then we have to take them into account and prevent them from developing into a threat, in the medium term, to price stability. This is also what we have done" (Noyer, ECB 2001, PC April 11).

8. In longer-term perspective the ECB may achieve its aspired price target by either accommodating temporary deviations in either direction, or by fighting any deviation, even if only temporary in nature, but symmetrically too. Current developments indicate that the ECB is unwilling to accommodate a temporary upward price shock and wait for future price shocks in the opposite direction. The ECB appears to seek more immediate compensation. In this case, bygones will not be bygones, a price will be paid in terms of growth--unless the ECB responds to favorable price shocks by monetary easing. The required symmetry in conduct is made less likely by the lack of a lower bound to the ECB's price target.

9. Issing (1997) boasts that the Bundesbank implemented its monetary targeting strategy indirectly by setting interest rates. Nevertheless, the Bundesbank managed to hide its *maximum* discretion behind fake monetarism.

10. According to Mr. Issing's (2000a, p. 335) recollections "there was a *risk* that--taking into account a potential measurement bias--price developments might hit the 'danger zone';" implying an implicit measurement bias of less than 0.8%. It is of some interest here that, in 1998, a Bundesbank study (see Hoffmann 1998) found that German CPI statistics were biased upwards by *only* 0.75%. This was a welcome finding in view of the reduction of the Bundesbank's "medium-term price assumption" from 2% to 1.5-2.0% for 1997-98 (after forcing actual inflation down to just over 1% in 1996; see Bundesbank 1997). The welcome finding thus served to attenuate pressures for easier money in view of high unemployment and wage moderation when inflation subsequently fell below 1%. Until the very end of its reign the Bundesbank denied any role for monetary policy in reducing Germany's predominantly "structural" unemployment (see e.g. Hesse and Naujokat 1998)--as enhancing its own inflation-fighting prestige seemed a more valuable goal. At first, orthodoxy criticized the (new) German government for implementing labor market reforms that were leading in the wrong kind (OECD 1999), but was then forced to deliver quick downward revisions in "structural" unemployment measures by actual developments (OECD 2000b). Then and now, Europe's independent central bankers have notoriously asserted that Europe's unemployment would be predominantly of a "structural" kind. A margin of error of three percentage points in the unemployment rate (which fell from 11.5% to 8.4% since 1997) is too trivial (and inconvenient) a matter to cause any reassessment of beliefs, it seems. Most amazingly, the mainstream of the economics profession fails to speak up against this kind of conduct (as their own beliefs and prestige are at stake too?).

11. "We wanted the move to be as convincing as possible and we were afraid that a smaller move would only have led to further expectations for the future, that this would only be a first step in a series. We have by all means possible tried to avoid that impression. ... and now you be sure: this is it" (Duisenberg, ECB 1999, PC April 8).

12. As observed by Mr. Issing in *Der Tagesspiegel* of 26 July 1999, denying that the April 1999 cut was a mistake. Marani (1999) observed that the ECB's conduct was generally damaging to the euro's external value, but that the April cut's effects contradicted the conventional wisdom on the interest rate/exchange rate nexus.

13. It is noteworthy that between the spring of 1996 and the spring of 1999, real short-term interest rates fell by more than 300 basis points in Spain but rose by some 50 basis points in Germany (cf. Bibow 2001a).

14. The December Bulletin's editorial reads: "the reaction to the rise in ECB interest rates was favourable. Long-term bond yields in the euro area fell in early November, as market participants revised their expectations for future inflation downwards" (p. 5; cf. also ECB 2000, MB May, p. 47).

15. The first hike of February 3 had the unfortunate stigma of looking like a panicky response to the U.S. Fed's hike of the day before, an incident which lastingly damaged the ECB's reputation in the markets and encouraged the ECB's rather desperate urge to prove its independence on subsequent occasions.

16. The ECB later commented on the rise in inflation to 2.8% in September (up from August's 2.3%) as follows: "This increase, which was already expected at the time of the decision to increase ECB interest rates on 5 October 2000, mainly resulted from energy price developments. ... Owing to developments in energy prices and the past decline in the euro, consumer price inflation may remain above 2% for longer than was expected just a few months ago. In this respect, in order to support the maintenance of price stability over the medium term, it is important that economic agents accurately perceive the nature of current price developments. In particular, it needs to be recognised that current upward pressures can be overcome most smoothly if economic agents see them for what they are, namely one-off or temporary price increases resulting from external factors" (ECB 2000, MB November, p. 6). But why, then, were interest rate hikes warranted?

17. It is often argued (see BIS (2000, p. 71) on the 1998-99 case) that external pressures prevent more timely moves as they threaten the central bank's independence. The point is, however, that if the ECB had, *either* behaved like any rule-oriented and forward-looking central bank and cut its rates, *or* communicated persuasively to the outside world that its idiosyncratic policies were appropriate, then external pressures would not have arisen in the first place. The failure to do either of those things provoked these pressures. But resisting them, with whatever economic consequences, might enhance central bankers' prestige nevertheless (as Bundesbank history shows).

18. It is misguided to associate the ECB's credibility with low bond yields. Mr. Issing is firmly attached to the belief that "if the central bank is credible, long-term rates will not move far away from levels consistent with maintained prospects of price stability," and never seems to get tired of making self-congratulatory assertions to the truly remarkable effect that the "high degree of credibility that the ECB already appears to command in financial markets is in itself a remarkable achievement ... The current level of credibility is mainly a result of the fact that financial markets, and the public at large, have understood the precommitment expressed through the announcement of the stability-oriented strategy, and they believe the strategy to be appropriate to fulfill the mandate of the Treaty" (Issing, 2000a, 338-9). Even right after the euro's launch, the ECB asserted that the downward shift in the yield curve would "indicate that the single monetary policy has already achieved a high degree of credibility in the eyes of the financial markets" (ECB 1999, MB January, p. 25). If anything, the ECB's attitude is primarily remarkable for exhibiting an extraordinary lack of concern for the dismal growth prospects prevailing at the time.

19. The BIS's (2001, p. 89) Annual Report observes that: "On balance, market participants may have considered the Eurosystem's monetary policy stance to be excessively tight inasmuch as it may have negatively influence the outlook for euro area growth." The OECD (2001, p. 106) refers to a "countervailing impact of interest rates on exchange rates via growth expectations" and an "unpleasant monetary policy dilemma" (p. 118).

20. To infer from a 'low' level of interest that monetary policy is necessarily expansionary represents the age-old Wicksellian fallacy, as succinctly expressed by Milton Friedman (1968, p. 7): "low interest rates are a sign that monetary policy *has been tight*."

21. Perhaps it is legitimate in democracies that special interest groups should try to capture the central bank; even if one hopes, in the public interest, that they would be less successful. Certainly those who are less sympathetic to Ayatollah-style forms of government will be quite dismayed by the widespread acceptance this perceived channel of influence appears to enjoy (cf. OECD 2001, p. 96).