The ECB and the Conduct of Monetary Policy: Goodhart's Law and Lessons from the Eurozone

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1. The Monetary Pillar

In advance of the arrival of the single European currency, the euro, at the beginning of 1999, there was a burst of activity in estimating pseudo-euro demand-for-money functions. These used artificially constructed data to aggregate from the nation-state to euro-wide levels, (see the survey in Browne, Fagan and Henry, 1997). As Arnold (1998, p. 1) reported,

> "This line of research started with the papers by Bekx and Tullio (1989) and Kremers and Lane (1990). Other notable papers in this line of research are Artis, Bladen-Hovell and Zhang (1992), Monticelli and Strauss-Kahn (1993), Cassard, Lane and Masson (1994), Artis (1996), Monticelli (1996), Tullio, De Souza and Giucca (1996), Wesche (1997), La Cour and MacDonald (1997) and Spencer (1997). From these studies a remarkable consensus emerged on the degree of stability of the European demand for money. Taking the residual standard error as a rough-and-ready indicator of stability, a typical European average money demand function beats German money demand, generally perceived to be one of the world's most stable, by at least 30%. Furthermore, standard econometric stability tests fail to detect any signs of structural instability in European money demand functions.
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> On the basis of this apparent stability, these studies [were] interpreted as providing support for the beneficial effects of monetary union. Monetary integration would stabilize the rather erratic monetary aggregates in Europe. This would make the life of European policy makers and monetary authorities a lot easier. Moreover, because of this stability, so the line of reasoning goes in Frankfurt, monetary targeting would be feasible."

This research continued. As Issing, et al, (2001, pp 86-89), reported, p. 87,

> "Most of the evidence produced in recent years – see for example, Fagan and Henry (1998) or the survey in Browne, Fagan and Henry (1997) – is broadly supportive of the view that a stable long run relationship between broad monetary aggregates in Europe and the traditional determinants of money demand exists. More recently, the issue has been reconsidered systemically in the comprehensive studies by Coenen and Vega (1999) and Brand and Cassola (2000), based on state-of-the-art econometric techniques. Both papers construct a multivariate model for the euro area including real M3 holdings, real GDP, short and long term interest rates, and inflation.
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> Over the 1980-98 period, CV find that the hypothesis of long run homogeneity of money and prices can be accepted at standard confidence levels."

Again, (ibid, pp 88 and 89), they note that,

> "Further empirical work on the role of money in the euro area has recently become available. Gerlach and Svensson (2000) propose a direct comparison between money and the output gap in terms of their explanatory power over inflation…..
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> Following this approach and also drawing on CV's results, Trecroci and Vega (2000) estimate an equation for inflation including the real money gap, the output gap and deviations of the real interest rate from equilibrium. Using a variety of measures of the output gap and of the monetary authorities' inflation objective, they confirm a substantive explanatory power of the real money gap over euro area inflation from 1980 to 1998. In addition, the output gap and deviations of the real interest rate from equilibrium also provide useful information on inflationary developments.
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> In out-of-sample forecasts, the aforementioned three variables also prove useful to predict future inflation up to six quarters ahead. Interestingly, the relevance of the real money gap is robust to changes of measurement of the monetary authority's inflation objective. On the contrary, the importance of the output gap hinges on its correct measurement…..
>
> Gerlach and Svensson's and Trecroci and Vega's results show a very important role for the real money gap in the euro area."

This research provided considerable support for the adoption of the monetary pillar of the ECB. There were a few voices counselling caution, (e.g. Giovannini 1991). In particular, Ivo Arnold himself, in a series of papers, (1994, 1997, 1998, the last jointly with de Vries), argued that the methodology of trying to deduce subsequent aggregate behaviour from an artificial aggregation of prior component nation states was

mistaken. The aggregation would have the effect of smoothing out idiosyncratic shocks. But once the euro-system was working as a single whole, the shocks which had previous independently affected the separate states would become concentrated at the centre. Thus an (artificial) combination of separate entities would appear to have smoother relationships than would the subsequent unified system in practice; and Arnold (1997) provided contemporary data from the USA, regions vs the whole country, to support that argument.

Be that as it may, M3 growth in the eurozone began to misbehave, relative to the reference value of a growth of 4.5%,[1] during 2001, and, apart from a brief spell in 2004 when its growth fell back to the reference value, has continued to grow much faster than consistent with the current growth of nominal incomes thereafter.

[Figure 1]

There are nevertheless several important differences between the first episode of excessively (relative to reference value) rapid growth of M3, 2001-3, and the second

[1] As Issing, et al, (2001, pp 85/6) report:-

> "On 1 December 1998, the Governing Council issued the following announcements on the calculation of the reference value…..
>
> 1. The underlying price assumption is consistent with the price stability definition (that is, a year-on-year increase in the Harmonised Index of Consumer Prices for the euro area of less than 2 per cent);
> 2. real GDP is assumed to grow at a trend rate between 2 and 2.5 per cent in the medium term;
> 3. the medium term velocity of circulation of M3 should be between 0.5 and 1 per cent of an annual basis;
> 4. taking all this into account, the reference value for M3 is set at 4.5 per cent. This value will be reviewed at the end of 1999."

This calculation implicitly assumes that the (real) income elasticity of demand is unity. Manfred Neumann estimates it rather higher, at around 1.5, and thus has an EMU Monitor's reference band of growth of M3 between 4 and 6%, (EMU Monitor Outlook, 25 November 2005, pp 2 and 3). But, as shown in Chart 2, below, this makes almost no difference to the interpretation.

more recent period of faster growth, end 2004-2005. The first period coincided with a slow-down in world growth, following the Nasdaq/Tech bubble burst, in which both eurozone, and US, growth were temporarily brought down much lower than average.

[Figure 2]

Consumer price inflation, though remaining generally just above the 2% level, was declining slowly back towards it.

[Figure 3]

Moreover, there were reasons that could be advanced to explain why agents would want to hold unusually large quantities of nominally safe, monetary assets during these years (2001-3). The bursting of the tech stock-market bubble ushered in a period of unusual financial market volatility and uncertainty. Greiber and Lemke (2005) show that adding an estimate of such uncertainty[2] to the basic demand-for-money relationship could re-establish a cointegration relationship in the eurozone between the real money stock and real incomes. This latter argument, that financial uncertainty can raise the demand for money, has a respectable pedigree.[3] It has been used, for example by Ericsson and Hendry (1991), to explain previous periods of, otherwise unexplained, surges in money holdings. Greiber and Lemke concluded (p. 33) that "The main implication of our approach for the current situation is that when macroeconomic uncertainty returns to average levels, monetary growth should do so

[2] Measured as the largest common factor of a number of indices of market volatility, using a principal components exercise.

[3] These years (2001-3) were also, of course, a period when interest rates were declining quite rapidly. But the relevant opportunity cost variable for a broad money (M3) aggregate is (thought to be), not the level of (short term interest rates), but the margin between short rates (available on time deposits) and on longer-dated assets, and nothing unusual was happening to this interest differential during this period.

as well." For a brief period, in early 2004, their prediction seemed well based, but there was soon to be a second monetary surge, not, (as far as can be observed) related to macro-economic uncertainty.

Finally, and for some most important, the rapid expansion of M3 in 2001-3 was not accompanied by a similar fast growth in bank lending to the private sector.

[see Figure 4]

Indeed the reverse was occurring; bank lending growth was declining fast during these years. There are several reasons why broad money growth which is not accompanied by similar rapid expansion in bank lending may seem less threatening, than when they are both expanding fast together. First, if there is no accompanying bank lending expansion, it would seem less likely that the broad monetary growth would be associated with asset bubbles, and/or over-confidence and high risk appetite by banks and private agents, (see Goodhart, Hofmann and Segoviano, 2006; Borio and Lowe, 2002). Second, there is the strand in the recent literature that associates the effect of bank expansion on the economy, over and above that directly associated with a concurrent reduction of real interest rates, with the relaxation of credit rationing constraints, especially on SMEs, (see Bernanke, Gertler and Gilchrist, 1998, 1999).

For all these various reasons, the ECB (rightly) continued to cut interest rates over this first period (2001-3), ignoring the excess of M3 growth over its reference value.

The monetary context is different in the second, latest and most recent episode of fast monetary growth in 2005. Financial markets have recovered, and seem relatively stable. The growth in M3 is being accompanied by equally rapid growth in bank

lending to the private sector. The world economy continues to grow reasonably rapidly (despite oil prices, Iraq, Katrina, etc.), and real output growth in the eurozone appears to be recovering, if only fitfully. It is more difficult, on this occasion, to dismiss M3 growth as a temporary anomaly. Assuming that the medium (and longer) term association between monetary growth and inflation persists, then this latest occasion of rapid monetary growth must, surely, be a serious warning (an amber light at least) of future inflationary pressures. Manfred Neumann assesses that the 'monetary overhang' was already above 10% by mid-2005, and has no doubt increased since.

[See Figure 5]

Yet if one strips out the effect of oil prices, (much of which is expected to be temporary) there is little evidence of currently worsening inflationary pressures in core price indices, unit labour costs, estimates of inflation expectations, or asset prices. [See Figure 3, again]. To be sure, in some eurozone countries (notably Spain), and in countries elsewhere (Denmark, USA), housing prices have been rising apace, but, quite commonly, the main worry that is expressed is rather what will maintain economic growth when this spur to confidence and wealth is withdrawn, (not that such price increases might be a harbinger of more general inflation).

This conjunction of easy money, low real interest rates, and rapid credit expansion on the one hand and lack of signs of cost inflation on the other hand is not peculiar to the eurozone, but has become quite general among developed OECD countries. The question is what to make of it? The position has been easier for the monetary authorities in the USA, where solid growth has allowed the authorities to return from

a stance of monetary ease to a more neutral level of interest rates without significant outside criticism.

The position is considerably more difficult and sensitive in the eurozone. Here the recovery in real output, from the trough in 2001-3, has been much more fitful and unsatisfactory. Unemployment remains high. With fiscal policy somewhat constrained by the Stability and Growth Pact, Ministers of Finance have been concerned, as is also the case in Japan, that any (premature) withdrawal of monetary ease could prevent a firm recovery taking place. Hence there has been considerable tension and a counter-flow of criticism and accusations between (some of) the national fiscal authorities and the federal Governing Council of the ECB. This has not been a pretty sight.

2. Hysteresis and Real Output Gaps

The continuing rattle of external criticism about the ECB's supposedly restrictive monetary policy has largely obscured the fact that, by most criteria, certainly their own, they have been extremely expansionary. Consider the following facts:-

(A) Both nominal, and real, interest rates have been at historic low levels.

[Figures 6 and 7]

(B) M3 growth, (and recently bank lending to the private sector), have been surging well above their reference values.

[see Figure 1, again]

(C) The inflation rate, as measured by the head-line CPI, has consistently averaged over 2% since 2000.

[see Figure 3, again]

(D) The short-term rate of interest has been held somewhat below that consistent with a standard Taylor-rate estimate. Figure 8 below is taken from the Goldman Sachs European Weekly Analyst (Dec. 1, 2005), and suggests that, on a Taylor rule basis, the ECB should be considering some four further 25 b.p. increases over the next year, or so. Yet, at the ECB's press conference on that same day, President Trichet denied that the 25 b.p. increase on that day was necessarily the first of a series of such increases.

[Figure 8]

The cumulative evidence is surely clear that the Governing Council of the ECB has gone as far as it possibly could to lean towards an expansionary policy, and yet at the same time remain consistent with its primary objective of maintaining price stability. Yet it has been confronted by a continuous drum-beat of criticism for excessive rigidity and conservatism. Why is this?

There are, perhaps, several reasons. One reason that has been advanced is that the ECB's self-imposed desire to achieve consensus may make them a few months' slower, than Central Banks which can absorb dissenting voices, in changing course in the face of incoming news. This is not the place to try to evaluate whether that criticism has merit, or not. But minor delays in adjustment, if such exist, can hardly be responsible for criticisms alleging persistent tightness, when the evidence just described would appear, on this view, to indicate systematic leniency.

Instead I shall point to two factors, one structural and one theoretical, that may have led to such external criticism (of misplaced conservatism). The first structural weakness relates to the way that the inflation target (objective) was chosen. This was done independently by the ECB, with no political input, with no apparent recognition of the need for symmetry, (to persuade concerned observers that the ECB would be as vigilant to prevent deflation as inflation), and with a seeming desire to limit accountability. Thus there is no precise definition of the target, no proposed bands within which inflation should be held, no mechanism for special reports should inflation go beyond such a range. Worst of all, the time scale over which the inflation target is to be achieved is said to be "medium-term", but the ECB has studiously avoided any definition of medium-term. I have made such criticisms before now, see Goodhart (2005), and I do not want to rehearse all of these at any length again.

The one aspect of this set of criticisms that I do want to expand is that the politicians have been excluded from any participation in target-setting. While this is directly in accord with the Maastricht Treaty's emphasis on the independence of the ECB from any political direction, it means by the same token that the eurozone politicians will have no feeling that they have any ownership of the ECB's target. That leaves them free to campaign against the actions which the ECB may feel the need to take to achieve the price stability target.

There is an analogy here with the IMF's attempts to get countries, which are being supported, to recognize ownership of the remedial package of measures. If the politicians of the countries involved claim that the policies have been forced upon

them, by an external and restrictive power, then, as in the case of Argentina, the results are likely to be mutual recrimination and inconsistent policies.

Ministers of Finance and Economics within the eurozone are restricted in their freedom of action in their individual countries. They can no longer use independent monetary and exchange rate policies; fiscal policies still remain constrained by the Stability and Growth Pact; competition issues come under the European Commission; labour market (structural) policies are difficult to implement, often unpopular, and frequently have adverse initial (demand-side) effects before any long-term (supply-side) benefits appear. When economic conditions become adverse, growth slows and unemployment rises, Ministers must feel relatively powerless to do much about that. Yet they are likely to take the public and political blame for such conditions. Under these circumstances the temptation to blame the "restrictive" policies of an external authority, i.e. the ECB, for such adverse outcomes must be overwhelming. It would take an unusually high-principled Minister to refuse to treat the ECB as a scape-goat and whipping-boy. So, the very structural independence of the ECB allows Ministers to distance themselves from ECB objectives and policies, and equally tends to generate mutual recrimination.

On this view, there is a clear need to try to get the politicians collectively to 'own' a specific, and quantified, inflation objective for the eurozone. If that could be achieved, then mutual conflict would be limited to technical arguments whether a particular adjustment in interest rates was appropriate to hit the agreed target. The ECB should be able to hold its own in any such technical dispute. If the ECB could

claim, “You agreed the objective; so you must accept the means to achieve it”, it would put them in a much better and stronger position.

There are two ripostes. The first is that the Maastricht Treaty prevents the ECB from asking Ecofin Ministers for their advice in setting an inflation target; the second is that Ecofin Ministers might seek an excessively inflationary target, say 4% growth in the CPI, plus or minus one per cent. In a sense these counter-arguments cancel each other out. If Ecofin Ministers advised a target that the ECB thought too lax, the ECB could refuse to adopt it, and explain why in public. At least that would air underlying inconsistencies in policy in public. Moreover, the ability of the ECB to refuse to accept Ecofin’s (published) advice means that the ECB’s prized independence could hardly be put in jeopardy by asking for such advice in the first place. A mechanism whereby Ecofin Ministers, say once every three years, reviewed, and possibly suggested changes in, the ECB’s inflation objective, in a published document; followed by a published response by the ECB, outlining its agreement and disagreement; with both documents to be laid before the European Parliament, and debated; would be far superior to the present opaque and undemocratic mechanism for determining the price stability objective.

The second main factor that, in my view, has led to the ongoing criticism of the ECB, despite its proclivity to an easy policy, is more theoretical, to wit the possible existence of hysteresis, or path dependence. Economics is a curious discipline; it is full of references to ‘real’, and ‘natural’, rates of certain variables, e.g. interest rates,

output, etc., yet there is nothing either real[4] or natural about such adjusted variables. The term 'natural' presumably refers to conditions that would apply in a state of nature which are free of shocks, an equilibrium concept. Yet it is difficult to conceive of an equilibrium, or state of nature, independent of initial conditions. If history, determining initial conditions, changes, then so will the equilibrium. In particular, if an economy has been stagnant (expansionary) for some time there are numerous reasons to expect that it will be harder (easier) to establish rapid growth in future.

This latter tendency is captured by those economic techniques that estimate the 'natural' or 'trend' rate of growth by some averaging, or filter, applied to actual growth rates, (Hodrick/Prescott being currently the most commonly utilised). Implicitly the 'natural' rate of growth has no independent life of its own, but is just an averaged (filtered) version of what has actually been happening to growth. A typical example is Japan. Prior to 1990 Japan had been growing rapidly, around 4% p.a., without signs of excessive inflation. Following the bust of the asset bubble then, growth fell to about 1% p.a. over the next 15 years; but this did not result in ever-accelerating deflation and/or continuously rising unemployment. Deflation was persistent, but quite slight, and non-accelerating; unemployment rose, but then stabilised. The inevitable implication is that the natural rate fell alongside, and following, the decline in the actual rate of growth.

This argument, that the so-called 'natural' rate of growth is not independent, but actually a function, of current and past actual rates of growth has both a pessimistic

[4] 'Real' variables are those adjusted for inflation. But should the adjustment be for past, present or expected inflation? Rationality generally implies that the adjustment should be for the appropriate expectation of inflation at the time that a decision/contract is undertaken. But such expectations have usually been difficult to observe, (and anyhow entail a probability distribution). So deflation into 'real' terms is commonly done using ex post data, which is for most purposes incorrect.

and an optimistic message for macro-policy in regions like the eurozone where growth has been quite disappointing for much of the last decade. The pessimistic message is that slow growth may have (already) reduced the potential (trend, natural) rate of growth in the eurozone. So, any attempt to grow in real terms much faster than 2 / 2½ % p.a. might lead to negative output gaps, supply-side bottlenecks, and worsening inflation. The contrary optimistic message is that policy to facilitate an increase in output could, of itself, help to overcome bottlenecks, improve productivity, and raise the long-term growth potential of the economy. Hence expansion could be less inflationary than feared because of its beneficial effect on supply side conditions and trend growth. The patron saint of this latter group of believers is Alan Greenspan. They hail his willingness to allow what then seemed to many to be excessively rapid growth in the USA in 1996/97 to continue as laying the groundwork for the acceleration in productivity, and hence in measured trend (natural) growth, thereafter.

The realists and the pragmatists, probably including many in the ECB, heed the negative message. The ECB's many critics argue on the contrary that if (monetary) policy always stamps on the first signs of growth, then, almost by definition, growth will never recover from its current disappointing levels. Where do I stand on this? First, I side with the pessimists in the view that expansionary demand management is highly unlikely of itself to generate supply-side improvements. A boom generated by demand-side expansionary policies is likely to come to grief in an inflationary blow-out. There were two examples of this in the UK in the 1960s and 1970s, the first was the Maudling 'Dash for Growth' and the second was the Barber boom of the early

1970s. Both failed miserably. Given the existing accommodatory policy of the ECB, there seem no grounds for any further monetary relaxation, rather the contrary.

That said, there can be, and often are, autonomous changes in supply-side conditions and productivity changes. Estimates of sustainable rates of growth of output are extremely fallible (just about as fallible as estimates of trends in the velocity of money). Greenspan was correct in the event not to counteract more rapid rates of output growth, at least until there was more evidence of adverse inflationary effects. But this latter course is extremely risky for a Central Bank. The lags, whereby inflation tends to trail a positive output gap with a delay of about one year, imply that a policy of wait-and-see could allow inflation and inflationary expectations to become entrenched before counter-vailing measures could be applied. Given such lags, a Central Banker needs extraordinarily sensitive antennae to discern whether an upturn in growth, above the current estimates of the trend rate, needs a policy offset, or not.

This brings us back to the question of how much information, if any, monetary developments can provide to help enhance the sensitivity of a Central Banker's antennae for assessing future inflationary risks. In this latter respect, the present conjuncture provides a useful test-bed. While there were good (monetary) reasons for dismissing the surge in M3 in the eurozone in 2001-3 as a temporary anomaly, these no longer hold. The monetary data in the eurozone are pointing, quite clearly, to nominal expansion and inflationary pressures; the 'real' data on output gaps, cost push, etc., are not. Which will be the better predictor?

A further consideration is that the informational content of a data series can change dependent on circumstances and on the policy stance. It is a corollary of Goodhart's Law that variables that become the cynosure of policy lose their predictive value, whereas variables that are no longer treated as policy measures may regain predictive value. Now that inflation has become the target for policy, and that policy has been successfully achieved, both inflation and inflationary expectations have become much more strongly anchored. That suggests that changes in these variables will lag even further behind changes in the balance of demand and supply, the output gap. The Phillips curve will become horizontal under a relatively wide range of unemployment/output gap measures. It would be wrong, however, to extrapolate that indefinitely. The analogy is to a thermometer which has a peg inserted at a particular temperature.

If so, there could be a need for a separate measure of underlying inflationary pressure, if the standard thermometer has become nobbled. Now that the monetary aggregates have become generally disregarded, they might once again prove to have predictive ability. We shall see.

3. Some Procedural Issues

(A) How to Respond to Failings: Triggers or Ladders?

There is a clear difference in methodology and approach between FDICIA and Basel II on financial regulation. The former's criteria for capital adequacy are simple, broad-brush and crude, being overall leverage ratios, but their ladder of steps for

dealing with capital deficiencies incorporate a detailed and fine-tuned ladder of increasing sanctions. In contrast, Basel II criteria for risk-related capital adequacy are detailed and sophisticated, but nothing at all is said about the appropriate sanction for deficiencies below the required ratio. This lacuna is understandable in the case of Basel II, since this is international soft law; whereas sanctions have to be left to national law-makers, except where there is some supra-natural harmonisation, as – in some instances – in the EU.

Nevertheless, subject to the constraints of legal feasibility and requirements, a ladder of increasing penalty for worsening infringement of regulations is generally preferable to a single trigger-point, or trip-wire. Increasing external control over the use of funds – as under FDICIA – as a bank approaches insolvency is one example. Another occurs with the use of government debt as collateral in commercial bank repos with the ECB. In this latter case, the public was suddenly informed by the ECB in November, 2005, that the ECB required such debt to have a rating of at least A- to be acceptable as collateral. But this introduces a new trigger point. If the debt of a member country should one day slide over this trigger point, the likelihood of a sudden jump in the prices of such bonds, and a potential crisis being unleashed, would be worrying. A far better approach would be a ladder of differential haircuts, starting much earlier, say below AA, and probably carrying on longer (below B-) before absolute refusal.

Be that as it may, there is an imbalance, in international monetary affairs, between the detailed concern with standards and requirements on the one hand, and the relative absence of attention paid to the structure of sanctions to be applied to those who fail

to meet such standards/requirements. Yet the attention paid to standards, etc., by the commercial banks will depend on the incentives to do so. If the incentives are not well designed, the standards may be ignored. Of course much of the incentive to abide by standards comes from market reaction to failure to do so. But such market reactions may not always be reliable, or necessarily influence managers. In any case to the extent that the effective sanction comes from market reaction, it raises the question why regulators need go further than ensure maximum exposure of (accurate) information to markets, and then stand back.

(B) <u>One Size Fits All</u>

There can only be one single nominal interest rate in an integrated currency union. But this entails the disadvantage that regions with faster inflation, (often accompanying stronger growth), will face lower 'real' interest rates than those with lower inflation. While this is inevitable, it is the reverse of what would be desirable. In currency unions with significant differences in nominal growth rates between constituent states and limited factor mobility, it could be a serious problem. There are indications that this could be a concern in the eurozone with much faster nominal growth in the periphery (e.g. Ireland, E. Europe) and hence lower real interest rates there than in the centre (e.g. Germany, Netherlands).

[Figures 9 and 10]

This raises the question whether there might be secondary financial instruments that could be used on a regional basis to aim to counteract the adverse effect of 'one size fits all'. I have argued in favour of one such instrument, in Goodhart and Hofmann

(2004). There is evidence that inflationary bubbles, and subsequent busts, are associated with rapid increases in bank lending (and fast monetary growth), often connected with property-related lending, see Goodhart and Hofmann, (2006, passim).

I have made the suggestion that loan to value ratios on mortgage lending should be varied countercylically in relation to the rate of growth of such lending. Thus the LTV could be raised when mortgage growth (and house prices) was low or declining, and lowered during booms. A recent example was the cut in LTVs imposed in Estonia in the face of a housing boom in December 2005. Similar measures have been applied in Hong Kong and South Korea. More generally capital/liquidity requirements could be varied counter-cyclically. The Spanish pre-provisioning procedure has been an innovative procedure. This would make sense both on macro-economic and prudential grounds. Moreover such variations in requirements could be imposed, in theory at least, on a regional basis, offsetting the 'one size fits all' effect of a single eurozone-wide nominal interest rate.

A problem, however, is whether such regional differentials in (prudential) requirements would just not simply lead to disintermediation, with little or no effect on aggregate mortgage lending or the housing market in each region. As the European (retail) bank market becomes increasingly integrated, with cross-border mergers and pan-European banks, disintermediation becomes even more likely. Furthermore the pan-European banks would find regionally differentiated (capital) requirements irksome, and it would distort the competitive 'level playing field'.

These are serious disadvantages, but not, on this view, overwhelming. There are already so many differences in national requirements, especially in retail banking, that differential capital requirements would hardly sully an otherwise perfectly competitive market. Disintermediation is a problem, but it can be restrained by some (minor) ancillary controls, for example by seeking to prevent banks with cross-border outlets from booking loans originating in high requirement regions with outlets in low requirement regions. Moreover, even should such disintermediation occur, it would shift the risky lending away from local banks onto banks situated elsewhere, thereby limiting the contagious effect of any subsequent housing/property bust on the local/domestic banking system. From a domestic financial stability viewpoint disintermediation is not necessarily such a serious problem.

Just as one small country, New Zealand, led the way in the adoption of inflation targets and central bank independence around the world, perhaps another small country, Estonia, will lead the way in the adoption of counter-cyclically varying (prudential) controls.

Decision-Making Procedures

With the prospective membership of the Governing Council of the ECB increasing to over 25, there is a problem of how to handle the decision-making process in the committee. The problem is, in some respects, not so much that of organizing the voting, (especially if the Governing Council seeks to stand by its maintained preference for consensus, group responsibility and little, or no, public reporting of contrary arguments), and more one of organizing the discussion itself.

On the one hand there may be a danger of excessive centralisation. Perhaps following a prior caucus of the ECB governors, plus an informal discussion with major country Central Bank governors, the ECB's Chief Economist could open the meeting, and present not only an assessment but also a recommendation for action. That would tend to focus discussion, from the very outset, on the Chief Economist's agenda, with little opportunity for a wider ranging discussion of forecast developments, risks and alternative policy paths. That would seem, to me, to be somewhat unduly centralised.

An alternative would be to have each member present his general view of the outlook, before moving on to the decision-making round. A problem with that is that with a committee of, say, 30 people, allowing each member 10 minutes for a short presentation ties up no less than 5 hours. This would make the whole exercise impossibly unwieldy.

My understanding is that present Governing Council procedure comes fairly close to what I have described above as unduly centralised. But the ECB seems satisfied with its own procedures, and, given the prospective expansion of the numbers on the Governing Council, incentives to stick with a centralised procedure will thereby strengthen.

My own view is that a committee of over 20 members is far too large. I would prefer the kind of solution adopted by the IMF where member countries are grouped into Colleges, based on size of population/economy. Each College, where there is more than one member, would hold a pre-meeting (and perhaps a post-meeting) conference

– possibly via a televisual link; and one representative of each College would go to the Governing Council. The ratio of ECB governors to College representatives could be for decision, but 13 would be the largest acceptable number at the table. A smaller Committee would allow more time for briefing (by the ECB staff) and general discussion before the decision-making round was reached.

This problem, of how to organise decision-making procedures in an expanded EU, is not, however, specific to the ECB, but will crop up in many other fora as well. There has been as yet little clear guidance on how this issue could, and should, be generally handled.

4. Conclusions

No sooner had all the empirical research work been done to demonstrate how stable would be the demand for M3 function in the eurozone, than it all broke down badly in 2001-2005. Was this yet another example of Goodhart's Law? Yes in part, but I rather doubt if it was caused by any change in the private sector's behaviour following the adoption of the euro[5], (as in the Lucas Critique), or by the ECB. Rather it probably reflected the methodological flaw in the earlier work, which had been pointed out by Arnold, and the inevitable tendency to over-fit in a short in-sample.

[5] Manfred Neumann, op cit, argues that the introduction of the 500 euro note was a boon to those in the grey and black economies, as had been criticised, and foretold, in Rogoff (1998) and Drehmann, et al, (2002). This led, he suggests, to an additional 1% increase in cash holdings from 2002 onwards. Even if one accepts, and discounts for this effect, the time pattern of M3 growth remains much the same.

[Figure 11]

Anyhow the initial monetary surge in 2001-3 did probably reflect a response to the greater market uncertainty of those years, and was rightly disregarded by the ECB. The current monetary surge, above the reference value, cannot be dismissed on similar grounds. Instead it forms part of a wider pattern whereby monetary data appear to indicate a very expansionary policy, and suggest a future acceleration in nominal incomes, whereas 'real' data on unit labour costs, capacity utilisation, current inflation, etc., suggest no such upturn in inflationary pressure. This should be an interesting test of alternative hypotheses.

Next I argued that, by most criteria, the ECB's policy had leant as far towards leniency as could be consistent with achieving its primary responsibility, for maintaining price stability. Yet it has remained under persistent criticism for being excessively tight and restrictive. Why? I emphasized two possible reasons. The first was that eurozone politicians did not 'own' the ECB's inflation target. This left them free to blame the ECB for macro-economic short-comings, notably slow growth and high unemployment, whether, or not, the ECB could do anything to improve such real outcomes.

In this latter respect the standard argument is that monetary policy cannot affect medium, and longer, term real outcomes. But there is a contrary view, termed 'hysteresis', whereby the 'natural' rate of growth is a positive function of current and past actual growth rates. But this can have both a negative implication, that the eurozone natural growth rate may already have fallen, as well as an optimistic interpretation, that expansion may not necessarily be so inflationary. British

experience of using demand management to ‘dash for growth’ has, however, not been encouraging.

Finally we discuss three lesser procedural issues; first the form of sanctions to be imposed on agents for failing to meet requirements. Here I argue in favour of a ladder of ascending penalties rather than a single trigger point (yes/no) dividing line. The second issue concerns whether there is any second instrument that could be used to offset the regionally adverse effects of ‘one size fits all’. Here I argue for regionally varying counter-cyclical (prudential) requirements despite the likelihood of (some) disintermediation. Finally there is the question of how to take decision in ECB/EU committees following enlargement. Here I argue for member countries to be grouped together in Colleges, based on size and contiguity, with one representative per College at the wider ECB/EU meetings.

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Figure 1: Money supply

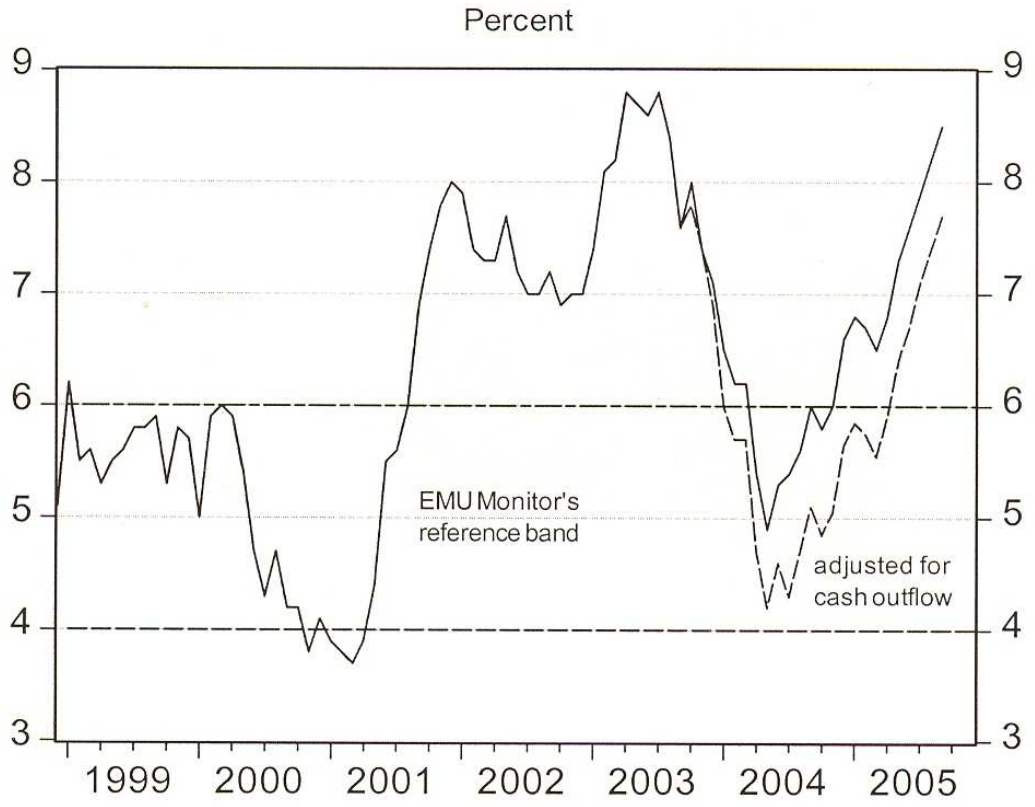


Figure 2: Real growth rates

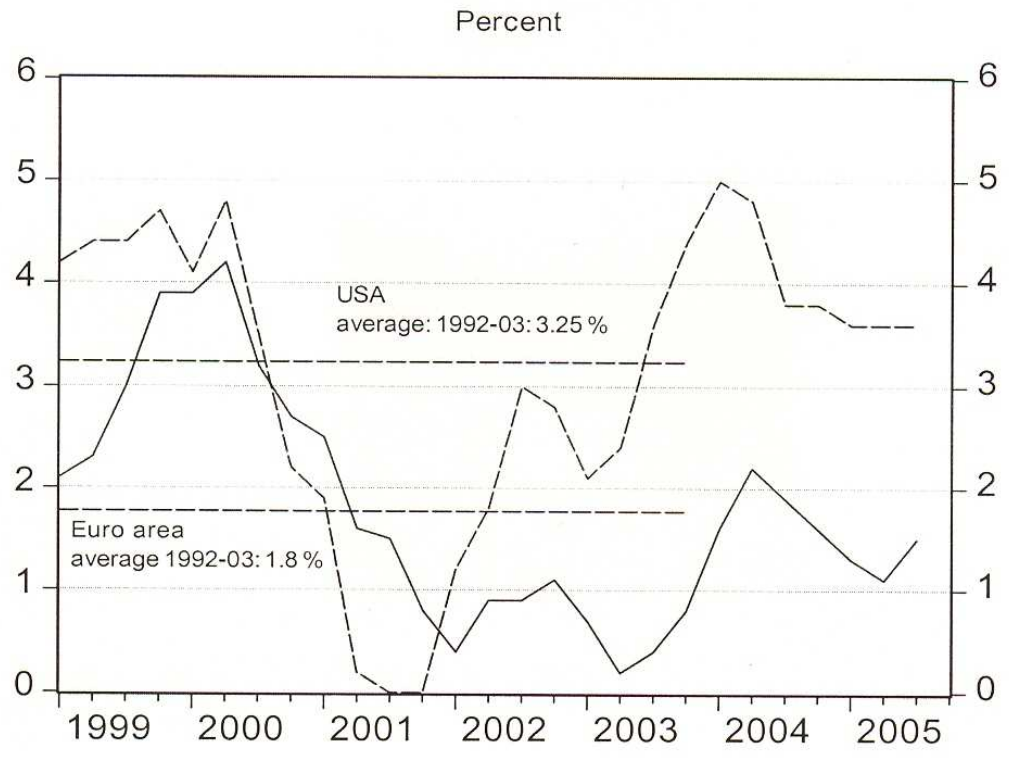


Figure 3: Eurozone HICP

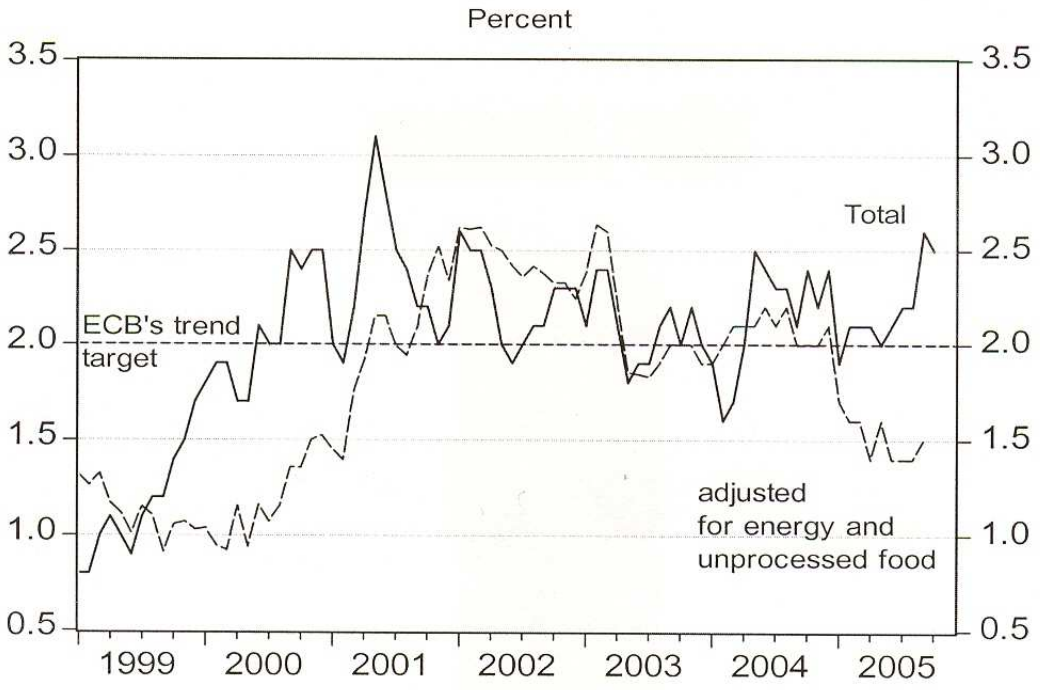


Figure 4: M3 and bank lending in the Eurozone

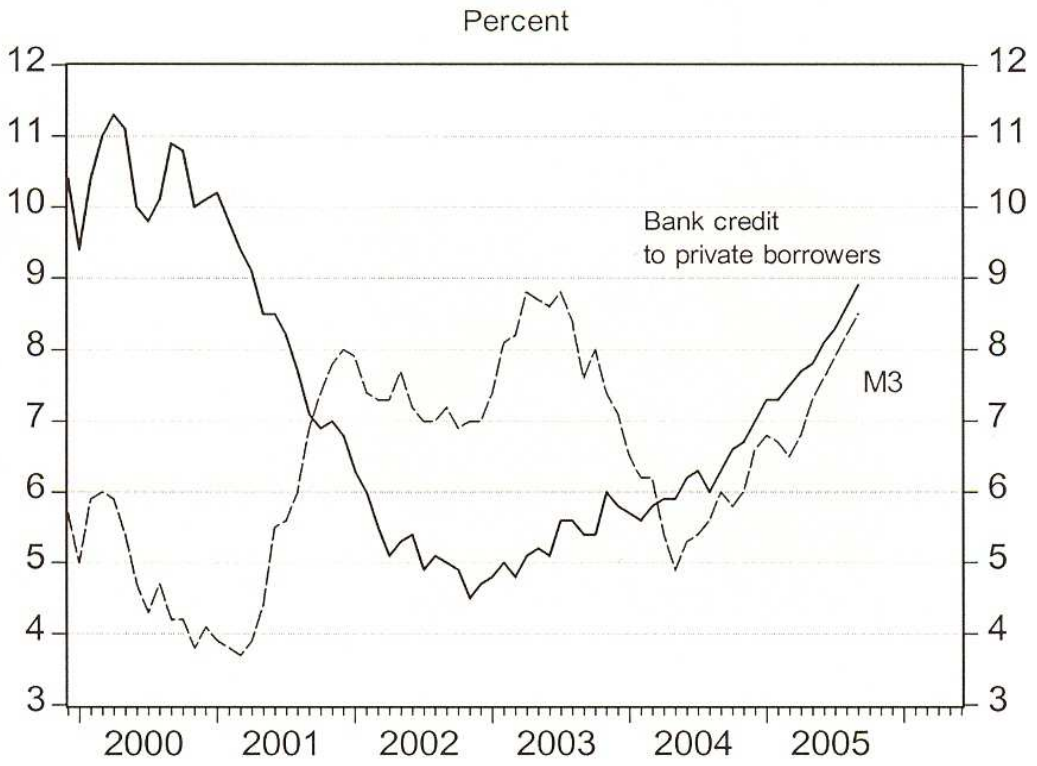
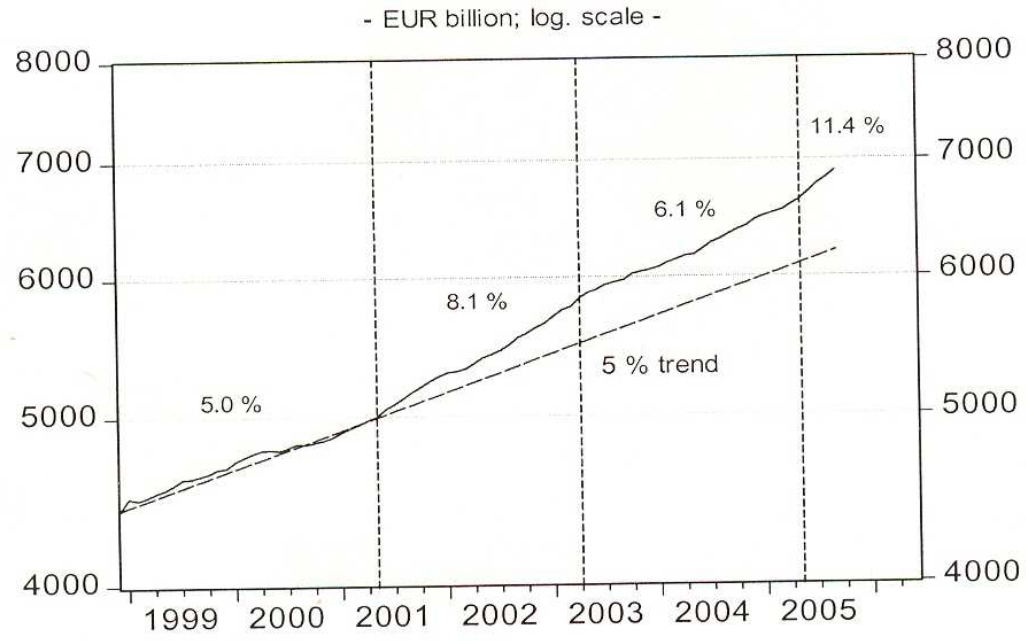


Figure 5: Money stock, relative to trend



* Money overhang by September 2005: 11.1 %.
The money stock is measured on a transactions basis.

Figure 6: Nominal rates of interest

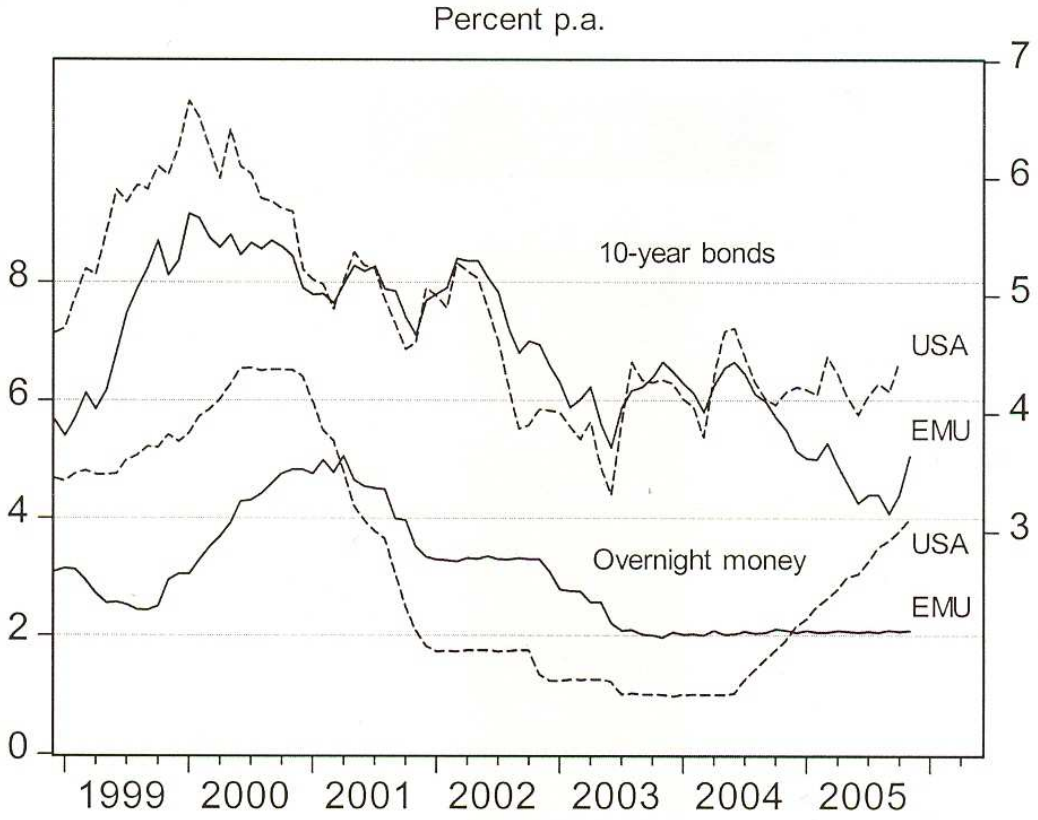


Figure 7: Real rates of interest

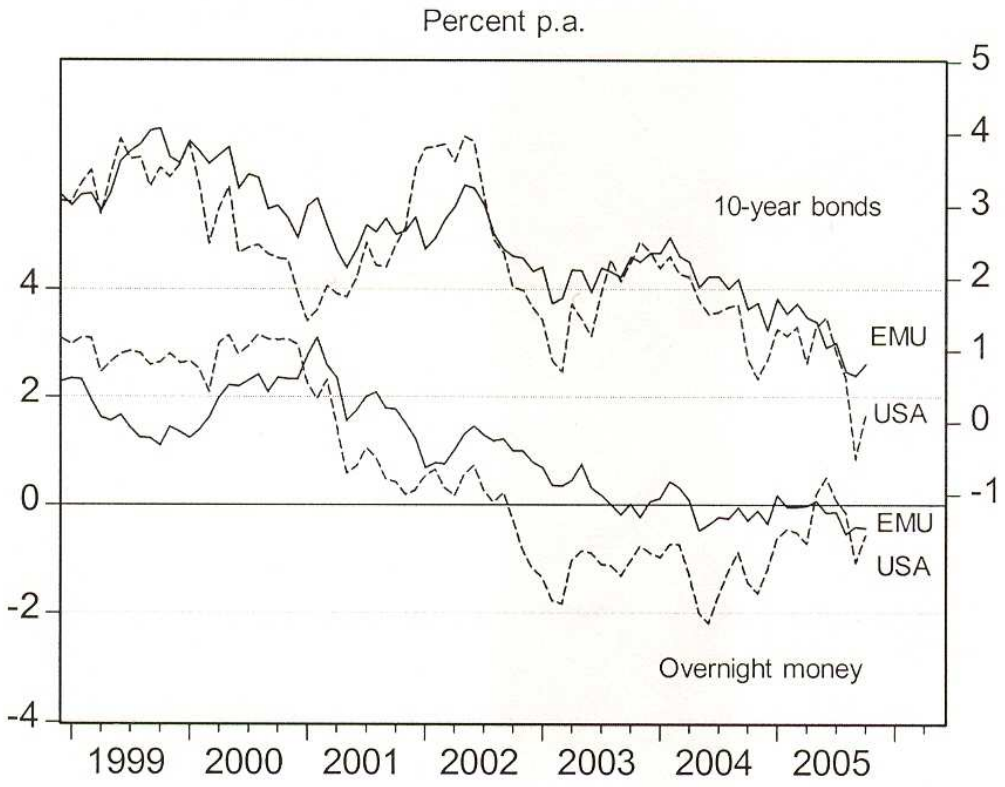


Figure 8: Goldman-Sachs Taylor rule estimate

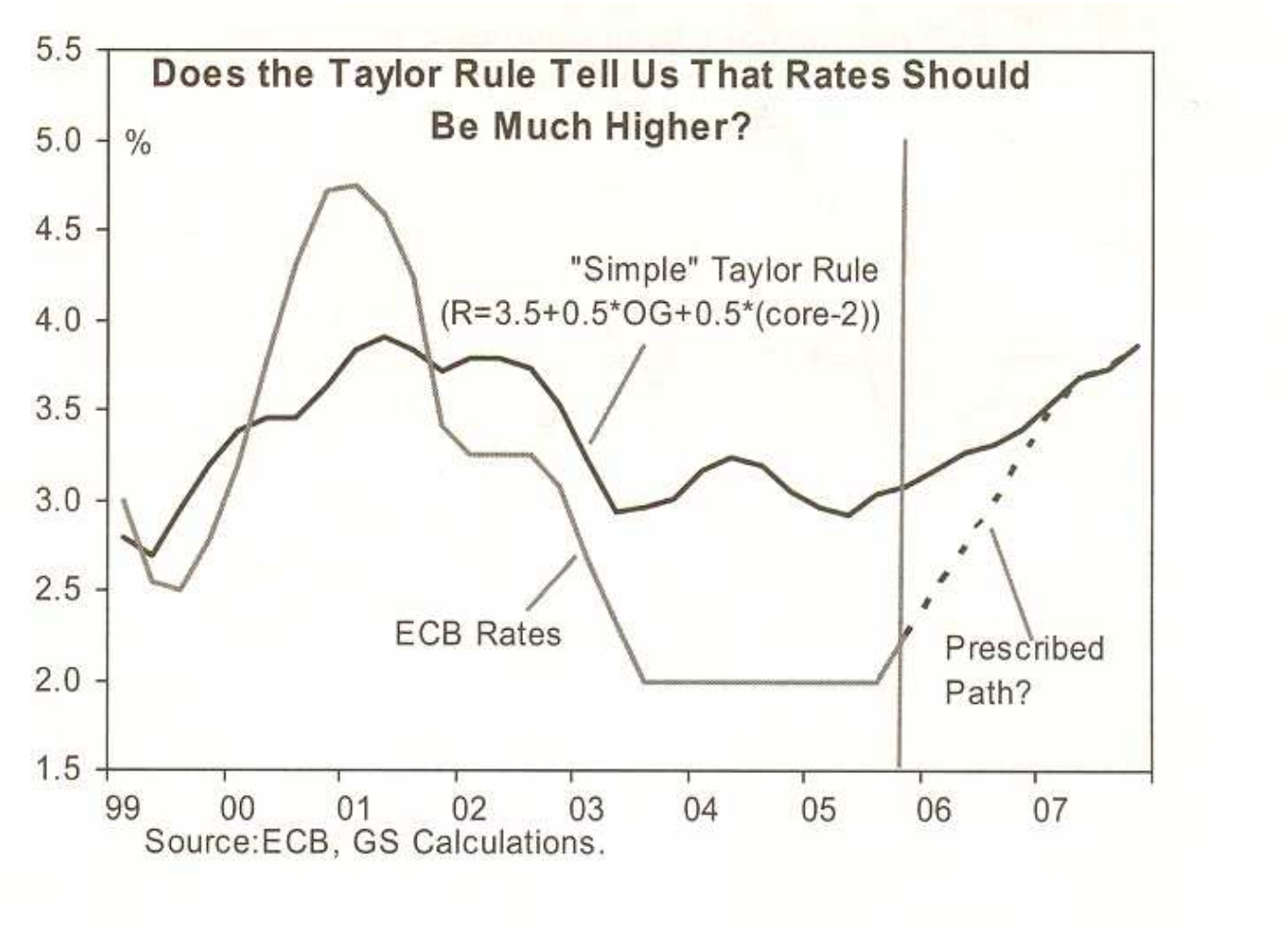


Figure 9: Inflation rates (Western Europe)

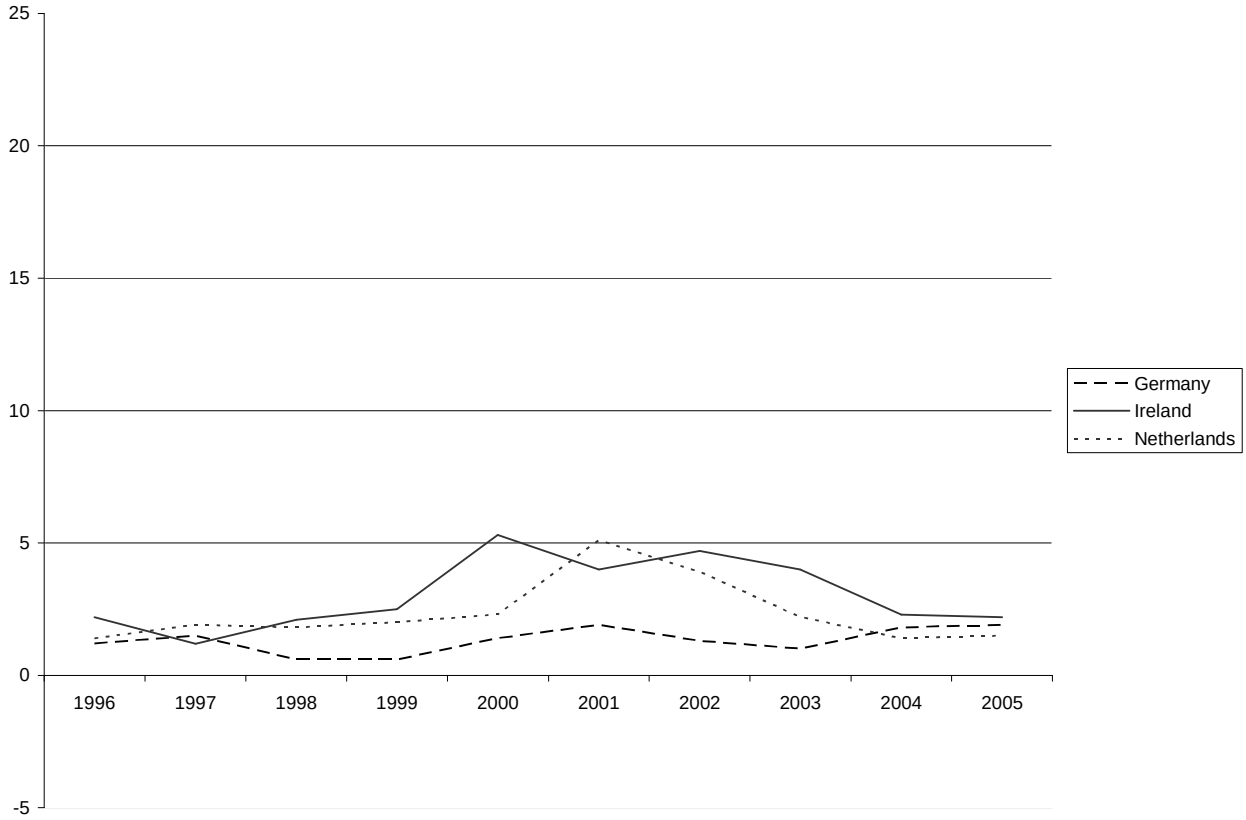


Figure 10: Inflation rates (Eastern Europe)

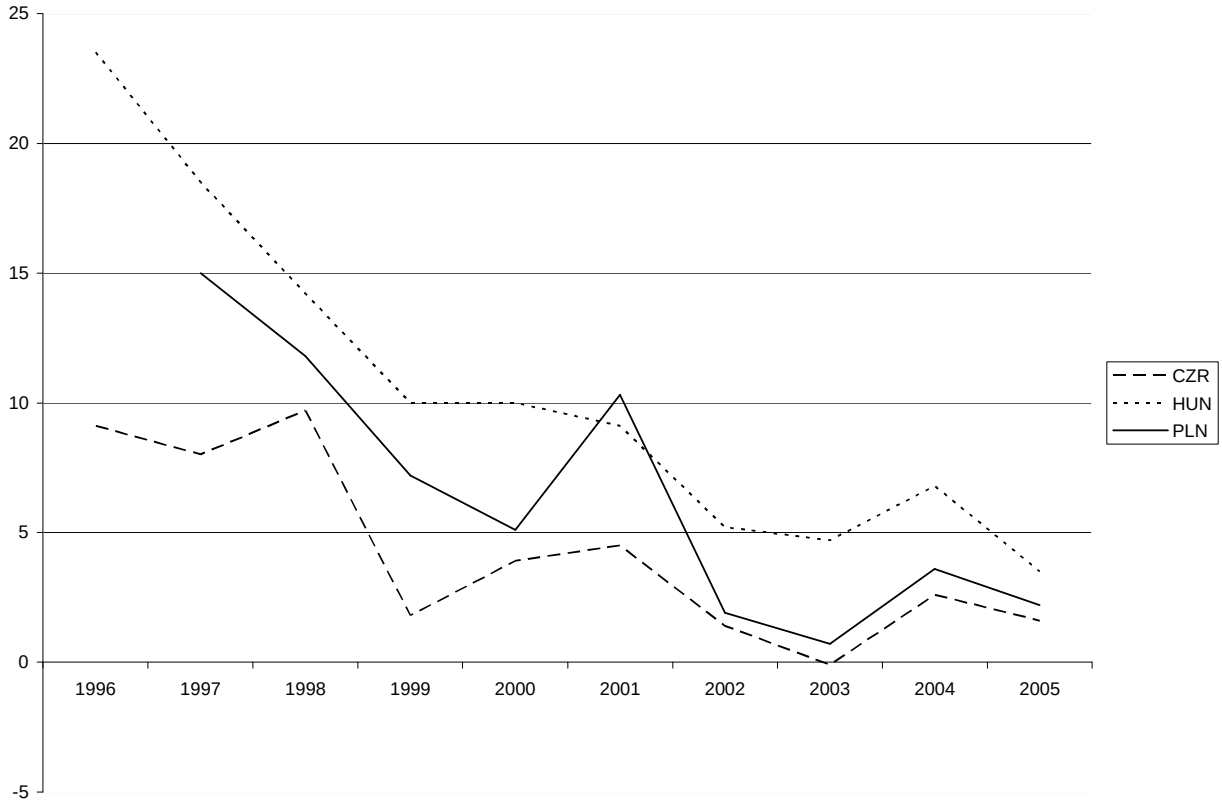


Figure 11: Growth of note-holding