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Fiscal Consolidation
Contrasting Strategies & Lessons From International Experiences

by

Jörg Bibow*
The Levy Economics Institute of Bard College
University of Hamburg

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*Address for correspondence:
University of Hamburg, ISTÖ, VMP 5, 20146 Hamburg, Germany e-mail:
joerg.bibow@t-online.de

The Levy Economics Institute
P.O. Box 5000
Annandale-on-Hudson, NY 12504-5000
http://www.levy.org

1. INTRODUCTION

The goal of consolidating public finances has been high on the public agenda since at least the 1990s. Austerity is the popular and apparently straightforward approach to the matter, as consolidation by austerity may appear to be the only possible strategy around. Concerns that austerity would tend to contract demand used to be acknowledged, but quickly declared inevitable in the short run—and made palatable by promises that the world would then be a better place in the long run.

In the 1990s, however, the idea of "expansionary fiscal contractions" became popular, especially among policymakers in Europe. In this case, even the supposedly short-run damages of fiscal austerity would be limited or not arise at all, but bliss follow immediately—if only consolidations were credible, decisive, and of the right kind. At any rate, rules and institutions for macroeconomic policymaking in Europe's EMU were devised accordingly. The independence and stability-orientation of the European Central Bank (ECB) had to be complemented by a Stability and Growth Pact (SGP)[1] that would discipline finance ministers—to safeguard the euro's stability. The ECB for its part, aside from its demands for structural reform that appear to be part of a wider political agenda, routinely asserts the all-importance of abiding by the SGP, as this would "lead to positive confidence and growth effects" (ECB 2003, October Bulletin, p. 6). According to the bank:

> Upholding trust in the soundness of public finances enhances confidence among all economic agents and thereby contributes to sustainable growth in consumption and investment. Stability and growth are thus not conflicting objectives, but rather reinforce each other—a fact which is very well captured in the title of the fiscal framework called the "Stability and Growth Pact" (ECB 2003, November Bulletin, p. 6).

The question is, though, whether the "Maastricht regime" and macroeconomic policies guided thereby are really all that conducive to, or even compatible with, economic growth—when neither a stable currency nor sound public finances may be attainable without growth.

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[1]Buti et al. (1998) and Artis and Buti (2000) explain the wisdom and supposed working of the SGP. For criticisms and alternatives see Arestis et al. 2001, Buiter, Corsetti and Roubini 1993, Buiter 2003a, Eichengreen 1997, and Eichengreen and Wyplosz 1998, for instance.

This study investigates the experiences with consolidation over the 1990s, comparing developments in the U.S. and Japan with those in the eurozone as a whole while scrutinizing disparities in economic performance and consolidation within Europe too. Domar's key message that fiscal sustainability crucially hinges on economic growth provides the starting point: growth-based consolidation is set against the common sense approach of consolidation by austerity, or thrift-based consolidation. The empirical evidence reveals stark international contrasts, with the U.S. being identified as champion of growth-based consolidation.

Stark disparities in macroeconomic policy stances and mixes, including fiscal consolidation strategies, also characterized developments within Europe over the 1990s. The point is, however, that experiences of individual EU member states may not be applicable to the eurozone as a whole. In fact, the study concludes that the U.S. provides the only relevant example for guiding policymaking in Europe's EMU; while Japan exemplifies what must be urgently avoided. The U.S. example features cooperative fiscal and monetary policies geared at steering domestic demand growth, with sustainable public finances as a consequence of their success. The risk is that the Maastricht regime of combining consolidation-by-austerity-type fiscal policies with inflation-obsessed monetary policy may not deliver expansionary fiscal consolidation, but lead Europe to follow in Japan's footsteps instead. The Maastricht regime thus needs to be reformed so as to secure cooperation and proper growth orientation in macroeconomic policymaking, with discipline being imposed in a more balanced way on both finance ministers and central bankers.

The analysis begins with an overview of broad fiscal trends in the OECD area since WWII in section 2, followed in section 3 by a discussion of the conventional wisdom on these developments and how to cure them. Section 4 explores the theory of fiscal sustainability and discusses contrasting consolidation strategies and their suitability for large economies. This is followed by an empirical investigation of developments in Japan, the U.S., and the eurozone as a whole in sections 5, 6, and 7, respectively; and individual EU member states' experiences in section 8. Developments since the 2001 global slowdown leading up to the current outlook are discussed in section 9. Section 10 offers a final assessment and policy recommendations for successful fiscal consolidation.

2. FISCAL TRENDS IN THE OECD AREA SINCE WWII

War-related, temporary debt spikes were a recurrent phenomenon in pre-WWII times too. As to the post-WWII period, a sea-change occurred in the mid-seventies as sustained and sizable budget deficits emerged under relative peace-time conditions. While both revenues and expenditures had been on a rising trend as a share of GDP since the early sixties, the rate of increase in expenditures started to far outpace that of revenues in the wake of the 1973 OPEC oil crisis. After stabilizing in the second half of the 1970s, budget deficits took another leap in the context of the second OPEC crisis and global recession of the early 1980s. Subsequently, revenues continued their rise as a share of GDP in the first half of the eighties, but stabilized in the second. Expenditures and deficits had stabilized earlier and then even retreated after the mid eighties—before rising again around 1990.

Between 1980 and 1995 public debt ratios of major industrialized countries increased by some forty percentage points on average (IMF 1996). After peaking in 1993, however, the share of public expenditures in GDP declined decisively. And, by 2000, "fiscal balance in advanced economies has been restored [in the aggregate] for the first time in a generation" (IMF 2001, p. 85). Debt ratios appeared set for a marked decline.

What were the key factors behind these broad fiscal trends since WWII? In particular, what caused the deterioration in public finances since the mid-seventies, and what led to the reversal of these developments in the 1990s? According to the IMF (1996), the source of the problem of deteriorating public finances is to be sought on the expenditure rather than revenue side. Government consumption, for one thing, contributed importantly to the rise in expenditures as a share of GDP from 1960 until 1980. Since then, however, the IMF observes, it has remained rather stable. The "really big increases have been in transfers (including public pensions), subsidies, and interest payments" (IMF 1996, 46). Quite likely, these developments were related to other key macroeconomic trends since the slowdown in GDP growth that started with OPEC I, particularly employment and unemployment trends. Furthermore, as interest payments are a function of the level of debt and the level of interest, monetary policies seem relevant here too.

In what follows the focus will be on the role of macroeconomic demand management, both monetary and fiscal policies, as key determinants of GDP growth and interest rate levels. For, by impacting on the employment and unemployment situation, GDP growth in turn profoundly affects

the fiscal position too. And in addition to any fiscal repercussions of their effects on aggregate demand, interest rates also affect interest payments and, hence, fiscal positions more directly. The aim is to investigate the role of macroeconomic demand management in fiscal consolidation strategies generally, and in successfully reversing adverse fiscal *trends* over the 1990s in particular.

3. CONVENTIONAL WISDOM ON POLICY MISTAKES AND RATIONALE FOR CONSOLIDATION BY AUSTERITY

It would be rash to deny any role for demand management on the ground that they belong to the realm of "the short run" only. For one thing, the whole idea of demand management is to stabilize the cycle *over time*. For another, there is the possibility that demand policies and institutions might feature some *systemic bias*; so that policy mistakes would perhaps not cancel out over time. In fact, according to conventional wisdom, ill-guided demand management was largely responsible for bringing about those adverse fiscal trends in the first place, which then motivated the 1990s attempts at fiscal consolidation. A key conviction underlying this view is the commonsensical explanation for any budgetary troubles: they must have their root in some tendency for fiscal profligacy.

The villains are thus promptly identified, finance ministers. And the intellectual source of all troubles supposedly is Keynesianism. However, while the post-WWII ("Keynesian") era saw a general rise in governments' involvement in the economy, including universal social benefit systems, it should not be overlooked that initially these changes came about at stable or declining debt ratios.[2] According to the conventional view, governments—misled by Keynesianism—then proved slow to respond properly to the trend break in productivity in the early 1970s. Misjudging

[2] "It is true nonetheless that the tendency to persistently large deficits did not occur in the heyday of Keynesian influence (in the United States, this was arguably the Kennedy administration of 1961-63), but emerged after 1970, when Keynesian ideas were clearly no longer as fashionable and when Democratic presidents (arguably more influenced by Keynesian views) had been replaced by Republicans" (Masson and Mussa 1995). Domar (1993, p. 477) observes on the rapid rise in the U.S.'s debt ratio since its nadir of 33.3 percent at the end of the Carter administration in 1981: "All this happened during the Reagan and Bush administrations, supposedly dedicated to 'sound finance' and opposed to deficit financing. The sad part of this story is that the doubling of this ratio was caused not by the need to stimulate the economy—a good reason for having a budget deficit—but by the desire of Reagan and Bush to eliminate the so-called 'social expenditures' from the budget by frightening the Congress and the public with large deficits."

deteriorating supply-side conditions, too generous unemployment benefits led to a rise in structural unemployment rates in the context of the oil price shocks, while expansionary macroeconomic policies, intended to boost aggregate demand, ignited inflation instead. Even worse, governments also failed to rein in deficits as GDP growth picked up. In short, fiscal policy proved asymmetric and procyclical—it was this expansionary bias that pushed debt ratios on to a rising trend.

Central banks were first to learn from their mistakes, tightening monetary policy in the 1980s in order to get inflation back under control. And at some point governments, too, began to realize that fiscal retrenchment was inevitable, making fiscal consolidation aimed at getting debt dynamics under control their policy priority. The OECD (2002) summarizes the conventional view:

> Prior to the second oil shock, the burden of public debt was reduced by large unanticipated inflation-induced transfers of wealth from bond-holders to the public sector (the so-called "inflation tax"). The unsustainable mix of loose fiscal and loose monetary policy manifested itself in rising inflation and deleterious consequences for economic growth. During the 1980s, tight monetary policy coupled with still rather loose fiscal policy was associated with high real rates of interest and increasing debt/GDP ratios in most OECD countries. ... Sustainability issues during this period revolved around the familiar debt dynamics of primary surpluses inadequate to offset spiraling debt interest payments. ... By the early 1990s, the problem of unsustainability had been widely recognized and prompted fiscal consolidation to bring debt dynamics under control. Fiscal positions worsened during the recession of the early 1990s but subsequently improved, as consolidation became a priority in Europe, the United States and a number of other countries, Japan being the notable exception (OECD 2002, 117-9).

Apparent theoretical breakthroughs since the 1970s, the New Classical revolution in macroeconomics in particular, seemed to offer support to the anti-Keynesian disillusion. Popular New Classical stories have it that governments' (Keynesian) fine-tuning ambitions, if anything, helped to destabilize economies, wrecking public finances on the way, and leading to over-regulated labor markets which produced rising levels of structural unemployment. Worst of all, if discretion-prone governments directly controlled money, systematically ill-guided attempts at pushing unemployment below its—upwardly distorted—natural rate resulted in an "inflationary bias."

Once fashionable stories along these lines have long seen their peak in popularity within the economics profession as far as theory is concerned. In certain policymaking circles though, remnants of these tales are still riding high. In any case, the commonsensical view prevails that fiscal laxity was the key source of all problems. And if that was the case, it would clearly seem to follow

that fiscal discipline is the one and only right fix. First of all, discretionary fiscal measures —or, fine tuning—must be avoided: governments should generally abide to rules instead. Representing a rule-based regime, the automatic working of built-in fiscal stabilizers alone should be relied upon.

While this principle partly acknowledges the traditional stabilization role of fiscal policy, in exceptional situations, consolidation has to take priority over stabilization and automatic stabilizers thus be switched off. An important idea here is that such seemingly procyclical discretionary measures, if policies and institutions were "credible," might help to inspire "confidence." While traditional Keynesian effects capture the direct contractionary (expansionary) impact of tax increases (cuts) and expenditure cuts (increases) on private agents' purses, "non-Keynesian effects" arise through the impact of policy on private agents' *expectations and confidence*. The latter are held to be especially important in case of countries facing an acute debt problem, particularly a very high debt ratio together with a soaring interest burden, involving or threatening adverse crowding out and confidence effects. The hope is that a fiscal squeeze might lead to falling interest rates and inspire confidence sufficiently enough to offset the income impact of the squeeze itself.[3] In the most favorable case, non-Keynesian effects even over-compensate the traditional Keynesian effects, so that retrenchment might boost rather than retard economic growth overall.

The idea of expansionary fiscal contractions[4] was hatched. Fiscal discipline became seen as a safeguard to protect monetary policy from political pressures. Complementing central bankers' "independence," a prudent fiscal framework would help maintain price stability; apart from sound public finances.[5] Finance ministers were the ultimate villains in the past: they *caused* poor economic performance, fueled inappropriate wage behavior, and overburdened monetary policy. Why not simply reverse all this through a grand redesign of macroeconomic policies and institutions, hoping that fiscal discipline and austerity will then *cause* better performance in future?

Europe embarked on this very path in establishing Economic and Monetary Union (of

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[3]The key link in this story is between debt and confidence and thus differs from the neo-Ricardian equivalence idea or hopes for positive "supply-side effects" through trimming back the state sector.

[4]See Giavazzi and Pagano 1990, 1996, Alesina and Ardagna 1998, Giavazzi, Jappelli and Pagano 2000, ECB 2001, and Aarle and Garretsen 2003, for instance. Von Hagen et al. (2001) refer to the "German view."

[5]See European Commission 1993 and Woodford 2001, for instance. Sargent and Wallace's (1981) seminal essay features the possibility that monetary policy might be too tight and prove inflationary.

peculiar design!) in the 1990s. The European Commission, the guardian of the Treaties on European Union, summarizes both the lessons that supposedly were to be learned from past mistakes and mal-developments as well as the thinking underlying the *Maastricht regime*[6]:

> Strong emphasis on fiscal prudence and stability in the Maastricht Treaty derived from the belief that the deterioration of public finances was an important cause behind the poor economic performance of many EU countries since the early 1970s. The subsequent decades taught Europe a salutary lesson of how economic prosperity cannot be sustained in an unstable economic policy environment. Inappropriate fiscal policies frequently overburdened monetary policy leading to high interest rates. On the supply-side, generous welfare systems contributed to structural rigidities in EU economies and fuelled inappropriate wage behaviour. The net effect was a negative impact on business expectations and on investment, thus contributing to a slower rise in actual and potential output. As a result, employment stagnated (European Commission 2000, p. 9).

But does an institutional setup primarily designed to close off avenues which supposedly allowed those past mistakes necessarily also define a positive strategy through which more desirable outcomes will be secured in future? The fundamental conviction appears to be that consolidation by austerity (in conjunction with a downsizing of the welfare state which this would likely entail) would encourage more appropriate wage behavior and lead to lower interest rates. A deliberate reversal of fiscal trends, brought about by means of redesigned macroeconomic policies and institutions, is believed to, as its net effect, thereby positively impact on business expectations and investment and, hence, deliver economic growth and employment. Clearly, then, on this view, important links are believed to exist between macroeconomic policy, fiscal consolidation, and economic growth and employment. The next section serves to identify the nature of those links and the direction of causality, so that sound consolidation strategies may be designed accordingly.

4. THE SUSTAINABILITY ISSUE, CONSOLIDATION STRATEGIES, AND BENCHMARK OF SUCCESS

Concern about budget deficits is closely related to the idea that rising public indebtedness implies rising taxes to service the debt. Worst of all, it is feared, high budget deficits might also compromise monetary policy and hence lead to a surge in inflation; an inflation tax levy designed to

[6]See ECB 2003b.

alleviate the debt burden, as some appear to believe happened over the 1970s.

However, high budget deficits do not occur in the context of high inflation only. Soaring budget deficits also tend to characterize situations of economic stagnation abound with deflationary pressures. In general, whether any fiscal boost might ignite inflation rather than real production and employment primarily depends on the rate the economy is capable of growing at and how much spare capacities exist at the outset. Whether or not measures designed to boost a sluggish economy may lead to bigger absolute deficits is one thing. Whether they might raise the burden of the debt in terms of future taxes is still another. For the burden of tomorrow's taxes can only be judged in any meaningful way in relation to the rate of growth the economy is *actually growing* at.

As Evsey Domar (1944) established in his seminal essay on the "burden of debt," even perpetual budget deficits, although they self-evidently add to the public debt, may not lead to unstable debt dynamics and debt explosion. Domar showed that if an economy grew at a constant rate, g, and a government borrowed a constant proportion of GDP, α, year after year, the debt-to-GDP ratio, d, would converge to a constant of size: α/g.

$$d = \alpha/g \tag{1}$$

Neither will the tax rate required to service the debt explode, but remain stable at $i \cdot \alpha/g$, where i is the rate of interest paid on public bonds (for simplicity sake assumed to be tax-exempt). From the taxpayer's viewpoint, then, the vital question is which grows the faster, the nominal debt or nominal GDP—since a stable debt ratio implies a stable tax burden on taxpayers on account of the debt.

In view of these revelations, stability of the debt ratio suggests itself as a meaningful definition of sustainability: public finances are judged sustainable as long as the public debt grows at a rate equal to or smaller than the nominal GDP growth rate (Pasinetti 1998). Accordingly, a consolidation strategy may be judged successful if it leads to a stabilization or even reduction of the debt ratio, while a continued rise in it may be a signal of failure.

Perhaps neither a balanced budget nor a stable debt ratio would be viewed as a proper policy success though, if this came along with GDP stagnation. This highlights that we are dealing with a ratio of two variables. Success or failure of attempts at consolidation depend upon the policy impact on the ratio of two variables; two variables which, moreover, are interdependent and neither of which represent an exogenous policy instrument. Even a policy that successfully reduces the deficit ratio may turn out a consolidation failure, namely, if the GDP growth rate falls by more than

the growth rate of the debt. Paradoxically, as it may at first seem, even rising *ex ante* deficits may herald successful consolidation, if GDP growth accelerates by more than the growth of the debt.

Accordingly, one may distinguish between "thrift-based" consolidation strategies on the one hand and "growth-based" ones on the other, depending on the main focus of policy orientation. At one extreme, a policy of boosting GDP growth "no matter what" might involve the risk of igniting inflation in case the economy runs into capacity constraints and/or soaring current account deficits—eventually—undermine the currency. At the other extreme, "no matter what" public thrift campaigns might involve the opposite risk of crushing GDP growth and/or—eventually—provoke retaliation from trading partners sharing their brunt. While a policy of deliberately inflating away the debt might be considered an unfair form of default. Crushing GDP growth, particularly when it leads to outright deflation, would seem undesirable, too.

From a stabilization policy viewpoint, the heart of the matter is whether macroeconomic policy maintains actual growth at its potential level and prevents protracted negative output gaps from arising. Failure to do so may be prone to depress potential growth as well, and thus prove doubly detrimental to public finances. Domar (1944, 822) wisely concluded that "the problem of the burden of debt is essentially a problem of achieving a growing national income"—and fifty years reiterated that "the proper solution of the debt problem lies not in tying ourselves into a financial straight-jacket, but in achieving faster growth of the GNP, a result which is, of course, desirable by itself" (Domar 1993, 478).

Domar's "fundamental equation" $d = \alpha/g$ yields some useful tools for empirical investigation that will be applied below. First, the concept of "stability [financial] balances" $\alpha^s = gd$, describing a "sustainability relation" (Pasinetti 1988) between the key variables may be derived, indicating the size of the deficit ratio that would be compatible with stability of any given debt ratio at the current GDP growth rate. Second, a related concept of the "sustainability gap" may be designed as the differential between actual and stability balances, indicating the degree of required consolidation.

Before embarking on their application some further issues may be cleared up. One concerns the size of the economy attempting to consolidate its public finances, an issue pertinent to the question of Keynesian versus non-Keynesian effects. The point is that "small economies" are typically also very open economies, that is, exports and imports represent high shares in GDP. At the same time, Keynesian retrenchment effects of thrift-based consolidation will leave the world

economy largely unaffected. Small economies may thus more easily rely on external growth in offsetting austerity without fear of either repercussions or retaliations from trading partners.

By contrast, a closed economy cannot rely (or, freeload) on any external anchor. Ideally, one would thus like to turn to closed economies when investigating whether and under what conditions non-Keynesian effects might compensate any domestic demand damages of austerity.[7] It is astonishing that Denmark's (1983-87) and Ireland's (1987-89) successful consolidations are widely seen as proving the dominance of non-Keynesian effects and possibility of "expansionary fiscal contractions." If anything, these cases prove nothing but the obvious: economic dwarfs may be pulled along by the world economic giant as long as the giant is moving fast enough anyway.[8]

The closed economy model would also be applicable if thrift-based consolidation were the order of the day globally. But while the world economy *is* a closed economy, no one individual country is. In practice, Japan, the U.S., and the eurozone come nearest to the theoretical ideal, and will thus be the focus of our analysis. Large and dominant enough to overwhelmingly make up the world economic giant among themselves, individually they are also closed enough in the sense that their own pace will mainly depend on domestic sources of growth rather than external growth.

Something else distinguishes them from typical small countries. Small countries often lack national monetary policy as an effective stabilization tool and may have tied their currencies to that of some large economy. Large economies have a considerable degree of control over their own economic area's monetary conditions, both interest rates and the exchange rate—while public borrowing is in their domestic currencies.[9] Effective macroeconomic policy coordination is thus possible: large economies cannot rely mainly on external growth, but they have all the macroeconomic tools at hand to look after domestic demand growth. In particular, even as fiscal

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[7]In passing one may note here that it was neither by accident nor purely a matter of convenience that Keynes focused on the closed-economy model in *The General Theory*.

[8]Conventional studies appear remarkably innocent about this fundamental point. For instance, analyzing a large number of—inevitably mainly—small countries' consolidation experiences the IMF (1996, 58) observes that "good timing in relation to the world business cycle helps."

[9]Catching up at a remarkable speed, China may not be far off from belonging to this group of big players in terms of economic weight. With the renminbi tied to the U.S. dollar and exchange controls in place, China has been free to gear its own national monetary and fiscal policies at domestic demand growth without running into potential external constraints to its fast-track development.

policy might get geared at consolidation, and certainly as long as inflation is under control, monetary policy represents a "spare" stabilization instrument. This trade-off is a standard mainstream result even in games with independent central banks: if fiscal policy can do less in terms of stabilization, monetary policy has to shoulder more of the stabilization burden.

This leads us to another important issue: interest paid on the public debt. Alas, addressing the links between interest rates and budget deficits is like opening up a Pandora's box—as the notorious "crowding out" issue immediately creeps to the fore. That budget deficits inevitably push up the general level of interest rates, thereby causing crowding out of private investment in particular, is still a widespread presumption today. Empirically, there may be no fast-cut answer to the issue either.[10] For if income distribution provides any gravitational force to the system at all, the finding of some positive correlation between the level of interest on (default-free) debts and nominal GDP growth should not come as any surprise. If financial markets were forward-looking, market expectations about future monetary and fiscal policies and their joint effects on nominal GDP growth should be pivotal. In policy terms, so-called Taylor rules, describing monetary policy as responsive to output gaps and deviations from some inflation target, are a case in point here.

Essentially, the issue of "crowding out" or "crowding in" is largely a matter of policy cooperation between fiscal and monetary authorities. Conditioned by financial market perceptions of the state of the economy, whether expansionary (contractionary) fiscal measures crowd out (in) private spending is largely dependent upon the degree of monetary policy accommodation forthcoming, both in terms of interest rate policy as well as communication policy (with the latter largely shaping financial market perceptions and expectations about future policies).

Therefore, rising nominal interest rates may signal successfully coordinated expansionary fiscal and monetary policies rather than reflect policy ineffectiveness due to crowding out. Namely, if nominal GDP growth accelerates sufficiently to become compatible with, and sustainable at, higher interest rates. By contrast, it is of no use whatever to undertake contractionary fiscal measures (or abstain from expansionary measures in view of alleged crowding out risks), if the central bank fails to deliver "crowding in" anyway.

The differential between the nominal rate of interest and the nominal GDP growth rate—or:

[10]See Cebula and Saltz 1997, Allsopp and Glyn 1999, and Laubach 2003, for instance.

"rate gap," for short—provides a useful auxiliary indicator. Presuming that macroeconomic policies have a crucial influence on nominal GDP growth, the rate gap provides a quality measure of policy coordination and indicator of likely success of any consolidation strategy. As equation (2) indicates, the rate gap is key to debt dynamics:

$$\partial d/\partial t = \alpha^p + id - gd = \alpha^p + (i - g)\, d \qquad (2)$$

where α^p is the "primary budget balance" net of interest service (both expressed as a share of GDP). Once more highlighting that nominal GDP alleviates the burden of debt, equation (2) shows that the greater the rate gap, the larger the "stability primary surplus" required for stability of any given debt ratio. When the level of interest and the nominal GDP growth rate are equal, debt dynamics are driven by primary balances only. Put differently, in steady state the new debt raised exactly pays the debt service—a kind of Ponzi scheme situation.[11] When the level of nominal interest paid on the public debt is higher (lower) than the rate of nominal GDP growth, an interest burden (subsidy) effect enters the play.

Finally, it is in order to stress what may well be the most relevant form of crowding out. As a worsening rate gap means that a correspondingly higher primary budget surplus will be required to keep the debt ratio from rising. When a budgetary squeeze forces the finance minister's hand at cutting primary expenditures, it will typically be public investment that is most easily cut.[12]

In conclusion, while rising (falling) levels of unemployment (employment) provide one chief candidate factor for causing a budgetary squeeze, a soaring interest burden supplies the other. Note that macroeconomic policies are key determinants of all the relevant variables. Macroeconomic policy stance may clearly be too expansionary for any desirable and sustainable path of nominal GDP growth, drive up inflation, and have unwelcome fiscal effects. But stance may also be too restrictive and, by pushing up unemployment and the interest burden, have unwelcome fiscal consequences too. It is a matter of finding both the right overall balance and the right mix of macroeconomic policies.

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[11]Largely for analytical convenience, conventional sustainability analyses simply assume that the level of interest exceeds the GDP growth rate. Nor does the empirical reality of the 1980s provide any excuse for such unwarranted generalization. See Blanchard et al. 1990 and Buiter 1985, for instance.

[12]Note here that except for the case of excessive public investment at the outset, a deteriorating public infrastructure has also rather clear-cut damaging supply-side effects. These come on top of any "short run" demand effects, but may prove long-lasting too.

Current fashion—especially in the eurozone—is obsessed with the idea that an expansionary bias in fiscal policy might pose a threat to sound money and price stability, while completely ignoring the opposite threat which a deflationary bias in monetary policy might pose to sound finances and fiscal consolidation. The rate gap captures the importance of effective coordination of fiscal and monetary policies, both for successful fiscal consolidation and economic performance generally. But the key insight is that a suitable mix of macroeconomic policies may be far better at steering nominal GDP growth rather than "directly targeting" some deficit ratio. Distinguishing growth-based from thrift-based consolidation strategies thus makes sense. Clearly, while real damages due to—allegedly—short-run "Keynesian effects" are regrettable in any case, nothing is gained if consolidation by austerity crushes g more than α.

Turning to the empirical analysis, fiscal developments in the three largest economies of the world diverged rather starkly in the 1990s: public debt took off in Japan adding some 100 percentage points to its debt ratio, while the U.S.'s debt ratio declined by roughly 10 percentage points, and the euro zone added another 15 percentage points and only stabilized its debt ratio towards the decade's end (Figure 2). These diverging fiscal trends warrant attention, particularly as the goal of fiscal consolidation appeared to have been a dominant theme in policymaking worldwide.

5. JAPAN: FROM PROTRACTED STAGNATION TO OUTRIGHT DEFLATION, AND ... ?

Commenting on the marked improvement in fiscal positions of almost all industrial countries since the early 1990s, the IMF observes that "only Japan has not contributed to this area-wide adjustment, reflecting the use of expansionary fiscal policy during much of the 1990s to promote and sustain economic recovery" (IMF 2001, p. 85). The view that Japan has conducted expansionary fiscal policies is well reflected in standard estimates of structural balances, showing a marked deterioration in structural balances much in line with financial balances (Figure 3).

Starting from a surplus of 2 percent of GDP around 1990, the structural balance sled into deficit of 7 percent of GDP by the late 1990s. Alas, even fiscal stimuli in this order of magnitude proved ineffective, on this view, as reflected by sagging nominal GDP growth that even turned negative in the context of protracted domestic demand and real GDP stagnation. With Japan's

sliding into outright deflation by the mid-nineties, the country has been stranded with a sustainability gap of up to ten percentage points of GDP in recent years; roughly the amount the country is adding to its debt ratio[13] per year (Figure 4).

Note here that Japanese debt dynamics over the 1990s were driven both by a rising primary deficit and a cumulative interest burden[14], with the latter contributing roughly twenty five percentage points, though less than a third of the overall rise in Japan's debt ratio since 1991 (Figure 5).

In fact, despite a soaring debt ratio and deteriorating credit rating (as assessed by international rating agencies) nominal interest rates have meanwhile fallen to extremely low levels and Japan's interest service on its (net) public debt is remarkably low (though pointing upwards of late).

As witnessed all too many times in emerging markets, rising interest rates can quickly spark a spiraling interest burden on public debt and cause more havoc on private sector balance sheets too. That, however, has so far not been the fate of the industrialized creditor nation Japan, which, in principle, is in full control of its national macroeconomic policies. And few would deny here that Japan's record low nominal bond yields (which in June 2003 briefly fell as low as 0.43 percent on ten-year JGBs) are related to the Bank of Japan's zero interest rate cum quantitative easing policies of recent years.[15]

The trouble is, of course, that even at such low rates of interest Japan is still burdened with an adverse rate gap. In fact, with core inflation and nominal GDP growth in negative terrain since the mid 1990s real interest rates have not been low. Private debtors have been left struggling with

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[13]It has to be acknowledged that Japan's *net* public debt position is still in significantly better shape than headline (gross) figures might suggest. On one measure the central and local governments financial assets holdings of some 35 percent of GDP (end of 1999), on another asset holdings of the pension system of some 50 percent of GDP (end of 1999), too, need to be deducted from gross debt. The latter would thus yield a less spectacular estimate at roughly 80 percent of GDP for 2003. On the other hand, there is significant potential offset stemming from the projected net future liabilities of the pension system as well as due to liabilities arising from loan guarantees and bank support. In any case, the debt ratio (gross and net) is on a sharply rising trend today.

[14]Note that stock-adjustment factors will not be considered separately in this study. Furthermore, for simplicity, the role of the rate gap in debt dynamics will be approximated by use of the 10 year government bond yield as the representative rate of interest paid on the public debt. In practice, the average maturity of the public debt is typically shorter than 10 years. Finally, one could deduct central bank profits (as a proxy for seignorage) from interest service.

[15]See Shirakawa 2001, 2002.

the rising burden a debt deflation "naturally" bestows on them, and banks have been hamstrung with loads of nonperforming loans and additional wreckage stemming from depressed asset prices.

Given that nominal interest rates are not known for falling below zero, many observers judge that Japan's situation might resemble what was previously seen as a mere academic curiosity: a liquidity trap. With rapidly growing public debt at near-zero rates of interest, many conclude that as neither nominal interest rates could be cut further, nor, on this view, more fiscal stimulus be expected to do much good, Japan seems stuck in a kind of "deflationary double-trap" (Figure 6). A related issue is that Japan's trend rate of potential output growth is estimated to be around 1 percent and cyclical slack judged negligible. Essentially, on this view, it is mainly "structural problems" that are holding back growth, and it is structural reforms—rather than expansionary macroeconomic policies—that would get Japan back on a recovery track.[16] For example the IMF judged in 2001 that "the very gradual withdrawal of fiscal stimulus currently under way is appropriate for now" (IMF 2001, p. 92), that is, consolidation by austerity should be the order of the day.

This assessment—the "structuralist view"—may be contrasted with an alternative interpretation of the evolving Japanese crisis of the 1990s which judges Japan's fiscal policy stance as insufficiently expansionary overall. For instance, Adam Posen (1998) rejects any idea that a sharp worsening in structural problems since the early 1990s might explain Japan's ongoing crisis. Instead, in his view, macroeconomic policy mistakes are mainly to be blamed. As measures implemented in 1995 proved, in his view, fiscal stimulus packages were not ineffective. Rather, they were generally insufficient in size and inefficiently administered. With actual amounts injected typically only a third of the announced headline figures, Posen (1998, p. 30) argues that "on net, the Japanese fiscal stance in the 1990s was barely expansionary, and it is the *net* injection of stimulus into the economy that determines the minimum result. In fact, the repeated reversals of fiscal direction and revelations of gaps between announced and implemented policies make even this

[16]The IMF acknowledged that a significant fall in tax elasticities in the 1990s has played a prominent role in the looming Japanese fiscal crisis, particularly as a reflection of the impact of declining profitability on corporate tax receipts. And the IMF also noted that the "real water" content of apparently huge "headline" spending figures, including public works spending, was often significantly lower. Furthermore, the IMF observed that the timing of previous attempts at consolidation may have been unfortunate, finding it "notable that the attempted fiscal consolidation in 1997 was followed by a sharp contraction in output" (IMF 2001, p. 98).

near-zero net injection an over-statement." Accordingly, on this view, "The appropriate policy response to Japanese stagnation is one, first and foremost, of expansionary macroeconomic policy" (Posen 1998, p. 113).[17]

While agreeing with this verdict, Richard Werner (2003) emphasizes the need for truly expansionary monetary policies. In fact, on Werner's account, Japan's ongoing crisis owes primarily and foremost to the Bank of Japan (BOJ) and its peculiarly designed monetary policies. Werner argues that Japan's central bankers, after first creating the bubble and then pricking it, for much of the 1990s pursued a strategy of deliberately immunizing whatever measures the Ministry of Finance may have tried to implement in order to stimulate the economy. The ultimate aim and rationale of the "Princes of the Yen," according to Werner, was to force structural changes upon Japan considered desirable by them, including the independence of the BOJ. Japan's central bankers reckoned that the right strategy to achieve this end through the monetary tools at their disposal was to cause a deep crisis and delay any recovery—with Japan's policy-imposed failure to recover itself proving the case for structural reforms. In Werner's view, Japan's central bankers possess the means to overcome any blockage in the banking system and stimulate nominal GDP growth sufficiently, but refrain from using it as this might disrupt their plans for Japan's new economic structure.

Werner's conspiracy theory may be hard to swallow for some contemporaries. Yet, the evidence on both technique and motives provided by Werner makes a compelling case indeed. Taking Werner's account of events in Japan seriously should alarm us to the necessity of protecting finance ministers from central bankers; no less urgent than protection may be the other way round. At the very least one might wish to consider the possibility of accidental monetary policy blunders—which may have serious fiscal repercussions too.

In fact, it is conventional wisdom today to blame the BOJ's inappropriate monetary policies

[17]Estimating trend potential output growth at 2 to 2.5 percent, Posen judged that a huge negative output gap had opened up and recommended decisive expansionary macroeconomic policies sufficient to close it. Also in view of the outright deflation that had set in the mid 1990s (only briefly interrupted by the untimely rise in consumption tax from 3 to 5 percent in 1997 that pushed up headline CPI inflation temporarily), Posen (1998) recommended a fiscal stimulus of at least 4 percent of GDP for 1998 (given a forecasted contraction of 1 percent for that year).

for much of the Japanese mess.[18] While some would see the key blunder in creating the "bubble economy" of the eighties, others emphasize the bank's too sluggish response, at first to the bubble's burst and emerging slump in the early 1990s and then, especially, since the onset of deflation. For one thing, this verdict by itself raises interesting questions concerning the popular money-neutrality postulate, given that Japan's difficulties would not really seem to qualify as a mere short-run affair. For another, the perception that the BOJ's independence, newly granted in 1998, might have played a part in the bank's obstinate refusal to pursue a more aggressively expansionary stance in a deflationary environment seems even more disconcerting in view of certain fashionable beliefs (cf. Bibow 2001d) in this respect; concerns which may be rather relevant to the situation in Europe too.

The independence issue also features in Ben Bernanke's recently issued thoughts on monetary policy in Japan (Bernanke 2003; see also Bernanke 2000). Laying out a plan for a "more active" cooperation of fiscal and monetary policies to boost GDP growth and end deflation, the "Bernanke plan" is of great interest here. Its author appears to take a middle course in the debate on whether macroeconomic stimulus would deter or encourage successful structural reforms, arguing for their pursuance on parallel tracks. In his view, a definitive end to deflation and re-ignition of spending "would do much to help moderate the unemployment and financial distress that might otherwise arise as the results of aggressive programs of reform and restructuring" (Bernanke 2003).

On monetary policy, the U.S. Fed Governor recommends a "period of reflation" to undo the effects of deflation on the burden of debt in recent years, namely by means of an announced, gradually rising price-level target for the BOJ. At the end of the foreseen reflationary phase of policy this would then be replaced by a conventional inflation target. Before that point, however, the bank might be confronted by the problem that successfully replacing deflation with low inflation would deliver the "reward" of substantial capital losses on its significant bond portfolio (as bond yields would rise in the process). As the BOJ might fear that this would put its independence at risk, Bernanke proposes prior steps to immunize the BOJ's balance sheet from interest-rate risk—at zero

[18] "The Japanese case serves as a reminder that wrong-headed monetary policy can also influence real economic outcomes, and seriously so" (B. Friedman 2003, p. 7, ft 3). On the Japanese experience and the lessons it offers see also: Ahearne *et al.* 2002, Buiter 2003b. Kregel 2000, Krugman 1998, Kuttner and Posen 2001, Palley 2000, and Posen 2002, for instance.

cost, given the budgetary neutrality of the whole affair.

Most interestingly, however, referring to Posen's (1998) view that Japan's debt problem is primarily the result of slow economic growth rather than active fiscal policies, the "Bernanke plan" reserves a special role for monetary policy in supporting fiscal policies. In view of the potentially diluting effects stemming from Japan's already high public debt, Bernanke proposes that either tax cuts and/or spending programs should be *money financed*, as fiscal measures should be "explicitly coupled with incremental BOJ purchases of government debt." Bernanke's following observations deserve to be quoted at some length:

> Isn't it irresponsible to recommend a tax cut, given the poor state of Japanese public finances? To the contrary, from a fiscal perspective, the policy would almost certainly be stabilizing, in the sense of reducing the debt-to-GDP ratio. The BOJ's purchases would leave the nominal quantity of debt in the hands of the public unchanged, while nominal GDP would rise owing to increased nominal spending. Indeed, nothing would help reduce Japan's fiscal woos more than healthy growth in nominal GDP and hence in tax revenues. Potential roles for monetary-fiscal cooperation are not limited to BOJ support of tax cuts. BOJ purchases of government debt could also support spending programs, to facilitate industrial restructuring, for example. The BOJ's purchases would mitigate the effect of the new spending on the burden of debt and future interest payments perceived by households, which should reduce the offset from decreased consumption. More generally, by replacing interest-bearing debt with money, BOJ purchases of government debt lower current deficits and interest burdens and thus the public's expectations of future tax obligations. Of course, one can never get something for nothing; from a public finance perspective, increased monetization of government debt simply amounts to replacing other forms of taxes with an inflation tax. But, in the context of deflation-ridden Japan, generating a little bit of positive inflation (and the associated increase in nominal spending) would help achieve the goals of promoting economic recovery and putting idle resources back to work, which in turn would boost tax revenue and improve the government's fiscal position (Bernanke 2003).

One might only add here that while focusing on nominal GDP growth and the interest burden is appropriate as far as fiscal sustainability are concerned, the output foregone (and unemployment endured) in Japan's protracted slump is indeed lost forever and for nothing too.

In conclusion, the contrasting views on Japan's ongoing fiscal crisis expressed by the IMF on the one hand, and Ben Bernanke on the other, represent rather neatly the two opposing approaches to fiscal consolidation, namely thrift-based versus growth-based strategies. Given that

yen interest rates have little scope left to fall, the IMF's continuing emphasis on consolidation by austerity either implicitly assumes external growth sufficiently strong so as to keep the large country Japan afloat and/or puts paramount faith on credibility-enhancing and growth-boosting effects of structural reforms cum public thrift arising otherwise than through falling interest rates per se. By contrast, Bernanke squarely emphasizes the traditional role of macroeconomic policies in stabilizing domestic demand, even when special circumstances might require unconventional applications. In fact, the Bernanke plan amounts to the purest form of growth-based consolidation. Note that the idea is not to run even bigger deficits forever. Rather, the rationale is to apply decisive stimulus temporarily to push the economy out of the slump, and reverse current debt dynamics on the way too.

In any case, an important lesson from Japan's apparent deflationary double-trap experience is that allowing stagnation to persist may be dangerous, not least for the risk of slipping into outright deflation; a risk that turned out to be rather a real one even in an economy known for its allegedly all-pervasive structural problems. In dealing with this case of a country outside the western hemisphere one comes across the idea that inappropriate monetary policies may cause serious economic and fiscal damage. Moreover, concerns are expressed about central bank independence as a potential obstacle to macroeconomic policy coordination and successful fiscal consolidation. While such ideas and concerns pose a challenge to certain beliefs that are highly cherished in certain circles, they do not undermine the proposition that macroeconomic policies are key determinants of both nominal GDP growth and the level of interest—a proposition that holds equally true for the U.S. (and eurozone) economies to which the analysis now (subsequently) turns.

6. THE UNITED STATES: ECONOMIC GROWTH AS PRIMARY FOCUS

Of the world's three largest economies, only the U.S. proved properly successful in the 1990s in consolidating its public finances: the U.S.'s debt ratio declined by about 10 percentage points over the course of the 1990s; "despite" the huge fiscal swing seen recently, the U.S. debt ratio in 2003 remains slightly below the level reached in 1988 (Figure 7).

One key characteristic of U.S. fiscal policy is its countercyclical conduct. In the early 1990s recession, the deficit rose significantly reaching 6 percent of GDP. Consolidation only started in

1993-4, after the economy had bounced back quite strongly. The ground for recovery was prepared by the U.S. Federal Reserve's sustained easy money policy and a weak dollar. Consolidation of U.S. public finances took place in an environment of remarkably stable nominal GDP growth of around 6 percent as the U.S. Fed refrained from aborting the long boom of the 1990s even as unemployment fell markedly below any previous conventional NAIRU measure. Among other things, the U.S. Fed's cooperation helped to keep bond yields close to nominal GDP growth, so that the interest burden stayed under control; reflected in stability primary balances close to zero line in figure 8.

As a result, U.S. debt dynamics over the 1990s (Figure 9) were mainly driven by primary balances, whereas the interest burden amounted to merely 5 percentage points since 1991 (see fn 14).

The U.S. managed to consolidate precisely because it enjoyed a long boom, at declining levels of unemployment and with nominal bond yields that were closely aligned with nominal GDP growth. Not any expansionary fiscal contraction, the U.S. experience illustrates the effective use of decisively countercyclical macroeconomic policies that allowed growth-based consolidation. Not thrift caused growth. It was expansionary monetary policy, in particular, that ignited and sustained growth, while fiscal consolidation was one consequence of that. In fact, it was only because private spending was stimulated *sufficiently and beforehand* that public finances could be successfully consolidated even without the Keynesian "short run" damages of fiscal retrenchment.[19]

But perhaps there were some longer run damages instead. While the U.S. exemplifies growth-based fiscal consolidation, with a close alignment of bond yields and nominal GDP growth checking public debt dynamics. The counterpart to this success in terms of the dynamism of private debts must not be overlooked. After all, for the economy as a whole sectoral balances must always add up to zero. And as Wynne Godley has highlighted from early on, the "new economy" boom not only came along with plenty of corporate debts, but plenty of household debts too; as the household sector's saving rate plunged to historic lows and its debt ratio attained new historical heights.[20]

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[19]See Horn and Scheremet 1999, Blinder and Yellen 2001, for instance.

[20]See Godley 1999, 2003, Godley and Izurieta 2001, 2002a,b, 2003, Godley and Martin 1999, and Godley and Wray 1999.

To repeat, it was the private sectors' willingness to spend in excess of its income, together with their ability of doing so by means of sufficient credit creation, that allowed the public sector to run budget surpluses by the late 1990s. Arguably, then, the "pay down the [public] debt hysteria" witnessed at that time was much overdone. Particularly observers who find fault with the plentiful accumulation of private debts in the U.S. in the 1990s and identify them today as structural obstacles to sustained growth should not miss the link between this phenomenon and the widely praised public debt consolidation. Another related issue is the build-up of international imbalances in the 1990s, an issue to be taken up in section 9 below.

7. EUROPE'S ZONE OF STABILITY AND THRIFTINESS: ECONOMIC GROWTH OUT OF FOCUS

Similar to the U.S., but in contrast to Japan, the eurozone's debt ratio stabilized over the course of the 1990s. Success was only partial though: whereas the U.S. chopped 10 percentage points off its debt ratio, the eurozone added 15 percentage points to its own (Figure 10). In search of an explanation of this 25 percentage-point gap, putting the blame on German unification is a nonstarter. As France, starting out from a fiscal position comparable to that of the U.S. in the early 1990s, even added 30 percentage points to its debt ratio without any "unification burden."

The popular view that the eurozone may not have been ambitious enough is also quite beside the point.[21] In terms of magnitude of the fiscal swing (as percentage point change in structural primary balances), the eurozone's consolidation efforts were quite comparable to the U.S.'s (Figure 11). If the eurozone was less effective in getting its debt ratio under control, it is the other highly relevant variable which provides the answer: the U.S.'s growth performance was so much better. The pertinent question then is: Why was growth performance so much different?

The evolution of structural primary balances (Figure 11) reveals a stark contrast in timing: whereas the U.S. only started to consolidate in 1993 (ie. two years after the official ending of the recession) the eurozone embarked on consolidation in the fateful year 1991 of the Maastricht

[21]For instance, ECB president Wim Duisenberg, a particularly staunch believer in fiscal austerity and the supposed confidence and growth effects meant to arise therefrom "also in the short run" asserted in June 2003 when countries were retrenching despite stagnation that "[certain] countries now have to pay the price for not having sufficiently consolidated their public finances when economic growth was strong" (Duisenberg 2003).

Treaty negotiations, that is, in an environment of widespread weakness (apart from Germany), and continued with it through the Europe-wide recession of 1992-3. In short, the contrast here is between countercyclical and procyclical consolidation attempts.

Clearly, adherents to the view that eurozone finance ministers got themselves into trouble in recent years because they failed to make sufficient use of "the good years" not only ignore that the eurozone's procyclical approach to consolidation during the run-up to EMU may have been quite damaging and inefficient enough in terms of growth foregone. They also overlook that the remainder of the decade was brief: the eurozone simply did not enjoy such a long run of years of high nominal GDP growth. And it does not seem heroic to presume that the late 1990s were less dismal for the eurozone than the previous years exactly because no further consolidation took place.

Finally, do not miss that the fiscal stance and degree of consolidation achieved at the time was quite sufficient to set the eurozone's debt ratio on a clearly declining trend. As figure 12 shows, a sharp turnaround in the sustainability gap (measured in terms of primary balances) of more than 4 percentage points of GDP happened between 1995 and 1997. This was due to an improvement in the primary budgetary position on the one hand and a less adverse rate gap that emerged with the start of EMU on the other. Both factors together, and in roughly equal contributing shares, set the eurozone's debt ratio on a decline. I argued above that the U.S.'s fiscal stance achieved by 2000 may have been overly tight and consolidation overdone. There is similarly little reason for the case that the eurozone's debt ratio should have been set on an even steeper decline.

A far more striking feature of the macroeconomic environment in the eurozone is that it was only in the late 1990s that—for once—a close-to-zero rate gap became established. This alerts us to a much bigger role of the interest burden effect in eurozone debt dynamics compared to the U.S.'s. The spread shown in figure 13 indicates the importance of this—fiscally rather costly!—difference.

There can be little doubt that the key source of this striking difference has to be sought in monetary policy. And it would be wrong to think that no awareness of this fact exists. When expressed in politically correct form, matters may, for instance, sound like this: "It can .. be concluded that monetary policy while remaining *cautious*, has *on average* played a supportive role

in the public finance retrenchment of the 1990s" (European Commission 2000; italics added). A lot has been said about the ECB's more "cautious" (compared to the U.S. Federal Reserve, Bank of England, or Swiss National Bank, for instance) approach to monetary policy in recent years, an issue which will be further discussed in section 9 below. But the Commission's qualification "on average" is also important here, particularly as it was not the ECB, but the German Bundesbank which was *de facto* controlling monetary policy in the eurozone (to be) until 1999 (while *de jure* charged with "safeguarding the deutschmark" only).

The point is that the 1990s were characterized by greatly *diverging* monetary conditions within Europe, as nominal interest rates *converged* to (close to) common levels by the end of 1998. While some observers still seem to believe that the Bundesbank's ultra-tight money policy may have been appropriate for Germany (in view of the "unification shock"), few would deny that the EMS hegemon's stance was grossly out of tune with requirements in the wider-Europe. In fact, this experience nicely illustrated the vital importance of the "policy-domain problem"; itself a strong case for EMU (even when a commonly decided monetary policy would not solve the "one-size-[rarely]-fits-all" problem). It also provided the background to the ERM crises in 1992-3, the other key factor behind diverging monetary conditions over the 1990s.

To Germany the ERM break-up meant a sharp negative competitiveness shock, while devaluing countries experienced a corresponding gain in competitiveness vis-à-vis Germany. The impact on relative export performance was as theory predicts. But the Bundesbank's response was not. Instead, the Bundesbank practiced "caution." Interest rate cuts by the Bundesbank were extraordinarily sluggish (Figure 14), with the result that Germany's ultra-tight monetary conditions established in 1990 remained virtually unchanged until 1996 (a six-year span!), and only eased with the DM depreciation (and later euro depreciation) that started by that time.

While the DM's and later euro's plunge (in the context of dollar strength and "new economy" boom) provided an important external boost to the whole of Europe, it is important not to overlook the other key force in diverging monetary conditions within Europe: the interest rate convergence process. Only Sweden and the UK grabbed the chance provided by the ERM breakup and re-introduced their own national monetary policies; other EMU aspirants continued to allow their monetary policies to be run "cautiously" from Frankfurt. Between 1995 and 1998, however, countries other than Germany benefitted from a general convergence (ie. decline) in interest rates

towards German levels. In some cases huge spreads shrank to next to nothing within a short time span. A significant boost to domestic demand was bestowed upon those countries—as a one-off boon—when the markets gave their go-ahead to a broad EMU.

These factors have to be borne in mind in understanding economic performance and fiscal consolidation experiences in Europe over the 1990s. Compared to the U.S., Germany, for once, suffered from the Bundesbank's "cautious" approach to monetary policy even more than others. Effectively, the country saw its previous monetary comparative advantage turned on its head. In former times Germany had usually benefitted from an undervalued DM; as reflected by the country's five percent current account surplus in the late eighties, for instance. The ERM breakup swiftly changed internal European competitiveness positions. In former times Germany had also used to enjoy the lowest interest rates in Europe. After 1995 the markets moved others on to a fast easing lane—while Germany was stuck with the "steady hand" of its adored guardian of monetary stability.

As these very different starting positions also help to explain divergence seen since the start of EMU and until today, they will be taken up again in section 9 below. Before, however, the analysis turns to fiscal consolidation strategies and experiences seen within Europe over the 1990s. For, on top of diverging monetary conditions, there were significant differences in timing, degree and composition of fiscal consolidation pursued—and rather different outcomes too. In broad terms three groups of countries may be distinguished, with Germany and Ireland forming the first group, a group of special cases. The other two groups include countries that either followed Germany's pro-cyclical consolidation strategy, or pursued strategies that were more anti-cyclical. Some concluding observations on the diversity of European experiences with Maastricht-style consolidation follow at the end of this section.

8. A LOOK AT INDIVIDUAL EU MEMBER STATES

8.1 The Special Cases of Germany and Ireland

Germany is today still considered something of a special case owing to the unification shock that hit Europe's economic powerhouse in 1990 and which, according to conventional wisdom, destabilized

the country lastingly.[22] As Bibow (2001c, 2003b) has shown in detail that this assessment is much beside the point, I may be brief here.

No doubt unification immediately destabilized former East Germany. To former West Germany this has meant annual transfers of some €65-75 bn ever since, roughly 4 to 4-5 percent of western German GDP. In addition, unification-related debts pushed up Germany's debt ratio, by less than ten percentage points. Otherwise, western Germany's economy coped remarkably smoothly with the shock until 1991—an economy previously described as suffering from all-pervasive "structural problems" suddenly put up a four-year run of 4 to 5 percent annual real GDP growth at stable (market-determined) inflation! The budgetary swing was a mere 3 percent of GDP as the balanced budget of 1989 turned into a 2.9 percent deficit in 1991. In addition, the current account surplus of 5 percent of GDP in 1989 turned into 1 percent deficit in the early 1990s. While there was no second unification around any corner, a massive Bundesbank-orchestrated macroeconomic policy shock hit the country in 1991-2. This shock came on top of the de-stabilization of eastern Germany (only ten percent the size of western German GDP) and lastingly destabilized western Germany too.

I commented on the Bundesbank's ultra-tight money policy followed by "cautious" easing since September 1992 further above. In 1992, the fiscal rudder was turned sharply right, too. Under severe pressure from the Bundesbank, Germany embarked on "no matter what" consolidation by austerity still characterizing its fiscal policy today. The economic and fiscal consequences of stability-oriented macroeconomic wisdom are reflected in figure 15: Not the deficit, but real and nominal GDP growth were crushed to zero.

Much of Germany's fiscal mess owes to record bankruptcies and job losses in western Germany; with the ineptly inflicted fiscal squeeze eliciting rises in taxes and non-wage labor costs which are then quickly diagnosed as "structural problems." It is also instructive to consider the impact of Buba-style macroeconomic policies on German debt dynamics. Figure 16 shows that a highly adverse rate gap delivered an "extra [interest] burden" to German tax payers of some 14 percentage points (compared to the U.S. rate gap)—a bigger factor than the unification-related

[22]By contrast, in Germany the country's consolidation experience of the 1980s is widely considered a success; which partly explains why consolidation by austerity became the norm to be imposed on Europe in the Maastricht Treaty and Stability and Growth Pact (SGP).

push.

Ireland

In contrast to Germany, Ireland enjoyed an extra "burden" of *minus* 35.5% between 1991 and 2003, a period during which Ireland's debt ratio declined by some 65 percentage points! Should we attribute this miracle to Ireland's legendary "expansionary fiscal contraction" of the 1980s? To begin with, it would be fair to say that Ireland actually waited for the economic boom of the late 1980s until it embarked on consolidation (after the Irish pound's devaluation in 1986-7). Furthermore, the fiscal tightening of 1988-90 was actually followed by a sharp fall in GDP growth[23]—until the Irish rise took off in earnest in 1994 (after another depreciation in 1993).

Apart from the six-percentage-points swing in its current account between the mid 1980s and the mid 1990s, it is noteworthy that Ireland benefitted quite exceptionally from a number of factors over the 1990s, including interest rate convergence, massive EU transfers as well as direct investment inflows. These factors underscored the Irish investment boom and fast-track catch-up. Not thriftiness, but investment and growth characterize the Irish miracle. Budgetary improvements primarily reflect a fall in interest service as a share of GDP from 11 percent in 1988 to next to nothing today. In the late 1990s, Ireland enjoyed a negative rate gap of more than 10 percentage points. Such a constellation does cause miracles to public finances of the opposite kind often seen in emerging markets. Beware of drawing any general conclusions from this very special experience.

8.2 Other EU Member States Which Pursued German-Style Pro-Cyclical Consolidation

Italy

Italy embarked on consolidation before Maastricht: between 1989 and 1993 a shift in structural primary balances of 8 percentage points of GDP occurred as nominal GDP growth fell from 10 to 3 percent and severe recession hit the country. However, the economy bounced back in 1994. Following the export-led recovery, spurred by the lira's depreciation since September 1992 and global recovery, Italy added another 3 percentage points to its structural primary surplus between

[23]Sterling's ERM departure in September 1992 hit Ireland negatively, particularly until January 1993 when the Irish pound devalued too.

1995 and 1997 in order to take the Maastricht hurdle. Economic growth was dented once again; with exports being hit by the lira's appreciation vis-à-vis the DM after its trough in mid 1995.

Up against an highly adverse rate gap and nasty debt dynamics (yielding an extra burden of 33 percentage points!), interest rate convergence since 1995 helped to offset Italy's whopping fiscal retrenchment, with relatively high domestic demand growth between 1997 and 2000. In the process, interest service as a share of GDP came down from 12.6 percent in 1993 to 4.7 percent today. Figure 17 summarizes the timing and degree of Italy's fiscal austerity vis-à-vis Germany's and the interest rate convergence process.

Belgium

Belgium, another high-debt, first-round entrant to EMU[24], also saw its nominal GDP growth plunge in the early 1990s, but embarked on consolidation in 1993 nonetheless. A four percentage point rise in its structural primary surplus between 1992 and 1998 reflects fiscal retrenchment more similar in degree to Germany's than Italy's, with a less marked interest rate convergence relief than in Italy's case too. Interest service as a share of GDP fell from 11.3 percent in 1990 to 5.2 percent today. Of the eight percentage points budgetary swing between 1992 and 2003, 75 percent were due to a reduction in the interest burden. The country still shouldered an extra burden of 21 percentage points though.

The Belgium franc's link to the DM survived the ERM crises, while Belgium underperformed in terms of GDP growth and was highly reliant on exports over the 1990s. Between 1990 and 1997, when consolidation took its main brunt on domestic demand, the country's current account surplus rose from 3 to close to 6 percent of GDP.

Netherlands

The Netherlands have a history of somewhat erratic and procyclical fiscal policies. After an expansionary shift between 1988 and 1990, policy again changed direction in 1991: tightening of some five percentage points of GDP followed until 1994-5. From then on fiscal stance stayed put

[24]It is of some interest that the high-debt country Belgium was in a happy currency union with Luxembourg until 1999. As Luxembourg has hardly issued any public debt at all, it will not be considered here.

as strong growth led to both huge primary surpluses as well as a sizable interest subsidy effect—nicely consolidating public finances. Perhaps too nicely, given that the economy was overheating by 2000.

Given that the Dutch guilder was on the DM ever since the early 1980s it was always something of a puzzle that the Netherlands did well throughout the period of sluggish growth in the early 1990s and fared much better than its big neighbor over the whole decade. Once more, though, it is noteworthy that this small country, too, ran significant current account surpluses throughout the period when fiscal retrenchment took place (rising from 2 to 6 percent of GDP).

Bibow (2001a) argued that the clue to the "Dutch miracle" lies in its incomes policies: ever since the Wasenaar agreement of 1982 the Dutch systematically underbid German (ie. European) wage inflation. In this way The Netherlands successfully gained in external competitiveness and thrived on export growth. As exports make up two-thirds of Dutch GDP (with Germany as the key market and unification presenting an extra boon without any tax tag attached to it), this strategy induced sufficient investment and employment growth, which, in turn, underscored domestic demand, particularly from the mid 1990s onwards. In fact, so much so that when monetary conditions eased in the second half of the 1990s the economy finally overheated.

On the basis of data through 1998, Bibow (2001a, p. 256, fn 22) judged that either wage, labor productivity, or asset price developments might eventually derail the peculiar Dutch beggar-thy-neighbor strategy.[25] As it turned out, it was probably due to a mixture of all three elements plus another peculiar factor—a factor which also featured prominently in Germany's economic fiasco a decade earlier: indirect tax hikes. For in 2001 value-added tax was raised by 3 percentage points and Dutch CPI headline inflation at five percent suddenly found at the top of the European league—with wage inflation being pushed up accordingly. Figure 18 summarizes the Dutch miracle and its unhappy ending. As fiscal stance has barely changed since 1994, budgetary developments essentially reflect economic performance during boom and bust.

Finland

[25]Data through 1998 showed that relative trends in unit labor costs in Germany and the Netherlands changed well before relative wage inflation trends—supporting the view that low-wage policies and structural reforms may not be conducive to labor productivity growth (Kleinknecht 1998, 1999, Kleinknecht and Naastepad 2002).

Finland started retrenching in 1993 while still emerging from a very severe economic crisis that had hit the country in 1990 (real GDP declined by 6.3 percent in 1991 and another 3.3 percent in 1992).[26] The fiscal shift amounted to three percentage points until 1994. However, on top of the markka's depreciation in 1991-3, monetary conditions eased also through short-term interest rates dropping sharply toward German levels at that time. Long-term rates then converged until 1998 too when another fiscal shift of some four percentage points occurred in an environment of strong growth that had started in 1994. With an interest subsidy effect in some years, Finland's extra burden amounted to 5.3 percentage points. The country's current account position moved from a deficit of 5 percent of GDP in 1990 to a surplus of 7 percent by the end of the decade.

Greece

Greece joined the eurozone with a two-year delay in 2001. Experiencing a sharp rise in its debt ratio since the mid eighties, Greece went through drastic austerity and disinflation between 1989 and 1994: the financial deficit declined from 16 percent of GDP in 1990 to 2 percent or below by 1998. A final round of retrenchment occurred between 1996 and 1998 (structural primary balances improved by two percentage points; reversed thereafter). Essentially any budgetary improvement since 1995 was due to falling interest rates: down from a 14 percent peak in 1994, interest service is today back to its 1985 level of 5 percent of GDP (despite the debt ratio having doubled since).

In Greece, too, fiscal austerity came along with domestic demand weakness. For Greece too export growth provided an important anchor as the Drachma depreciated and the current account position improved sharply between 1990 and 1994. Domestic demand and GDP growth began to accelerate only in 1995—as interest rates were converging to German levels. In fact, an interest subsidy effect emerged around 1997 which today—at a negative rate gap of 4 percentage points—drives debt dynamics in an unusually benevolent way (leaving an extra burden of 2.8 percentage points only). After stabilizing around 110 percent of GDP between 1993 and 1997, Greece's debt ratio has started to decline—although the country has yet to comply to the SGP.

[26]As in Sweden's case, this included banking crises and stock adjustments due to revaluations of foreign currency denominated public debts when starting in November 1991 the Finnish markka lost 30 percent of its value.

Portugal

Portugal's consolidation path looks similar to Germany's and in Portugal's case, too, fiscal austerity between 1991 and 1993 came along with a slump in domestic demand. In addition, Portugal's exports were hit at first as the escudo's depreciation since 1992 was delayed and smaller compared to the peseta's. However, exports bounced back strongly in 1994 and domestic demand followed the year after. As figure 19 shows[27], the interest rate convergence process delivered significant relief since 1995; more than offsetting the limited fiscal retrenchment after 1993. Portugal thus enjoyed high GDP and employment growth during the second half of the decade, which together with falling interest service further improved public finances and set the country's debt ratio on a decline.

While Portugal's wage inflation during its high growth span was in line with (domestic-demand-driven) nominal GDP growth and CPI inflation barely exceeded 2 percent, trends were well above those in, say, Germany. It is debatable which country's conduct may or may not have been in line with longer-run requirements of stability within a monetary union, but imbalances were bound to arise in such a situation. Portugal's current account deficit exceeded ten percent of GDP by 2000.

8.3. EU Member States Which Adopted a More Anti-cyclical Consolidation Approach

France

France's performance in the second half of the 1990s surprised many observers, particularly as its labor market reforms did not comply with demanding neoliberal taste. The point is that despite the franc fort surviving the ERM crises, its macroeconomic policy mix diverged wisely from Germany's over the decade. Essentially, France's fiscal response to the early 1990s slump was anti-cyclical: its structural primary deficit rose between 1991 and 1993 and France delayed consolidation until 1996; rather well timed, as the boost from interest rate convergence kicked in at just that time (Figure 20).

While France's performance in terms of GDP and employment growth was markedly better than Germany's, this came at a cost: France's debt ratio rose by even more than Germany's over

[27]Portugal's budgetary statistics were significantly revised in 2001 when Portugal—in the context of a change in government—was suddenly found to be in breach of the 3 percent deficit ceiling. The European Commission's Convergence Report of March 1998 shows a deficit ratio for 1997 of 2.5 percent, for instance.

the 1990s. What is so striking about this is that France's economic and fiscal position in the early years of the decade was actually fairly similar to the U.S.'s. One key difference existed though: while the U.S. economy received massive support from the Federal Reserve's easy money stance and weak dollar, France suffered through the ERM spillovers of the Bundesbank's ultra-tight money crusade. This proved costly not only in real terms, but fiscally too: a thirty percentage point rise in France's debt ratio including an extra burden of 12.4 percentage points (the latter being similar to Germany's). Some forms of central bank independence may include the right though to publically blame finance ministers for the stability-oriented damages inflicted upon tax payers.

Austria

With an extra burden of about 11 percentage points, Austria's debt ratio increased by 10 percentage points only over the 1990s (an outcome which is comparable to Germany ex unification, as were starting positions in 1990). However, Austria's growth performance was much better. Again, starkly contrasting fiscal attitudes may be identified. As figure 21 shows, Austria at first seemed to follow Germany's consolidation approach in 1992, but strongly reversed the year after and then pursued an anti-cyclical course. The tightening in 1995-6, while still denting GDP growth, was better timed.

United Kingdom

The importance of macroeconomic policymaking could hardly be better illustrated than by the U.K.'s experience of the 1990s, with figure 22 depicting the country's anti-cyclical policymaking approach. Discretionary fiscal expansion was applied in response to the early 1990s crisis, supported by sterling's departure from the ERM and the Bank of England's quick and drastic interest rate cuts.

With flexible and well timed macroeconomic policies at work, the U.K. achieved remarkably stable growth and successful consolidation (Figure 23). With an extra burden amounting to 2.7 percentage points, its debt ratio rose mildly by 5 percentage points. Similar to the U.S., however, private debt developments mirrored the public sector's improvement (see Godley and Izurieta 2003).

Sweden

Sweden's experience was in many respects similar to the U.K.'s. Sweden too introduced inflation targeting in the aftermath of the ERM debacle and exchange depreciation of 1992. In the context of a severe slump Sweden's deficit rose to 12 percent of GDP by 1993.[28] Consolidation only started in 1994-5 after the economy had turned. This was followed by a temporary growth slowdown in 1996, but as interest rate convergence came to support, the economy then grew strongly through 2000 (Figure 24). Again it is noteworthy that since the 1992 devaluation Sweden's current account position turned from a deficit of 2.9 percent of GDP to a surplus of around 4 percent by 1997. Overall, Sweden's debt ratio rose only mildly over the 1990s, with an extra burden of 19 percentage points. Coping rather well with the 2001 slowdown, Sweden is still running a budget surplus today.

Denmark

Following its legendary expansionary fiscal contraction of 1983-7, Denmark lived through a long span of sluggish growth from 1987 until 1993 (with shrinking domestic demand in 6 out of 7 years and a current account shifting from deficit of 5.3% of GDP in 1986 to surplus of 2.8% in 1993; while until 1990 5 percent inflation too helped to check debt dynamics). As to the 1990s[29], Denmark's structural primary balance deteriorated by more than two percentage points in the first half. In fact, while its financial balance peaked at a deficit of 3 percent of GDP in 1993, a significant fiscal boost occurred in 1994-5. Since 1994 domestic demand has played a balanced role in GDP growth, receiving support from interest rate convergence (Figure 25). Denmark embarked on consolidation in 1996 and, in 2003, has a budget surplus of 1.4 percent together with a current account surplus of 3 percent of GDP. With an extra burden of 12 percentage points Denmark has reduced its debt ratio by 20 percentage points since 1990.

Spain

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[28]Sweden suffered from a major banking crisis, which, in addition to the revaluation of foreign-currency denominated public debts, led to sizable upward stock adjustments in its debt ratio.

[29]Denmark was the only Nordic country not to suffer from major banking crises, but not to devalue either.

Spain is another country that mainly consolidated in the second half of the 1990s. While a first round of retrenchment occurred in 1991-2, followed by a slump in domestic demand in 1992-3, export growth held up well thanks to the peseta's depreciation. The current account deficit of 3.6% in 1991 was balanced by 1995. The second round of retrenchment then occurred in 1996 by which time interest rate convergence was boosting domestic demand and employment growth (Figure 26). So much so that since 1998 Spain is enjoying a significant interest rate subsidy. With an extra "burden" of *minus* 2.3 percentage points, Spain's debt ratio is 15 percentage points above its 1990 level.

8.4 Summary and Concluding Observations on Diverse Experiences in Europe over the 1990s

Fiscal developments within the EU over the 1990s show much diversity and yield many a valuable lesson on factors that may tend to either support or retard consolidation; although not a single "expansionary fiscal contraction" could be identified.[30] Germany stands out as a warning illustration of the wreckage that mindless procyclical consolidation accompanied by tight money may cause. Other countries' experiences differed from Germany's due to disparities in macroeconomic policies: either monetary conditions evolved more favorably, in many cases significantly so, and/or consolidation strategies differed in terms of timing, degree and composition. In general, countries achieved better economic performance and proved more successful in consolidating their public finances if they pursued anti-cyclical rather than procyclical fiscal policies, and/or if their currencies depreciated at the right time, and/or if interest rates fell sufficiently and timely enough to boost private domestic demand; on top of whatever fiscal relief the latter factor meant in terms of lower interest service costs.

Fiscal austerity depressed domestic demand in all cases. If this proved temporary, the critical role of interest rate convergence in countries other than Germany must not be overlooked; no tales of "expansionary fiscal contractions" though, but a one-off event heralding EMU. Furthermore, do not miss another conspicuous pattern, especially among the smaller countries, as consolidation was typically accompanied by corresponding shifts in current account positions.

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[30] According to von Hagen et al. 2001 fiscal consolidation in the 1990s was less costly than in earlier periods, a result they see as "consistent with the notion of non-Keynesian effects, but not strong enough to imply that the fiscal consolidations were actually expansionary" (p. 67). They reckon the "Maastricht effect" might not apply in future.

One needs to be careful in drawing general conclusions from these individual experiences for the eurozone as a whole today. For one thing, while macroeconomic conditions diverged greatly during the run-up to EMU, the euro's launch meant that in many respects policy convergence finally arrived by the decade's end (though new forces of divergence have emerged too). First, swift changes in external competitiveness due to exchange rate adjustments are no longer possible; while strategic wage underbidding presents only a slow-track alternative. Second, the interest rate convergence process has truly been a one-off event for current members, which by now has run its course in most cases (while a preliminary repeat could be observed in accession countries). Third, whatever their policy preferences and attitudes towards anti-cyclical versus procyclical fiscal policymaking may have been in the past, the SGP now limits the room for free choice and discretion and poses a potential binding constraint on all countries alike.

Even more important in this context is Keynes's warning that sound macroeconomic analysis must not fall victim to fallacies of composition. For instance, to the extent that individual countries managed in the past to improve their relative position within Europe by either currency depreciation or wage disinflation, such success may not offer any practicable advice as a common strategy for the eurozone as a whole. What worked well for the Netherlands or other dwarf economies might cause havoc if applied to the economic giant eurozone.

In a sense, however, the eurozone went through an experience of this type when, starting in early 1996, first the DM and later the euro depreciated strongly against the U.S. dollar, in particular. Arguably, this timely external growth boost proved key to EMU getting off the ground in the first place. Certainly in Germany's case, the prime case of "stability-oriented"[31] macroeconomic wisdom practiced with doggedness, external demand has been the sole growth engine since the mid 1990s (as domestic demand has stagnated ever since).

The point is that currencies cannot be weak and economies freeload forever on external growth. Global tensions and imbalances are bound to arise—breeding the potential for swift and disruptive corrections. Particularly for a large economy, then, obstinate neglect of domestic

[31]When I criticize so-called stability orientation à la Bundesbank I should perhaps add that I do not rule out the possibility of more sensible versions. For instance, the Swiss National Bank, renowned for its stability orientation, is a case in point, and in November 2002 Philipp Hildebrand (as managing director of Union Bancaire Privée) aptly attested that ECB-style stability orientation was suffocating Europe—its public finances too!

demand, whether for the sake of fiscal consolidation or whatever, is an unsustainable and, hence, highly risky strategy. For at some point the external growth engine may simply stall and/or the currency appreciate sharply and cut off the external lifeline in this way. The 2001 global economic slowdown is a case in point—and will be the subject of the next section.

9. THE 2001 GLOBAL SLOWDOWN AND THE ECONOMIC AND FISCAL OUTLOOK IN LATE 2003

To some degree, the 2001 slowdown was a global event driven by common factors, among them the monetary policy tightening since 1999. But there were stark differences too (see Bibow 2003a). In the U.S. both domestic and external demand began to fall off by mid 2000, recession hit in late 2000, from which the U.S. economy reemerged in the final quarter of 2001. By contrast, the eurozone's external demand held up through 2000 and only plunged in 2001. While the decline in domestic demand that started in mid 2000 was less steep than in the U.S., it has proved more protracted. In fact, by late 2003 the eurozone has yet to recover. Effectively, net exports kept eurozone GDP growth in positive territory in 2001 and 2002.[32] Following the euro's sharp appreciation since March 2002, however, net exports' contribution to GDP growth turned negative in the final quarter of 2002, so that GDP growth too was negative over the first half of 2003 as the German disease of protracted domestic demand stagnation and fiscal squeeze had meanwhile spread. By late 2003, however, the euro area's policymakers seem hopeful that roaring U.S. GDP growth will, once again, pull the euro's land of stagnating domestic demand out of the mess.

Of course, popular stories about structural problems that might explain Euroland's lack of resilience and delayed recovery abound, especially in Germany. The facts are plain though. Euroland does indeed lack flexibility, flexible macroeconomic policies in particular. The contrast in policy response to the global slowdown between Euroland and the U.S. could hardly have been any starker. The swift and decisive shift in U.S. macroeconomic policy stance has been matchless even by U.S. standards. After a budget surplus in 2000, an unprecedented budgetary swing of some 7

[32]In Germany's case, net exports and private consumption both made a positive GDP growth contribution of 1.1 percentage points each in 2000 (with GDP growing at 2.9 percent, the single "boom" year and only year with a non-negative output gap since 1991!). Private consumption then subtracted 0.6 percentage points from GDP growth in 2002 while net exports added 1.7 in that year—with both components converging to close to zero in 2003.

percentage points has occurred since, while the Federal Reserve moved into the fast-easing lane in early 2001, slashing the Fed Funds rate from 6.5 percent to 2 percent by the end of the year. Further cuts to 1 percent followed until June 2003, pushing the real Fed Funds rate into negative terrain. Yet, real GDP growth and inflation remained too low (below 4 and 2 percent, respectively) for U.S. policy preferences, until the economy finally roared ahead at an 8 percent annual rate after mid 2003.[33]

A negative sustainability gap has opened up in the process and the U.S.'s debt ratio is on the rise again (Figures 7 and 27)—causing no panic though. U.S. authorities appear to stick to received wisdom and experience that, for a large economy, consolidation without sufficient domestic demand growth is not an option and, hence, consolidation by austerity not a practicable strategy. It is also noteworthy how aptly the Federal Reserve has supported the government's policy of boosting growth. After engineering a decline in bond yields to 3 percent in June (as an insurance policy against perceived deflation risks!), bond yields have since then bounced back to 4-4.5% *only*, that is, roughly half the rate of nominal GDP growth. Apart from supporting public debt dynamics, the Fed has managed to keep household interest service in check (despite a rising private debt ratio); while the government's tax cuts boosted disposable incomes sufficiently (despite a stagnating wage bill).

In Euroland, too, a continuation of received macroeconomic policy traditions may be observed. As figure 28 shows, after nearly doubling interest rates between November 1999 and October 2000 (thereby propelling the euro's plunge and pushing up inflation; Bibow 2001b, 2002a), the ECB subsequently was in no hurry to ease in view of the economy's plunge into stagnation. Its belated cuts in the aftermath of September 11 did no more than stabilize domestic demand at a depressed level. And in contrast to its panicky conduct in 1999-2000, the bank then ignored the currency's rise since March 2002 too. Effectively, its "too little, too late" cuts since December 2002, bringing EONIA down to 2 percent by June 2003, not even offset the euro's new-found strength, that is, there was no relief for the struggling economy from easing monetary conditions.

[33]Again, contrasting economic performances (in textbook-like reflection of equally contrasting macroeconomic policies) could hardly be starker: in the third quarter of 2003 U.S. annual GDP growth was exceeding 8 percent—while German domestic demand *shrank* at an annual rate of more than six percent; without never-ending structural story-talk losing any of its popularity among Germany's stability-oriented economic experts.

Furthermore, it is noteworthy that euro bond yields have for most of the time stayed above U.S. levels, and also well above nominal GDP growth in the eurozone. In fact, the ECB appears to be keen, through its notorious (and worse than meaningless) excuse that interest rates have already fallen to historically low levels, to prevent them from falling any further.

Unsurprisingly, the budgetary situation in the eurozone has deteriorated sharply in recent years. This was not due to any major discretionary fiscal boost though. Quite the opposite. As the ECB's chief economist Otmar Issing correctly observed when questioned on the role of the SGP in an interview with Der Spiegel (2003) in June 2003: "Current overstepping of budgetary plans is primarily due to economic weakness." As a result, though, most countries, including the big three, are under severe pressure today to inflict more fiscal austerity upon their struggling economies—if they wish to comply with the SGP's wisdom.[34]

Portugal was the first country to experiment with consolidation by austerity in the context of stagnation in the eurozone. And not even this small country's experience looks encouraging. At first, a 2.5% of GDP fiscal tightening in 2001-2 brought the deficit back below the holy 3 percent ceiling. Alas, with the economy pushed into recession in the process, the deficit soared again this year (Figure 29).[35]

Nevertheless, certain small member states vigorously demand from their struggling bigger partners to stick to the rules and apply—allegedly—virtuous fiscal austerity no matter what.[36] After

[34]Do not miss the irony that measures undertaken in that very spirit may push inflation up rather than down. That protracted stagnation through depressing investment also tends to depress productivity growth (apart from measured productivity increases due to labor shedding) is all too obvious. A more intricate source of inflationary pressures which may arise under deflationary conditions stems from budgetary-squeeze-induced hikes in indirect taxes and regulated prices. "Tax-push inflation" proved catastrophic in Germany in the early 1990s (Bibow 1998, 2003b). The ECB (2003b) estimated that tax-push inflation may have at times added little less than one-half of 1 percentage point to headline CPI inflation in Euroland between 1999 and 2002; a factor which may thus have prevented the ECB from a more timely easing of interest rates in response to the 2000–01 economic slowdown which, according to Mr. Issing, is largely responsible for ongoing budgetary troubles. In fact, tax-push inflation seems no less important a factor in keeping inflation stubbornly above 2 percent by late 2003, and features prominently in the upward shift in the ECB's inflation projection for 2004 of December 2003 too. Perhaps, then, it was for this reason that Mr. Issing (2002) asserted back in December 2002 that the risk of stagflation deserves more attention than the risk of deflation.

[35]Excluding one-off receipts the deficit rose back to 3.6 percent of GDP in 2003, since "in a depressed European environment, external demand did not take over as an engine of growth" (OECD Economic Outlook no. 74, p. 159. Revised estimates for structural balances in the latest Outlook show that Portugal's economic history is being rewritten so as to suit the conventional view on the country's ongoing recession.

[36]On November 25, 2003, Ecofin suspended the SGP's sanctions mechanism (as part of the ongoing "excessive deficit procedures" against Germany and France), rejecting the European Commission's advice to proceed with imposing fines if structural deficits were not further reduced in line with Commission demands. After a long struggle

being lectured for years by Germany's famous finance minister Theo Waigel (a lawyer who legendarily taught everyone that 3 percent really meant 3.0 percent) on the wisdom of strict abidance by the Maastricht rules, they now seem to think pay-back time has arrived. For instance, Spain's authorities have yet to realize that their lucky budget surplus together with a 3 percent of GDP current account deficit implies piling up private debts; by all likelihood related to the ongoing property market bubble propelling construction and private consumption growth. As structural reforms in labor markets erroneously get much of the credit, the massive monetary easing bestowed upon Spain since the 1990s may yet turn out to have been too much of a good thing.

While Austria's exposure to the EU accession countries has proved a boon so far (even more so than for Germany), recent developments in Hungary may be seen as a reminder how precariously that balance hinges on the proposition of smooth convergence. Certainly Austria's break with former traditions and experience with SGP compliance since 2000 looks altogether uninspiring. For once achieving a budget surplus in 2001, Austria has joined the slump in the process (Figure 30).

Another case of virtue is The Netherlands. With the once miracle ending in tears and the deficit ratio approaching the 3 percent limit, the government promptly announced an austerity package of some 2.5 percent of GDP for 2004 (Figure 31). There is a Dutch history of erratic fiscal policies, including drastic austerity measures. There also appears to be an attitude of the kind: What might work for us, necessarily holds true for the eurozone too.[37]

Finally, the authorities of another less-than-2-percent-of-the-eurozone economy, Finland, also appear to believe that their successful consolidation after 1993, which involved a thirty percent

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that had started in early 2002, this event was widely interpreted in the media as the pact's final burial—a burial Spain, Austria, The Netherlands, and Finland (as well as the Commission, Bundesbank, and ECB) strongly protest against. In truth, the pact lives on in spirit and continues to cause vast damage even as a dead body. For the "suspension" has not changed the reality that fiscal austerity in these countries continues unabated anyway, even if by slightly less than the Commission demanded. Needless to say, the right course of action would have been to change rather than break this foul law. While the Commission's president Romano Prodi once famously observed that the pact was "stupid," Ernst Welteke, president of the German Bundesbank, when questioned on this issue at the 13th Hyman P. Minsky Conference in April 2003, countered that Mr. Prodi's remark was "stupid."

[37]At a time when U.S. central bankers felt their responsibility was to take seriously the risk of deflation, or even further unwarranted disinflation, the ECB's first president Wim Duisenberg legendarily boasted: "In the 16 years that I was the Governor of the central bank of the Netherlands, there were two years in which we had deflation of 0.5 percent. I publicly declared then that I lived in a central banker's paradise; as long as the others have more inflation, it is not a problem" (ECB Press Conference, 8 May 2003).

devaluation of the currency and 12 percentage-point swing in the country's current account position, might provide a blueprint for the eurozone today.

With finance ministers tight-up in disputes about how much more they should tighten fiscal policy in order to stimulate recovery, meanwhile, social partners in certain countries started to follow classical prescriptions for healing unemployment through cutting wages. Dutch unions recently agreed to a two-year wage freeze. In Germany, the left-wing government has taken the initiative for across-the-board public sector wage cuts; with negotiations and developments in the private sector following suit. This is not only counterproductive: the measure tends to push German inflation even further below eurozone trends, so that with common nominal interest rates Germany's domestic demand (70 percent of aggregate demand) is burdened with the highest real rates in the currency union (Spahn 2003). It is also bound to cause imbalances within the union, as Germany is effectively trying to export even more of its deflationary pressures and unemployment to its European partners; despite being world export champion and its current account surplus approaching 3 percent of GDP. Finally, starting from the eurozone's wage inflation trend rate of 2 percent that became established in the mid 1990s, one might wonder for what kind of wage inflation trend (and wage share) Euroland might be heading under Dutch-German leadership.

As the ECB readily admitted that its baffling equanimity as regards protracted stagnation was based on the view that rigid labor markets would prevent deflation, it is puzzling that ongoing labor market developments do not seem to provoke any reflection in Frankfurt. Currently, the ECB's primary concern appears to be to bring about as much fiscal tightening as possible—and Euroland's independent central bankers do not even shy away from threatening interest rate hikes to underscore their determination. The bank appears to subscribe to tales of expansionary fiscal contractions. Yet, given that the idea of falling interest rates that would offset the contractionary effects of fiscal austerity is key to the hoped-for outcome, it is somewhat ironic that the bank at the same time asserts interest rates are already at historically low rates (and hence unlikely to fall further). In addition, the ECB's new president Trichet, esteemed for his franc fort attitudes, appears to possess talents similar to his predecessor's in inviting currency moves that may not be altogether

benign.[38]

In other words, totally unaware, it seems, of the fact that they have swapped their former toys for a heavy truck and thus should have adapted their driving styles accordingly, Euroland's central bankers and finance ministers may still be acting under the illusion of riding tricycle. Not the least of all concerns is that the eurozone heavy truck is heavy enough to cause serious rampage in the world economy too. The eurozone is simply too large to perpetually freeload on U.S. sponsored export-led growth while eurozone policymakers do their best to suffocate domestic demand.

Arguably, EMU would never have got off the ground without the external boost it received from the U.S.'s "new economy" boom in 1996. In that era, the U.S. was complacent about a sizable chunk of U.S. domestic demand growth bypassing U.S. labor markets through a protracted net exports drag. But times have changed. With a current account deficit of five percent of GDP and rising, election looming next year, but sizable labor market slack at their own doorstep, U.S. authorities are destined to continue re-tuning their "strong dollar" policy accordingly. This is not an illegitimate strategy at all. As they deserve, notorious freeriders may be left out in the cold though.

In that context, China is currently much in the line of fire. Yet, despite a huge bilateral trade imbalance between China and the U.S., this is barking up the wrong tree. For China's roaring growth is largely domestic demand driven and its current account surplus a quarter of Germany's and less than 15 percent of Japan's. Whereas the latter long-time drag on world economic growth bounced back in 2003, in seems, the other true villain becomes ever more of a drag on world economic recovery (Figure 32). In effect, the U.S.'s budgetary position and private household indebtedness deteriorate by more that would be required to stimulate U.S. growth, if the US were not so much overburdened as the world's sole growth engine. At the same time, public finances in Euroland too deteriorate as "extraordinarily incompetent macroeconomic policies" (Economist 2003) have plunged this self-deceiving economic giant into protracted stagnation. With US growth

[38]On taking over the ECB's helm Mr. Trichet declared that "we follow a strategy of a stable euro, a strong euro and a euro that inspires confidence" (Wall Street Journal Europe 20 November 2003). More recently too, he has been understood as signaling that the ECB was not concerned about the euro's ongoing rise (Wall Street Journal Europe, 5 December 2003). Mr. Duisenberg proved a remarkable talent in steering currency markets in either way. In 1999 and 2000, he was very effective in talking down the euro when it was weakening (Bibow 2002b). More recently, he proved equally apt at talking up the euro when it was strengthening (Wall Street Journal Europe 7 October 2003; FT.com, 5 November 2003;). Perhaps, then, Mr. Trichet might try to improve on the timing.

priorities and German-style "stability orientation" in Europe staying on collision course[39], the world economy is currently not a safe place and outlook for fiscal consolidation grim.[40]

[39]After gaining sufficient experience with the economic consequences of German-style stability-oriented policymaking, first in Germany (as the Bundesbank's chief economist from 1990 until 1998) and then in Euroland (as the ECB's chief economist from 1998 until 2006), Otmar Issing now seems to offer his advice to U.S. policymakers too. In October 2003 in a speech at the German British Forum in London he demanded that the U.S. should quickly reduce its budget deficit (Börsen-Zeitung 30 October 2003). The speech as published (see Issing 2003) repeats the usual assertions that each country is responsible for securing stability at home and that macroeconomic policies are of no use in lifting the eurozone's low potential output but would only ignite "temporary straw fires" instead. While the first assertion begs the question why the ECB seems to act as guardian of protracted stagnation in the euro area, the second assertion reveals an interesting answer to that puzzle: Mr. Issing appears to confuse actual and potential output growth. This might also explain Mr. Issing's rather peculiar interpretation of the money neutrality postulate, an issue on which Milton Friedman had some important practical advice for him (see Friedman 2002). Be that as it may, the ECB's assessment of risks to the eurozone's [export-led!] recovery as residing in "persisting imbalances in some regions in the world" seems almost comical when it rejects any responsibility for stagnating demand at home.

[40]The U.S.'s external imbalance is no longer merely driven by its trade deficit as capital income flows (long after the U.S. has become a net debtor) have meanwhile become adverse too; adding extra pressure to the fast built-up in the U.S.'s foreign indebtedness (Godley and Izurieta 2002b). Yet, with macroeconomic policy stimuli distributed unevenly and growth differentials rising accordingly, the U.S.'s current account deficit would tend to grow further and thus enhance risks of fragility accordingly – unless the U.S. dollar depreciates sufficiently to offset this. In that case, however, the eurozone would miss out on the hoped-for external boost that underlies current forecasts for an export-led recovery in 2004.

10. FINAL ASSESSMENT AND RECOMMENDATIONS

Of the world's three largest economies analyzed in this study, Japan's experience over the 1990s is clearly a warning sign of the serious dangers posed by protracted stagnation. These dangers include the risk of public finances getting out of control and eventual slippage of the economy into outright deflation; even in an economy that allegedly has been plagued by all-pervasive structural problems. While the effectiveness of macroeconomic policies in stimulating domestic demand has become doubted under such conditions, sole reliance on exports has clearly proved insufficient. Reliance on external growth nourishes global imbalances which might implode prior to successfully putting a large economy back on track through this strategy. Nonetheless, the IMF's advice for Japan is: consolidation by austerity. In the light of theory and evidence, Ben Bernanke's seemingly radical proposal for a money-financed fiscal boost, ie. growth-based consolidation through coordinated fiscal and monetary policies, makes far more sense. But the most important lesson is to avoid slipping into a "deflationary double trap" in the first case.

U.S. authorities have taken this lesson on board. With inflation running at a very low level when the economy took a dive after mid 2000, decisive measures were implemented to contain the plunge and prop up domestic demand through traditional macroeconomic tools. Essentially, this is a continuation of U.S. macroeconomic policymaking traditions. For the U.S.—at least at the federal level—does not have any history of (attempts at) consolidation by austerity. And for good reason too, as reliance on external growth to offset any fiscally induced contraction of domestic demand is not an option open to a large economy. The real choices open to such an economy are either to pursue fiscal contraction and accept the recessionary consequences, hoping that *subsequent* easing of financial conditions as monetary policy responds to the slump will—at some point at least—boost private demand sufficiently as to lead to a recovery; or to do things in the opposite order.

The U.S. experience of the 1990s illustrates the latter approach of successful growth-based consolidation. In the early 1990s recession, automatic fiscal stabilizers were allowed to work freely

while monetary policy eased sufficiently and timely to boost private spending.[41] Reductions in unemployment and benign debt dynamics due to interest rates in line with nominal GDP growth are key to checking public expenditures and keeping tax revenues up as well. Importantly, not thrift caused consolidation. Rather, it was the strong growth in private domestic demand—ignited by expansionary macroeconomic policies—that allowed public finances to be consolidated passively over the course of the decade.

In fact, it may be argued that the strategy has proved too successful and consolidation gone too far. The idea that the public sector should run budget surpluses forever (perhaps even beyond paying down the public debt?) has always been strange—not least as this would require other sectors to run corresponding deficits. There is some concern today about the record indebtedness of the U.S. private household sector that has emerged when the private saving rate fell to zero by the late 1990s. But few observers appear to see the necessary link. Similarly, there is some debate today about the relevance of credit growth and asset prices to monetary policy, factors which played important parts in the private spending boom that allowed successful consolidation of public finances. Yet, with fiscal stance (since 1994 fairly rigidly) tuned at consolidation only, steering private spending so as to deliver the GDP growth that would allow that aim was left to monetary policy alone—and, like it or not, credit growth and asset prices play crucial parts in the way monetary policy does its work. Perhaps what this should tell us, then, is that monetary policy was simply overburdened, and the proper role of fiscal policy thus be reassessed.[42]

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[41]"Overall, then, various pieces of evidence indicate that fiscal policy has been responsive to both fiscal and macroeconomic conditions, and possibly more responsive in recent decades than previously. Whatever the intellectual developments regarding the efficacy of countercyclical policy, policymakers are still Keynesians, and spending and revenue do react to the budget situation, as measured by current and projected surpluses" (Auerbach 2003: 97-8).

[42]This process seems well under way in the U.S., as reflected in Taylor (2000) and Feldstein (2002), for instance; although any possible role of ideology in this remains somewhat unclear. In a speech at New School University, New York City, 20 October 2003, Joseph Stiglitz noted that Alan Greenspan may have shown different attitudes to budgetary developments in the early 1990s under the Clinton Administration (D) compared to recent years under the Bush Administration (R). From a European perspective, the Greenspan Fed has been remarkably cooperative on either occasion. There is a vast gulf between respective attitudes. Europe's independent central bankers do not view themselves as servants to any democratically-legitimated government policy, but as "high priests" unaccountable to anyone; as aptly described by Münchau (2003): "To an outsider, the most alien aspect of European economic policy is not the bizarre obsession with deficit targets but the way central bankers publicly admonish finance ministers. ... The ECB may not be a carbon copy of the Bundesbank but it still manifests some of the German central bank's more disagreeable mannerisms - especially the persistent need to comment on political affairs. Until October, one could have put this down to the eccentricity of Wim Duisenberg, its former persistent. But even though the much more controlled Jean-Claude Trichet is now in charge, the ECB is still compulsively speaking out." If fact, what is at issue

But today's imbalances also owe greatly to the fact that the U.S. has been overburdened as sole growth engine of the world economy for far too long. Japan—not China!—has been one important drag on world economic growth, the eurozone—especially its leader Germany!—the other. Hamstrung with the Bundesbank's peculiar stability orientation, mindless consolidation by austerity caused great economic damage across Europe until 1996.[43] Subsequently, the old continent benefitted—at varying degrees—from currency weakening and strong overseas growth together with the one-off event of converging European interest rates; factors which temporarily spurred consolidation of public finances within an environment of growth.

Alas, this has proved a brief span of luck. Today, Euroland is back for more consolidation by austerity—and with little hope for more luck. The point is: Euroland's policymakers have yet to grasp that they are now in the same league facing the same policy options as their counterparts in the U.S. In fact, the only economy relevant for guidance of eurozone policymakers today is the U.S. That means for the eurozone as a whole consolidation by austerity is a nonstarter, while successful growth-based consolidation hinges on effective coordination between fiscal and monetary policies; with reducing unemployment and checking debt dynamics (by keeping interest rates aligned with nominal GDP growth) as key determinants of budgetary developments. By contrast, continued austerity and stagnation will shrink tax revenues (or induce rises in tax rates and social security contributions then quickly identified as "structural problems"), while the declining trend in public investment will be offset by rising unemployment benefits and interest service. In this way, not just the current generation is being burdened by stagnation and unemployment, but future ones will inherit a smaller capital stock together with a bigger debt stock too.

Whatever the eurozone's potential growth with or without "structural problems" might be,

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is far more than just disagreeable talk, but openly uncooperative monetary policies (or use of blackmail?).

[43]In promoting the "Single Market Project" (SMP) back in the 1980s the European Commission's (1988) study observed that macroeconomic policy would have to be set on a "coherent, growth-oriented strategy" in order to reap the foreseen supply-side gains and let the economy climb on a higher growth trajectory. The study compared two simulations, one with a passive, another with a more active macroeconomic policy stance. In its later Assessment of the SMP the Commission (1996) conceded that "in reality, economic events (e.g., German unification) forced an European-wide macroeconomic policy environment during implementation of the SMP more like that envisaged in the first simulation. Clearly, this may have restrained the potential positive effects of the SMP." Given that even the first simulation implied huge employment gains and budgetary improvements, this is a rather polite way of describing the mess that the Maastricht process under the Bundesbank's leadership made of the "greatest supply-side project in the world economy."

the relevant model for policymaking has to include, but is still lacking today, proper domestic demand management. With respect to consolidation this means that the SGP—erroneously believed dead by many observers today—focuses on the wrong variable: macroeconomic policies are better suited for steering nominal GDP growth than "directly targeting" some random number for the deficit ratio. Importantly, for consolidation to be growth-based private spending has to be boosted sufficiently *prior* to the budgetary tightening taking effect. Clearly this is not the way the ECB views matters when it threatens to hike interest rates in view of the budgetary consequences of a protracted stagnation that is primarily of its own making.[44]

Hence the "Maastricht paradox" (Bibow 2001a, 2002b) of granting independent central bankers unbounded discretion needs to be confronted. If there is a case for protecting monetary policy (and rentiers) from spendthrift finance ministers, and there may well be one, the case for protecting fiscal policy (and tax payers) from paranoid inflation nutters is no less urgent: "monetary policy is much too serious a matter to be left to the central bankers," as Milton Friedman (1992, p. 261) vigilantly observed.

The possibility of a political agenda like the one attributed to the "princes of the yen" by Werner (2003) aside, Euroland's all-too independent central bankers appear clueless concerning their vital role in fiscal consolidation and steering economic growth more generally. The ECB's assessments are marred with stark inconsistencies and systematic errors. Missing out on the growth opportunities that a low-inflation environment would offer even to stability-oriented policymakers, the ECB keeps on fighting yesterday's war. Finance ministers too, often inspired, it seems, by some

[44]In practice, the ECB's blunders may be easily covered up by the use of popular statistical techniques that estimate potential trend growth by simply averaging actual growth in recent years (e.g. Hodrick-Prescott filtering). The OECD Economic Outlook no. 69 of June 2001 estimated a negative output gap for the euro area of -0.3 percent of GDP for 2000. Meanwhile, from the Economic Outlook no. 74 of December 2003 it would seem that the euro area had a positive output gap of 0.9 percent in 2000. For one thing, this appears to retrospectively justify the ECB's aggressive interest rate hikes in 2000, apparently preventing an incipient outburst in inflation. For another, it increasingly appears as if structural budget balances deteriorated in line with financial balances in recent years (similar to the situation in Japan discussed further above), which would seem to justify criticisms of finance ministers' irresponsible profligacy. In November 2003, this very issue featured in the confrontation between the European Commission and the German government on Germany's "excessive deficit." For despite the fact that tax increases and expenditure cuts were inflicted upon Germany in 2003, the Commission estimated that Germany's structural deficit had *increased* (see Financial Times Deutschland 21 November 2003). In other words, if "exceptionally incompetent macroeconomic policies" (Economist 2003) depress actual growth sufficiently, the corresponding downward revisions in estimated trend growth might still prove that Germany was really suffering from a "contractionary fiscal expansion" (apart from its all-pervasive structural problems, of course).

economic dwarf's unique experience, appear intellectually trapped in models that are irrelevant to the proper management of an economic giant. Together, it seems, Euroland's policymakers hang on to fairytales about "expansionary fiscal consolidation"—and achieve the exact opposite.

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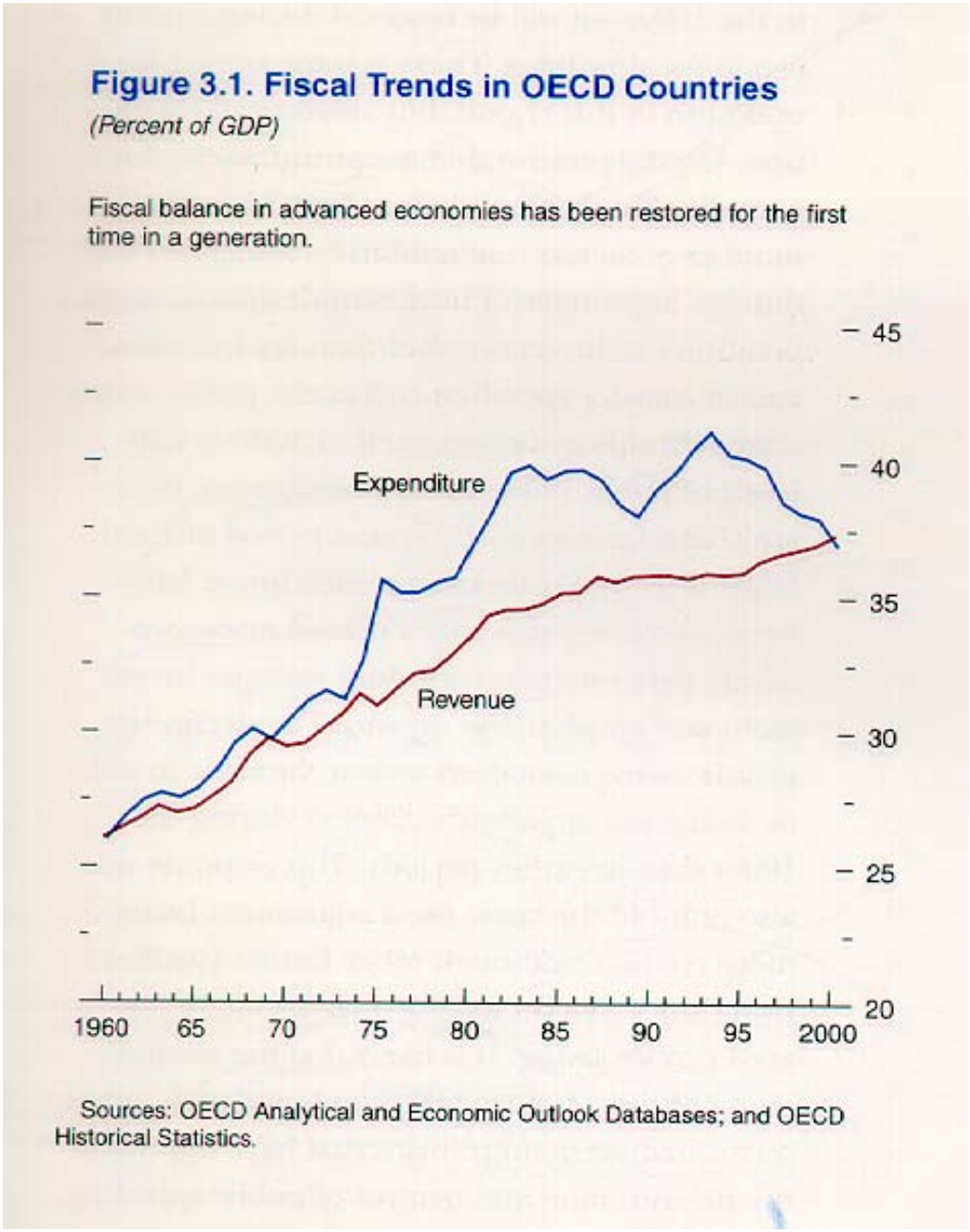
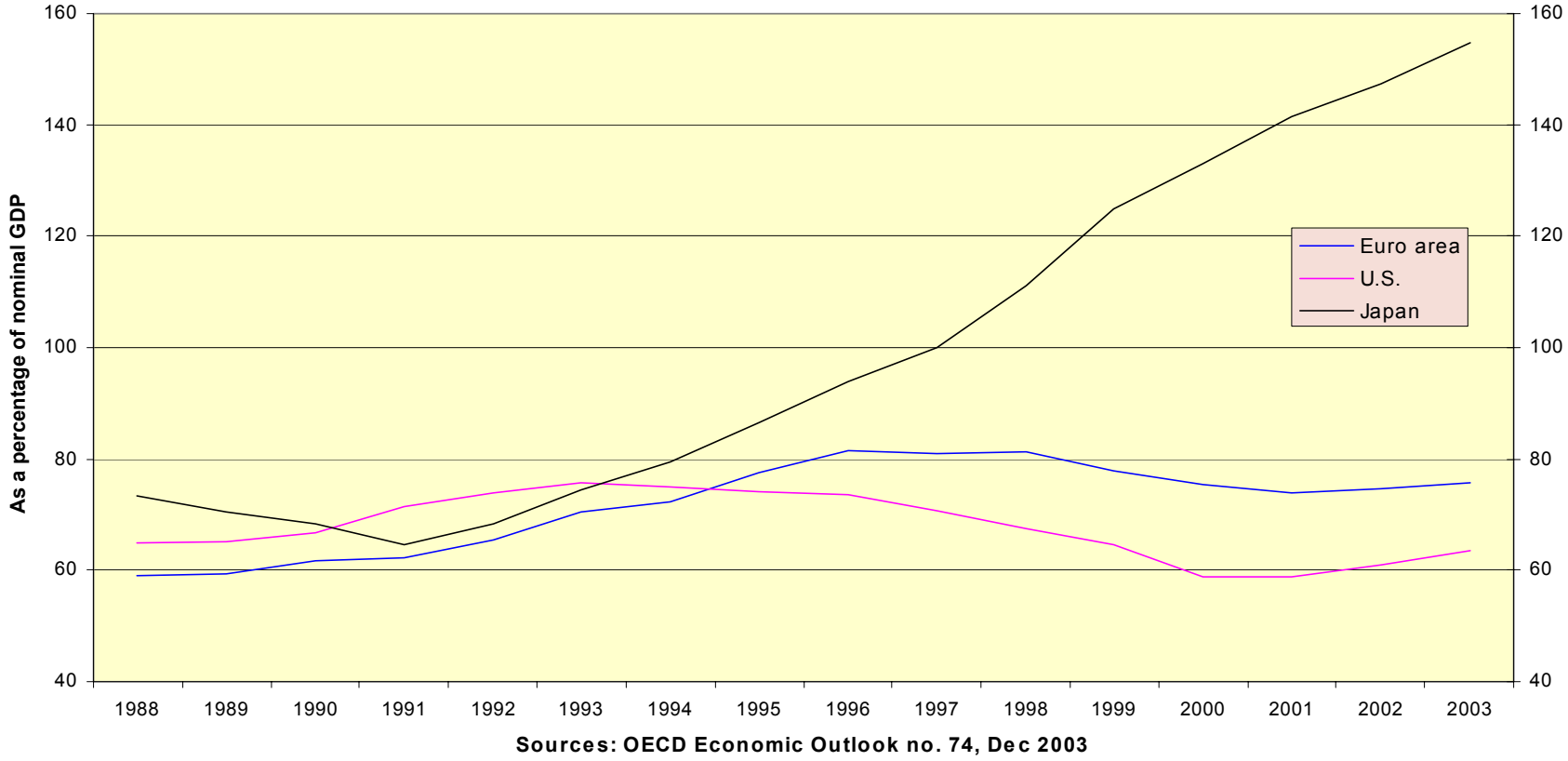
Figure 1:



Source (scanned from): IMF World Economic Outlook May 2001

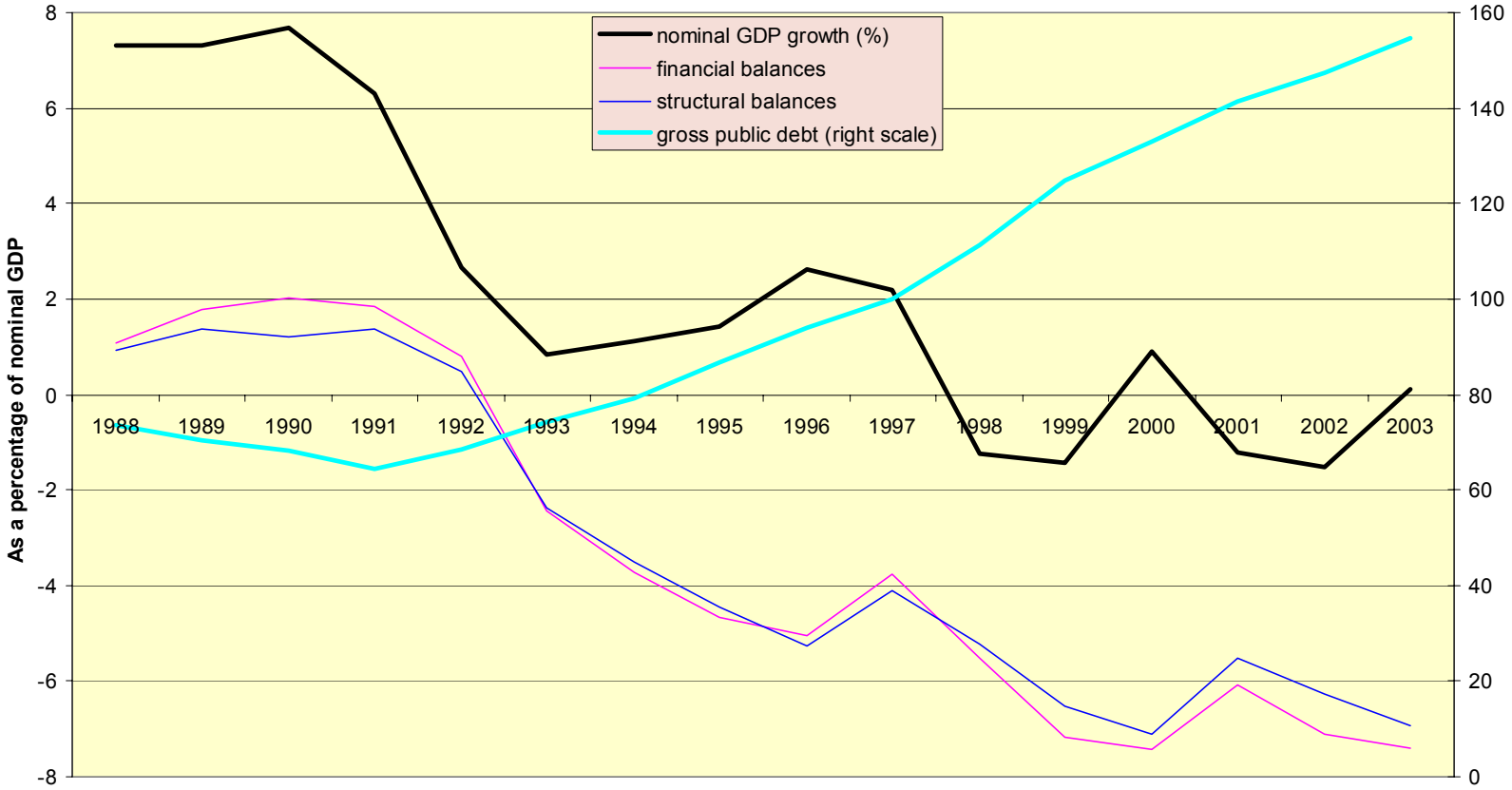
Figure 2. Consolidation: common priorities, perhaps - divergent results, surely

General government gross financial liabilities



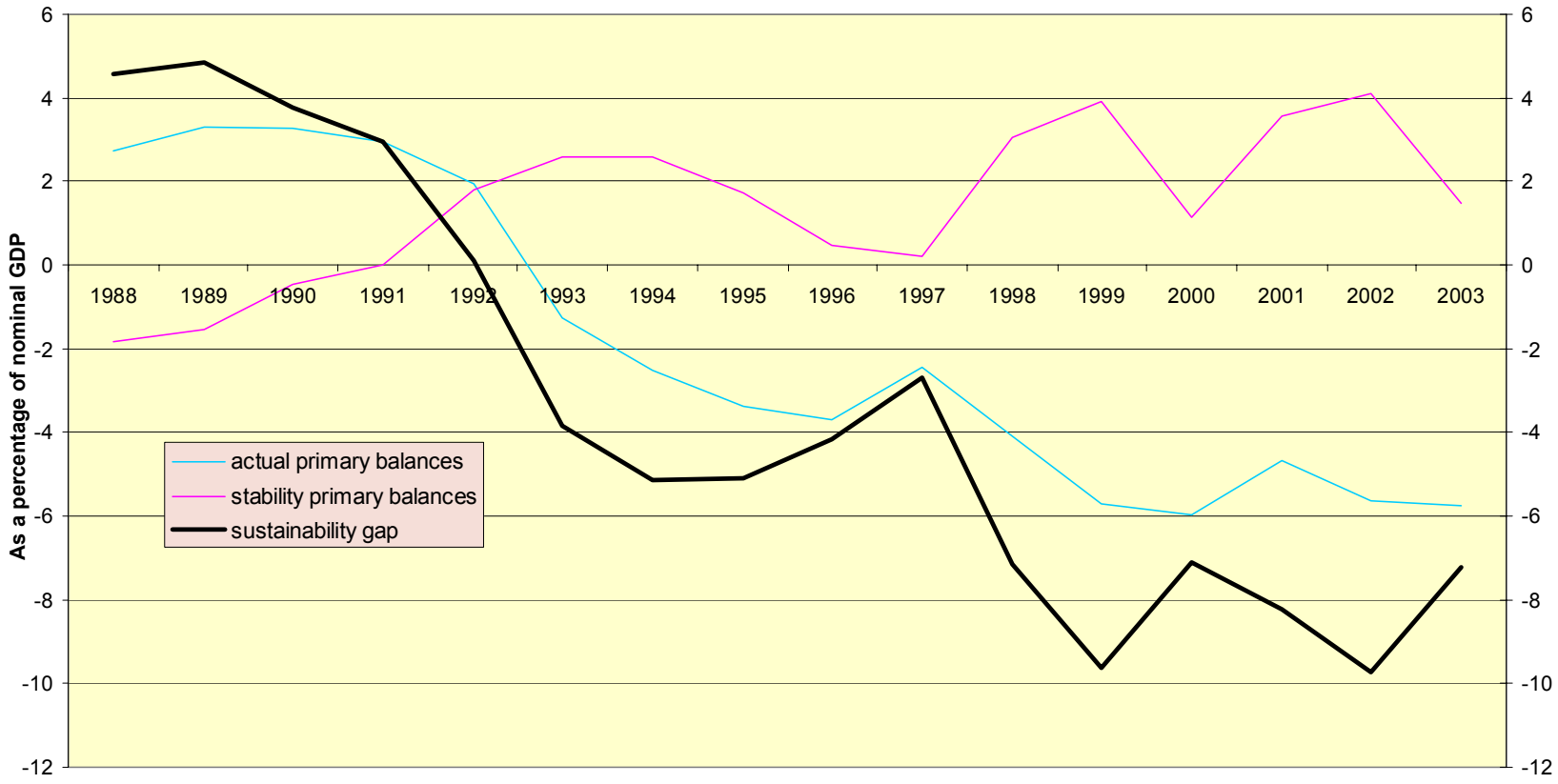
Sources: OECD Economic Outlook no. 74, Dec 2003

Figure 3. Japan's fiscal expansion: Too much of a good thing, really?



Source: OECD Economic Outlook no. 74, Dec 2003

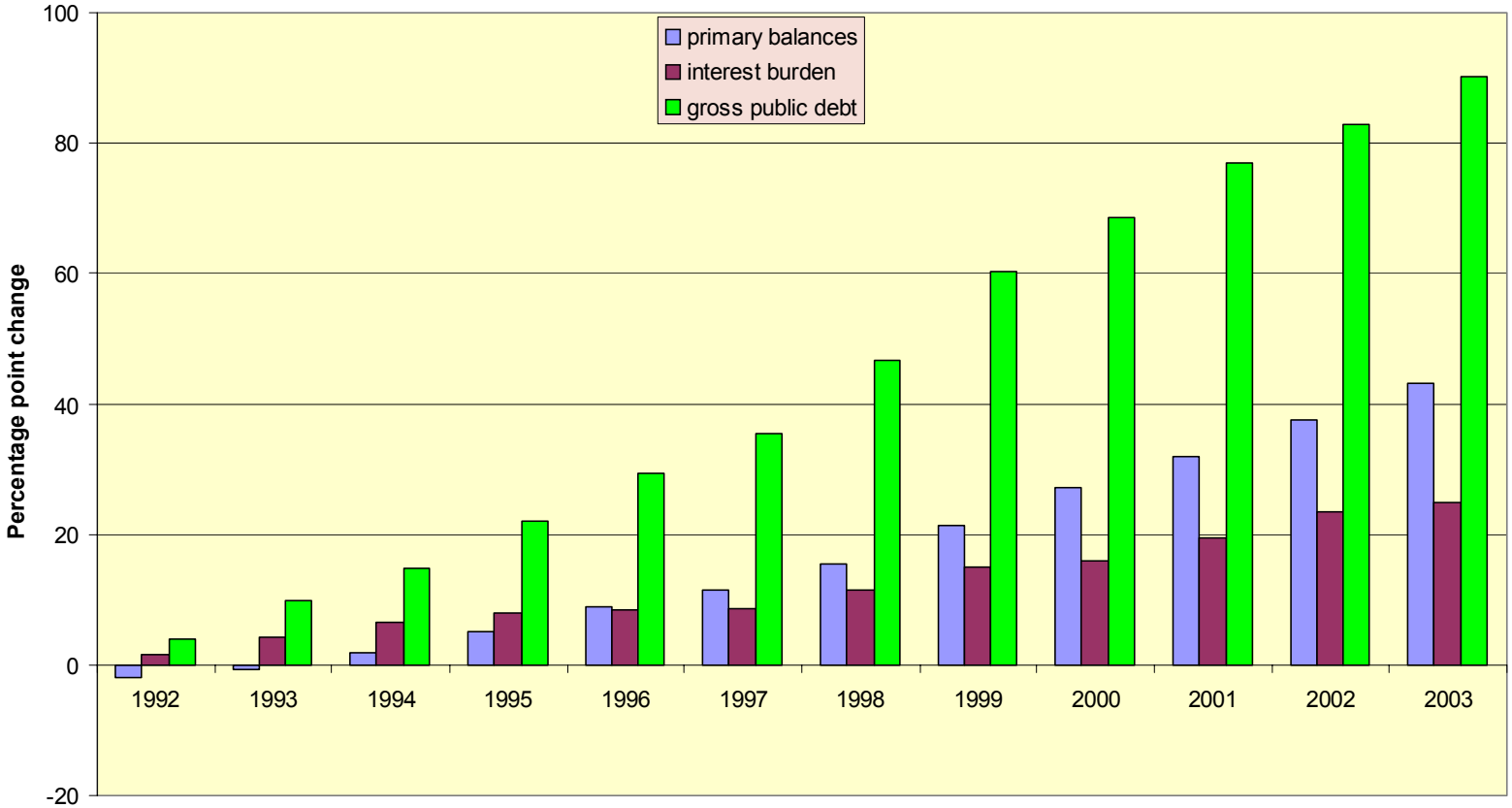
Figure 4. Sustainability of Japan's public finances with reference to *primary* balances



Source: OECD (Economic Outlook no. 74, Dec 2003)
Note: A positive (negative) "sustainability gap" implies a falling (rising) debt ratio on account of the interest burden

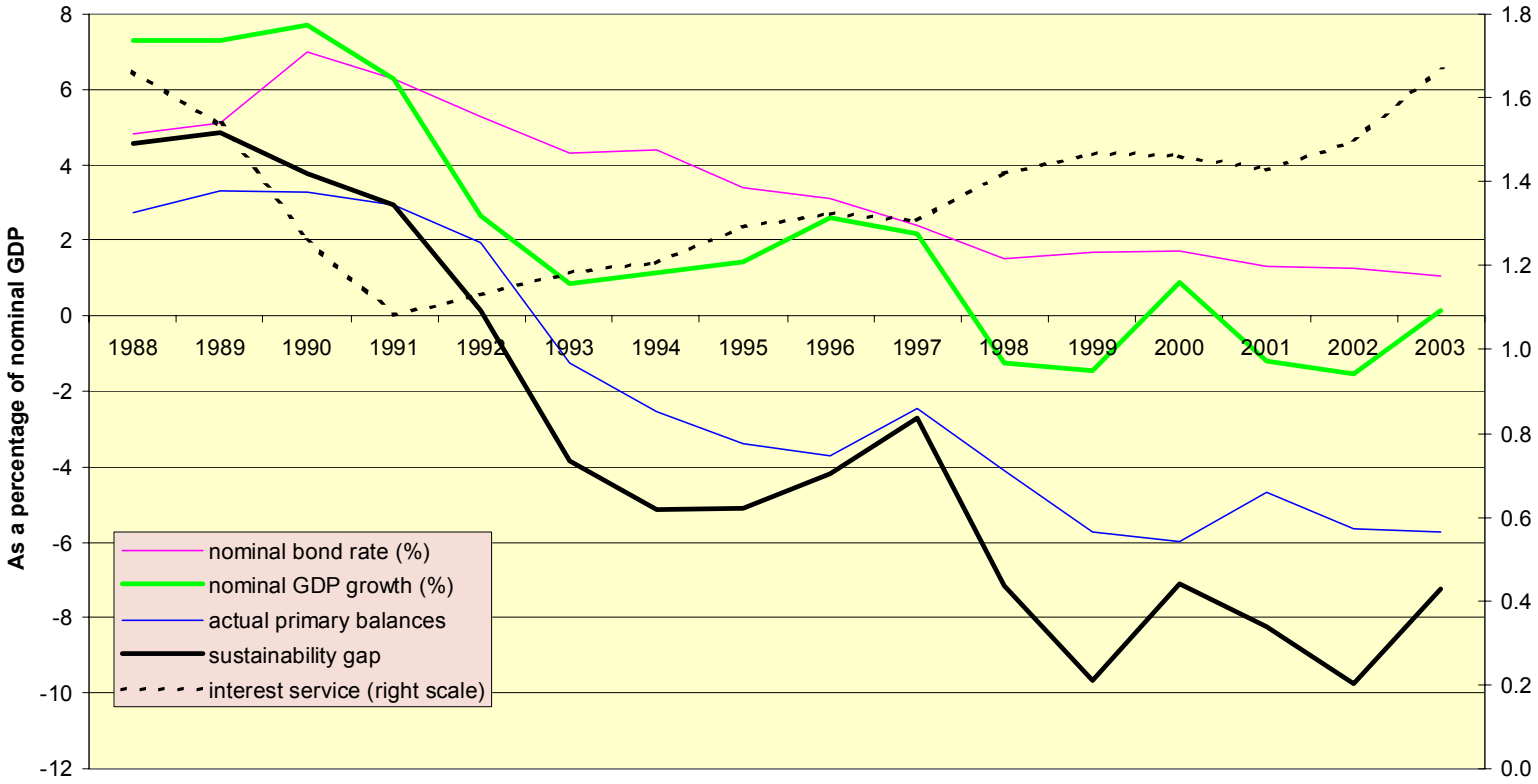
Figure 5. Japanese debt dynamics over the 1990s

Cumulative contributions relative to base year 1991 (gross public debt 64.5% of GDP in 1991)



Source: OECD Economic Outlook No. 74, Dec 03

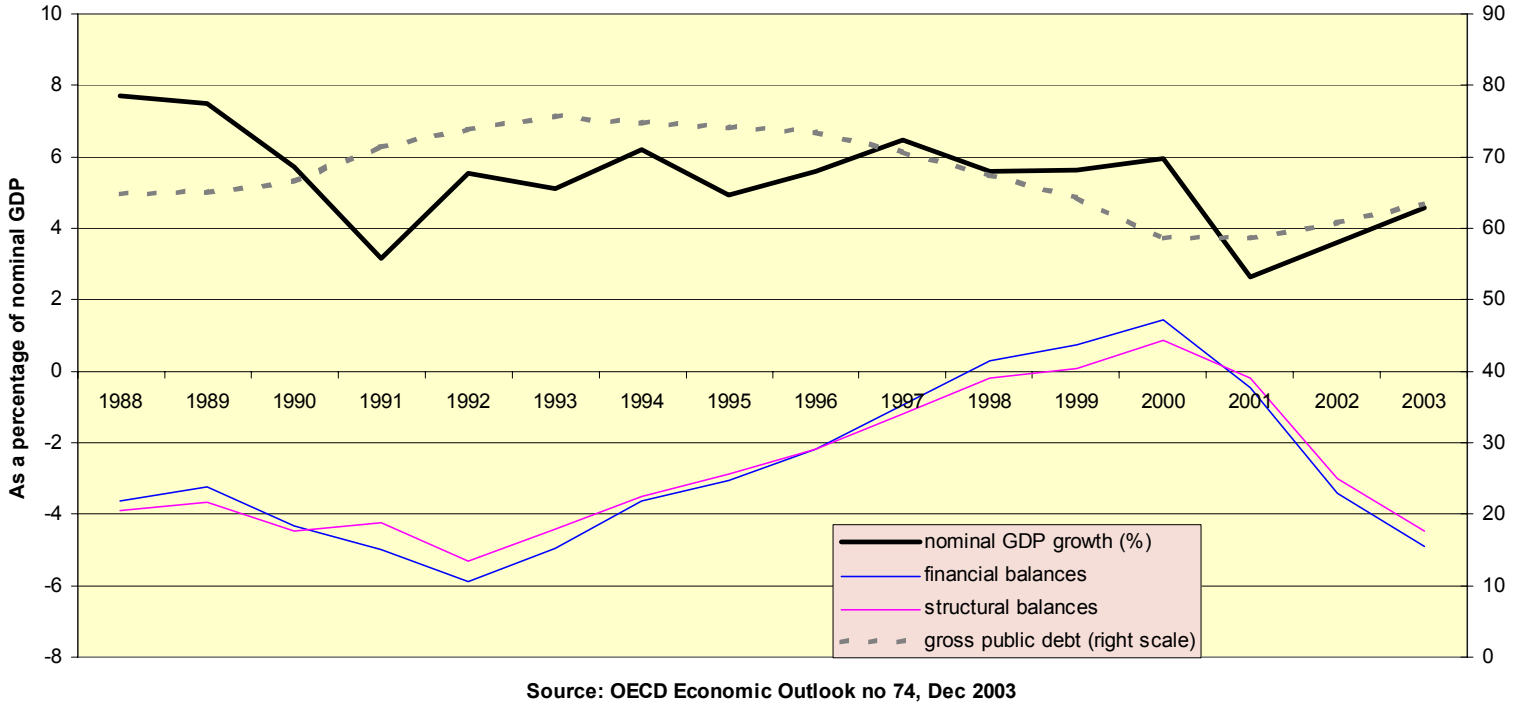
Figure 6. Japan's deflationary double-trap: fiscal explosion at interest-rate floor



Source: OECD Economic Outlook no. 74, Dec 2003

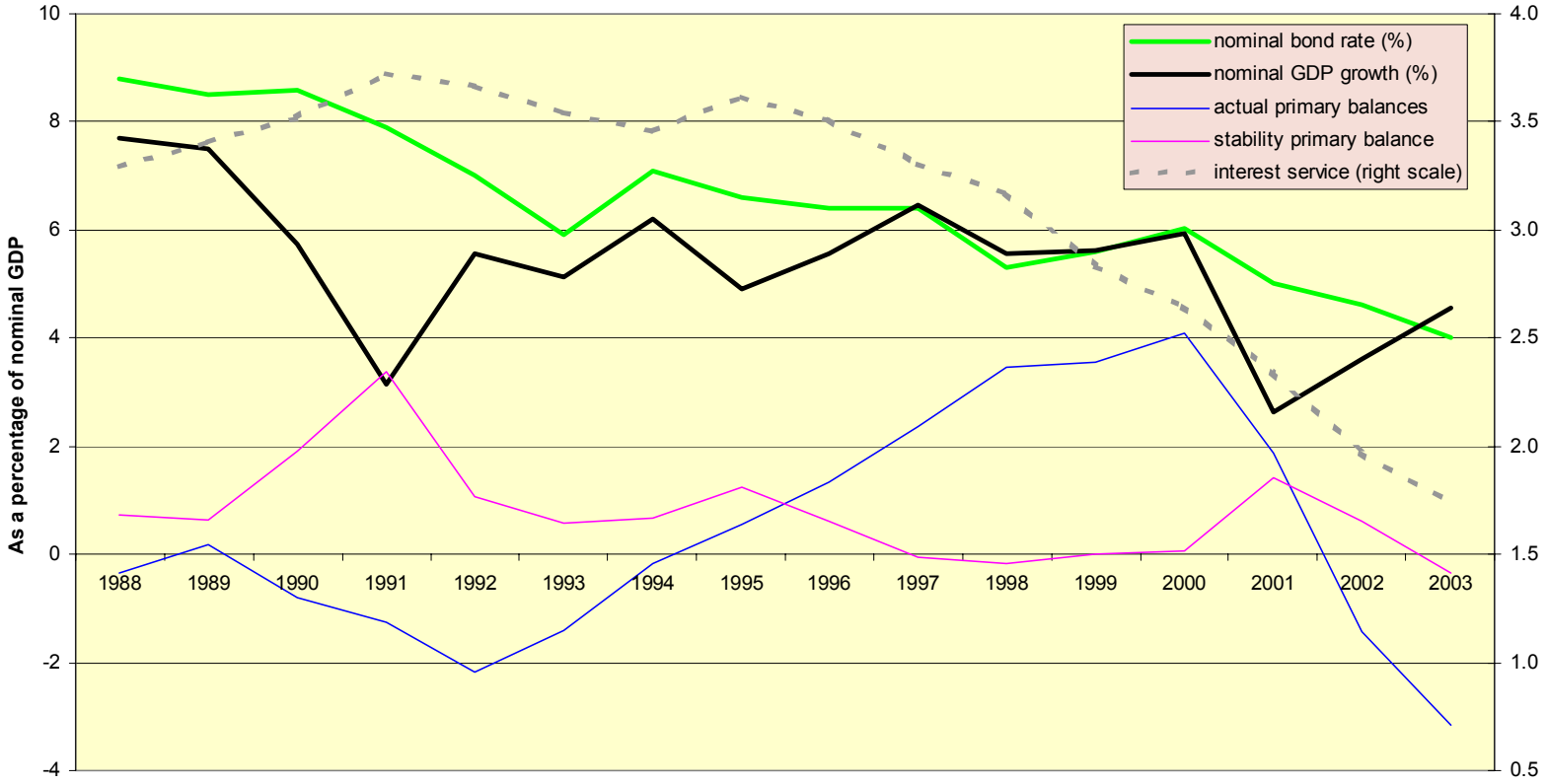
Figure 7. U.S.-style growth-based consolidation of the 1990s

Built-in stabilizers supported by countercyclically applied discretion



Source: OECD Economic Outlook no 74, Dec 2003

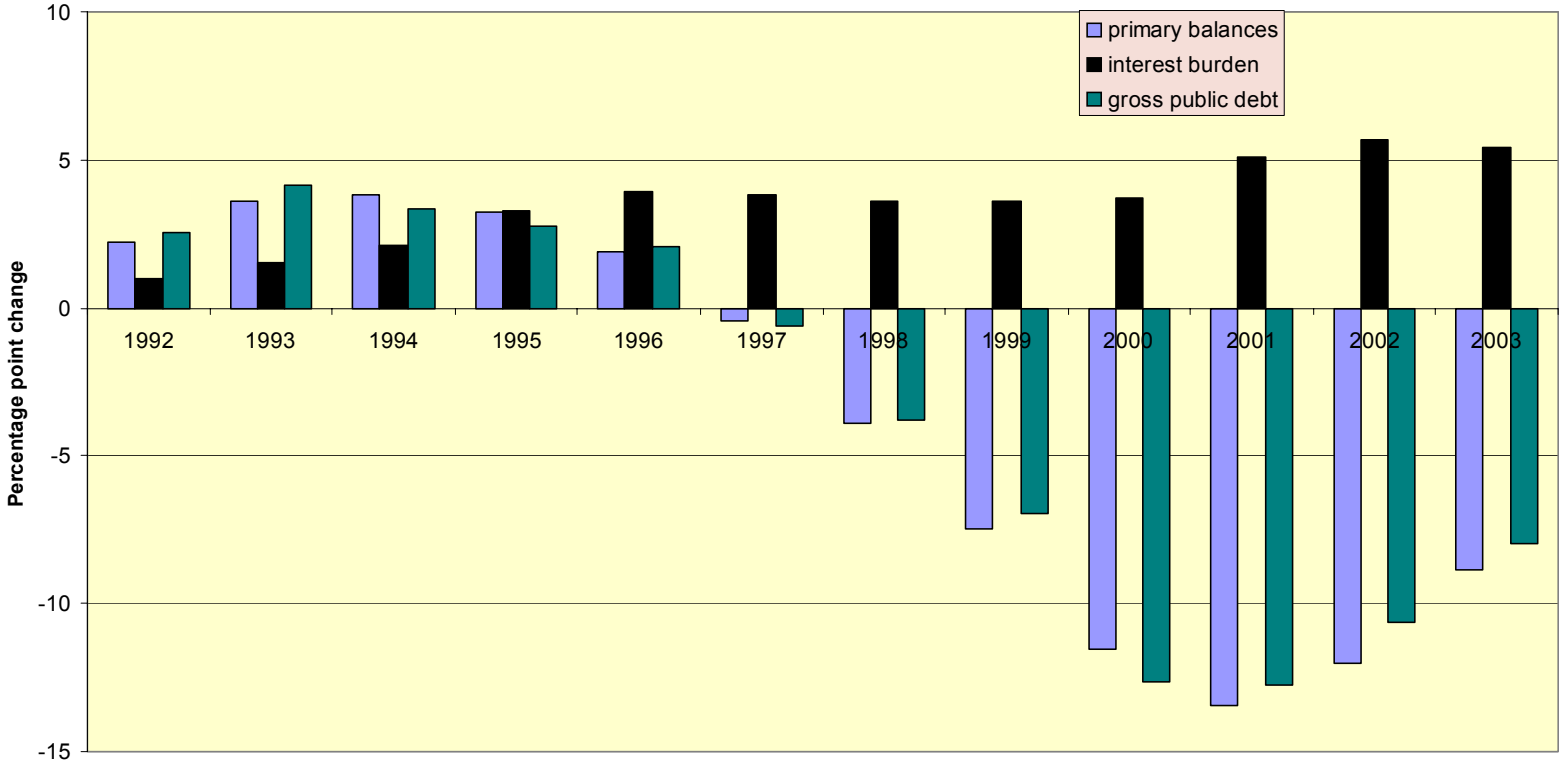
Figure 8. As bond rates keep touch with GDP growth, interest burden under control



Sources: OECD Economic Outlook no. 74, Dec 2003

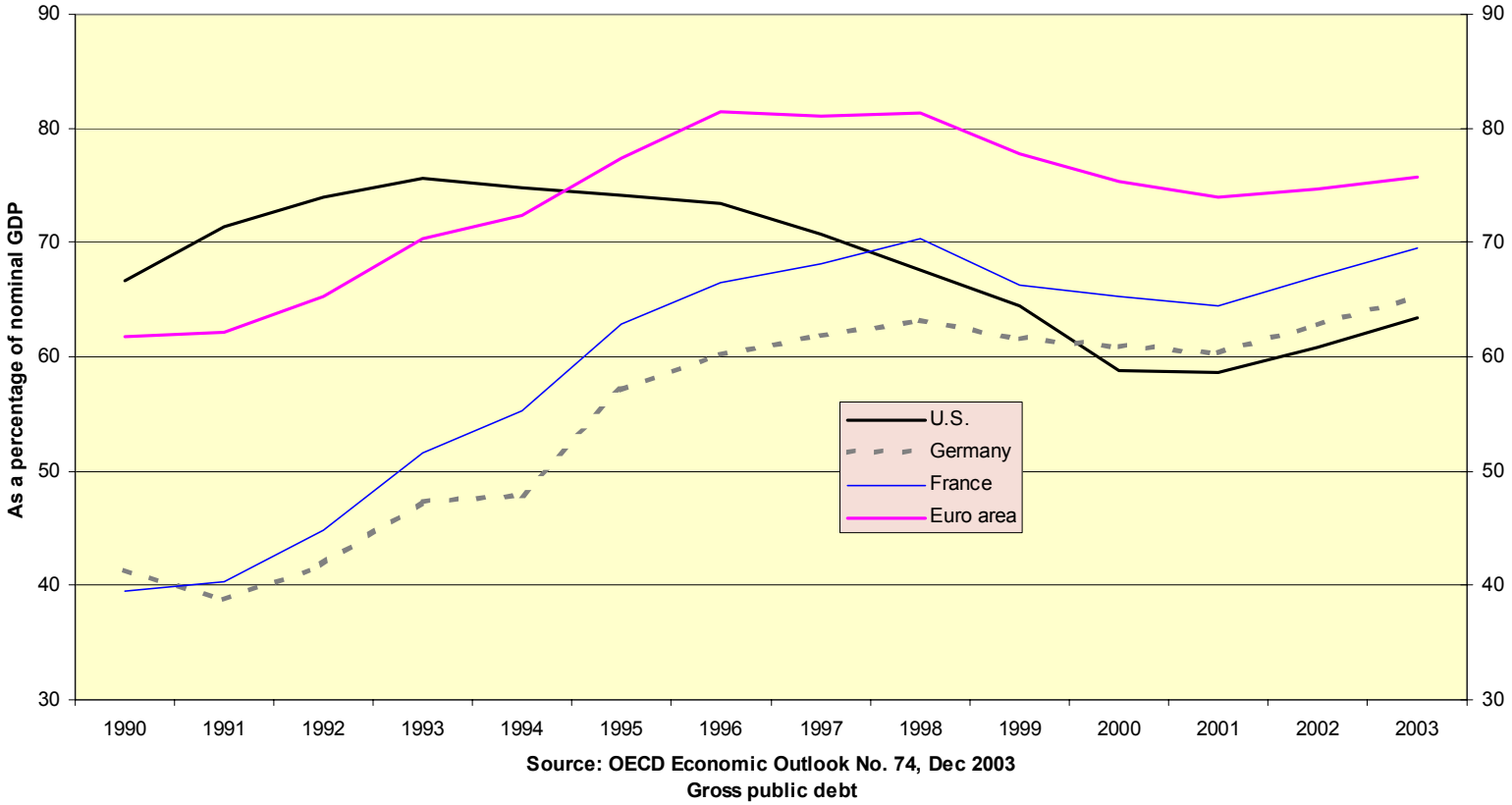
Figure 9. Debt dynamics mainly driven by primary balances

Cumulative contributions relative to base year 1991 (gross public debt 71.4% of GDP in 1991)



Source: OECD Economic Outlook No. 74, Dec 03

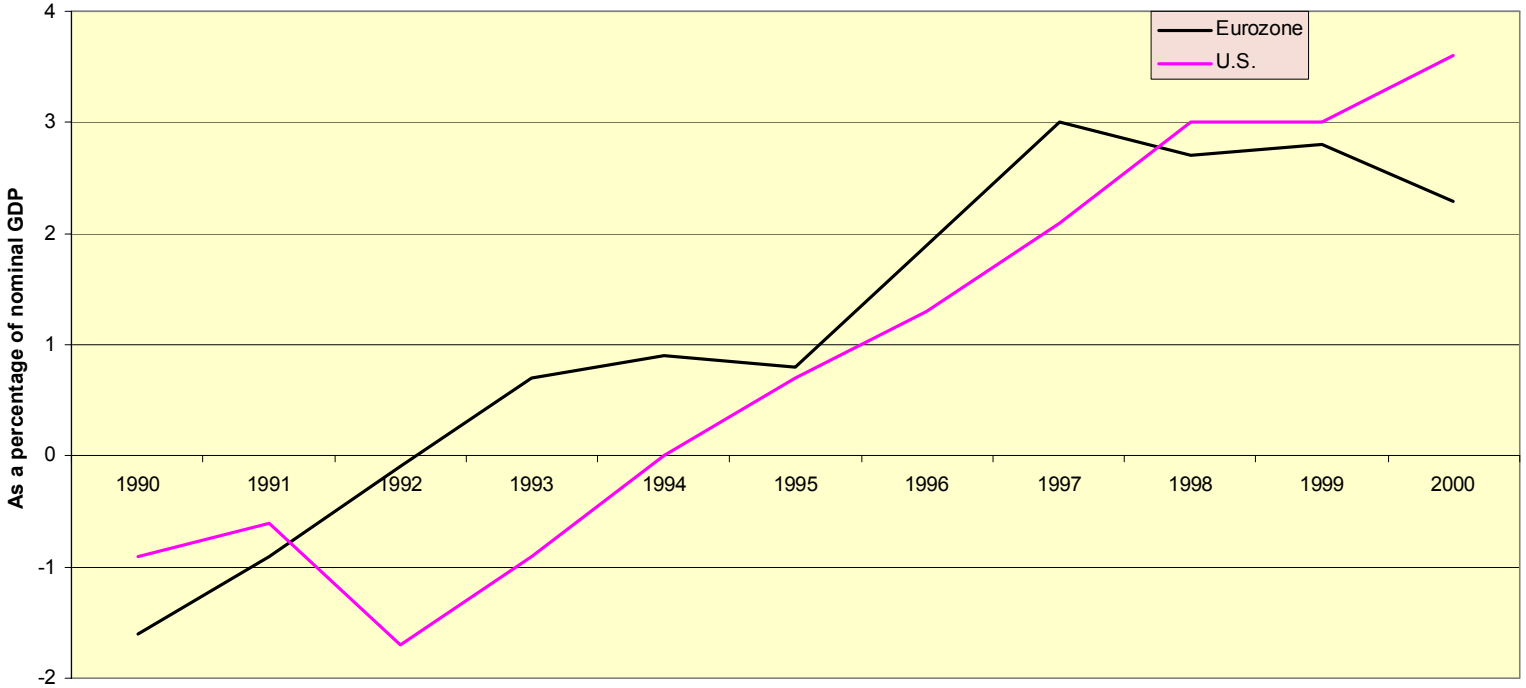
Figure 10. Public debt ratios stabilized on either side, 'mind the gap' though



Source: OECD Economic Outlook No. 74, Dec 2003
Gross public debt

Figure 11. Eurozone with head-on start, but tired before finish line?

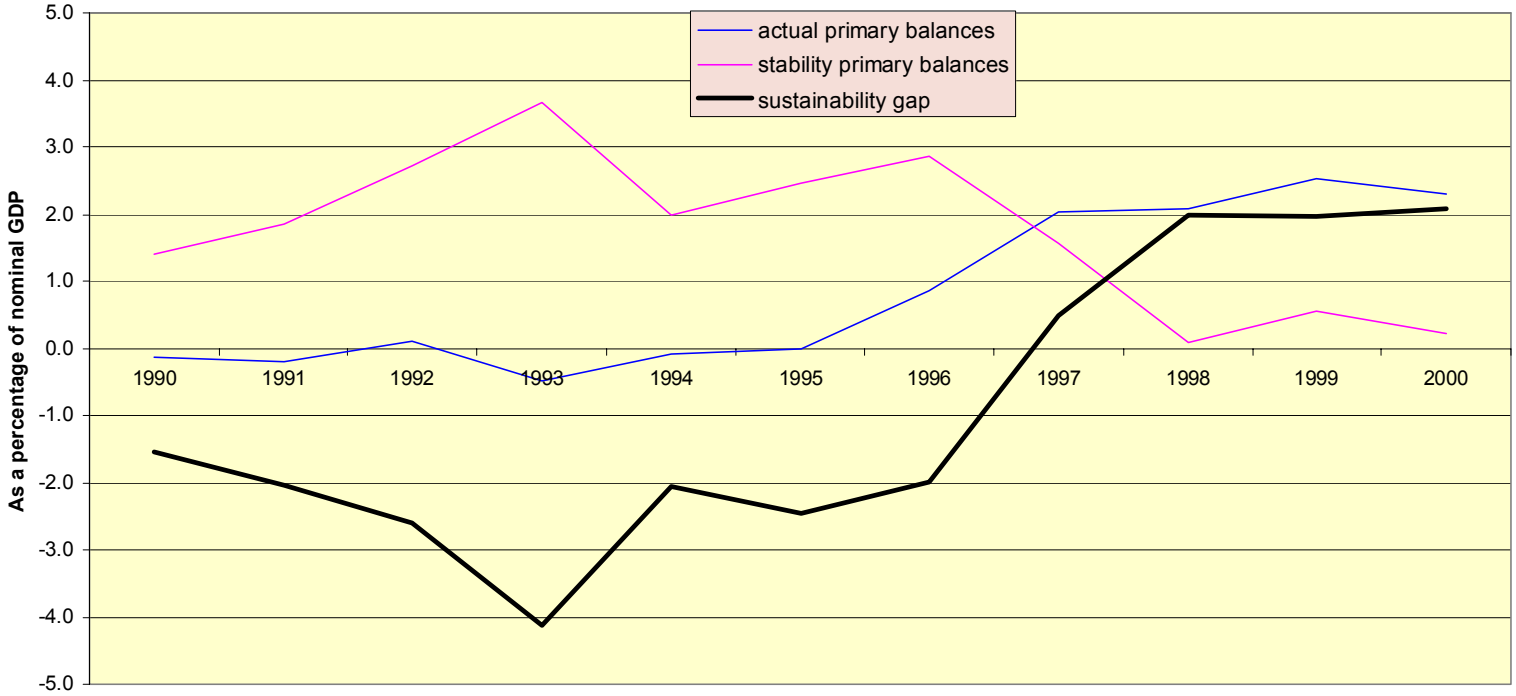
Issues of timing and ambitiousness



Sources: OECD Economic Outlook no. 74, Dec 2003
General government structural primary balances

Figure 12. Sustainability of Euroland's public finances

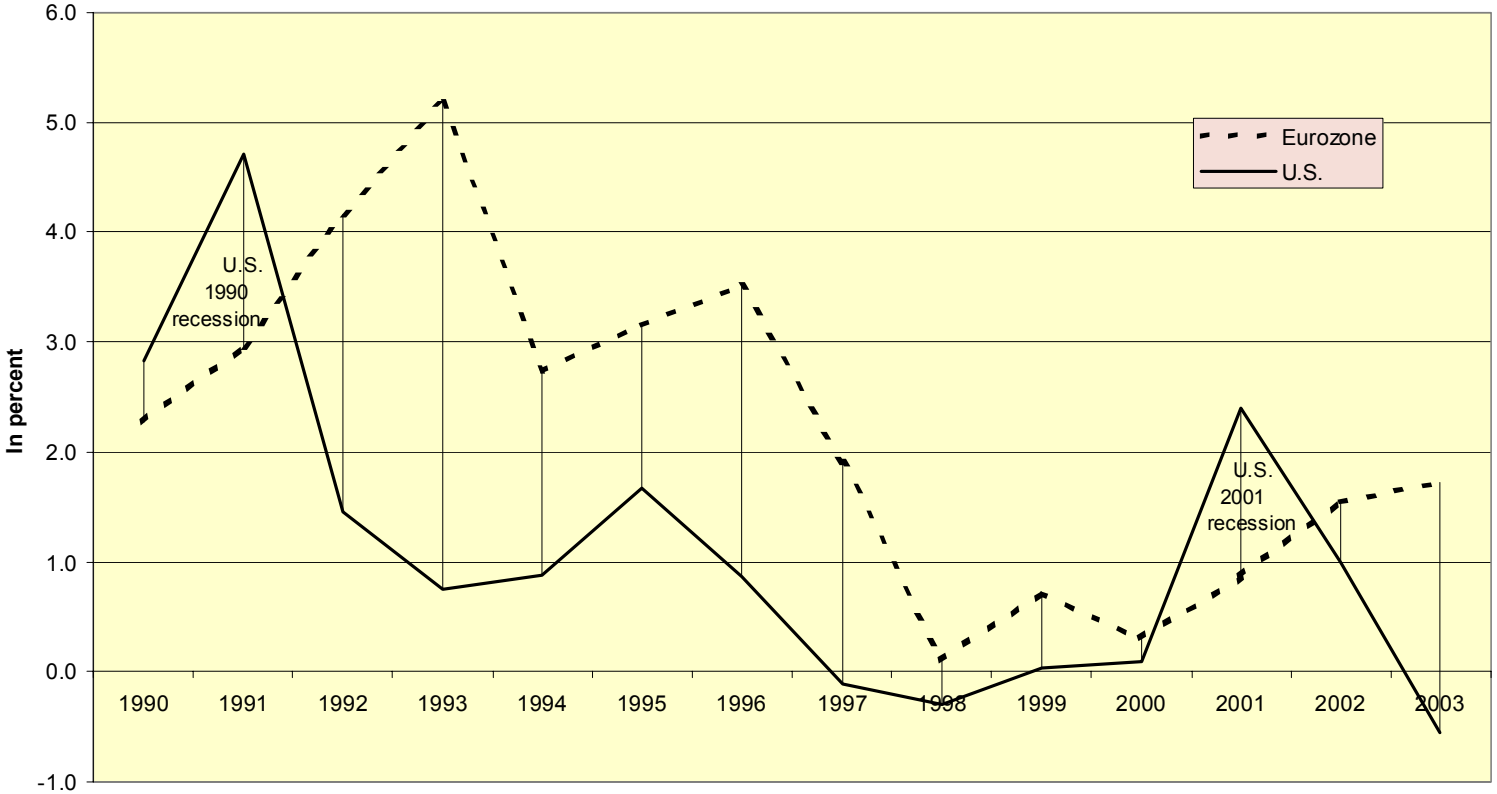
After 4-percentage-point turnaround, stance quite sufficient to set debt ratio on decline



Source: OECD (Economic Outlook no. 74, Dec 2003)
Notes: A positive (negative) "sustainability gap" implies a falling (rising) debt ratio on account of the interest burden; 2000 excl. UMTS revenues.

Figure 13. Money matters!

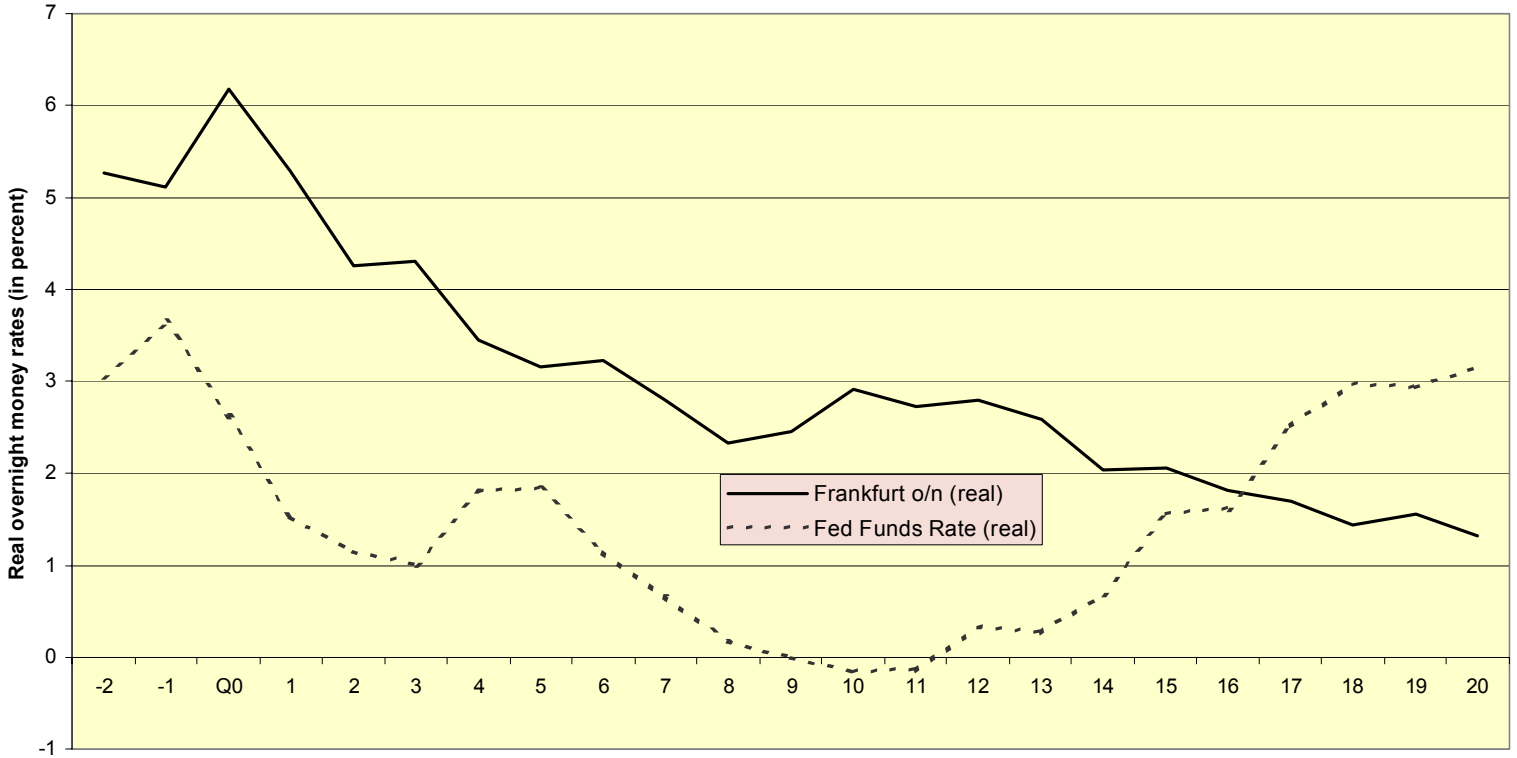
U.S. and eurozone rate gaps in comparison



Source: OECD Economic Outlook no. 74, Dec 2003

Figure 14. Early 1990s recession: as Fed fights 'headwinds', Buba practices 'caution'

Failure of timely easing means delaying next proper tightening opportunity

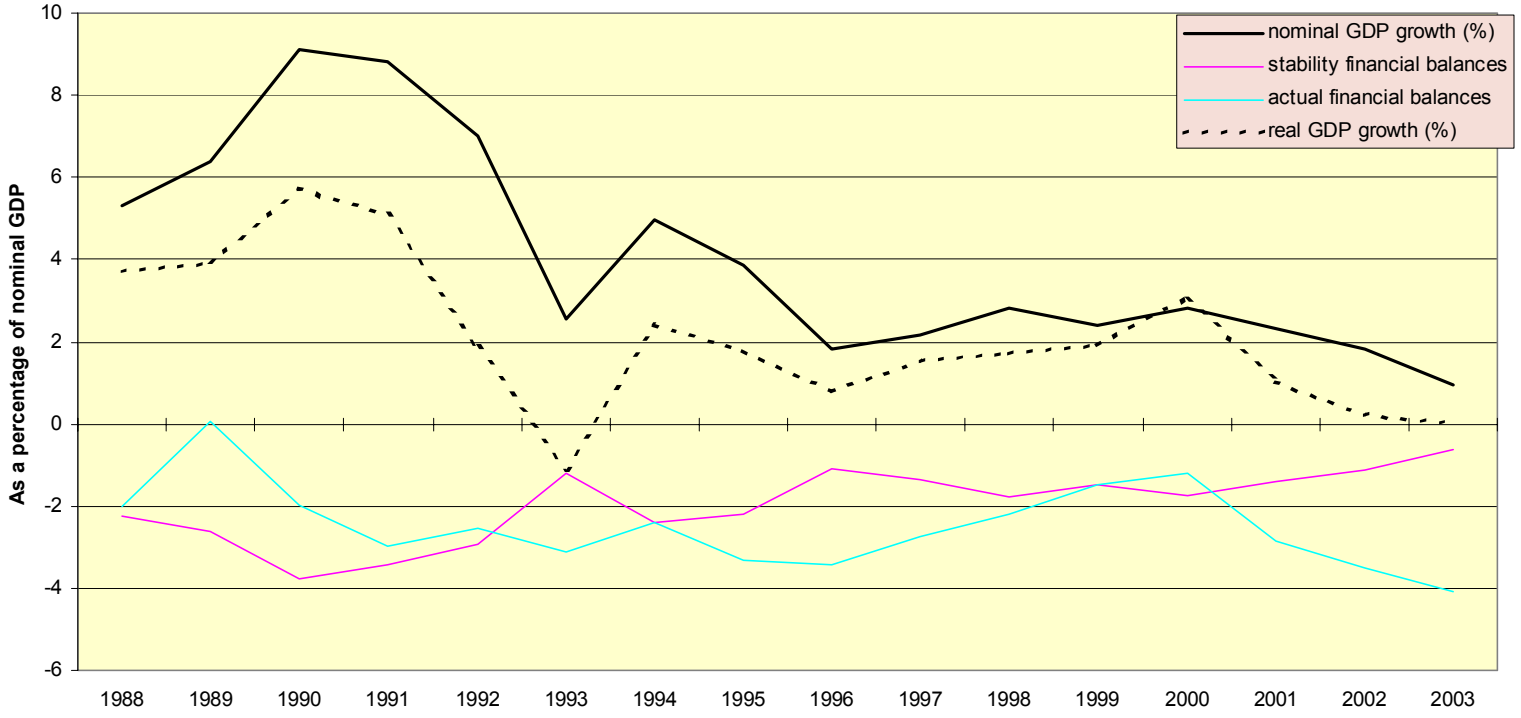


Notes: Recession starts in Q0 (USA 1990: III - Germany 1992: III); overnight rates deflated at consumer prices

Sources: IMF, Deutsche Bundesbank

Figure 15. Try save more, get poorer: the German way

Attempted consolidation by austerity and the collapse of GDP growth

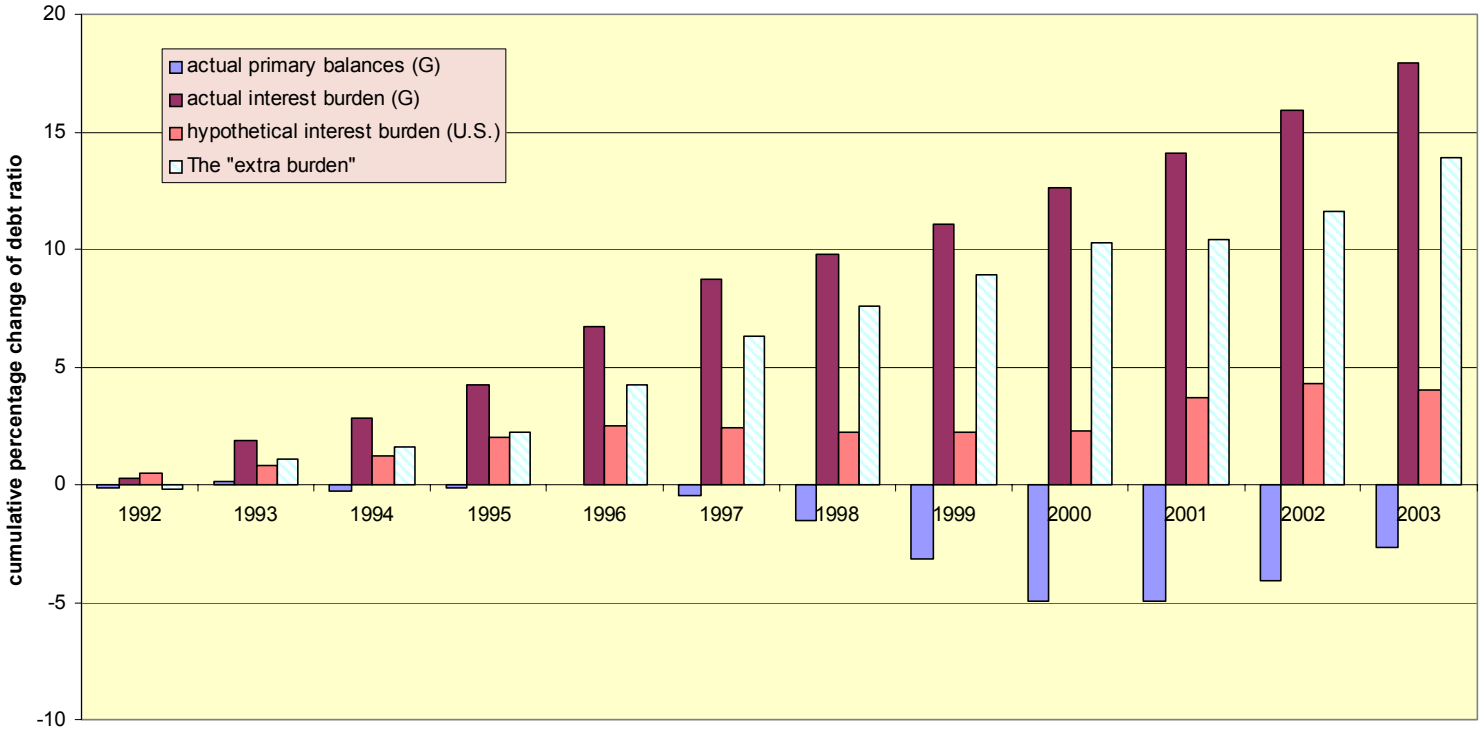


Sources: OECD Economic Outlook no. 74

Notes: financial balance for 2000 excl. UMTS revenues. Deficit ratios not exceeding "stability balances" imply public debt sustainability (defined here as a non-rising debt ratio).

Figure 16. The interest burden effect at work in Germany

Cumulative contributions of primary balances and the interest burden (1992-2003)

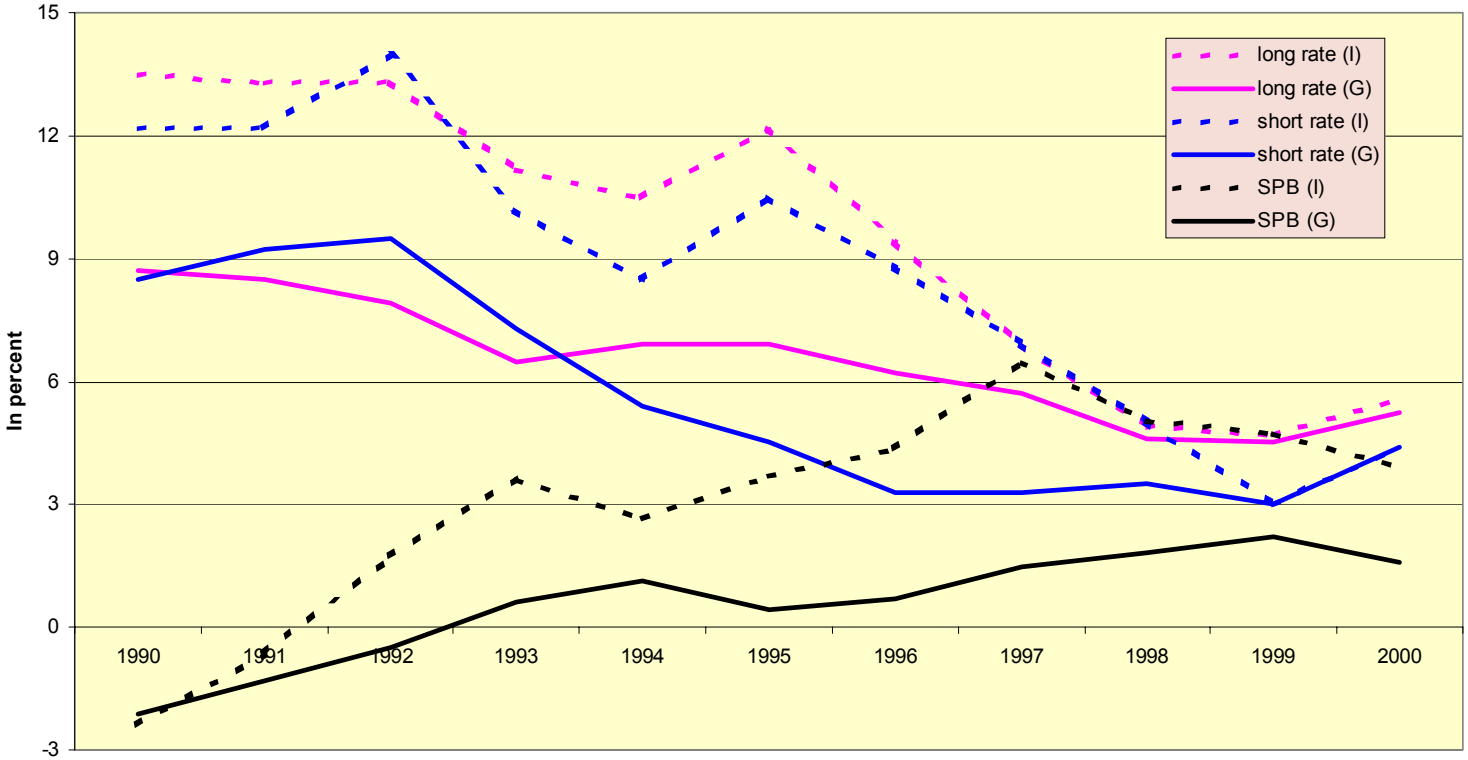


Source: OECD (Economic Outlook no. 74, Dec 2003)

Notes: Calculation of hypothetical burden based on U.S. interest rate/growth rate differential. The "extra burden" shows the cumulative impact of Germany's more adverse rate gap on its debt ratio.

Figure 17. Evolution of Italy's policy mix over the 1990s

Severe fiscal austerity with later interest-rate-convergence offset

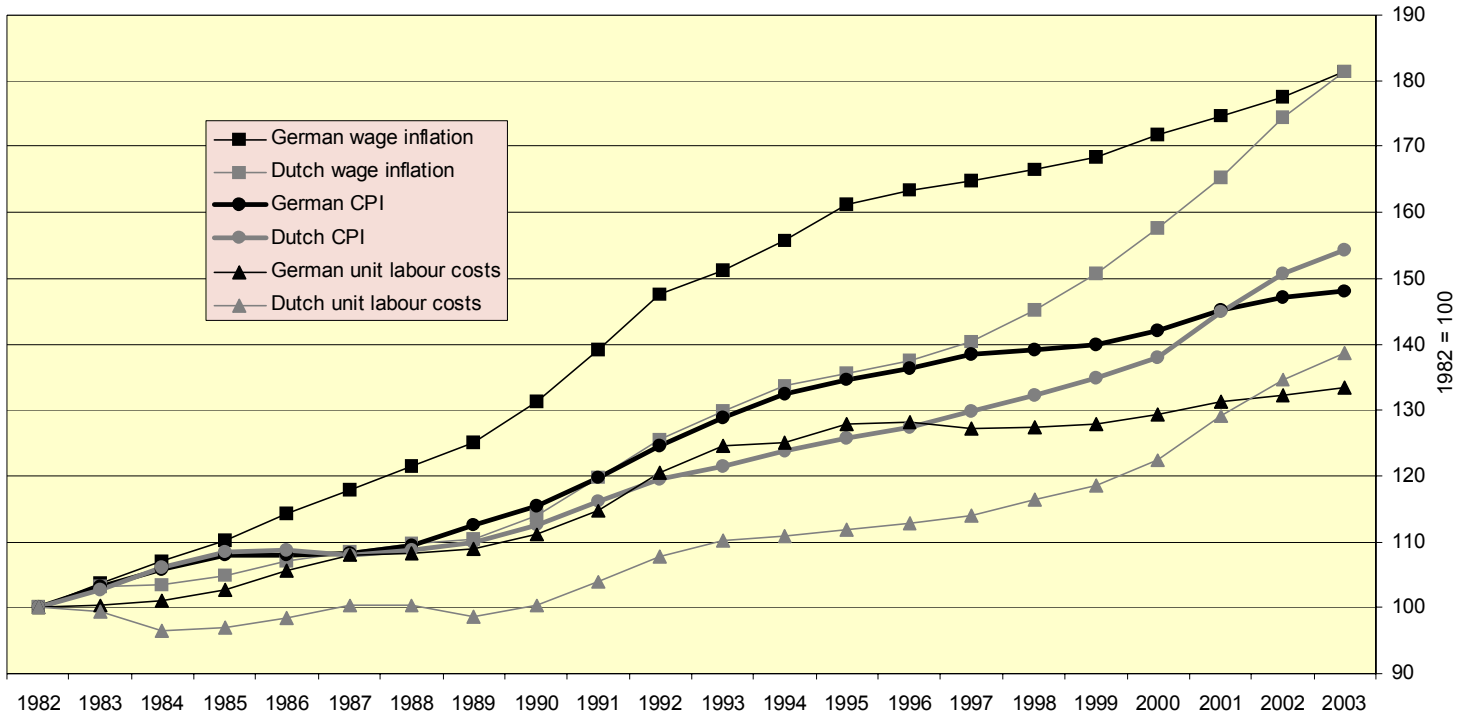


Source: OECD Economic Outlook no. 74, Dec 2003

Notes: Policy mix vis-à-vis Germany's; structural primary balances (SPB) as a percentage of nominal GDP

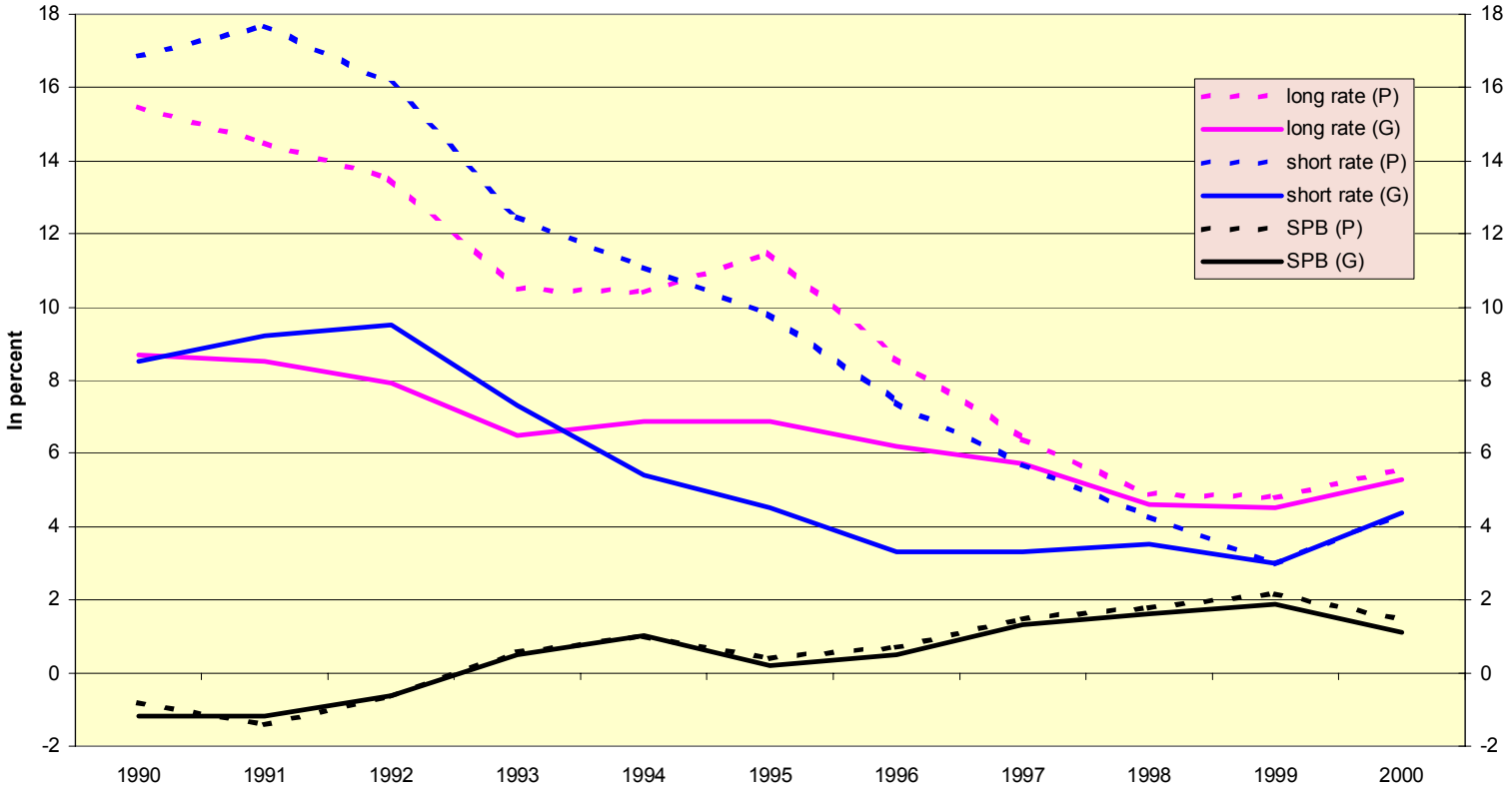
Figure 18. The Dutch miracle - and its unhappy ending

Wages, consumer prices, and unit labour cost trends in Germany and The Netherlands



Sources: European Commission, German Federal Statistical Office (for western Germany 1990-93);
Notes: compensation per employee and unit labour costs in the total economy; headline CPI; All-Germany since 1994

Figure 19: Evolution of Portugal's policy mix over the 1990s

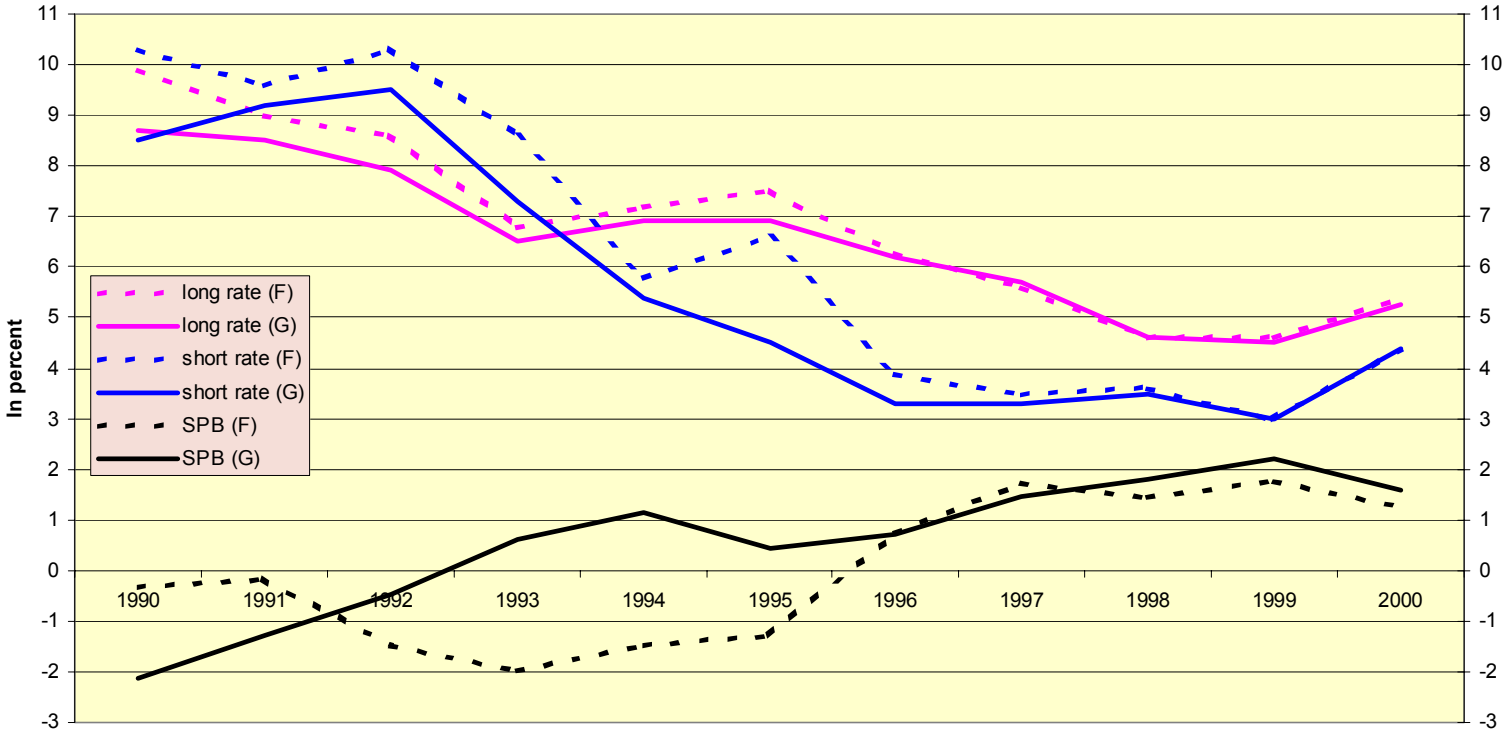


Sources: OECD Economic Outlook no. 73, June 2003

Notes: Policy mix vis-à-vis Germany's; structural primary balances (SPB) as a percentage of nominal GDP

Figure 20. France's more anticyclical policy mix over the 1990s

Consolidation delayed until interest-rate convergence kicked in

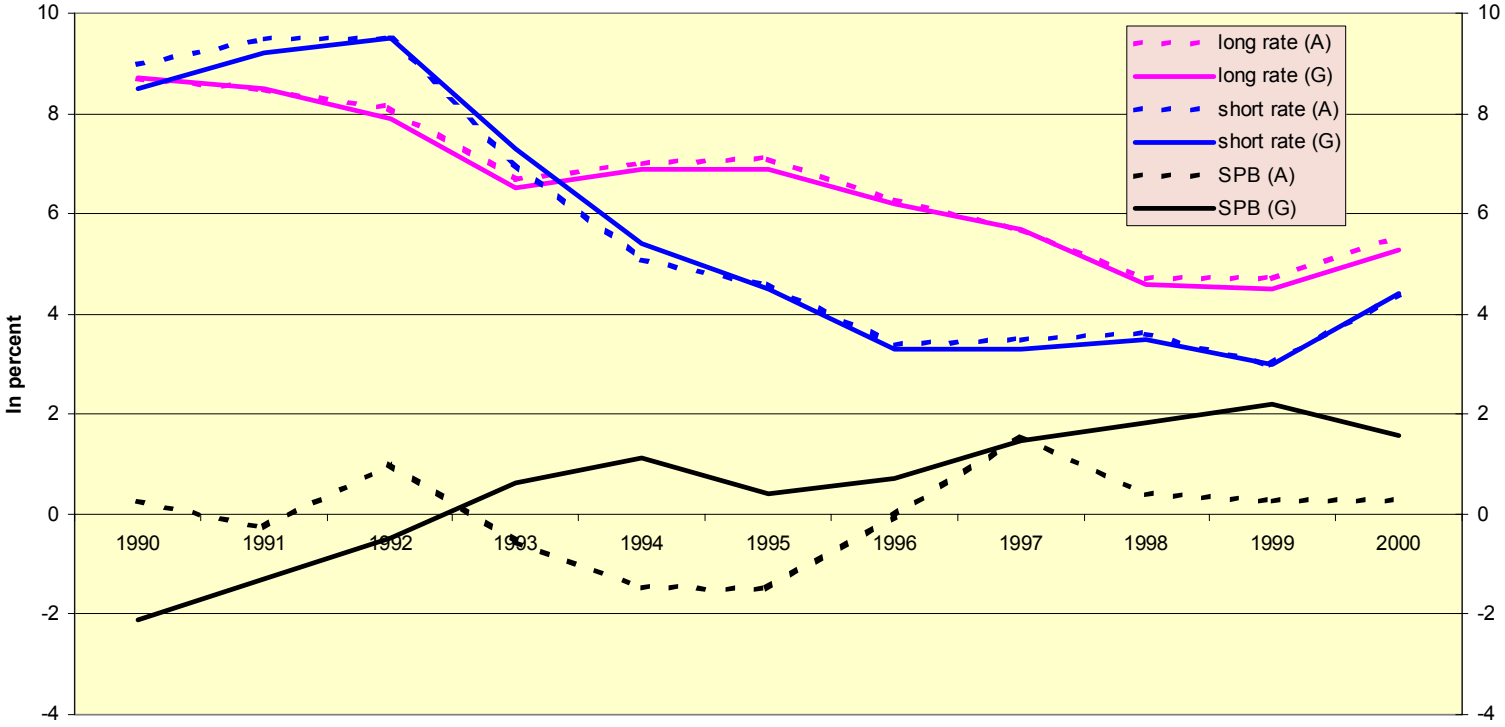


Sources: OECD Economic Outlook no. 74, Dec 2003

Notes: Policy mix vis-à-vis Germany's; structural primary balances (SPB) as a percentage of nominal GDP

Figure 21. Evolution of Austria's policy mix over the 1990s

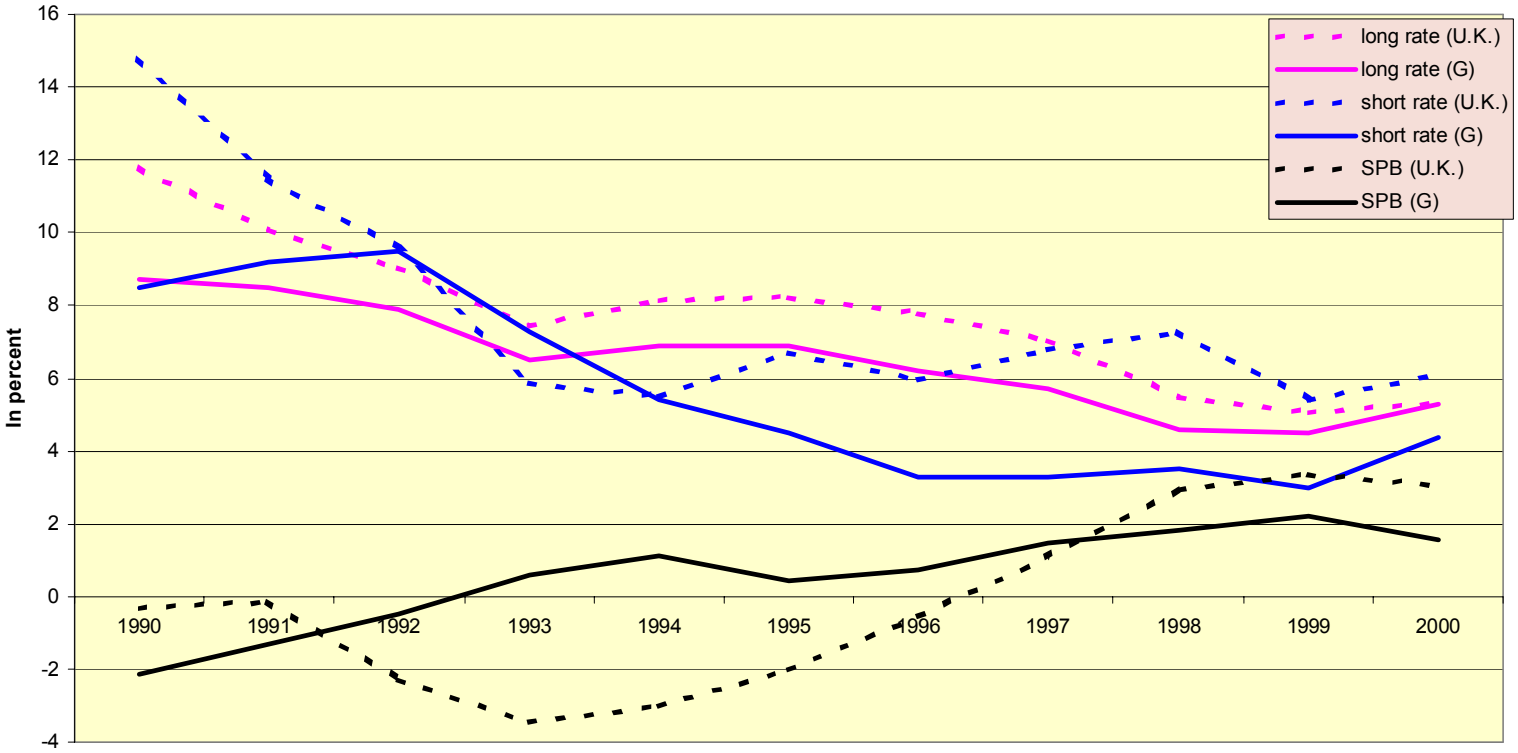
A monetary tandem with contrasting fiscal attitudes



Sources: OECD Economic Outlook no. 74, Dec 2003

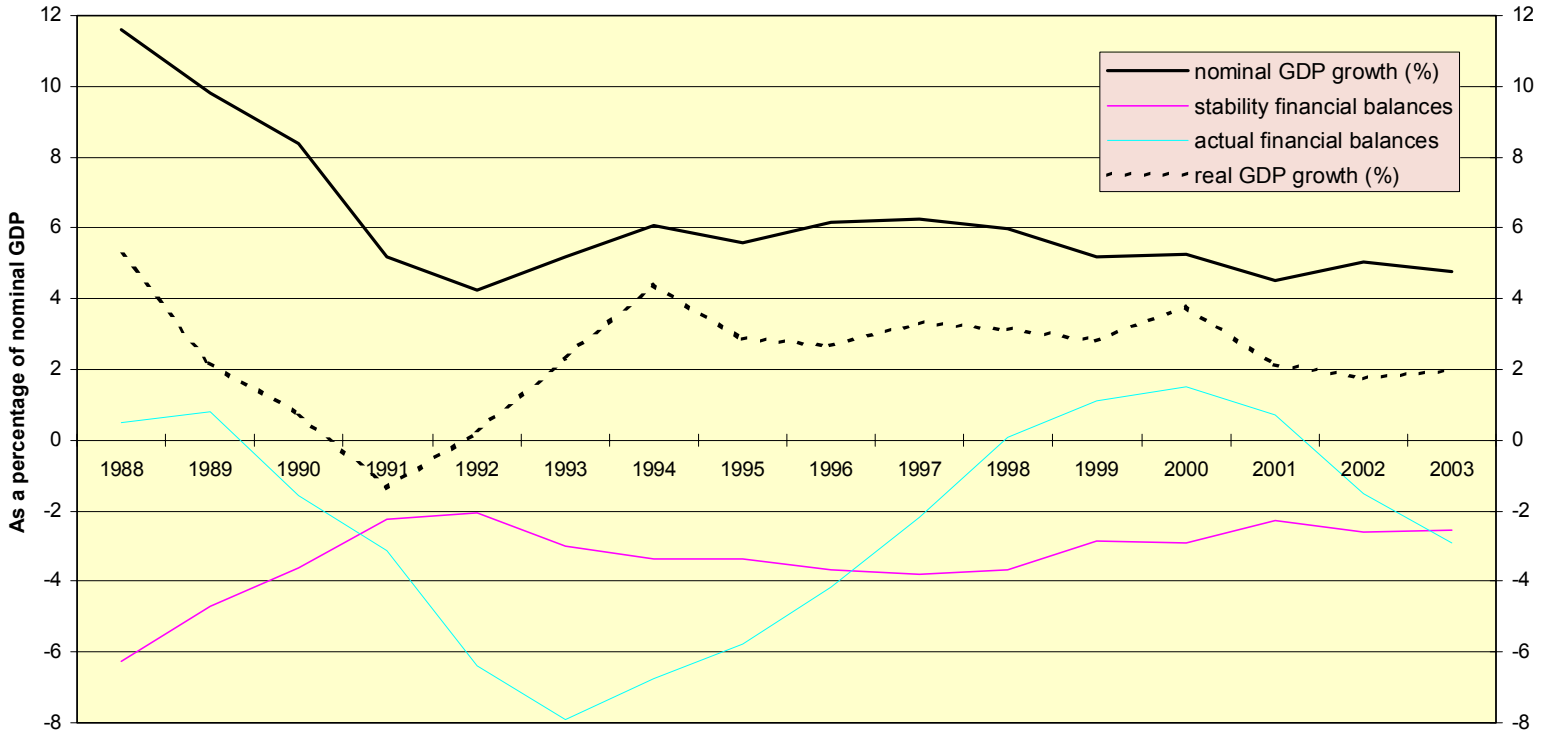
Notes: Policy mix vis-à-vis Germany's; structural primary balances (SPB) as a percentage of nominal GDP

Figure 22. The UK's anti-cyclical approach



Sources: OECD Economic Outlook no. 74, Dec 2003
Notes: Policy mix vis-à-vis Germany's; structural primary balances (SPB) as a percentage of nominal GDP

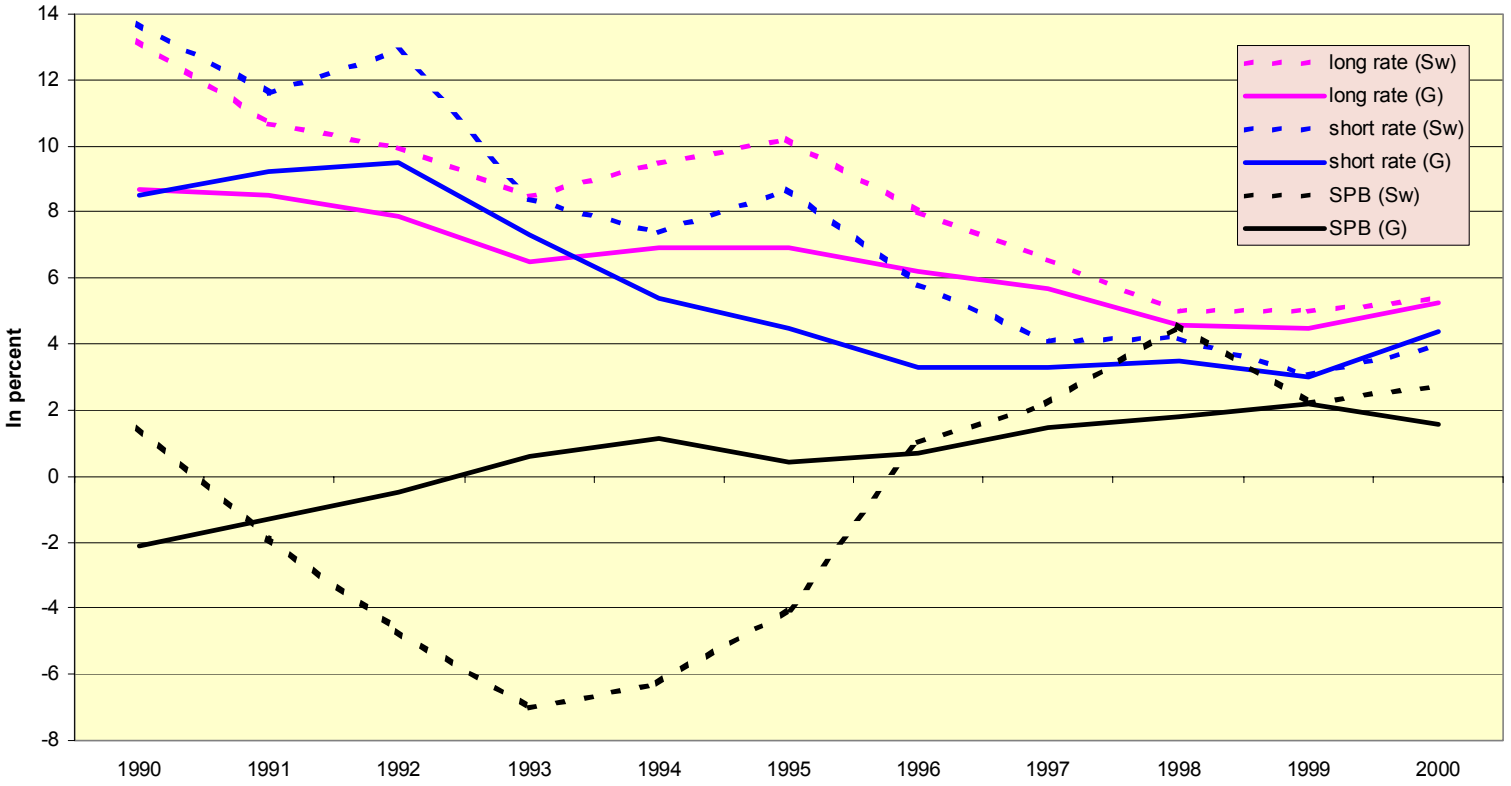
Figure 23. Flexible policy & stable growth - the U.K.'s successful consolidation



Source: OECD Economic Outlook no. 74, Dec 2003
Notes: Financial balance 2000 excl. UMTS revenues. Deficit ratios not exceeding "stability balances" imply public debt sustainability (defined here as a non-rising debt ratio)

Figure 24. Evolution of Sweden's policy mix over the 1990s

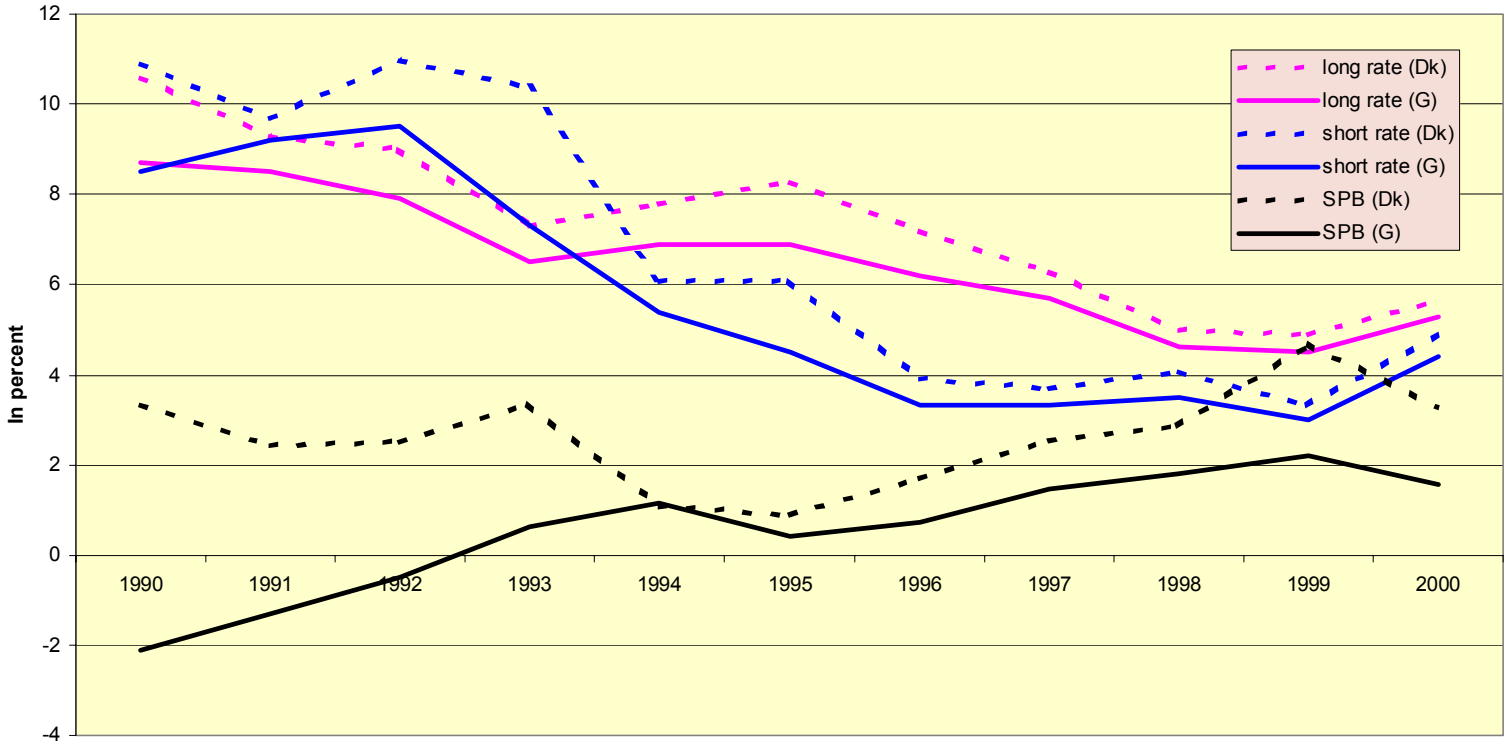
Better fiscal timing plus interest-rate-convergence boon



Sources: OECD Economic Outlook no. 74, Dec 2003

Notes: Policy mix vis-à-vis Germany's; structural primary balances (SPB) as a percentage of nominal GDP

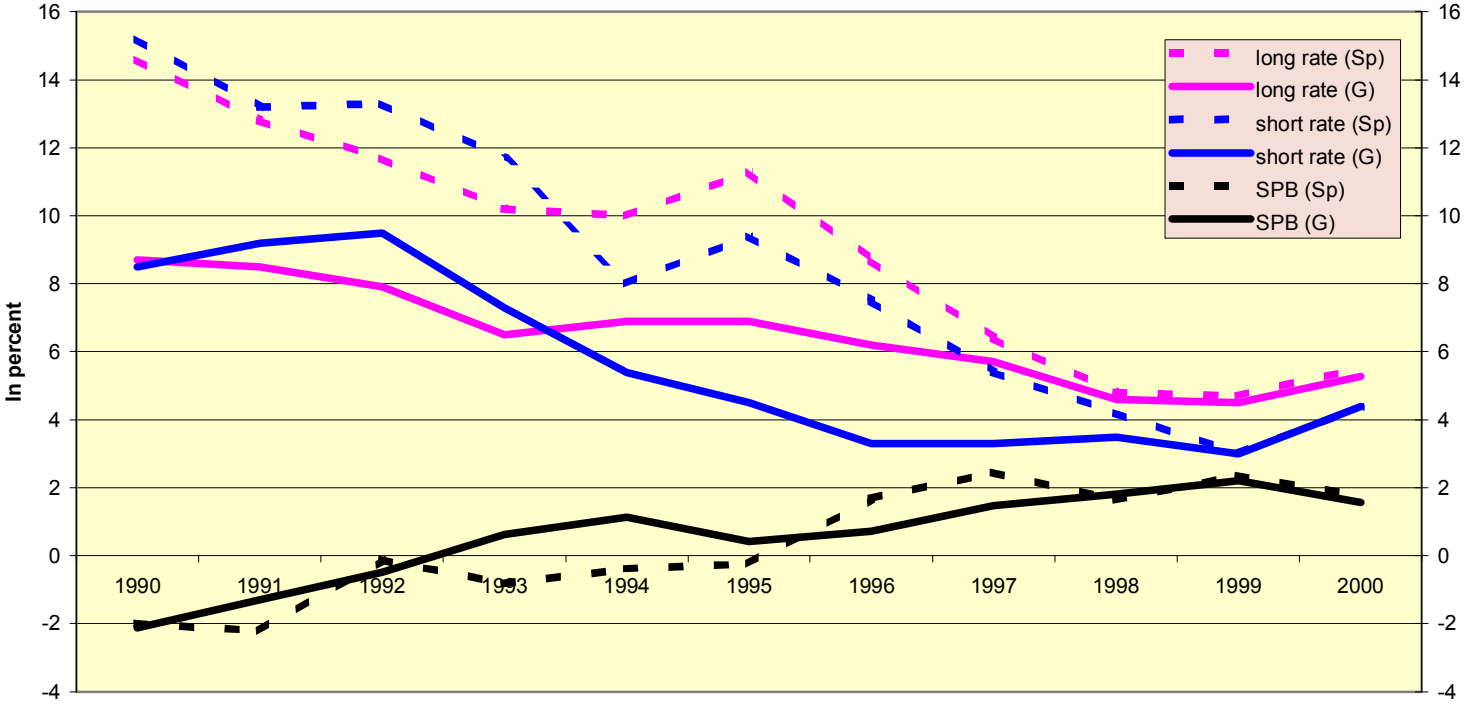
Figure 25: Evolution of Denmark's policy mix over the 1990s



Sources: OECD Economic Outlook no. 74, Dec 2003
Notes: Policy mix vis-à-vis Germany's; structural primary balances (SPB) as a percentage of nominal GDP

Figure 26: Evolution of Spain's policy mix over the 1990s

Delayed consolidation plus massive monetary easing

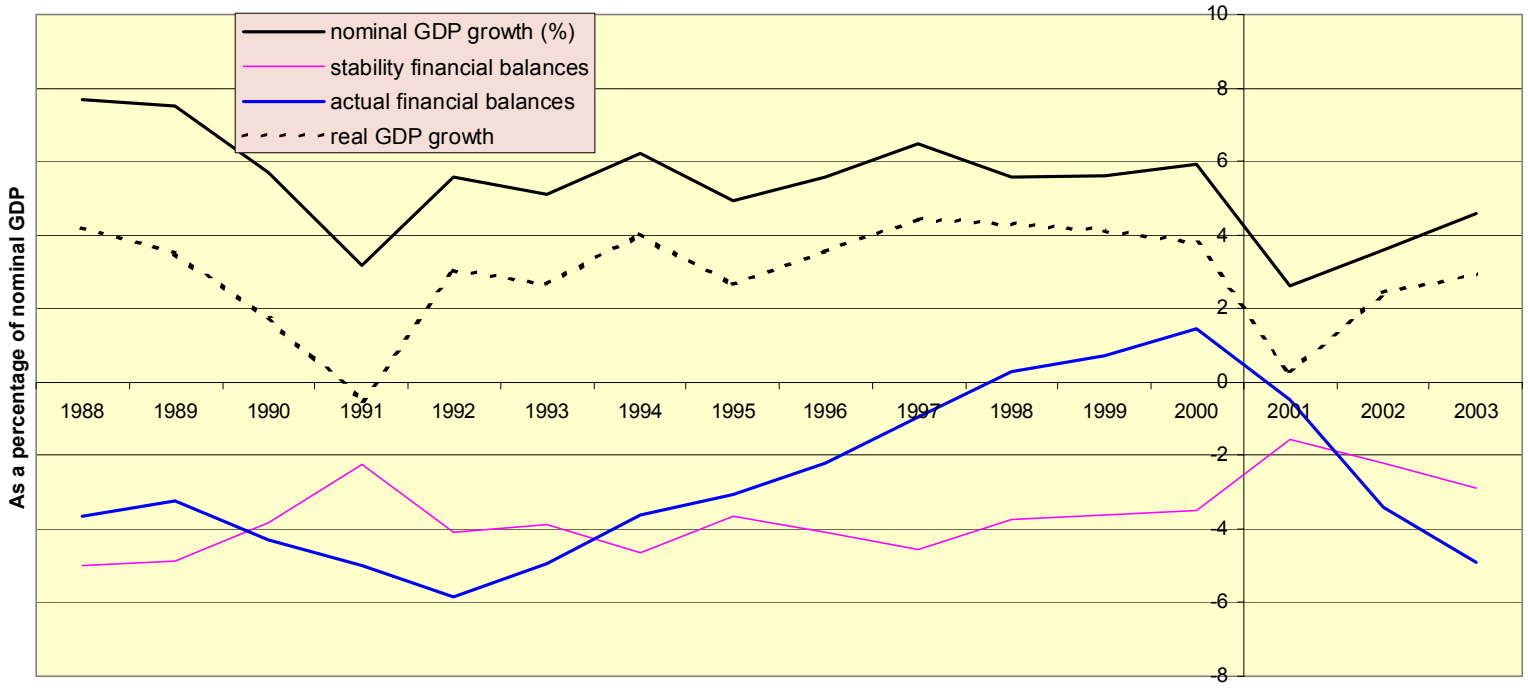


Sources: OECD Economic Outlook no. 74, Dec 2003

Notes: Policy mix vis-à-vis Germany's; structural primary balances (SPB) as a percentage of nominal GDP

Figure 27. After the long boom and consolidation, discretionary fiscal policy is back!

Flexible macroeconomic policies focussed on GDP growth

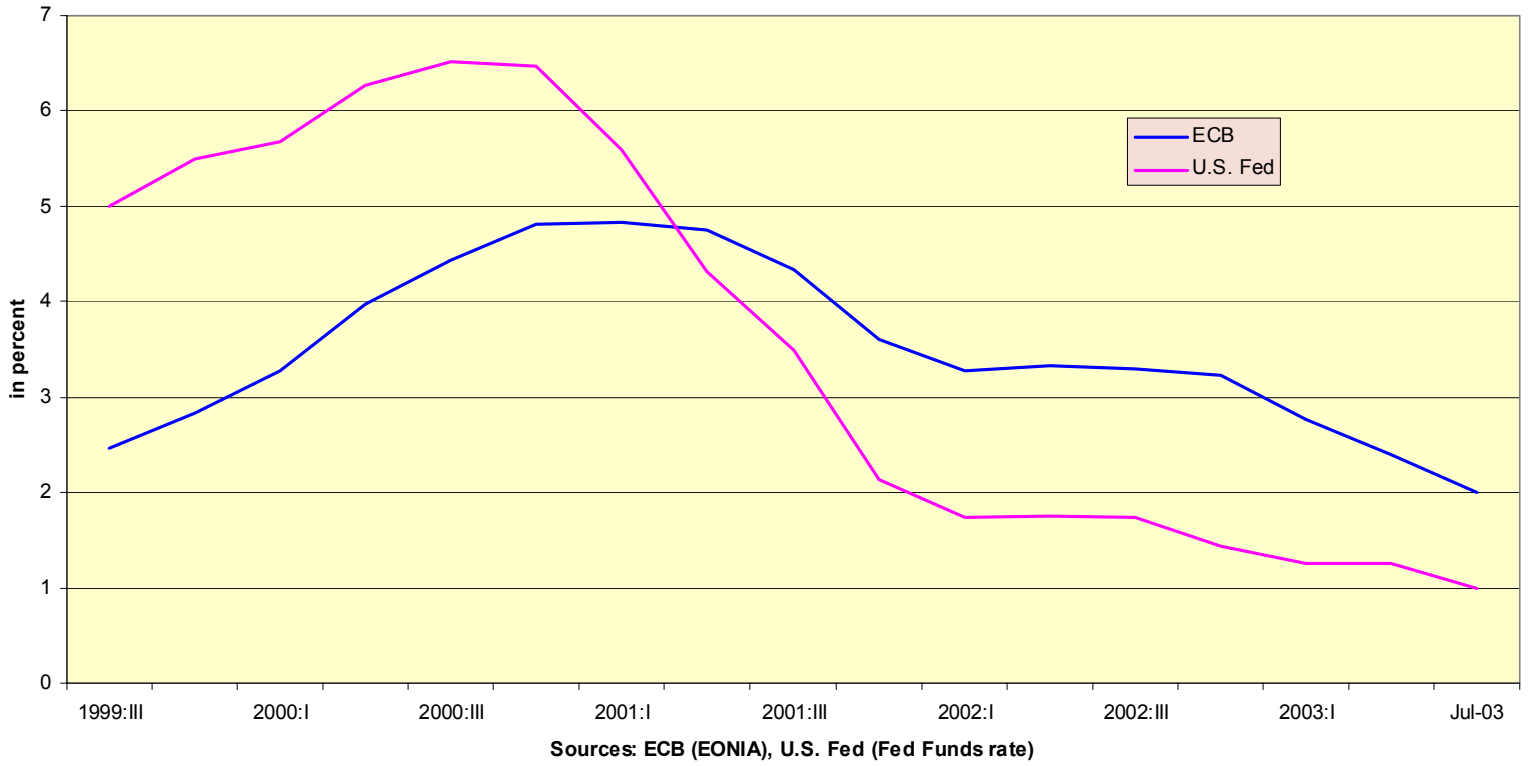


Source: OECD Economic Outlook no. 74, Dec 2003

Note: Deficit ratios not exceeding "stability balances" imply public debt sustainability (defined here as a non-rising debt ratio)

Figure 28. The 2000-01 global slump: caution may be risky

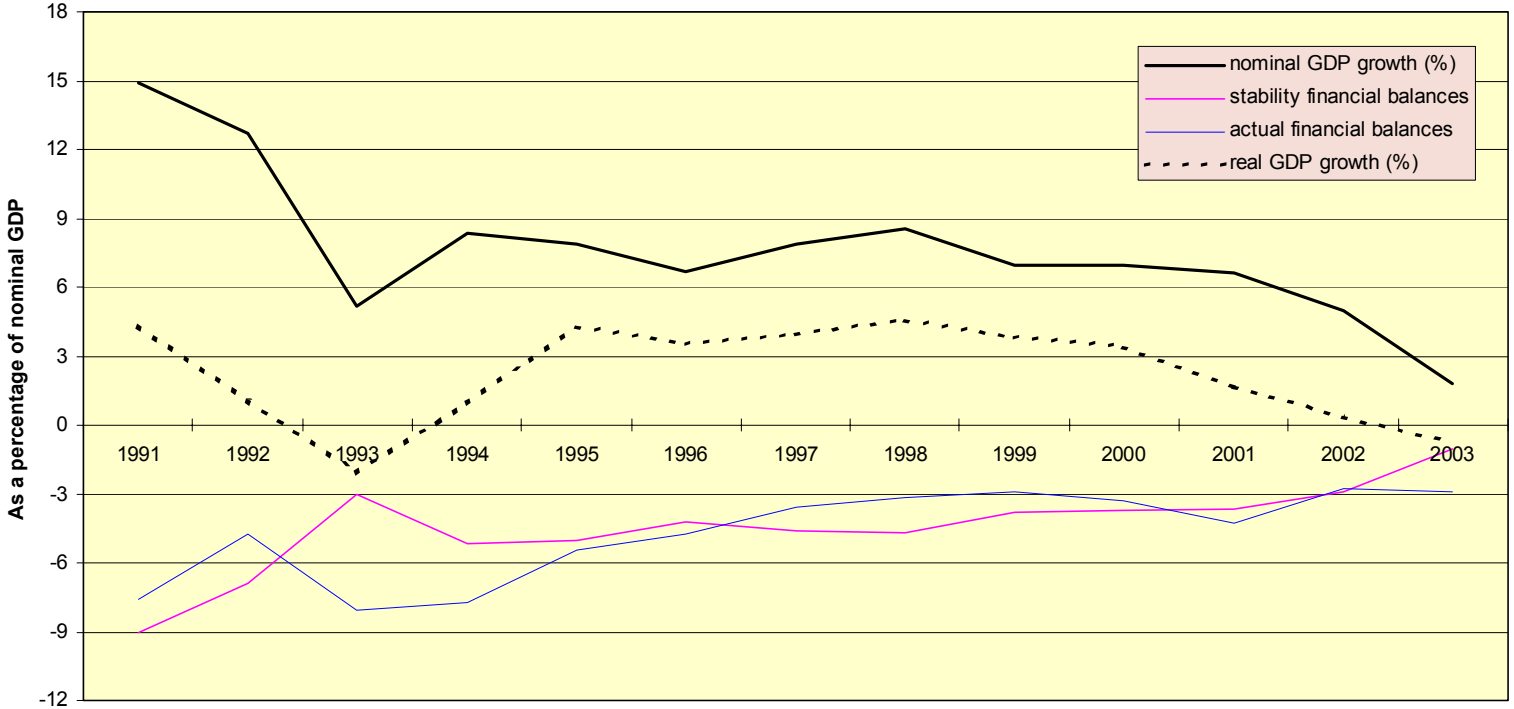
As Fed takes out insurance, ECB's 'wait and see' attitude translates into 'too little, too late'



Sources: ECB (EONIA), U.S. Fed (Fed Funds rate)

Figure 29. Portugal's rueful application of Maastricht wisdom

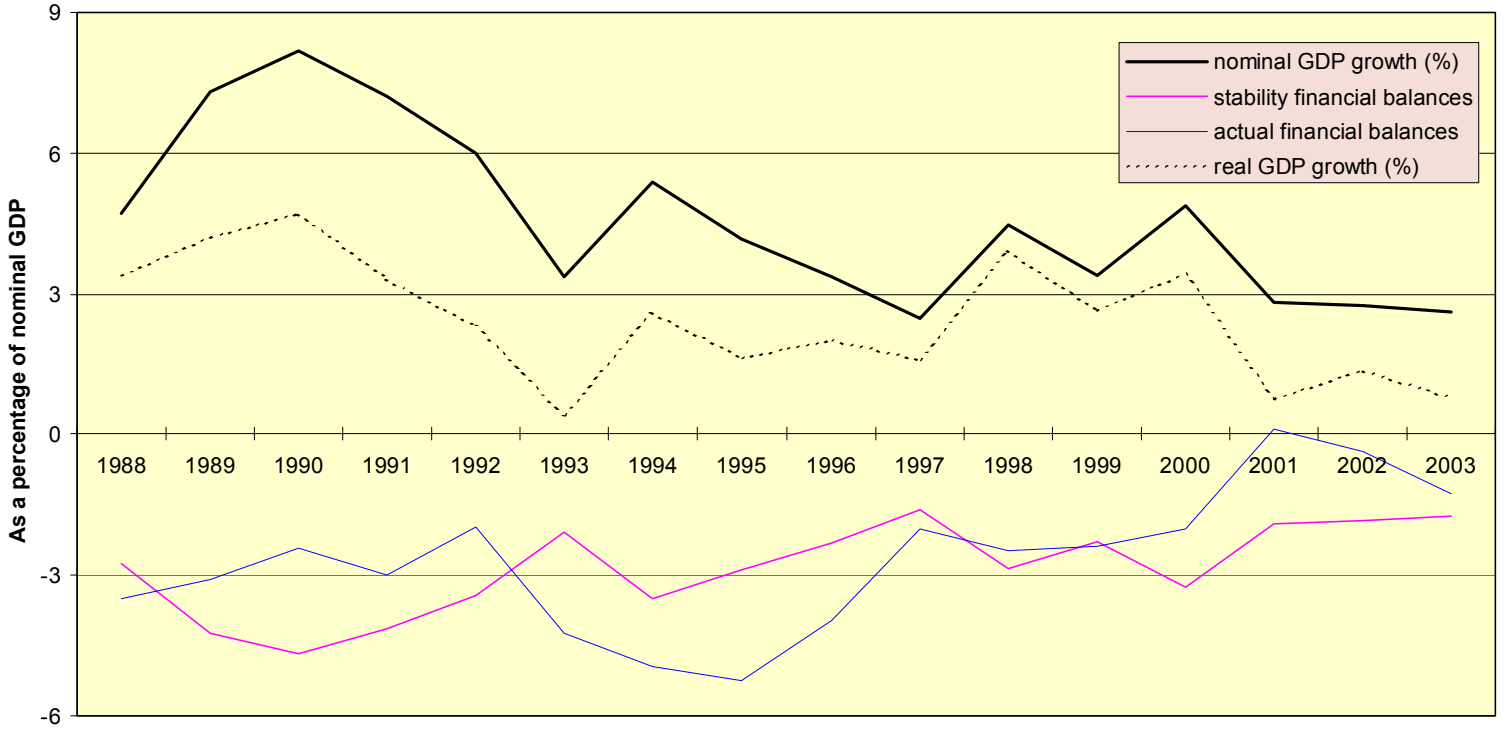
Crushing growth neither conducive to SGP compliance nor sustainability though



Sources: OECD Economic Outlook no. 74

Notes: Financial balance 2000 excl. UMTS revenues, balance 2003 incl. 0.7% of GDP one-off receipts. Deficit ratios not exceeding "stability balances" imply public debt sustainability (ie. a non-rising debt ratio)

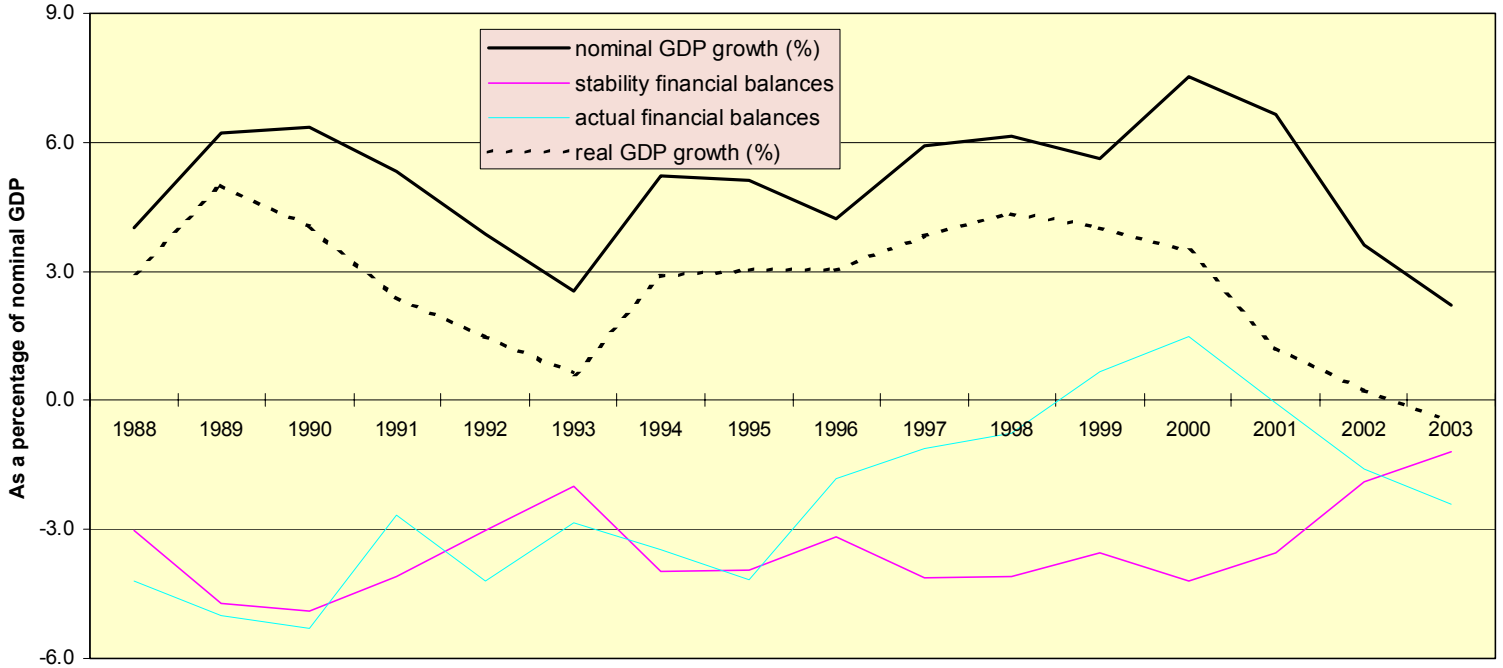
Figure 30. Austria stayed clear of German-style growth crushing in 1990s, but then enforced SGP wisdom in 2001 - rather untimely



Sources: OECD Economic Outlook no. 74
Notes: Financial balance 2000 excl. UMTS revenues. Deficit ratios not exceeding "stability balances" imply public debt sustainability (defined here as a non-rising debt ratio)

Figure 31. Another miracle ending in tears ... Another Dutch disease in the making?

A 2.5 percent of GDP austerity package in pipeline for 2004

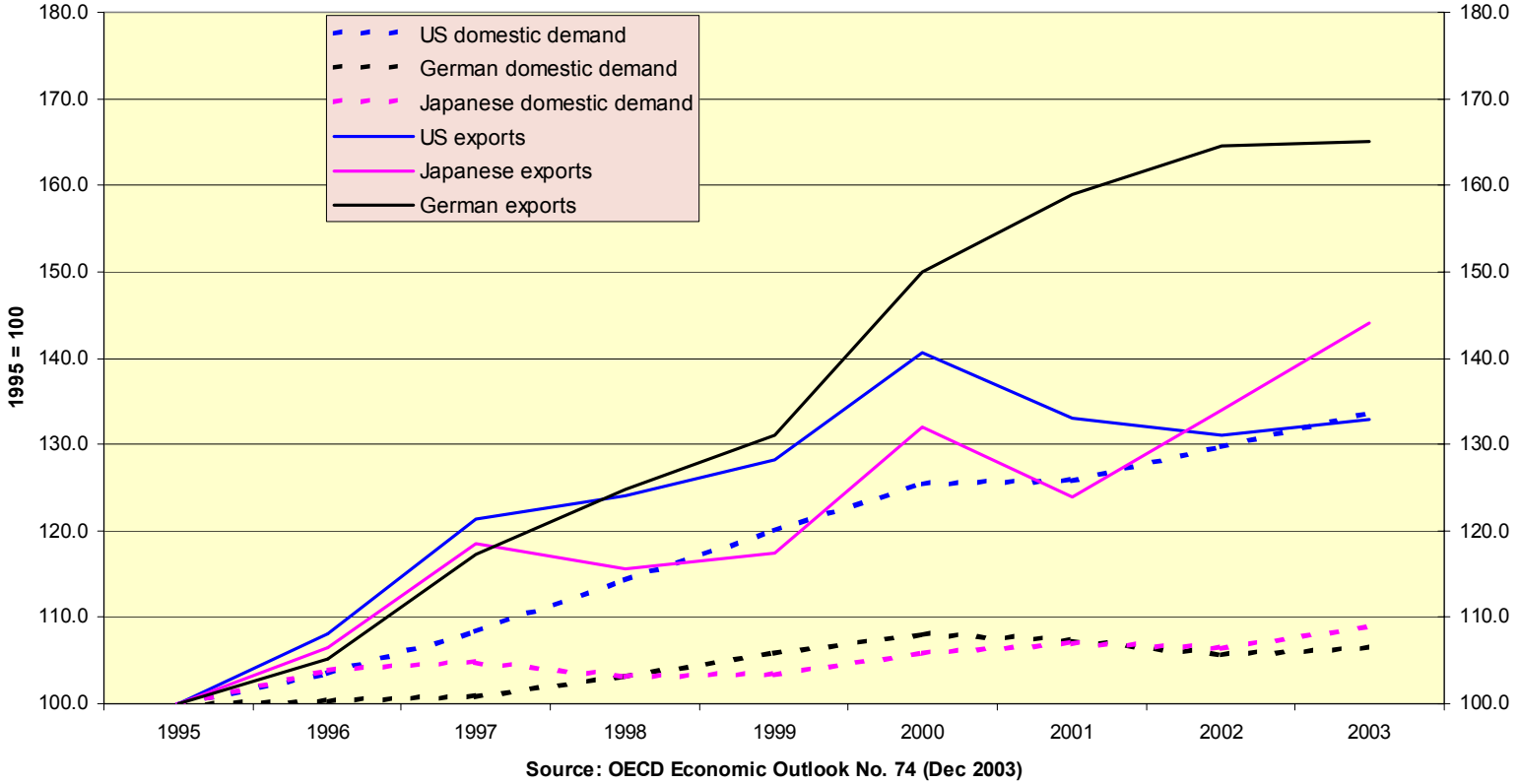


Sources: OECD Economic Outlook no. 74

Notes: Financial balance 2000 excl. UMTS revenues. Deficit ratios not exceeding "stability balances" imply public debt sustainability (defined here as a non-rising debt ratio)

Figure 32. Policy inconsistencies and global imbalances

Cumulative growth of real domestic demand and exports since 1995



Source: OECD Economic Outlook No. 74 (Dec 2003)