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IS EUROLAND THE NEXT ARGENTINA?

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The American tourist in Europe cannot have helped noticing big changes over the past couple of decades: Euroland is becoming homogenized. While it has some distance to go before it becomes a true “melting pot”, even the casual visitor is struck by the degree of social, political, and economic integration achieved. Common standards, perfunctory border crossings (with special treatment for “EU citizens”), and movement toward a common language (thankfully, English!) are important indicators, but the most obvious change has been the adoption of the single currency: An American need only convert once from dollars to euros. Perhaps more mundane but no less important for the tourist, the euro has the good sense to stay close to parity with the dollar so that one no longer needs to lop off three zeros and divide by fourteen, give or take, to convert the price of that Firenze Big Mac.

True, there have been costs that are hard to overlook. Pay phones are mostly idle, still awaiting conversion to the new currency. Elderly Euroland customers, baffled by the new denominations, simply proffer a handful of coins to merchants. And shopkeepers are still pulling off the old tags as they euro-ize prices of their inventories of unsold goods. Some department stores have even run very successful sales campaigns accepting the old currencies to move goods as customers unload hoards of outdated cash.

But that is small potatoes. The bigger costs are evident in the deteriorating public infrastructure, crumbling social services, rising unemployment, and simmering social unrest. The famous Eurostrada are no longer so conducive to triple-digit speeds. Mussolini’s museums of Italian culture in Rome are less impressive, awash in litter and uncut waist-high grass. Idle young men are everywhere, unemployed and begging for euros or washing windshields at intersections. (True, a lot of these are recent immigrants from eastern Europe—but by no means all of them, and in any case, the flood from the east will increase as Euroland expands, enhancing freedom of movement.) Increasingly, the middle class abandons public schools and universal health care in favor of privatized, exclusionary services not subject to government spending constraints. And politics within the individual Eurostates turns to the right—less generous, less democratic, anti-immigrant, even occasionally racist and isolationist--somehow less European. In short, the New Millennium American Tourist comes away from Europe far less envious than she had a couple of decades ago—in spite of the welcomed conveniences accompanying integration.

To the optimist, these costs are temporary. Convergence criteria dictated austerity to bring down inflation and to get government budgets under control. The single currency would eventually allow all of Euroland to enjoy the same interest rate by eliminating currency risks. Further, sounder fiscal policy would ensure that the interest rate would remain low. On this view, poor economic performance should be short-lived, as low interest rates would boost investment and growth and as governments learned to live within their means. As soon as the process of “structural adjustment” (increasing flexibility of labor and capital markets) is complete, Euroland will prosper.

Call me a skeptic. I do acknowledge many of the benefits of European integration. We cannot tolerate another European-instigated World War. Freedom of movement of labor and capital within Europe, as well as adoption of uniform (high) standards, is a worthy goal. Creation of a larger internal market will allow Euroland to reap many of the efficiency gains that generated the relatively higher living standards long enjoyed within the huge American market. And one can plausibly believe that integration could lead to a marked improvement of monetary and fiscal policy over what had been practiced in many of the formerly independent nations of Europe. But the Maastricht model is so flawed that these benefits will not be realized. Indeed, the rising social and political unrest to date results almost directly from the design flaws of economic integration, and threatens to rend asunder the political and social integration achieved.

No where is the recent reversal of European fortunes more apparent than in Germany, where recent elections have threatened the governing coalition. Ironically all through the 1980s, the populations of the “weaker” nations suspected that a German conspiracy lay behind the push for integration—some sort of a plan for domination of Europe by the Bundesbank. (In truth, the French fear of armed conflict was probably the key factor pushing integration forward.) Germany enjoyed lower inflation, low interest rates, unemployment rates so low that labor had to be imported, and relatively low budget deficits. Hence, integration required that most of the costs of integration would be borne by the weaker nations, which had to severely cut government spending, suffer higher interest rates, and drive unemployment into the double digits in order to converge. Now the tables have turned, as Germany struggles with collapsing business spending, official unemployment that will exceed 4 million this year, real GDP growth near zero, and a budget deficit that will exceed the 3 per cent (of GDP) Maastricht limit (as will the deficits of France, Italy, and Portugal). It is the turn of the smallest nations (with the only economies in Europe that are doing well) to lecture Germany and France on the necessity of getting their fiscal houses in order. Germany’s “five wise men” (the Council of Economic Advisers to Chancellor Gerhard Schroder) agree, recently calling on the government to tighten its austerity program in order to cut the deficit, even as they project rising unemployment and stagnant economic performance.

Still, the optimist looks ahead to the prosperity promised to follow on economic integration and liberalization as “one big, free, market” is created. I believe they fail to recognize the major flaws of the Maastricht model. The problem is the single currency, or, rather, the adoption by member states of what is essentially a “foreign” currency. Much is made of the reduction of transactions costs involved in currency conversions. No doubt there are nonzero—perhaps even nontrivial—savings. However, they are dwarfed by the substantial costs to a nation of abandoning its own currency in favor of a foreign currency (unless the foreign sovereign takes on responsibility for maintaining full employment).

SOVEREIGN VERSUS NON-SOVEREIGN FINANCES: The Case of Argentina

Argentina provides a case in point.ⁱ In 1991, it adopted a currency board based on the dollar. Much like the Eurostates that adopted the euro, Argentina from that point forward surrendered

currency sovereignty as it became a user of a currency rather than an issuer.ⁱⁱ To some extent, Argentina's experiment with a currency board can be seen as a last-ditch effort to constrain instability. There can be little argument that Argentina has long suffered from economic mismanagement. Before it dollarized (technically, it adopted a currency board arrangement, but the difference is moot), it endured high inflation, high interest rates, slow growth, high unemployment, and chronic budget deficits.ⁱⁱⁱ It is not necessary to argue against the position that adoption of the dollar provided the political justification and will to implement fiscal austerity, nor to deny that this austerity helped to bring down inflation, nor that the stable currency relative to the dollar eliminated currency risk. Indeed, the creation of the currency board, as well as various structural reforms that included rapid privatization of state assets and downsizing of the national government did appear to bring major benefits. Between 1984-93, inflation-adjusted growth barely exceeded 2% per year; for the rest of the 1990s, it came close to 5% per year. The Clinton boom and America's growing trade deficit helped to fuel Argentinean growth by boosting its exports. Exports plus imports as a percent of GDP grew well over 7% during the first half of the 1990s as the economy was opened and trade was liberalized. Federal expenditures fell from more than 27% of GDP at the end of the 1980s to about 20% during the 1990s; the federal budget achieved a balance during the first half of the 1990s (even a surplus in 1994). Inflation fell from nearly 100% at the beginning of the 1990s to nearly zero for the rest of the decade (until the currency board collapsed). It is no wonder that those who promoted the Washington Consensus viewed Argentina's experiment as a nearly unqualified success story.^{iv}

This austerity lent a slow-growth bias to the economy that could only be overcome by high nongovernmental spending—either domestic consumption and investment or a trade surplus. Dollarization made Argentinean exports less competitive whenever its competitors devalued, and as the dollar rose generally over the decade. Appreciation caused imports to rise more than exports so that a persistent trade deficit opened up after 1992 (at cyclical peaks the deficits rose to some 3% of GDP). Moreover, as deflationary forces built and as the economy began to grow more slowly (with negative inflation-adjusted GDP growth every year from 1999-on), tax revenue growth fell off and government was forced to borrow or cut spending.

In an attempt to slow growth of its own deficits, the federal government cut transfers to regional governments, pressuring their budgets, increasing unemployment, constraining income and private spending, and eventually bringing regional governments to the edge of default. Interestingly, regional governments experimented with novel financing methods, issuing very short-term bills in government payment that they then accepted in payment of regional taxes (the Patacones were one example). These were soon accepted all over the country for all kinds of purchases (even for utility company payments and for Big Macs at McDonald's!), and even accepted by the national government in payment of taxes. However, for regional governments these only temporarily averted default—since at maturity they were supposed to be redeemed for pesos, making them additional peso debt for the provinces. And for the national government they actually hastened default since they reduced peso and dollar revenue.

Additionally, since interest rates did not fall as expected (indeed, Argentinean interest rates remained on par with those of its neighbors after creation of the currency board, indicating that

market assessment of default risk substituted nearly perfectly for reduced currency risk), federal debt service payments grew fairly rapidly (by 2000, interest costs were about 17% of national government spending). Hence, the combination of slow growth and high government borrowing rates ensured a vicious cycle of pressures on the Treasury to increase fiscal austerity, which hindered growth, raised unemployment, and increased fiscal pressures as taxable income fell. Federal governmental default was thus assured, as was the extreme social unrest that normally comes when unemployment reaches twenty percent.

In conclusion, even if it is accepted that dollarization brought initial benefits, it put Argentina in an unsustainable situation—any benefits were likely to be short-lived. The whole package came crashing down by Christmas 2001 as Argentina defaulted on its dollar debts, abandoned the currency board, refused to convert pesos to dollars, and floated the currency. Little more than a year later, Argentina appears to be mounting some sort of recovery. It still ignores letters and phone calls from its creditors. And so long as it continues to do so, it can be expected to slowly recover so long as it maintains a floating exchange rate and does not run an overly tight fiscal stance. Exactly how fast it recovers depends to a large extent on whether its policy makers recognize they are now working in a new paradigm: operating with a sovereign currency.

EUROLAND'S EXPERIMENT

Previous to monetary union, each of the Eurostates was a sovereign issuer of its own currency. Unfortunately, they did not fully realize what this meant, and tended to adopt policy based on an incorrect paradigm—that is, based on the belief they were users, not issuers, of sovereign currency. Hence, there was always much fretting about the size of budget deficits, about the possible impact of deficits on interest rates, and about supposed market forces that were said to be determining domestic interest rates. Such worries kept growth chronically below potential, but would have been appropriate if these had been nonsovereign nations. With the movement toward unification, the countries did begin to abandon sovereignty. As mentioned previously, one of the justifications for monetary union was the belief this would bring down interest rates in the highly indebted nations, as they converged toward low German rates. Ironically, before the movement toward unification, a country like Italy (with government interest payments equal to a tenth of GDP) could have had zero overnight rates (as does Japan today) at any time.^v Subsequently, however, the adoption of the euro actually eliminated this option as sovereignty was abandoned and Italy's interest rates became exogenous! Most of the Eurostates had to adopt severe fiscal austerity as they tried to converge in line with the Maastricht criteria. With the final adoption of the euro, the last vestiges of currency sovereignty were given up.

We have already quickly looked at recent Euroland performance: rising unemployment, deflation, collapsing stock markets, neglect of infrastructure, and rising unrest. Still, the optimist can hope for a quick turn-around, and can point to the strong euro as evidence of the wisdom of monetary union. We will return to an evaluation of Euroland's prospects in the final section.

CURRENCY SOVEREIGNTY

Before we continue our analysis of Euroland, let us examine the case of fiscal and currency independence or sovereignty. A nation like the US creates a currency for domestic use (and ensures its use primarily by demanding payment of taxes in that currency). The government, itself (including the Treasury and the Central Bank—the Fed in the case of the US), issues and spends the high powered money (HPM--cash and reserves at the Fed) as its liability. It is clear that the US government does not promise to convert its HPM to any other currency, nor to gold or any other commodity, at any fixed exchange rate.^{vi} The flexible exchange rate is key to maintaining fiscal and currency independence—what I like to call sovereignty, although governmental sovereignty certainly has other dimensions as well. But there is more to it than a flexible exchange rate. The sovereign government spends (buys goods, services, or assets, or makes transfer payments) by issuing a Treasury check, or, increasingly, by simply crediting a private bank deposit.^{vii} In either case, however, credit balances (HPM) are created when the Fed credits the reserve account of the receiving bank. Exactly analogously, when the government receives tax payments, it reduces the reserve balance of a member bank (and, hence the quantity of HPM). Simultaneously, the taxpayer's bank deposit is debited, and her bank's reserves at the Fed are reduced. While we commonly think of a government needing to first receive tax revenue, and then spending that revenue, this sequence is quite obviously not necessary for any sovereign government. If a government spends by crediting a bank account (issuing its own IOU--HPM) and taxes by debiting a bank account (and eliminating its IOU--HPM), then it is not as a matter of logic “spending” tax revenue.^{viii} In other words, with a floating exchange rate and a domestic currency, the sovereign government's ability to make payments is not revenue-constrained.

This fundamentally simple point is difficult for some to grasp because we are used to thinking about government as if it were not sovereign. It is the non-sovereign government that must obtain “money” before it can spend; for the most part, it obtains money by taxing and borrowing (non-sovereign governments also sell services, assets, and some commodities, to obtain money). For example, state and local governments in the US are non-sovereign in the sense in which I am using the term. They really do spend tax revenue. When state and local taxes are paid, bank deposits of taxpayers are debited and those of the state and local governments are credited. These governmental deposits are then used when state and local governments spend, leading to debits to their accounts and credits to the accounts of those receiving state and local government checks. When tax revenues fall, as they have in the current US slowdown, states have to cut spending, raise taxes, or borrow to finance their spending. However, as we'll discuss below, state borrowing is ultimately limited by market assessment of default risk. Thus, states are forced to act in a pro-cyclical manner in recession, cutting spending and raising taxes and thereby exacerbating the unemployment problems.

In the US it is the federal government (the sovereign) that ultimately has the responsibility and the means to maintain full employment—not the individual, nonsovereign, states. Logically, this is a necessity implied by the fiscal arrangements. As the sovereign issuer of the currency, only the national government is able to spend without regard to revenue. Fiscal transfers (mostly from the US Treasury, although the Fed can also play a role) from Washington to the

states can help counter the pro-cyclical behavior of states. If Washington had stepped in to provide sufficient transfers to the non-sovereign Argentina, it could have prevented a fiscal, economic, and social crisis. Obviously, such a policy would have had little political support in the US.

Note that the sale of its own treasuries by a sovereign government is not best thought of as a borrowing operation, even though it is frequently described as such. Rather, the purpose of such sales (even if policy-makers do not realize this) is to drain any excess reserves created by deficit spending. If the bond sales were not undertaken to drain excess reserves, the overnight rate would fall. Operationally, the Treasury and the Central Bank work together to ensure that the overnight interest rate target (set by monetary policy) is hit. They do this through security sales or purchases to drain or add reserves as necessary to allow the monetary authorities to hit rate targets.

When a household or nonsovereign government borrows, it issues an IOU and obtains a bank deposit that it needs in order to spend. The sovereign government, on the other hand, has no need to obtain a deposit before it spends its own currency. It can spend by crediting a private bank account. It sells a security, not to finance its expenditures but to reduce the outstanding stock of HPM, merely offering to substitute one of its interest-paying liabilities (the security) for a non-interest-paying liability (the HPM that is debited from bank accounts). This is really an interest rate management operation (known within the Fed as offsetting operating factors)—reducing bank reserves in order to eliminate (non-interest-earning) excess reserves that would otherwise place downward pressure on overnight interest rates.^{ix}

The final point to be made regarding such operations by a sovereign government is that the interest rate paid on treasury securities is not subject to normal “market forces”. The sovereign government only sells securities in order to drain excess reserves to hit its interest rate target. It could always choose to simply leave excess reserves in the banking system, in which case the overnight rate would fall toward zero. When the overnight rate is zero, the Treasury can always offer to sell securities that pay a few basis points above zero and will find willing buyers because such securities offer a better return than the alternative (zero). This drives home the point that a sovereign government with a floating currency can issue securities at any rate it desires—normally a few basis points above the overnight interest rate target it has set. There may well be economic or political reasons for keeping the overnight rate above zero (which means the interest rate paid on securities will also be above zero). But it is simply false reasoning that leads to the belief that the size of a sovereign government deficit affects the interest rate paid on securities.

For a real world example, one need only look at the current case of Japan, which has by far the largest government deficit (relative to GDP—about 8% today) as well as the all-time largest outstanding government stock of debt (in absolute and relative terms, at 150% of GDP) of any major developed country.^x However, Japan has maintained interest rates on government securities at a few basis points above zero (and sometimes, for technical reasons, even below zero!) for half a decade. The US Treasury accomplished the same feat during WWII, when short term treasuries paid 3/8 of one percent even as the deficit-to-GDP ratio reached 25% of GDP—three times higher than Japan’s current ratio! This indicates that a sovereign nation

with a floating exchange rate can choose to “enjoy” interest rates on government debt as low as it wants. By the same token, the sovereign government could have interest rates above 100% if it so desired. All it need do is set the overnight rate target at 100% and then sell securities whenever excess reserves placed downward pressure on that rate. This drives home the point that the interest rate is exogenously set in any sovereign nation. Whether the base rate will be zero or one hundred is a policy matter, not subject to market determination.

A non-sovereign government faces an entirely different situation. In the case of a “dollarized” or “euro-ized” nation, the government must obtain dollars/euros before it can spend them.^{xi} Hence, it uses taxes and issues IOUs to obtain dollars/euros in anticipation of spending; unlike the case of a sovereign nation, this government must have “money in the bank” (dollars/euros) before it can spend. Further, its IOUs are necessarily denominated in dollars/euros, which it must incur to service its debt. In contrast to the sovereign nation, the nonsovereign government promises to deliver third party IOUs (that is, dollars/euros) to service its own debt (the US and other sovereign nations promise only to deliver their own IOUs).

Furthermore, the interest rate on the nonsovereign, dollarized/euro-ized, government’s liabilities is not exogenously set (whether it is a US state, a Eurostate or an Argentina).^{xii} Since it is borrowing dollars/euros, the rate it pays is determined by two factors. First there is the base rate on dollars/euros set by the monetary policy of the US government (the issuer of the dollar) or the ECB (issuer of the euro). On top of that is the market’s assessment of the nonsovereign government’s credit worthiness. A large number of factors may go into determining this assessment.^{xiii} The important point, however, is that the nonsovereign government, as user (not issuer) of a currency cannot exogenously set the interest rate. Rather, market forces determine the interest rate at which it borrows.^{xiv}

PROSPECTS FOR EUROLAND

The Eurostates that have adopted the euro are now nonsovereign governments in the sense that they have become users of a currency, not currency issuers--essentially like American states or like a dollarized Argentina. The new potentially sovereign entities are the ECB and the European parliament—not the nation states. To be sure, this is not fully recognized by officials or by markets. The ECB and the European Parliament are constrained by politics, Maastricht agreements, and their failure to recognize the economic options that accompany sovereignty. (On this, see below.) Markets, likewise, have not yet fully recognized the regime shift that has eliminated currency sovereignty for the nation states. While interest rates have not fully converged (and will not), they are typically more similar than they had been before union. This is because while currency risk has been eliminated, markets have not yet begun to fully price-in default risk. Rating agencies are still treating the individual nations as if they were sovereign, with eyes focused on the Maastricht criteria (most importantly, the 3% deficit ratio limits).

Note that by these criteria, even Argentina at the peak of its crisis should have been rated better than Germany today--the Argentinean national government deficit ratios did not reach 3%. Further, Argentina’s public debt-to-GDP ratio only reached 35%--far below the 60-100% ratios that are common among Eurostates. However, markets correctly realized that because

the Argentinean government was no longer sovereign, its debt was effectively foreign currency debt—and thus was subject to high default risk given the circumstances. It is also interesting to note that Luxembourg's government debt is under 6% of GDP. (See Table 1.) It has never issued its own currency, and therefore it may have felt that market forces never permitted it to run a higher debt ratio.

Similarly, no state in the US has a debt ratio that approaches the ratios common throughout Euroland. Like Luxembourg, they have always been users, not issuers, of the currency. In the US, even a temporary state government deficit leads to immediate downgrading of the government's debt. No US state has ever been permitted to run persistent government deficits that approached 3% of state GDP, and state debt to GDP ratios rarely exceed much more than 15% of state GDP. Table 1 compares the nine states with the worst financial ratios (based on debt to Gross State Product, GSP, in 2000) with the financial ratios of Eurostates. The worst state deficit to GSP ratio achieved since 1993 was 0.6% (by Rhode Island in 1993 and Hawaii in 1995). In 2000 no US state ran a deficit. Since 1993, the worst debt/GSP ratio was 22.8% (Rhode Island in 1994); currently the worst is 15.6% (still Rhode Island). By contrast, Belgium's debt/GDP ratio was 138% in 1993, and that fell to 109% by 2001 after the fiscal austerity that was required for integration. In addition, Greece and Italy had debt ratios near 110% as of 2001. Excluding Luxembourg (which, as discussed above, never had currency sovereignty, hence, consistently ran surpluses every year since 1993), only Ireland managed to get its debt ratio under 50% by 2001. The contrast cannot be more clear: even the worst of the non-sovereign US states in terms of deficit or debt ratios is in a far better situation than even the best of the now non-sovereign Eurostates (excluding Luxembourg).

Indeed, an announcement that a state might consider running an unbalanced current account as a matter of policy would shut it out of financial markets. All but 2 US states are prohibited from running deficits by statute or constitution; of course, when the economy tanks, states do end up with unintentional deficits—as they are today—but that is quite different from the current case of Germany, France, Italy, and Portugal, which all budget for persistent government deficits. It is only the expectation that states budget with a view to balancing the current account even in downturns, with substantial surpluses during expansion that keeps ratings high.

It is only a matter of time before financial markets figure out this discrepancy.^{xv} One could argue that Germany's situation is better than that of Louisiana (even if objective factors indicate it is a worse credit risk) simply because it is a favored nation within Euroland, hence, would never be allowed to default. Although the ECB is prohibited under the treaty from bailing out a member, and it is counter-agenda for the European Parliament to do so, the EU does have the financial ability (as issuer of the euro) to step in with huge fiscal transfers to bailout Germany as necessary.^{xvi} While markets might remember the case of Orange County, California (one of the wealthiest jurisdictions in the world and a not insignificant political force, to boot)—which was allowed to default—there is probably some reason to take such arguments seriously. However, the EU does not currently have any mechanism for the size of transfers that could be required. To be sure, an Argentinean-scale crisis throughout Euroland would almost certainly generate a movement to develop such a mechanism. Meanwhile, the fiscal situation of member states could deteriorate rapidly—with rising market-determined

interest rates absorbing ever-larger portions of the budget, forcing spending cuts, driving growth further into negative territory, destroying tax revenue, and leading to further downgrading of debt.^{xvii} And even if the EU manages to mount the necessary forces to save Germany, will markets bet that it will do the same for Portugal?

A deep recession could plausibly require government deficits in the range of 7% of GDP all over Euroland; as argued, if markets realize that the individual nations are no longer sovereign, this will have to come from the EU itself. There isn't much evidence that policymakers anywhere in Euroland are considering this possibility. To the contrary, the "five wise men" of Germany are arguing for balanced budgets! True, Prodi has called the Maastricht 3% limits "stupid"—but as we've seen, they are actually irrelevant, as irrelevant as they would have been for Argentina (or, for that matter, for Massachusetts or any other of the "highly indebted" US states). The actual limit is the limit established by markets for nonsovereign states. If Euroland wants to exceed market-imposed limits, it must re-establish sovereignty.

In the medium term, the likely outcome will be increased pressure from markets to tighten national budgets. As unemployment rises and wages and other costs fall, deflationary pressures will increase international competitiveness of European output. At the same time, rising net exports will allow Euroland citizens to accumulate net financial claims on the rest of the world. Thus, both external demand (boosted by exports) and internal demand (boosted by rising net wealth) could substitute somewhat for restrictive fiscal policy. However, various forces will frustrate this process. First, European competitiveness is enhanced primarily to the extent deflationary pressures are maintained, and this, in turn, requires a significant domestic demand gap to maintain deflationary pressures. Second, Euroland is competing to a large extent with Asia and other low-cost producers for the world market. It is not clear that Euroland wants to engage in a race to the bottom, or that it could win such a race. Third, export-led growth relies on the strength of demand of net importers like the US and the UK. Unfortunately, the economies of the US and the UK seem to have run out of steam, and I do not believe it is likely that their demand for imports will remain high, although we will not pursue an analysis of their prospects here.^{xviii} In any case, while the recent rise of the euro against the dollar is seen as evidence for the wisdom of unification, the appreciation is already hindering exports and contributing to the deterioration of Euroland economies.

It is easy to see that there are two potential longer-run paths for Euroland, either of which would allow 7% government deficits. The first is to abandon the euro and to return to individual currencies and national sovereignties. This is the path that might follow on from continued rise of right-wing nationalism. It would probably be an ugly path. Further, any member that leaves still must service its euro debt—so default might eventually result. The preferred path would be to form a "more perfect union", including above all fiscal integration. The European Parliament would have to assume a predominant fiscal role, with size and responsibilities similar to those of the US Treasury. Responsibility for spending programs could remain fairly decentralized—even more than that of the US—so long as a significant portion of spending of the Euroland states were financed from the central treasury.^{xix} Individual states could run balanced budgets (as US states mostly do), while the budget balance of the central treasury would be determined by overall economic performance within Euroland. Automatic stabilizers should be built-in such that the treasury would run increasing

deficits as unemployment rose; the budget would turn toward balance or even surplus as full employment was achieved. The central treasury's budget would have to counter-act the pro-cyclical movement of the budgets of the individual states just as the US Treasury's balance moves to deficit to help offset austerity measures enacted by states during recession to keep their budgets balanced.

This analysis might be viewed as overly alarmist. It is perfectly possible that Euroland might muddle and struggle through its current downturn without a collapse. This could occur, for example, if sufficient private demand were restored, either through exports or through domestic private spending fueled by borrowing, much as private borrowing fueled the Clinton boom in the US. This appears quite unlikely, given rising unemployment, the size of the demand gap that needs to be closed, and the falling equity markets that are wiping out wealth.

The primary purpose of this analysis, however, is to distinguish between sovereign and nonsovereign governments and to urge consistent application of the proper analytical paradigm to analysis of each. Deficit and debt ratios of sovereign governments have no objective impact on their credit-worthiness. Nor do markets determine interest rates on their debts. On the other hand, nonsovereign governments operate in an entirely different paradigm, where deficits and debts do impact default risk, and hence, should and do affect market-determined interest rates. Sovereign governments are able to deficit spend as necessary to climb out of recession and to restore full employment. Lack of will, not lack of financial where-with-al, is the constraint. Nonsovereign governments are constrained by revenues and ability to borrow, the latter of which is a function of market assessment of credit risk. They can provide a more favorable environment for private spenders ("structural adjustment"—including reduction of labor market "frictions" such as minimum wage laws) in the hope that this might increase nongovernmental demand, but they may not be able to increase demand directly as needed should this fail. Their own ability to spend will necessarily be pro-cyclically biased: not only does their tax revenue rise in good times, but market assessment of their credit-worthiness will also improve in expansion.

The American tourist in Italy stands in awe of the splendor that was imperial Rome. The Roman emperor of two thousand years ago faced real constraints, but so long as there was a will and a feasible way, massive state projects could be undertaken essentially without financial constraints. Today, it is not just the lack of will that constrains Eurostates (although that is certainly in evidence), but also the lack of financial means. Ironically, the lack of financial means forces Euroland to forego projects that would have been feasible to the Romans 2000 years ago, even as resources, labor, and manufacturing capacity lie idle. In today's world, enforced idleness is the cost of giving up currency sovereignty. In the case of a nation with a sovereign currency, it is only lack of will that keeps resources idle. And it may well only be during a crisis of Argentinean proportions that this distinction becomes generally recognized.

Table 1: Financial Balances of US States and of Eurostates

(Percent)	1993		1994		1995		1996		1997	
	Debt/GDP	Fiscal bal./GDP	Debt/GDP	Fiscal bal./GDP	Debt/GDP	Fiscal bal./GDP	Debt/GDP	Fiscal bal./GDP	Debt/GDP	Fiscal bal./GDP
US states										
Alaska	19.2	8.4	15.5	2.0	13.0	11.2	12.3	10.2	12.4	14.0
Connecticut	11.9	0.2	12.1	-0.8	13.0	0.1	17.3	0.7	12.6	1.0
Hawaii	13.8	-0.2	14.0	-0.3	14.0	-0.6	13.6	1.2	13.6	1.6
Maine	11.8	0.1	11.3	0.7	10.9	0.1	10.9	0.1	10.5	2.5
Massachusetts	14.5	0.0	14.2	-0.1	14.0	-0.1	13.9	0.1	13.1	0.3
Montana	10.8	2.2	12.4	2.3	12.6	1.7	12.4	1.6	10.9	1.7
New Hampshire	19.1	-0.1	19.2	-0.3	17.9	0.5	16.6	0.9	15.6	0.6
Rhode Island	21.1	-0.6	22.8	1.3	21.5	-0.1	20.7	0.8	18.0	0.9
Vermont	10.8	0.8	11.4	0.8	11.9	0.4	11.7	0.6	13.1	1.6
Euro Zone										
Austria	61.8	-4.2	64.7	-5.0	69.2	-5.3	69.1	-4.0	64.7	-2.0
Belgium	138.1	-7.3	135.8	-5.0	133.9	-4.3	130.5	-3.8	124.8	-2.0
Finland	58.5	-7.3	61.0	-5.7	66.0	-3.7	66.6	-3.2	64.9	-1.5
France	51.6	-6.0	55.3	-5.5	62.9	-5.5	66.5	-4.1	68.2	-3.0
Germany	47.4	-3.1	47.9	-2.4	57.1	-3.3	60.3	-3.4	61.8	-2.7
Greece	110.1	-13.6	107.9	-9.9	108.7	-10.2	111.3	-7.4	108.2	-4.0
Ireland	96.2	-2.7	90.4	-2.0	82.6	-2.2	74.2	-0.2	65.1	1.2
Italy	118.1	-10.3	123.8	-9.3	123.2	-7.6	122.1	-7.1	120.2	-2.7
Luxembourg	5.7	1.9	5.4	2.7	5.6	2.6	6.2	2.0	6.1	2.8
Netherlands	78.8	-3.6	75.7	-4.2	77.2	-4.2	75.2	-1.8	69.9	-1.1
Portugal	59.1	-5.9	62.1	-5.9	64.3	-4.5	62.9	-4.0	59.1	-3.0
Spain	..	..	..	..	73.8	-6.6	81.4	-4.9	80.8	-3.2

Sources: OECD, Census bureau, BEA.

Notes : The US states shown here had the worst financial balances in terms of Debt to GSP (Gross State Product) in the year 2000.

(Percent)	1998		1999		2000		2001	
	Debt/GDP	Fiscal bal./GDP	Debt/GDP	Fiscal bal./GDP	Debt/GDP	Fiscal bal./GDP	Debt/GDP	Fiscal bal./GDP
US states								
Alaska	15.4	13.1	15.4	4.6	15.0	7.1		
Connecticut	12.4	1.4	11.7	0.8	11.6	0.8		
Hawaii	14.5	2.3	13.4	0.9	13.2	0.8		
Maine	10.8	3.4	11.3	3.0	11.3	2.4		
Massachusetts	13.6	0.4	13.7	0.0	13.7	0.9		
Montana	11.3	1.8	11.5	1.0	11.7	2.2		
New Hampshire	13.2	1.3	12.4	1.0	11.5	1.3		
Rhode Island	17.4	1.5	17.0	3.4	15.6	2.6		
Vermont	12.9	0.5	12.3	2.6	11.8	0.4		
Euro Zone								
Austria	63.9	-2.5	64.9	-2.4	63.6	-1.7	63.2	0.0
Belgium	119.5	-0.7	114.8	-0.5	109.6	0.1	108.6	0.4
Finland	61.3	1.3	55.9	1.9	53.1	7.0	51.5	4.9
France	70.4	-2.7	66.2	-1.6	65.4	-1.3	65.0	-1.4
Germany	63.2	-2.2	61.2	-1.5	60.5	1.1	60.2	-2.8
Greece	105.8	-2.5	105.1	-1.9	106.2	-1.8	107.0	-1.2
Ireland	55.1	2.3	49.6	2.3	39.0	4.5	36.4	1.7
Italy	116.3	-3.1	114.5	-1.8	110.5	-0.6	109.8	-2.2
Luxembourg	6.3	3.1	6.0	3.6	5.6	5.6	5.6	6.1
Netherlands	66.8	-0.8	63.1	0.7	55.8	2.2	52.8	0.1
Portugal	55.0	-2.6	54.3	-2.4	53.1	-3.0	55.4	-4.2
Spain	81.4	-2.7	75.6	-1.1	72.4	-0.6	68.4	-0.1

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ENDNOTE

ⁱ The data presented in this section draws heavily on "Understanding Argentina's Economic Collapse", a manuscript by Marc-Andre Pigeon.

ⁱⁱ Note that there are differing degrees of currency independence. Some nations drop their currencies altogether and adopt a foreign currency for use in the domestic economy. Dollarization is an example. (So is euro-ization by Euroland, although this may not be obvious because the euro was not a pre-existing currency used in any nation. More below.) Others continue to use their own currency, but fix it to a foreign currency. So long as a 100% reserve of the foreign currency is held on reserve (frequently in the form of official deposits at the foreign central bank, or in the form of securities issued by the foreign treasury), there is no important difference between this and "dollarization" (since in both cases governments must operate to reassure markets they will always have the dollars needed to cover government liabilities). This is essentially how Argentina's currency board operated—holding dollar reserves on a one-to-one basis against pesos issued and promising to convert pesos to dollars on demand. Still others peg to the foreign currency, but hold less than 100% reserve backing. This allows for the possibility that the supply of convertible (domestic) currency (more accurately, the domestic supply of high powered money, or, monetary base, which includes cash plus bank reserves) can exceed the reserves of the foreign currency (again, including foreign cash but mostly consisting of securities issued by the foreign treasuries and deposits at foreign central banks). In practice, this is a very risky proposition if the exchange rate is fixed and conversion on demand is permitted. Hence, the behavior of a prudent government operating with less than 100% reserves would not be much different from one operating with a 100% reserve because any policy that might provoke a "run" on the currency would force it to default on its promise to convert. Even a 100% reserve backing will not be sufficient if the government issues non-money liabilities (for example, treasury securities) to borrow dollars (as we shall see, this can force the government to default on the securities even though its currency could remain good).

ⁱⁱⁱ It could be argued that over the course of the whole of the twentieth century, Argentina essentially adopted a policy of reverse development—dropping from a position with one of the highest per capita living standards in the world to one more on par with that of its South American neighbors. While a detailed examination of this relative decline is desired, it is not necessary for our argument here. What is important is that Argentina opted to abandon an independent currency in favor of the US dollar. By doing so, it moved a crucial component of fiscal power (what I will call sovereignty below) to Washington. This might not have worked out too badly if only Washington had assumed responsibility

for maintaining full employment in Argentina. As we know (and should have known even without the benefit of hindsight), that was an exceedingly risky “if only”—a point to which we shall return.

^{iv} Note, however, that in spite of the apparently better economic performance after reforms and adoption of the currency board, unemployment not only persisted, but also rose sharply in the first half of the 1990s—partly due to the government downsizing. Unemployment never returned to the single digit range it experienced before the adoption of the currency board. High unemployment means that output growth must have been well below potential, indicating that both before and after the reforms, aggregate demand was too low to generate full employment. Hence, the inflation problem was never a simple demand problem. While it is beyond the scope of this article, resolving the inflation problem could not have required a generalized fiscal austerity program such as the one adopted (although adoption of the currency board did require austerity and resulted in higher unemployment). To the extent that the currency board arrangement contributed to reduction of inflation, it was probably not simply that government spending fell, but rather that other policies that had previously generated an inflation bias—such as wage, benefit, and pension indexing—were abandoned.

^v This is not to say that this would have been a good policy, and there is no need to deny this might have impacted exchange rates or inflation rates—we are only claiming that the high government borrowing rates were not dictated by markets but rather were chosen by policy-makers.

^{vi} The US government may hold reserves of various foreign currencies, and may occasionally use its foreign reserves to buy dollars, or may sell dollars to obtain foreign currencies. This is done not only to facilitate foreign transactions by domestic residents, but also to influence exchange rates of the dollar against foreign currencies. Still, the US operates what is called a “dirty” floating exchange rate regime, rather than a fixed exchange rate. While markets might expect that the short-term fluctuations of the dollar against foreign currencies will be maintained within some not-too-wide band (both by operations of the US government as well as by operations of the major foreign nations), there is no illusion that the US government promises to convert the dollars to foreign currencies at anything approaching a certain rate. A rapidly falling dollar would probably generate concerted official action by the US and other major players to cushion exchange rate movements. However, it would not financially constrain the US government from making timely payment on any and all dollar-denominated liabilities precisely because the US government does not guarantee any particular conversion rate.

^{vii} Here and throughout, I define a sovereign government as one that creates a currency, imposes taxes in that currency, and operates in a flexible exchange rate regime.

^{viii} The sovereign issuer of the currency is in a quite different position from that of the nonsovereign users. If it tried to tax first before it had ever spent, there would be no HPM to be used by the nongovernment sectors to make the tax payments. An objection immediately comes to mind. The population could pay taxes this year even if the sovereign government did not spend this year *if* it already held some HPM, or if the government would *lend* some HPM equal to the required tax payment. And, of course, this is true. In the first case, the outstanding HPM hoards must have been received due to previous government spending, or lending, since HPM is the government’s liability and could not otherwise have come into existence. In the second case, government lending is simply purchase by government of an asset (the IOU of the borrower).

^{ix} There are two additional matters that can be examined, both of which are apparently confusing to economists and policy-makers alike. More detailed treatments are available elsewhere so we will be as brief as possible. Both are ultimately related to a mismatch between sovereign spending and tax receipts—either in size or in timing. When spending equals taxes, the government’s credits to private bank accounts equal its debits; hence, there is no net impact on net balances at the Fed’s member bank accounts and cash in circulation (the quantity of HPM). Over any relatively short span of time, it is highly unlikely that such would be the case. Even if the government’s budget were balanced over the course of a fiscal year, there will be weeks, months, even quarters over which chronic deficits or surpluses will be sustained—meaning either net HPM injections or net HPM drains. This typically has

an immediate impact on “overnight” interest rates (the fed funds rate in the US)—net injections cause rates to fall while net drains cause rates to rise. Much could be said about impacts on the banking system and about required and desired reserve ratios, but I will not go into detail regarding Fed operations. It is sufficient to note that all modern central banks use the overnight rate as the primary policy target. When a net HPM injection places undesired downward pressure on fed fund rates, the Fed automatically intervenes with an open market sale (in practice, selling treasuries) to drain any excess banking system reserves. Conversely, budget surpluses trigger open market purchases to replace desired (or required) reserves that are drained by the surpluses.

The second consideration concerns a size mismatch between spending and taxing—that is, annual surpluses or deficits. Again, over the short run, the central bank offsets impacts on banking system reserves. However, sustained budget deficits would cause the central bank to sell-off treasury securities (or other assets) on a perpetual basis (obviously, limited to its stock of previously accumulated holdings); budget surpluses would force the central bank to accumulate treasuries. This isn’t currently the central bank’s job (though it could be), which is to hit overnight interest rate targets. Offsetting impacts on banking system reserves that result from annual deficits or surpluses is the responsibility of the Treasury. Annual budget deficits lead to outright sales of new issues of treasuries; annual budget surpluses generate redemptions of treasuries. Since treasuries are simply interest paying liabilities of the government (functionally, just certificates of deposit at the Fed) there is no limit to the government’s ability to drain excess banking system reserves through new issues. Redemptions triggered by government surpluses are limited by the outstanding stock of treasuries (that resulted from previous budget deficits)—but in practice budget surpluses are almost never sustained long enough to retire all outstanding treasury securities. (The last time the US government retired its outstanding securities was in 1837—and that was in an entirely different monetary regime, with the dollar backed by gold. Note, also, that this was followed by the first US depression; indeed, every US depression was preceded by a significant Treasury surplus. Each depression lowered tax revenue and drove the budget back into deficit.)

^x Indeed, Japan’s government debt situation looks—superficially--far worse than those of emerging market nations on fixed exchange rates, that have been burdened with high interest rates and in some cases forced into default.

^{xi} The nonsovereign government that does not fully dollarize or use a currency board, but that chooses to peg exchange rates (say, against the dollar) faces a quite similar situation. While it can spend in its own currency, hence, can spend by crediting private bank accounts, it must always worry about its ability to maintain the exchange rate peg. This in turn requires that it keep on hand dollar reserves sufficient to meet any demands to convert domestic currency (and other government liabilities) to dollars at the pegged rate. Ultimately, any reserve of dollars that is equal to less than 100% of the outstanding domestic supply of HPM plus the stock of outstanding interest-paying government liabilities puts the government at risk. So long as markets continue to believe that the peg can and will be maintained, all is well. A balance of payments deficit will begin to raise doubts (even if capital flows are such that official transactions are not required—since these flows can be reversed), however, so that the interest rate will rise due to rising currency risk.

^{xii} This makes it clear that a nonsovereign government that runs a budget deficit in the dollarized nation that also runs a balance of payments deficit can quickly find itself in deep trouble. It will have to issue dollar-denominated IOUs internally and externally, at market determined interest rates. As the market assessment of default risk rises, interest rates also rise which forces the government to use more of its tax revenue to service debt—leaving less available for its spending. If the government does not get its fiscal house in order, markets will punish it with ever-rising interest rates. Fiscal austerity will be used to try to balance the budget. Perhaps monetary policy will be used to raise domestic interest rates even above those dictated by international markets in an attempt to slow the economy even further, and on the belief that the higher rates will attract capital “inflows” (in the form of dollar and other hard currency “flows”). Together, fiscal and monetary policy austerity might help to close the balance of

payments deficit by reducing imports as the population becomes too impoverished to buy foreign goods, and by lowering the prices of exports. Such thinking underlies the “Washington Consensus” approach to developing countries debt problems. Note however that these problems are generated because the government has given up sovereignty—something the Washington Consensus generally viewed as a desirable move.

^{xiii} Two key factors, however, are the country’s balance of payments situation and the nonsovereign government’s budget balance. The first determines the international flow of foreign currency, including dollars/euros, “into” (or “out of”; these are in quotes because the dollars/euros mostly don’t really “flow”, rather ownership of dollar/euro-denominated accounts shifts from/to foreigners to/from domestics; explaining this in detail would take us too far afield) the country; the second determines the dollarized/euro-ized government’s ability to service its debt with its tax revenue. If the nation runs a balance of payments surplus, its producers accumulate net foreign currency claims, including some in dollars/euros (and, of course, sterling or yen can be converted to dollars/euros as desired). These dollars/euros are then available for domestic lending, including lending to the nonsovereign government. If that dollarized/euro-ized government runs a budget surplus, it collects more dollars/euros than it pays out, hence, can service its dollar/euro-denominated debt (and retire some of it). If it runs a deficit it can issue dollar/euro-denominated IOUs domestically to borrow some of the dollars/euros accumulated as a result of the balance of payments surplus.

^{xiv} Sometimes such governments believe they can escape this by issuing liabilities in the foreign currency, rather than in the domestic currency. (Mexico’s tessebonos come to mind.) However, this merely substitutes default risk for currency risk and probably only multiplies the problems. Rising interest rates, in turn, worsen the government’s budget problems, as described above. Hence, whether a country fully dollarizes or simply pegs exchange rates against the dollar, in either case it faces tight constraints on its options. Its government is nonsovereign in the sense that it really does need to tax or borrow in order to spend, and it gives up its ability to exogenously set interest rates as well as its ability to run discretionary, countercyclical, fiscal policy

^{xv} Perhaps they are beginning to do so—a recent threat by rating agencies to downgrade Italian debt was cited by Prime Minister Berlusconi as a justification for budget cuts and tax hikes even in the face of rising unemployment.

^{xvi} Actually, the US Treasury is in a far better situation to do this for Louisiana than the EU is to do this for Germany, but we can presume that the “will” may not be as strong.

^{xvii} Note that the 1997 treaty specifically forbids the European Central Bank (ECB) from undertaking the sort of coordinating actions that would allow it to finance growing deficits of member nations. An important article reads: “Neither the ECB nor a national central bank, any member of their decision-making bodies shall seek or take instructions from Community institutions, or bodies, from any government of a Member State or from any other body.” Further, “in addition to the right of issuing currency thus being completely removed from national governments, these governments are also bound by EU statutes not to run a deficit above 3% of GDP.” (www.eurotreaties.com/emutreaty2.html)

^{xviii} Finally, net export growth for Euroland places upward pressure on the euro, which increases the difficulty of remaining competitive. For example, if German demand is low, sluggish domestic sales of German autos place downward pressure on prices and wages in the auto industry. German autos become more competitive and sales abroad (say, to the US) rise. However, the increased exchange of dollars for euros causes appreciation of the euro, which wipes out the advantage. The ECB could sell euros for dollars to prevent this, but the EU is opposed because it does not want Euroland to accumulate dollar reserves. It would prefer to see the euro become a reserve currency, and accumulation by the ECB of dollars would be seen by some as indirect support of the dollar as the world’s reserve currency.

^{xix} Note also that there is a huge issue of bank deposit insurance; responsibility for bailing-out depositors should a Fisher/Minsky type debt deflation process begin must be addressed by the central authorities at the Parliament and/or the ECB. However, we will not address this issue here.
