
Public Policy Brief Highlights

[To order]

No. 67A, 2001

The Economic Consequences of German Unification: The Impact of Misguided Macroeconomic Policies

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Conventional wisdom holds that the drastic deterioration in Germany's public finances and the country's exceptionally poor economic performance during most of the 1990s was a direct and apparently inevitable result of German unification. This brief challenges this viewpoint. It shows that thoroughly unsound macroeconomic demand policies were pursued by the government and the Bundesbank (Germany's central bank) that conflicted with both economic theory and the best practices of more successful countries. Moreover, western Germany was not brought to its knees by a collapsing eastern German economy that was merely 10 percent the size of western Germany's GDP. Rather, ill-timed and extraordinarily tight fiscal and monetary policies of exceptional length and degree caused a severe and protracted deflationary economic environment. Thus, the happiest political event in Germany's post-World War II history provoked its most burdensome economic policy disaster, at a time when the country was in a position to easily achieve a more favorable economic performance.⁽¹⁾

The analysis focuses on western Germany (formerly known as West Germany), assesses the fiscal challenge posed by unification, investigates the sustainability issue of public finances and the risk of unstable debt dynamics, and reviews Germany's fiscal and monetary policies. By simulating German public finances under alternative growth scenarios, the analysis ultimately reveals the actual rise in Germany's debt ratio and tax burden that may be properly attributed to unification.

The Former West German Economy Before and After Unification

Any assessment of the economic consequences of German unification over the 1990s must be impressed by the favorable economic shape of the former West Germany as the event drew near. After having grown rather sluggishly since the 1981-82 recession as a result of fiscal austerity and restraint by the Deutsche Bundesbank (hereafter Bundesbank), which led to weak demand, slack investment, and underutilized capacity, the former West German economy picked up markedly toward the end of the decade. The year 1989, when the Berlin Wall came down, was the finest year in a decade. There was noninflationary and broad-based gross domestic product (GDP) growth due to strong domestic and foreign demand that yielded a high employment growth rate, a balanced budget, and a trade

surplus of 5 percent of GDP. Producer price inflation remained stable at around 2 percent, while headline consumer price index (CPI) inflation was 2.8 percent, which was perfectly in line with the inflation trend during the 1980s. Exports, traditionally relied upon for igniting demand-led growth, performed strongly. Fiscal and monetary policies contributed (although belatedly) to the recovery in domestic demand.

Not surprisingly, the former West Germany's economy coped rather smoothly with the strains that unification put on its resources. In fact, real GDP grew at a solid rate of 5 percent in both 1990 and 1991, and it was not only robust, but also noninflationary. Investment, potential output, and labor productivity grew rapidly, with the result that supply-side growth was both strong and broad-based. Employment growth was evenly distributed and included people previously classified as structurally unemployed. Moreover, the influx of labor from the former East Germany provided important supply-side relief, so that general labor market pressures were abated.

After German unification in October 1990, the economic performance of western Germany was initially strong. However, it deteriorated by 1992 and remained dismal for the remainder of the 1990s. During this time, the unemployment rate nearly doubled, as GDP growth averaged a meager 1.5 percent per year. The government's fiscal strategy after 1992 was to raise taxes, increase social security contribution rates (payments by workers/employers into the social security program), and cut spending, all of which was meant to reduce its borrowing requirements. Public finances deteriorated and resulted in protracted budget deficits and soaring public indebtedness.

The Fiscal Challenge

Official estimates of fiscal transfers from western to eastern Germany by the German Finance Ministry are about DM 180 billion per year since 1991, or roughly 6.5 percent of western Germany's GDP. Deducting federal revenues in eastern Germany yields proper net transfers from western to eastern Germany of some DM 120-140 billion per year, or roughly 4.5 percent of western Germany's GDP. As a result of income and employment multipliers, and associated higher exports, actual financing requirements are expected to be considerably lower. This is confirmed by the fact that, starting from a balanced budget in 1989, the budget swung from a deficit of close to 3 percent of GDP during the 1990-91 period and resulted in an overall budget deficit of DM 85 billion in 1991.

Three main factors affected the budget: reduced revenues as a result of the final stage of the income tax reform that came into effect in 1990, net fiscal transfers attributable to unification, and increased revenues related to increases in tax and social security contribution rates. This shows that, initially, measures aimed at financing the cost of unification by means other than borrowing were introduced on a limited scale. The sharp rise in deficit spending in 1990-91 was one aspect of fiscal policy that was both inevitable and not inconsistent with economic theory. The fiscal boost helped to stabilize growth in western Germany at a time when other countries were hit by recession.

Public Finances and the Economy: Theory and the German Experience

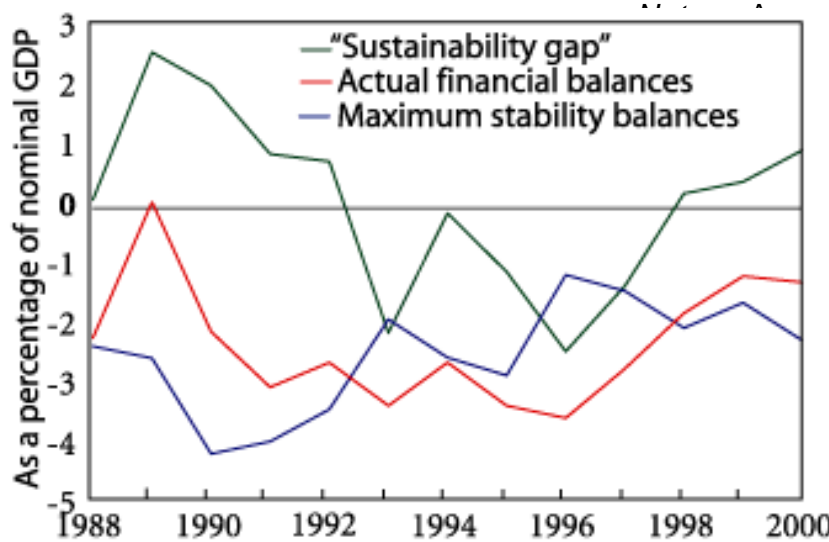
Public Debt and Deficits

Concern about the public debt is closely related to the idea that rising public indebtedness implies rising taxes to service the debt. However, Domar's seminal essay on the "burden of debt" (1944) showed that if an economy grew at a constant rate and a government borrowed at a constant deficit ratio, then the debt ratio in each period will not explode, but gradually approach a constant. Similarly, the tax rate required to service the debt will approach a constant, so that a higher tax rate may not be required to service a rising debt. In a growing economy, the higher the GDP growth rate, the lighter the burden of debt.

According to Pasinetti's definition (1998a, b; 2000), public finances are sustainable as long as the public debt grows at a rate equal to or smaller than the nominal GDP growth rate. A stable debt ratio implies a stable tax burden on taxpayers due to the level of the public debt. An example is provided by the Maastricht criteria of 3 percent and 60 percent for the deficit and debt ratios, respectively. According to the stability relationship, internal consistency of the Maastricht criteria presupposes a 5 percent nominal GDP growth rate, since this rate with an annual budget deficit of 3 percent of GDP leads to a stable debt ratio of 60 percent.

Applying Pasinetti's sustainability concept to Germany's public finance position over the period from 1988 to 2000 shows significant positive gaps in the period to 1992, followed by a period of protracted negative gaps until 1998 (Figure 1). The problem of unsustainable public finances arose only with the sharp recession of 1992-93, and abated with the long-delayed recovery of 1997-98. Therefore, it is clear that unification per se did not pose any immediate risk

Figure 1 Sustainability of German Public Finances with Reference to Total Budget Balances



positive (negative) "sustainability gap" indicating (rising) debt ratio on account deficit.

IMD, *Economic Outlook 67*, June 2000

debt dynamics, and there was no need for fiscal consolidation.

It is important to recognize the interdependencies among the key parameters of the sustainability of public finances: interest rates, deficit and debt ratios, and growth rates. Rising interest rates increase the debt servicing cost and likely have a negative impact on GDP growth. If public expenditures are cut or taxes increased in order

to reduce borrowing requirements, GDP growth will again be negatively affected. In either case, keeping the debt ratio from rising is made more difficult, and matters are made still more difficult as a rising debt ratio in turn raises the interest burden. A potential inherent instability emerges here. This highlights the fact that any consolidation

strategy must avoid disturbing any favorable alignment among the key parameters. Unfortunately, the strategies of the government and the Bundesbank after unification did not heed the existing favorable alignment among Germany's key economic parameters.

German Fiscal Policy and the Fiscal Paradox

From 1989 to 1991, the German government deliberately relied on borrowing to take up almost the whole of unification's fiscal brunt. Starting in 1992 and under mounting pressure from the Bundesbank, the government began to introduce a series of new fiscal measures aimed at cutting its borrowing requirements. Between 1992 and 1995 a cumulative fiscal tightening occurred that was far in excess of initial borrowing requirements. A study by Heilemann and Rappen (1997) estimated that by 1995, the total effect of expenditure savings and increases in tax and social security contribution rates was sufficient to finance almost the whole of gross fiscal transfers amounting to DM 180 billion. Yet by 1996, Germany's deficit ratio stood at 3.4 percent, well above the deficit ratio in 1991. A glaring fiscal paradox emerges here. Clearly, something must have gone seriously wrong.

The practice of German fiscal policy over the recessionary 1992-97 period began with cuts in structural deficits at the onset of recession in 1992. Tax hikes and expenditure cuts were undertaken with the intention of reducing public borrowing. These measures were enacted under mounting pressure from the Bundesbank, which argued that cuts in public borrowing were needed to prevent inflation. Rather than preventing inflation, however, these measures caused inflation. Hikes in indirect taxes and government-administered prices pushed headline CPI inflation higher, peaking at 4.0 percent in 1992. Moreover, as a result of the recession's onset in 1992-93, borrowing requirements soared. In response, new rounds of indirect tax and administered price increases were implemented by the government, with the intention of keeping borrowing requirements low and pressure from the Bundesbank at bay. These actions caused further "tax-push" inflation before the inflation rate fell rather sluggishly to below 2 percent by 1995; this, in turn, discouraged the Bundesbank from monetary easing and encouraged ongoing pressures for continued fiscal consolidation (Bibow 1998). Another far-reaching consequence of this bizarrely inconsistent policy was higher wage inflation. While the economy deteriorated, the budget failed to improve. Essentially, the worsening financial balances overcompensated for any improvement in structural balances. Consolidation efforts failed, as the destabilized economy (and cyclical balances) backfired on the budget.

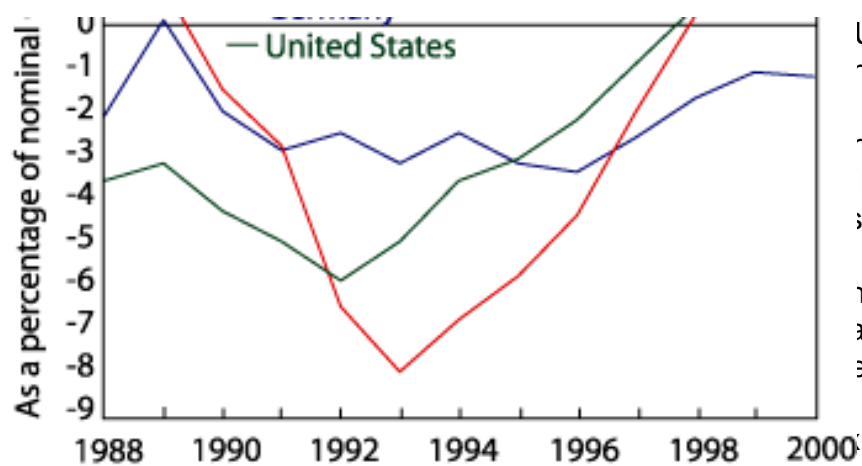
After six years of consolidation efforts, the deficit ratio finally improved to 2.6 percent in 1997, enabling Germany to meet the Maastricht hurdle of 3 percent. Strong growth in the United States and other trading partners proved highly instrumental in preventing Germany from slipping into another outright recession. Nevertheless, Germany's debt ratio was still rising, as nominal GDP growth had declined to a rate as low as 2.2 percent.

Figure 2 General Government Financial Balances



Economic Outlook 67, June 2000

he German economy was out of



United States and the United Kingdom. Germany was experiencing strong growth at the beginning of the decade. The United States and the United Kingdom hit by recessions. When Germany experienced a recession in 1992, both the United States and the United Kingdom were undergoing a recession. While Germany's deficit ratio was around 3 percent of GDP until 1992, the United States and the United Kingdom had achieved fiscal surpluses from 1993 onwards.

Germany experienced surpluses by 1998, implying a declining absolute level of debt (Figure 2).

2). Although Germany's public finances had started to improve by 1997, they were in a significantly and comparatively worse state by the end of the decade.

Structural and financial balances were allowed to deteriorate markedly when recession hit the United States and the United Kingdom. They subsequently improved when recovery took hold. By contrast, Germany embarked on cutting structural deficits at the onset of recession. The fiscal tightening was not only untimely, but also unusually stringent relative to Germany's own past experience and by international standards (Heilemann and Reinicke 1995). Germany thus pursued a rather counterproductive route toward fiscal consolidation by conducting its affairs in a procyclical rather than a countercyclical mode. Therefore, if its fiscal policy had been more in line with economic theory and had followed the best-practices example of the United States and the United Kingdom, Germany could have easily achieved a more favorable economic performance in the 1990s. The same can be said for Germany's monetary policy.

Monetary Policy and the Bundesbank

The Bundesbank attributed almost the whole of the rise in the overall public sector debt-to-GDP ratio (20 percentage points) since 1989 to the costs of unification. The bank viewed unification as a risk to price stability with the threat of runaway inflation, and it responded by severely tightening monetary policy. As significant increases in indirect taxes and administered prices pushed up inflation, the Bundesbank further tightened monetary policy. Thereafter, interest rate cuts were extraordinarily sluggish, and until the spring of 1996 these cuts were fully offset by DM appreciation. In essence, the monetary condition established in late 1989 remained unchanged over the next six years. As a consequence, capacity utilization plunged with the recession of 1992-93 and remained stuck at severely depressed levels for several years.

The above analysis has exposed one striking fact—contractionary macroeconomic demand policies, not unification, caused the 1992-93 recession and pushed Germany into a situation of unstable debt dynamics. Another striking fact is that, to begin with, there was only a very small rise in inflation in Germany in the early 1990s; moreover, this negligible rise was caused by taxation policies that were enacted when the economy delivered robust GDP growth rates. A further truly striking fact is that these developments did not prevent the Bundesbank from subsequently pushing headline CPI inflation from its 1992 peak of 4 percent to almost zero, while it appears that the U.S.

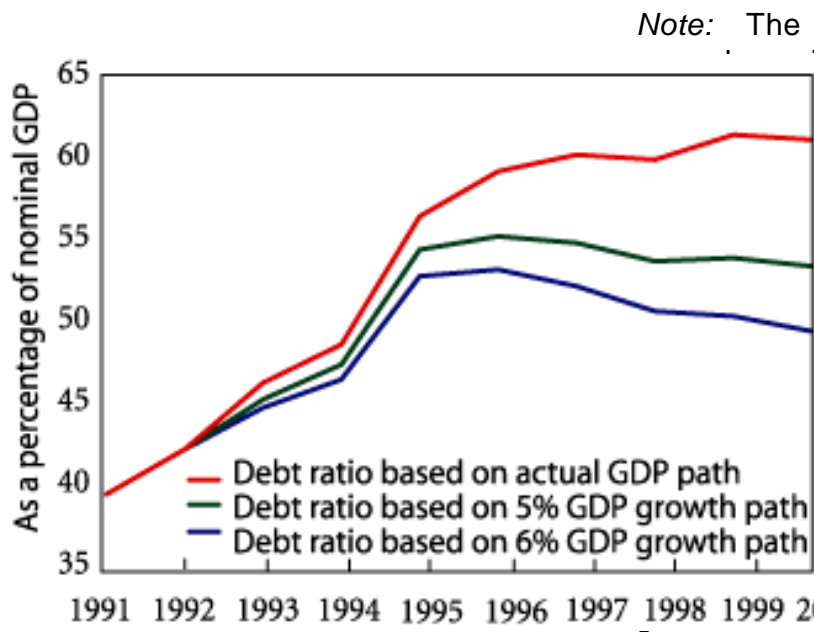
Federal Reserve cautiously avoided trying to push inflation below 2 percent.

Claims that there were excessive wage hikes in Germany at this time were unjustified. The degree of wage moderation in Germany was excessive relative to depressed productivity growth, as wage disinflation merely compensated the tax-push inflation imposed by ill-conceived macroeconomic policies. It was also ineffective because it was used by the Bundesbank to enhance the bank's anti-inflation credentials and maximize its prestige, rather than to promote employment (which would have required significant monetary easing). By comparison, the U.S. Federal Reserve's monetary policy of easing interest rates when inflation was still above 3 percent yielded sufficient productivity increases to offset (relatively higher) U.S. wage inflation as CPI inflation rates declined. This policy initiative sparked the investment boom of the 1990s that saw strong GDP and employment growth and falling inflation rates. Clearly, the Bundesbank's aggressive and single-minded pursuit of price stability was not inevitable. Unfortunately, German society paid a steep price in terms of high unemployment and low economic growth, which also had stark consequences for public finances.

Fiscal Consequences of Unification

The fiscal damage caused by sluggish growth due to the deflationary policy mix can be estimated by simulating the evolution of public finances under alternative growth scenarios (Figure 3). Two hypothetical scenarios that both modestly

Figure 3 The Effects of Hypothetical GDP Growth Paths on Germany's Debt Ratio



Note: The first scenario assumes 5 percent GDP growth after 1992; the second assumes 6 percent annual growth.

Source: OECD, *Economic Outlook 67*, June 2000

...landing in 1992 followed by 5 percent nominal GDP growth annually, are compared with actual (the base case). The first scenario is the former West Germany's 1980s and the implicit Maastricht 5 percent nominal GDP growth scenario is closer to the former Germany's long-term nominal 6 percent, as well as to the U.S. during the 1990s. Higher GDP growth rates are accompanied by higher tax revenues and lower government expenditures relative to the base case. Estimates of German tax and expenditure elasticities show that a 1 percent increase in GDP reduces the budget deficit by roughly one-half of 1 percent of GDP (Organization for Economic Co-operation and Development 1999).

Analysis of the two scenarios shows that by the end of 2000, Germany's debt as a percentage of nominal GDP would have been in the range of 50 to 55 percent, rather than

in excess of 60 percent. This confirms that an extraordinarily severe fiscal tightening occurred after 1991 and that Germany's untimely and overly ambitious consolidation strategy had largely gone to waste, while soaring unemployment in western Germany was the key channel through which poor GDP growth wrecked Germany's public finances. After the synchronized growth spreads for Germany and the United States both collapsed in the wake of the early 1990s recession, the United States managed to reestablish a favorable growth spread in due course, while Germany got stuck with an unfavorable growth spread, owing to the fact that GDP growth remained persistently depressed. This pattern had stark fiscal implications for Germany, as the interest burden soared in light of the impact of government bond yields in association with a much lower growth rate. Five percentage points of Germany's debt ratio was directly attributable to the effects of the Bundesbank's long-run tight monetary policy on the interest burden. Moreover, by the end of the 1990s the interest-burden gap between the U.S. performance scenario and Germany's actual performance had swelled to 10 percentage points.

Bundesbank Assumptions and Calculations

According to the Bundesbank (1997, p.19), "it can at least be said that more than half of the increase in the overall indebtedness of the central, regional and local authorities since 1989 (totaling about DM 1,200 billion) is attributable to reunification." This assertion amounts to attributing almost the whole of the rise in Germany's debt ratio from 1989 to 1996 to unification. The Bundesbank attributed 7.5 percentage points to the interest burden, 12.6 percentage points to "inherited debts" from eastern Germany, and also attributed additional indebtedness and borrowing related to eastern German state governments and unity funds to the rising debt ratio.

Revised Assumptions and Calculations

In calculating the rise in indebtedness owing to unification, three main adjustments are made to the Bundesbank's assumptions and calculations: transfers financed by borrowing through the German Unity Fund are excluded, as is the debt incurred by the European Recovery Program Special Fund; and redemptions and prospective debts of the Indemnification Fund are included as inherited debts.

A more appropriate approach to estimating the fiscal cost of unification is to focus directly on net fiscal transfers in relation to western German GDP and on stock adjustments due to inherited debts in relation to total German GDP. If economic policies had allowed a more benign nominal growth rate of 5 or 6 percent, then the fiscal burden from current transfers would have declined to roughly 3.5 percent of GDP by the end of the decade. Stock adjustments from inherited debts would have increased the debt ratio by about 8 percentage points (roughly one-third of the actual rise in Germany's debt ratio) and only increased the interest burden on the debt by about 0.5 percent of GDP.

Summary and Conclusions

The initial sharp rise in deficit spending in 1990-91 as a result of unification was both inevitable and not out of line with economic theory. The fiscal boost helped to stabilize noninflationary domestic demand growth in Germany at a time when other countries were

experiencing a recession. However, a key fiscal mistake occurred when an ill-timed and overly ambitious consolidation crusade by the government began in 1992. Moreover, the long run of tight money orchestrated by the Bundesbank between 1990 and 1995 magnified the counterproductive effects of fiscal policy. The Bundesbank was the primary source of pressure for fiscal consolidation at any price, since it based its reputation on maintaining very low inflation.

Ironically, the Bundesbank's deflationary quest proved to be counterproductive, as the overall fiscal tightening and deterioration of public finances after 1992 were far in excess of what would have been required to cope with the challenges and responsibilities of unification. At the most critical stage, the Bundesbank's argument that fiscal consolidation would prevent inflation did not hold, and measures undertaken to cut borrowing actually pushed inflation higher. With recession, public finances deteriorated and inflation declined rather sluggishly, owing to continued tax-push inflation. Unfortunately, this did not stop the Bundesbank from squeezing inflation down to zero by 1999. As a result, the period from 1993 to 1999 stands out by far as Germany's worst economic performance on record. The stark consequences of high unemployment, slow growth, and fiscal deterioration, however, were anything but inevitable.

To an important extent, Germany's structural problems today are a reflection of these unsound fiscal and monetary policies. The country (and Europe) paid a dear price for a policy experiment based on doctrines and beliefs whose relation to economic theory was anything but clear. The dismal results of the great German deflation of the 1990s cannot be blamed on unification, nor do they represent the burden of unification. Instead, they are the economic consequences of the self-serving policies of the Ministry of Finance and the Bundesbank.

Note

1. This Brief draws from research in Bibow's *On the "Burden" of German Unification: The Economic Consequences of Messrs. Waigel and Tietmeyer*. Working Paper no. 328, May 2001. Annandale-on-Hudson, N.Y.: The Levy Economics Institute.

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About the Author

Visiting Scholar Jörg Bibow is conducting research on central banking and financial systems. His research focuses on the effects of monetary policy on economic performance, especially the monetary policies of the Bundesbank and the European Central Bank. This work builds on his earlier research on the monetary thought of John Maynard Keynes. Bibow received a bachelor's degree (with honors) in economics from the University of the Witwatersrand; a diplom-volkswirt from the University of Hamburg; and master's and doctoral degrees in economics from the University of Cambridge. He is on leave from the University of Hamburg, where he lectures on central banking and European integration.

The full text of this paper is published as Levy Institute Public Policy Brief No. 67.

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ISSN 1094-5237
ISBN 1-931493-03-0