

# **Working Paper No. 886**

## How Germany's Anti-Keynesianism Has Brought Europe to Its Knees

by

Jörg Bibow
Levy Economics Institute of Bard College\*

March 2017

The Levy Economics Institute Working Paper Collection presents research in progress by Levy Institute scholars and conference participants. The purpose of the series is to disseminate ideas to and elicit comments from academics and professionals.

Levy Economics Institute of Bard College, founded in 1986, is a nonprofit, nonpartisan, independently funded research organization devoted to public service. Through scholarship and economic research it generates viable, effective public policy responses to important economic problems that profoundly affect the quality of life in the United States and abroad.

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

Copyright © Levy Economics Institute 2017 All rights reserved

<sup>\*</sup> Comments on an earlier draft by Hélène de Largentaye and James Trevithick are gratefully acknowledged.

**ABSTRACT** 

This paper investigates the (lack of any lasting) impact of John Maynard Keynes's General Theory on

economic policymaking in Germany. The analysis highlights the interplay between economic history and

the history of ideas in shaping policymaking in postwar (West) Germany. The paper argues that Germany

learned the wrong lessons from its own history and misread the true sources of its postwar success.

Monetary mythology and the Bundesbank, with its distinctive anti-inflationary bias, feature prominently

in this collective odyssey. The analysis shows that the crisis of the euro today is largely the consequence

of Germany's peculiar anti-Keynesianism.

Keywords: John Maynard Keynes; Mercantilism; Economic and Monetary Union; Euro Crisis

**JEL Classifications:** B31, E30, E58, E65, N14

1

# 1. INTRODUCTION: GERMAN EXCEPTIONALISM IN MATTERS OF MACROECONOMIC POLICY

It is no longer any secret that there is something peculiar about Germany in matters of economic policy: the country seems to be seriously at odds with macroeconomics. In Germany, macroeconomic policy appears to boil down to just two things: austerity and price stability. Certainly in recent years Germany was at the forefront of the voices pushing for austerity in the midst of a major slump plaguing the eurozone, asserting that austerity boosts confidence and hence growth (Schäuble 2010, 2011). Internationally this hypothesis is known as "expansionary fiscal contraction" (Guarjardo et al. 2011; Blyth 2013; Perotti 2014). Earlier it was also known as "the German view," at least in the country in which it gained popularity among economists and policymakers in the early 1980s (Fels and Froehlich 1987; Hellwig and Neumann 1987).

According to a widely held view, Germans care more about price stability than anybody else in the world. The "ghost of Weimar" seems to have given rise to a general fear of debt (*Schulden*, the German word for debt, is related to guilt) and a peculiar German "stability culture." As a related matter, Germans deeply adored their deutschmark and are still harboring similar feelings for its old-time guardian, the Bundesbank. So much so that this public love affair prompted Jacques Delors to proclaim that: "Not all Germans believe in God, but they all believe in the Bundesbank" (quoted in Issing 2008: 23).

There is something distinctively "anti-Keynesian" about these German peculiarities, the roots of which this paper sets out to explore. The objective is to show how Germany's anti-Keynesianism

\_

<sup>&</sup>lt;sup>1</sup> Here are some examples that illustrate the point at issue. To begin with, Peter Bofinger, one of Germany's very rare Keynesian voices and a member of the German Council of Economic Experts (GCEE) attests: "There is no doubt that the macroeconomic debate and actual macroeconomic policy in Germany differ considerably from other countries" (Bofinger 2016). *The Economist* quotes Winfried Kretschmann, a member of the Alliance '90/Greens and Minister President of the State of Baden-Württemberg, as proclaiming that "'the Swabian housewife represents the starting point' in German thinking on the euro and fiscal management" (*Economist*, February 1, 2014). Let me add that while Swabian housewives are known for their thriftiness, Keynes had shown that microeconomic virtues can be macroeconomic vices. Finally, two prominent *Financial Times* columnists have taken issue with Germany's finance minister, Wolfgang Schäuble (2013), who had famously accused his critics of living in a "parallel universe." Wolfgang Munchau (2014) refers to "the wacky economics of Germany's parallel universe," while Martin Wolf (2013) observes that "[inside Mr Schäuble's 'parallel universe'] pursuit of competitiveness is never recognized for the zero-sum game it is if demand is completely ignored."

is related to today's euro crisis, which is part of the European Union's "existential crisis" and relevant well beyond Europe.<sup>2</sup>

We find that Germany has thoroughly misunderstood its own economic history and learned the wrong lessons from it. Germany has misconstrued the true sources of its postwar success and developed an economic policy philosophy that is fundamentally ill-suited for Europe as a whole.

What we describe as the "German model" requires others to behave differently from Germany. The model worked for (West) Germany because and as long as its partners behaved differently. The trouble with the euro is that the "Maastricht regime" of economic and monetary union (EMU) required all partners to become like Germany. In other words, the euro was built on a "fallacy of composition," an error of logic highlighted in Keynes's invention of macroeconomics. Making matters worse still, when the German model stopped working for Germany, Germany's knee-jerk reaction was to "restore" its competitiveness. Committing this blunder under the euro was what brought Europe to its knees.

Section 2 offers a brief economic history of Germany up to 1948. Section 3 discusses the German school of economics known as ordoliberalism as a factor that hindered any lasting triumph of Keynesianism in Germany. West Germany's postwar economic history and the German model are the subject of section 4, while section 5 highlights the impact of German unification and German ideas on Europe's EMU. Section 6 depicts Germany's role in causing the euro crisis. Section 7 concludes.

# 2. GERMAN ECONOMIC HISTORY UP TO 1948 AND BUNDESBANK MYTHOLOGY

Germany's economic history prior to 1948 was extraordinarily "rich." That is to say, Germany experienced many extremes, in fact a whole variety of economic calamities. Twice, in the

<sup>&</sup>lt;sup>2</sup> As recently argued by Paul Krugman (2016), referring to fiscal policy in particular: "Germany's fiscal obsession has a sort of multiplier effect on Europe, and indirectly on the world, that is disproportionate even to Germany's economic size."

aftermath of (lost) world wars, Germany also had foreign masters decisively impacting its own fate. It is quite easy to identify the respective policy mistakes that caused or aggravated the various dismal episodes the country went through. The point is that Germany's economic history of calamities and policy blunders was mixed and "symmetric"—symmetric in the sense that errors and experiences were actually of opposing kinds.

This is important because Germany's "symmetric," in this sense, historic reality starkly conflicts with the popular and official German historical narrative, which is rather asymmetric: one-sided and very selective. According to the official-popular narrative, Germany seems to have suffered only one kind of calamity, and repeatedly so.

The hypothesis presented here is that the peculiarly one-sided historical narrative represents an important force behind Germany's strangely one-sided policy preferences: priority for austerity and price stability at all times. The official-popular historical narrative provides inspiration and justification (or excuse) for Germany's odd views on macro policy today.

It is also possible to identify at least one important player, if not the mastermind, behind Germany's strangely asymmetric historical narrative (Bibow 2010).<sup>3</sup> The Bundesbank skillfully nourished the asymmetric narrative, since it served its own position and reputation as "guardian of the currency" and guarantor of stability in Germany rather well. The Bundesbank enjoys an international reputation as an inflation hawk, a central bank with a strong anti-inflationary bias (Hayo 1998). This strong anti-inflationary policy bias is the counterpart to Germany's strongly biased (asymmetric) historical narrative. In fact, the Bundesbank's fame is closely tied up with what I have also dubbed Germany's "monetary mythology" (or: "Bundesbank mythology"; see Bibow [2013d]).

Importantly, Bundesbank mythology not only served the Bundesbank itself rather well, but also used to help rather than hinder Germany's economic performance. From the perspective of economic theory, the challenge is to explain how the Bundesbank's famous policy bias was

4

<sup>&</sup>lt;sup>3</sup> Simon Mee's (2015, 2016) ongoing doctoral research at Oxford University promises to shed more light on this matter.

conducive to good performance in former times, but then became a liability in later times. More precisely, how did "the German model" work for (West) Germany under the deutschmark? Why did the model stop working under the euro? And how is all this related to today's crisis in Europe?

We begin by looking at two examples of German history that illustrate the peculiar asymmetry in Germany's official-popular historical narrative: one concerns foreign debt, the other price level instability.

Germany faced challenges related to foreign indebtedness following both world wars. In each case, victorious foreign powers exercised a decisive influence over Germany's postwar destiny, including by their treatment of Germany's foreign indebtedness.

Following WWI, the victors imposed harsh reparations on Germany. Because of the lost war, Germany was saddled with huge foreign debts. Keynes had participated in the negotiations of the peace treaty at Versailles as a representative of the British Treasury. As it became clear what kind of shape the "peace" handed to Germany would take, he resigned from his position in disgust and set out to write his first work of world fame: "The Economic Consequences of the Peace" (1919), in which he severely criticized the victors for imposing what he considered counterproductively harsh reparations on a defeated Germany. In Keynes's view, the victors had not quite understood what they were demanding. By requiring Germany to generate huge trade surpluses (to enable the country to repay its foreign debts), its trade partners would also have to accept the opposite kind of adjustments to their own economies. In the end, Keynes feared, the flawed peace treaty would prevent Europe from properly recovering, and only lead to more hardship, instability, and renewed hostilities.

In retrospect, it seems all too clear how prescient Keynes's warnings were.<sup>4</sup> Reparations were not the only reason for the Weimar Republic's persistent economic and political instabilities. But

<sup>&</sup>lt;sup>4</sup> Revisionist studies, which started with Étienne Mantoux's (1946) "The Carthaginian Peace, or the Economic Consequences of Mr. Keynes?" and include Marks (1978) and Schuker (1985), for instance, not only make more optimistic assumptions about Germany's capacity to pay, but also fail to see the logic, both trade and macroeconomic logic, in Keynes's argument.

they were an important part of the forces that led, in turn, to hyperinflation, banking crises and depression, the demise of democracy and rise of Hitler, and WWII.

For Germany, WWII and Hitler's "total war" meant total defeat. The country ceased to exist; it was divided and occupied. And yet, much in contrast to the treatment received after WWI, this time around, the victors soon came to lend a supportive hand to West Germany, newly established in 1949. It is true that more than empathy and generosity were at play. The geopolitical constellation favored a more constructive and cooperative approach to reconstruction in Western Europe. But in purely economic terms it can hardly be overemphasized that the United States's "Government Aid and Relief in Occupied Areas" program and "Marshall Plan" (1948–52), which provided sizeable transfers to West Germany during the early years, as well as the London debt agreement of 1952–53, which forgave about half of Germany's foreign debt, helped West Germany enormously in turning itself into a prosperous country and stable democracy in subsequent decades (De Long and Eichengreen 1993; Galofré-Vilà et al. 2016).

The burden of foreign debt and its treatment in these two episodes illustrates well what I mean by Germany having had "symmetric" experiences with this type of calamity. Clearly some policy approaches are more constructive than others; some are downright counterproductive and ultimately even harm those who inflict undue harshness and punishment.

It is in this light—the light of Germany's own mixed but symmetric experience with foreign indebtedness and debt forgiveness—that the modern reader is invited to reflect upon Germany's role in the ongoing eurozone crisis, Germany's barbaric treatment of Greece in particular. How can we understand modern Germany's treatment of Greece? What kind of lessons did Germany learn from its own history (Ritschl 2011, 2012)? Does Germany think that its own treatment after WWI was somehow superior to its later one?

The second example is as illustrative and puzzling as the previous example. In the first half of the 20th century, Germany experienced extreme price level instability and currency crises. But, again, Germany experienced symmetry: first hyperinflation in 1922–23, and then deflation

during the Great Depression of 1929–33. And, yet, the official-popular narrative features asymmetry. Apparently Germany only suffered one kind of calamity, one type of disorder: hyperinflation.

Consider the comments of the late Hans Tietmeyer, life-long government official and Bundesbank president from 1993 until 1999. According to Tietmeyer (1991):

The reasons for the success of German monetary policy in defending price stability are in part historical. The experience gained twice with hyperinflation in the first half of this century has helped to develop a special sensitivity to inflation and has caused the wider public to believe in the critical importance of monetary stability in Germany. For this reason, the strong position of the Bundesbank is widely accepted by the general public—questioning its independence even seems to be a national taboo. This social consensus has yielded strong support for the policy of the Bundesbank.

Note that Tietmeyer refers to Germany's monetary history but does not mention deflation. Instead, Germany (allegedly) suffered not just one, but two hyperinflations. He also describes a tight connection between this historical hyperinflation experience "gained twice" and the special position in Germany gained by the Bundesbank.

Of course Germany did not suffer any second hyperinflation. It was just that when Germany went under as a result of a lost total war, the German currency went under with it. This meant that it was left to the new government of the newly established West Germany to find a political (re-)distributional compromise when organizing a fresh start.<sup>5</sup> To concoct a narrative around any specific loss and special worthiness of "the German saver" in the context of the all-pervasive human grief and destruction of WWII is economic nonsense and sickening political hypocrisy. To see a public figure like Tietmeyer utter this kind of nonsense is a national disgrace that should

\_

<sup>&</sup>lt;sup>5</sup> Actually, and conveniently, the Allies settled this issue for West Germany (to-be), which handed the new federal government (to-be) a clean and free hand in addressing postwar (internal) reconciliation. It also meant that "while Western Europe in the 1950s struggled with debt/GDP ratios close to 200 percent, the new West German state enjoyed debt/GDP ratios of less than 20 percent" (Ritschl 2012).

<sup>&</sup>lt;sup>6</sup> Today, as the most recent mutation and disgraceful outgrowth of Bundesbank mythology, that very honorable character, the German saver, is under frontal attack by no other than the Bundesbank's successor, the European Central Bank, which is allegedly expropriating the German saver and bankrupting German banks by means of its negative interest policy. Because of Germany's hyperinflation experience, "gained twice," the German saver always needs special care and protection, which only the Bundesbank can properly provide, it seems—and no matter how utterly dismal the economic situation in the rest of the eurozone may be.

be treated as a criminal offence. Of course it is not, as this kind of "currency denial" seems to suit certain interests rather well.

So much for the former Bundesbank president. Consider next another German official, Wolfgang Schäuble, Germany's finance minister from 2009 until today. He made the following remark in the context of international controversy (among G20 member countries) about the fast return to austerity in 2010, which was aggressively pushed for by Germany. According to Schäuble (2010) there are:

[T]wo different approaches to economic policymaking on each side of the Atlantic. While US policymakers like to focus on short-term corrective measures, we take the longer view and are, therefore, more preoccupied with the implications of excessive deficits and the dangers of high inflation. So are German consumers. This aversion to deficits and inflationary fears, which have their roots in German history in the past century, may appear peculiar to our American friends, whose economic culture is, in part, shaped by deflationary episodes. Yet these fears are among the most potent factors of consumption and saving rates in our country. Seeking to engineer more domestic demand by raising government borrowing even further would, here at least, be counterproductive. On the contrary, restoring confidence in our ability to cut the deficit is a prerequisite for balanced and sustainable growth.

Note that Schäuble, too, refers to German history, which was special and remains of special importance to economic policymaking in Germany today. Germans are said to have a special aversion to deficits and inflation. American economic culture, by contrast, was also shaped by "deflationary episodes."

To repeat, Germany experienced both: hyperinflation and deflation. In fact, the economic hardship caused by the Great Depression was quite as bad in Germany as in the US; Hitler's Nazi movement saw little gains in popularity until unemployment soared after 1929 (Johnson 1998). So, politically the consequences of the Great Depression in Germany were far worse than in the US: the US got FDR, Germany got Hitler. But German economic culture was apparently *not* shaped by deflationary episodes.

The sad truth is that Schäuble is actually making a valid point, not about historical realities, of course, but about Germany's monetary mythology, and the official-popular historical narrative that has shaped German economic culture in the post-WWII era.

This mythology is all-pervasive, and a very effective form of indoctrination. In Germany, the "stability culture" socialization starts in kindergarten. Thanks to constant repetition by the media, Germans constantly inhale Bundesbank mythology. Its key feature is *asymmetry*. Germany suffered two hyperinflations within one generation and nothing else, apparently. Therefore, inflation must be prevented above all else—which *conveniently justifies the Bundesbank's strong "anti-inflationary bias."* We Germans learned our lesson. Hence we prioritize price stability and praise the Bundesbank. We are special and, because of our history, we have every right to be special. We also have a lot of wisdom to teach others about our national blunders and successes. We know very well that debt gets a country into trouble and therefore must be avoided above all else, as well (even if we may be a little forgetful at times about the forgiveness granted to us in this regard). In addition, we also know that price stability never does any harm to growth but actually *causes* growth—as that has been our own post-WWII experience (on which more in a moment).

I may add here that Germany's economic journalism is quite exceptionally poor and Germany's economics profession mediocre. Of course, the socialization of German journalists and economists also happens within the national climate of monetary mythology described above (Hayo and Neumeier 2016). With such effective indoctrination, there is little room for thinkers and nonbelievers.

As I already suggested above, the Bundesbank, that central bank that is better than God, has been a key proponent (if not the mastermind) behind this peculiar German mythology. A related and rather interesting fact is that the German Reichsbank was actually an "independent central bank" during both extreme episodes: the Weimar hyperinflation of 1922–23, and deflation of the early 1930s (Holtfrerich 1988). So one could rightly argue that Germany's experience with central bank independence was actually very poor, with *symmetry* describing the kind of failures

produced; as did, for instance, Herbert Giersch, the godfather of "supply-side economics" in West Germany (see Giersch and Lehment 1981).

So here is another puzzle (or two) then. How did Germans come to see central bank independence as such an inherent part of their perceived economic success and peculiar stability culture? And how did (West) Germany end up with an independent central bank in the first place?

The issue of central bank independence has been woven into Bundesbank mythology in an intriguing way. We will only be able to answer the first question fully once we have appreciated the substance of the "German model." About the second question there exists some confusion and controversy.

I will be brief here. The Bank deutscher Länder (BdL), the forerunner of the Bundesbank, was established by the occupying Allies in March 1948. This was before West Germany and its federal government even existed (which happened in September 1949). The motivation for establishing the BdL was the launch of the deutschmark and the currency reform of June 20, 1948. Again, all this was before West Germany was established and its federal government even existed. As a result, the BdL enjoyed a head start in establishing its reputation as guarantor of stability and growth. In the minds of war-torn Germans, the deutschmark quickly became associated with the "economic miracle" that started in June 1948.

Obviously, the BdL was independent of any—initially nonexistent!—German federal government. Instead, it was under the comprehensive control of the Allied occupation forces. In the context of establishing the *Besatzungsstatut* (occupation statute), the Allies then asked the new German government to establish their own desired form of control over the central bank before they would relinquish their control. This happened provisionally in 1951 with the so-called *Übergangsgesetz* (interim law). The political fight over the independence of the central bank and its mandate lasted for almost a decade in West Germany. It only ended with the Bundesbank Law of 1957.

\_

<sup>&</sup>lt;sup>7</sup> For details, see Bibow (2009, 2010) and the literature quoted there.

Initially, there was considerable opposition to granting the central bank independence, including from German industry, from within the economics profession, and particularly from within the government itself. Having enjoyed a head start, however, central bankers played their cards well. Fights inside the government went in their favor, too. The central bankers were not shy about provoking public conflicts with the government if this could be exploited to foster their own reputation (as "guardian of stability"; see Goodman [1992]; Henning [1994]; Johnson [1998]; Kaltenthaler [1998]; Marsh [1992]). Until the arrival of the euro, the Bundesbank had another 40 years to foster its "untouchable" status (and nourish Germany's peculiar monetary mythology along the way).

Much later, in the 1980s and 90s, the economics profession generally got very fond of price stability and the concept of central bank independence. It became conventional wisdom that inflation targeting was best executed by an independent central bank. The new dogma reached the Bank of England in due course. Mervin King, Bank of England governor from 2003 until 2013 and himself a great fan of inflation targeting, once remarked (half-mockingly) that central bank independence might also carry a risk in the form of "inflation nutters." In Germany, by modern tradition, "inflation nutters" are highly respectable (in fact the norm), and a precondition for becoming a Bundesbanker—guardian of Germany's monetary mythology as much as of its "stability culture."

### 3. ORDOLIBERALISM VS. KEYNESIANISM IN WEST GERMANY

It is not true that Keynes and Keynesianism have never reached Germany. Keynes was a well-known and highly respected economist in Germany ever since the publication of "The Economic Consequences of the Peace" (Keynes 1919). He paid various visits to Germany to give speeches and/or meet with public figures, including Reichskanzler Heinrich Brüning in January 1932. At that time, Keynes's (1930) *Treatise on Money* was widely discussed in German academia. Keynes engaged with numerous leading German economists on the nature, causes, and consequences of the business (or: credit) cycles.

His contribution to the Spiethoff *Festschrift*, published in 1933 and titled "A monetary theory of production," Keynes essentially sketched his plan and ambitions for *The General Theory*, marking a watershed. For by the time the *General Theory* was published in 1936, both in its original version and translated into German, almost all the German economists who had engaged in the discussion of the earlier *Treatise* had either fled the country, *gleichgeschaltet* (i.e., collaborated with the Nazi regime), or operated in a kind of internal exile (Hagemann 2016).

As it happened, "ordoliberalism" emerged as a product of internal exile under the Nazi regime. Walter Eucken (1892–1950), the leader of the "Freiburg School" of ordoliberalism, risked his life by opposing the Nazis. During the war, this peculiar German branch of the neoliberal movement of the 1930s developed plans for the postwar *Wirtschaftsordnung* (economic order; "ordo" in Greek) to be established in Germany. In a way, it is not very surprising that the ordoliberals developed a strong dislike of any form of "interventionism," "experimentation," "command economy" (*Planwirtschaft*), or central planning, which they associated either with the horrors of the Nazi regime and/or the instability of the Weimar Republic. It was their Nazi regime experience and the earlier chaos of the Weimar Republic that framed their perception of Keynes's *General Theory* as excessively and dangerously interventionistic (James 1989)—providing ordoliberalism with a distinctive anti-Keynesian flavor from the start. 10

Put in a nutshell, ordoliberlism envisions a strong state as the force that establishes and guards the market order, but refrains from interfering in market processes. Interfering in market processes constitutes interventionism, which is rejected. But ordoliberals also reject laissez-faire (classical) liberalism, which they associate with the concentration and abuse of private power in the presence of a weak state. The historical background here is the late industrialization of

<sup>&</sup>lt;sup>8</sup> As Hagemann (2016) reports, Keynes played an active role in helping numerous academic refugees from Nazi Germany (or fascist Italy, as in the case of Piero Sraffa) to find a new home in either Britain or the United States.

<sup>9</sup> Following the failed attempt to assassinate Adolf Hitler on July 20, 1944, Eucken was arrested by the Gestapo and interrogated, but released.

<sup>&</sup>lt;sup>10</sup> It is unclear whether the controversy surrounding the preface to the German translation of the *General Theory* was a factor in this. There were certainly some attempts to exploit this controversy for an ideological onslaught on Keynes as an alleged Nazi sympathizer; see Hagemann (2014).

Germany in the 19th century, and the militarism that ensued, which nourished wars and the suppression of personal liberties (Hutchison 1979; Rieter and Schmolz 1993).<sup>11</sup>

So the strong state has a key role to play in establishing the market order, safeguarding competition, offsetting externalities, and even organizing some income redistribution. But it is essential to maintain a well-functioning price mechanism and not interfere with it—provided a proper order was set up that prevents the concentration and abuse of private power.

According to Eucken (1940, 1952), a well-functioning price mechanism presupposes currency stability. He therefore declared the "primacy of currency policy" (*Primat der Währungspolitik*) as a vital complement to establishing a competitive market order. In general, ordoliberals and the Bundesbank make a lot of buzz about this "primacy." In my view, Eucken's concern for price stability is little different from Keynes's (1923) emphasis on that very matter in his *Tract on Monetary Reform*. But whereas Keynes concluded that a "managed currency was inevitable," Eucken favored implanting some "automatic stabilizer" into the monetary order. In other words, Eucken outright rejected any discretion on the part of central bankers, which Keynes considered unavoidable. In fact, Eucken was dreaming of some "rational automatism" or monetary rule that would preclude any central bank discretion.

Let me add that Eucken's policy preferences in this regard were not based on any deep understanding of monetary theory. His monetary thought was based on primitive quantity theoretic ideas. Eucken had no comprehension of Keynes's far-more sophisticated monetary theory developed in the *Treatise* and *General Theory*. Eucken also had no clear concept of fiscal policy and no real grasp of systematic macroeconomic stabilization policy. On the other hand, he was pragmatic enough to favor fiscal stimulus over catastrophe in the early 1930s (Feld, Köhler, and Nientiedt 2015).

Eucken's views were shaped by history, by the German experience of the 1920s and 30s in particular. Eucken wholeheartedly rejected central bank independence because he objected to the

<sup>&</sup>lt;sup>11</sup> As a student at Hamburg University, I learned that (West) Germany's economic policy traditions contrasted sharply with the French strategy of "indicative planning" (*planification*, *economic concertèe*).

Reichsbank's exercise of discretion during his own formative years. He especially objected to the Reichbank's pursuit of monetary policies that conflicted with the government's economic policy. In contrast to modern Germany's monetary mythology as peddled by the Bundesbank, Eucken also fully recognized the *symmetry* in the Reichsbank's failure during the 1920s and 30s. He concluded that central bankers cannot be trusted with any discretion.

While (West) Germany's peculiar variety of neoliberalism was a homegrown product of Germany's peculiar history, Keynesianism was imported to (West) Germany in its "bastard" or "synthesis" form from early on, too (Hagemann 2000). Keynesians were well represented on scientific advisory councils from the beginning. Keynesians captured many university positions in economics throughout West Germany until the 1970s. Keynesians were present in public debates and the media, too. By contemporary international comparison, Germany was not special for missing out on the "Keynesian revolution," but for the fact that Keynesianism faced a strong homegrown competitor in ordoliberalism.

And ordoliberalism had luck on its side when West Germany's first federal government included a popular free-market champion in Ludwig Erhard (1897–1977). Erhard's popular fame rests on his supposed role in West Germany's *Wirtschaftswunder* (economic miracle). He is seen as the architect of the miracle and the establishment of West Germany's "social market economy" (*soziale Marktwirtschaft*), supposedly a market economy that is not of a "laissez-faire" type, but one that embraces social responsibility together with personal liberties. Ordoliberalism's luck was its initial association with Ludwig Erhard and the economic miracle.

Thanks to these early success, ordoliberalism's initial impact left a lasting impression—conscientiously kept alive by West Germany's right-wing parties and vested interests to this day. As initial luck and perceived success secured a lasting influence of ordoliberalism, Keynesianism has been assigned a difficult stand in Germany until today (a kind of "path dependency").

In all this, one big puzzle truly stands out: How did the Bundesbank emerge as the untouchable saint and ultimate source of economic wisdom given that Walter Eucken strongly opposed central bank independence? We will address this puzzle in a moment.

Before we begin, we briefly turn to Keynesianism's fleeting moment in the sun in West Germany. The heydays of Keynesianism in West Germany were in the second half of the 1960s and early 1970s (Dillard 1985; Allen 1989; Hagemann 2000). The Keynesian reign in economic policy proved very short lived. Its decline began in the second half of the 1970s; in the early 1980s Keynesianism was officially shelved in West Germany, lastingly. Its transitory sway on economic policymaking was intimately linked to Karl Schiller (1911–94), an economics professor at Hamburg University, social democrat, and prominent Keynesian voice in West Germany from an early hour. Schiller had served on numerous scientific advisory committees on various economic policy matters and became a constant presence in the media.

By the mid-1960s, Ludwig Erhard had outlived his reputation as the "father of the economic miracle." Successor to Konrad Adenauer (1876–1967), since 1963 as West Germany's second chancellor, he seemed to have lost his grip on the economy. In 1966, West Germany was headed for its first recession, the first crisis moment since the early balance of payments crisis of 1950–51. Among other things, Erhard's fall from grace and power in 1966 also featured conflicts with the Bundesbank (Marsh 1992). A "grand coalition" of conservatives and social democrats took over the government until 1969, when the social democrats became the strongest party and were able to form a new coalition government with the liberals ("free democrats") as junior partners, when in the past they had formed coalition governments with the conservatives.

The rise of the social democrats in the 1960s was owed mostly to the charisma of Willy Brandt (1913–92), who became West Germany's fourth chancellor in 1969, but also to no insignificant degree to the perceived economic competence of Karl Schiller, who served as minister of the economy from 1966 (and later in 1971 also as finance minister). Schiller's claim to fame—and with him the popularity of Keynesianism in West Germany—received an enormous boost when he managed to cut the downturn of 1966–67 short by the application of demand stimulus measures (Scherf 1986).

The Keynesian stimulus featured fiscal measures and monetary easing, including open market purchases of long-term government bonds on the part of the Bundesbank (Deutsche Bundesbank 1994). While the establishment of the *Sachverständigenrat* (GCEE) had earlier roots, Schiller

was the chief architect behind the *Stabilitäts und Wachstumsgesetz* (Stability and Growth Law) of 1967, featuring the *magische Viereck* (magic polygon) of four key economic policy objectives constituting macroeconomic equilibrium: price stability, high employment, steady and reasonable (in modern parlance: sustainable) growth, and external balance.

Schiller was keen to avoid open conflicts with (still-popular) ordoliberalism and worked hard to achieve a kind of synthesis between ordoliberalism and Keynesianism by essentially adding deliberate macroeconomic management (*Globalsteuerung*) to ordoliberal principles regarding the West German economic order (Krüger 1967; Hagemann 2000).

As earlier in Erhard's case, Schiller's fall in 1972 also featured public conflicts with the Bundesbank (Marsh 1992). He was replaced by Helmut Schmidt (1918–2015), another social democrat from an early hour (who had been Schiller's student of economics at Hamburg University). Helmut Schmidt then succeeded Willy Brandt as the West German chancellor in 1974.

The decline of Keynesianism in the course of the 1970s and reemergence of unchallenged ordoliberal supremacy under the name of *Angebotspolitik* (supply-side economic policy) in the early 1980s are best understood in the context of the evolution of West Germany's post-WWII economic history, a brief review of which is the subject of the next section.

# 4. GERMAN POST-WW II ECONOMIC HISTORY AND THE "GERMAN MODEL"

The currency reform of June 1948—undertaken in conjunction with the lifting of price controls that were attributed to Ludwig Erhard's influence in his role as advisor in the Allied occupation forces' administration—marks the zero hour in West Germany's economic miracle. The image stored in the collective memory is one of shop windows being filled with goods overnight and of black market trading and scarcity being replaced by an immediate glimpse of the newfound prosperity that was going to reach West Germany in subsequent decades. It was also the

neoliberal dream of replacing a command economy (under the control of the Allied occupation forces) with a free-market economy. West Germany's ordoliberals saw their prescriptions vindicated by the miraculous consequences of unleashing the price mechanism and market forces. Structural reform can do wonders.

The unfolding miracle saw an early disruption in 1950–51, when West Germany's trade and current account positions turned into a deficit with the outbreak of the Korean War and surging commodity prices. Yet West Germany's economy was to benefit from the reconstruction-driven rise in the demand for capital goods soon enough, as this was traditionally a stronghold of the German economy (Eichengreen 2007). West Germany would subsequently run almost continuous and often sizeable current account surpluses until 1979 (Wallich and Wilson 1979).

The miracle resumed in 1951 and West Germany achieved average annual growth rates of over 8 percent for the rest of the decade, slowing down to an annual average of 4–5 percent during the 1960s. Exports and investment, both private and public, were the foremost engines of growth. Real incomes and consumption grew steadily, too. Prosperity was widely shared as unemployment steadily declined, providing jobs for millions of refugees who had reached West Germany at the end of the war from Eastern Europe and continued to trickle in until the "Berlin Wall" was built in 1961—at which point West Germany started attracting immigrant ("guest") workers from southern Europe to meet emerging labor shortages (Giersch, Paque, and Schmieding 1992).

There are certain similarities between West Germany's miracle phase and what happened during the postwar reconstruction boom elsewhere in Western Europe. West Germany stands out for one thing in particular, which is at the heart of the "German model": West Germany's inflation was very low, lower than the inflation performance of its main trading partners. The Bundesbank built its reputation on this achievement of stability. But much more was involved.

In the context of the international Bretton Woods monetary order of pegged nominal exchange rates, West Germany would make cumulative improvements in its competitiveness by keeping its inflation rate not just low, but *below* inflation trends experienced elsewhere. While trade was

growing strongly worldwide at the time, German exports received an extra lift in this way, for the West German authorities always resisted deutschmark revaluation pressures for as long as possible, even in the face of persistent and sizeable trade and current account surpluses.

There is some evidence that the West German authorities actually understood what they were doing, that the "German model" was conceived as a deliberate development strategy. The balance of payments crisis of 1950–51 provided the opportunity and the starting shot. External pressure to boost exports was helpful. The men at the helm of the BdL and the architect of the economic miracle, Ludwig Erhard, were in accord. In August 1950, Erhard detected that a "great opportunity for the future of German exports has arisen out of the current situation. If, namely, *through internal discipline* we are able to maintain the price level to a greater extent than other countries, our export strength will increase in the long run and our currency will become stronger and health[ier], both internally and with respect to the dollar" (quoted in Holtfrerich 2008: 35; emphasis added).

From the beginning, West Germany became (over-)reliant on exports for its growth, successfully pursuing a model of export-led growth, featuring persistent external surpluses (Wallich 1955; Hölscher 1994; Holtfrerich 1998). The government would balance its budget, or at times even run fiscal surpluses, and generally abstain from active fiscal stabilization policies. The requirement was to achieve superior "internal discipline," as Erhard had pointed out. Towards this end, Erhard himself often actively preached "moderation."

But it fell to the Bundesbank to adopt the role as chief enforcer of internal discipline—of balanced budgets and wage moderation, in particular. Success as the discipline enforcer enabled the Bundesbank to build its reputation and fame on an inflation record that was superior (for the lower inflation, the better) to its competitors without standing in the way of growth or playing much of an active part in stimulating domestic demand. In fact, owing to the working of the German model, in West Germany price stability appeared to *cause* growth.

As price stability paid off for both the Bundesbank and the country as a whole, it became even more important to nourish the country's monetary mythology. Interested parties were quite

happy to include the Bundesbank, central bank independence, and price stability into the ordoliberal success story that had given West Germany its economic miracle. The deutschmark and its stability became part of German pride, and its guardian, the independent Bundesbank, as well. For once, Eucken must have erred in his opposition to central bank independence—which was silently written out of the play and forgotten together with the deflation of the 1930s.

The Keynesian success story of 1967 neither disturbed Bundesbank mythology nor the German model all too much. The recession proved brief. The German model was quickly back to normal again. Schiller himself was always keen to keep the peace with ordoliberalism. So Keynesianism did not seem too much of a threat after all. But then developments in the 1970s prepared the ground for an outright rejection of Keynesianism and a return to ordoliberal roots in the early 1980s.

Following two decades of strict internal discipline, albeit with steady and sizeable gains in productivity and real wages, wage inflation started to accelerate in West Germany in the late 1960s. Schiller turned more and more active in managing "concerted action," the process of reconciliation and compromise between social partners designed to keep wage-price inflation in check—and lower than elsewhere. Meanwhile, the federal government, led by social democrats, added more social democratic attributes to West Germany's "social market economy," including expanding the welfare state and strengthening workers' rights. The balance of power in labor relations was shifting in labor's favor. Yet these developments as such did not undermine the German model, as inflation in West Germany stayed lower than elsewhere.

Then the other shoe dropped in the early 1970s with the demise of the Bretton Woods system of pegged exchange rates. The deutschmark appreciated strongly until the late 1970s. This helped to contain inflationary pressures, but worked against the German model. Then the OPEC oil price hike hit the global economy and provided yet another blow to the West German economy: a triple whammy of rising wage inflation, currency appreciation, and terms-of-trade deterioration. Unemployment soared to over one million and, as elsewhere in the western world, West Germany was suffering from "stagflation." By international comparison, however, it was a fairly mild dose. Budget deficits and public debt rose in line with unemployment and interest rate

levels. In response to OPEC I, fiscal expansion was tried to some degree and with some measure of success while the Bundesbank was exploring the newly popular monetarist wisdom of monetary targeting (Giersch, Paque, and Schmieding 1992; Richter 1999).

Mirroring US weakness, the deutschmark was beginning to receive more and more financial investor attention as an alternative reserve currency competing with the US dollar—developments which the Bundesbank was always keen to contain, as they threaten the German model. Given West Germany's relative economic strength, the US authorities put pressure on the Schmidt government in 1978 to share the burden of acting as a "locomotive" by adding fiscal stimulus measures and limiting monetary tightening. Germany complied to some extent but the boost turned out to be ill-timed, as inflation reaccelerated with the second OPEC oil-price shock. Simultaneously, the current account turned into deficit in 1979 and the deutschmark weakened. Panic seemed to grip the authorities. The Bundesbank tightened its monetary stance sharply. Procyclical fiscal tightening was enacted in the early 1980s, even prior to the fall of the Schmidt government in 1982. The new right-wing government, led by Helmut Kohl, was to embrace supply-side economics and henceforth deny any role for demand management. This concluded West Germany's brief flirtation with Keynesianism that had started in 1967.

The GCEE had prepared the ground for the *Wende* (U-turn) in economic policy during the 1970s (Sachverständigenrat 1977; Sievert 1980, 2003; Spahn 2010). This was not based on any scientific breakthrough, of course. Quite the opposite. The GCEE simply declared that "Say's law" was valid after all. The German version of Say's law says that you can always produce more for sale abroad unless you are lacking competitiveness. So a lack of competitiveness may hinder growth and employment. By contrast, domestic demand and hence demand management can never be an issue. That at least is the German perspective (see Helmstädter 1988). Hence, German policy wisdom is simple and straightforward: monetary policy has to focus on price stability and fiscal policy on balancing the budget. Beyond that there is no more to be done—provided that competitiveness is sufficient for exports to drive the economy. The wise men repeat their message every year in all too many words that cannot hide this simple substance.

The German model of export-led growth had indeed been under threat during the 1970s, hit by that triple whammy of currency appreciation, rising wages, and terms-of-trade deterioration. While exports became a less-reliable growth engine, domestic demand temporarily rose in prominence. Private consumption especially became more of a source of growth as income distribution shifted in favor of labor. Fiscal policy was more active, too, as unemployment stayed high for unusually long.

These developments frustrated certain powerful interests, which found an expression, for instance, in the GCEE's endeavors and the Bundesbank's turn toward monetarism. At a certain level of simplicity, the U-turn of 1982, the return to ordoliberal roots under the name of "supply-side economics," and outright rejection of Keynesianism was an easy sell. Just compare the stability of the 1950s and 60s with the instabilities of the 1970s and "miracle nostalgia" wins hands down. Clearly, Keynesianism had failed. In any case, Keynes got the blame—and was henceforth condemned to oblivion. The Reagan-Thatcher neoliberal revolution reached West Germany in 1982. The German variety centered on the requirements of the German model.

In fact, the 1980s were all about reviving the German model. The state of the West German economy was quite poor in 1981–82: inflation peaked at 7 percent and unemployment exceeded two million, while both the government budget and current account were in deficit. The Bundesbank imposed a tight money policy, but the deutschmark weakened as the "Volcker shock" was unfolding across the Atlantic. The Kohl government embraced the idea of expansionary austerity (the "German view") and adopted a single-minded focus on the supply side.

Unsurprisingly, the recovery from the 1981–82 recession was very sluggish and unemployment stayed stubbornly high. This foretold subsequent results in the 1990s and 2000s, when the same policy recipe was applied in even higher dosages. There was some boost from exports in the mid-1980s, owing to the strong US dollar and the US recovery driven by Reagan-type "supply-side economics" (which featured a strong Keynesian fiscal stimulus). In this way exports helped to offset some of the damage that austerity inflicted on domestic demand. Then the European

Monetary System (EMS) brought the German model fully back to life in the second half of the 1980s.

The deutschmark revaluations under the Bretton Woods order in 1961 and 1969 had been very controversial in West Germany. The authorities' position on currency appreciation during the 1970s was ambivalent. On the one hand, it was seen as the right way to contain "imported inflation." On the other hand, currency appreciation was considered "unfair," as it undermined German competitiveness. West Germany's trade and current account surpluses showed a declining trend over the course of the 1970s (as a percent of GDP), turning negative by 1979.

Even before the demise of the Bretton Woods system, Western Europe had started exploring ways to stabilize exchange rates regionally. Early attempts had failed, but at the end of the decade West German chancellor Helmut Schmidt led the initiative that established the EMS, which included the Exchange Rate Mechanism (ERM) and the European Currency Unit (ECU). The former was the mechanism through which national currencies were meant to be stabilized, with the latter serving as (a politically neutral) anchor. While there were still numerous "realignments" in the early years, exchange rates "hardened" following a critical French macro policy U-turn in 1983. Essentially, countries participating in the ERM accepted Bundesbank leadership, as pegging to the deutschmark was judged a convenient way to disinflate and achieve inflation convergence towards the low benchmark set by West Germany. Once again, West Germany would achieve cumulative competitiveness gains under a system of pegged exchange rates owing to the fact that its inflation rate was lower than that of its partners.

In other words, in 1983, the German model was back in business. West Germany ran up rising external surpluses over the course of the 1980s. While bilateral surpluses  $vis-\dot{a}-vis$  the US shrunk, together with the US dollar's decline after 1985, they were replaced by soaring intraregional imbalances  $vis-\dot{a}-vis$  West Germany's European partners that used the deutschmark anchor to disinflate their economies. In addition, owing to income tax cuts, private consumption and investment picked up towards the end of the decade: West Germany achieved 4 percent GDP growth in both 1988 and 1989. This put paid to the official dogma that "structural problems" were holding back the economy. Strong growth balanced the West German government's

budget. Public finances were generally in poorer shape in other ERM member countries. Similar regional developments were later to reemerge under the euro. Be that as it may, on the eve of German unification, the West German economy presented itself in great shape and ready to cope with the coming surprise challenge of unification (Bibow 2005).

### 5. GERMAN UNIFICATION AND EMU: "MADE IN GERMANY"

By historical accident rather than design, German unification unleashed a sizeable Keynesian fiscal stimulus. For the rest of Europe, the stimulus was well-timed and highly welcome. If the neoliberal dogma of all-pervasive structural problems is believed, it was ill-timed for uniting Germany itself. For on this view, the West German economy was nearly fully employed when the "unification shock" hit. Remarkably, the West German economy grew at a 5 percent rate in both 1990 and 1991, with only a fairly mild rise in inflation but a huge rise in employment. Official statistics today suggest that consumer price inflation peaked at 5 percent in the early 1990s. That would be very close to hyperinflation by German standards. Two factors are overlooked here, though. First, there was a one-off price-level adjustment taking place in the former East Germany, where prices had been held constant for the previous 40 years. Second, government measures rather than market forces were responsible for a significant upward price shock, as indirect taxes and administered prices were raised to contain the budget deficit of 3 percent of GDP. Excluding "tax-push inflation," consumer price inflation in former West Germany barely reached 3 percent.

In most countries central bankers would be grilled on whether, in the face of the historical challenge of unification, it was wise to deliberately cause the recession of 1992–93. In Germany, independent central bankers are not supposed to be doubted, no matter how costly their blunders may be. In 1991, the Bundesbank had not only hiked interest rates to 10 percent, but simultaneously the central bank also applied massive pressure on the government for a swift fiscal U-turn toward austerity. The Bundesbank then ignored that austerity (through tax-push inflation) distorted inflation upwards.

And the Bundesbank also added another blunder on top: it allowed itself to be misled by its monetary target, M3, a broad monetary aggregate that includes interest-yielding time and saving deposits. When the Bundesbank pushed its short-term policy rate into overkill territory, banks started piling into long-term bonds and the yield curve inverted. This made bank deposits paying 10 percent interest even more attractive to the public. The Bundesbank failed to understand why its monetary target had been overshot. After first tightening money to a degree that broke the economy's neck, Germany's independent central bank then proved extraordinarily slow to ease despite the recession, misreading the working of its own medicine. As Walter Eucken had emphasized, there is a downside to discretion: incompetent independent central bankers can pose a big risk to economic well-being.

If the Bundesbank's tight money stance was excessively tight for Germany, it was utterly out of tune with the situation elsewhere in Europe. So, the Bundesbank's tight money crusade also blew up the ERM (Hefeker 1994). The ERM crises of 1992–93, together with temporarily elevated German inflation, amounted to a significant real deutschmark revaluation against the rest of Europe. Together with the unification boom, this had the welcome side effect of rebalancing Europe. West Germany's current account surplus of 5 percent of GDP prior to unification had turned into a small all-German deficit.

Europe got rebalanced by these events, but the recession of the early 1990s did not help the cause of the economic and monetary union (EMU) that foresaw the introduction of a common currency by 1997 (or later). The EMU policy regime, agreed upon at Maastricht in 1991, largely followed the German rulebook (Dyson and Featherstone 1999; James 2012). Germany was in a strong negotiating position to make the Bundesbank's abdication of monetary rule over Europe conditional on its partners' signing up to a "stability union" (based on prescriptions informed by Germany's monetary mythology). Countries keen to join the German-style "stability union" jointly engaged in unconditional austerity and continued to disinflate toward the German stability benchmark. After having been banned from Germany for a decade, Keynes also got banned from Europe's EMU—which would henceforth (attempt to) operate according to its German rulebook.

Quite obviously Germany was begging for trouble. An important fallacy of composition got overlooked: the German model gets undermined when exported. West Germany's success with the German model in former times rested on other countries behaving differently. The German model could only work because and as long as others behaved differently. But now the Maastricht regime of the EMU required everyone else to become just like Germany.

Little wonder Germany's export engine would not catch fire quite so easily anymore. The 1990s became a decade similarly disappointing as the first half of the 1980s, characterized by protracted stagnation and slow recovery. In due course Germany would become known as the "sick man of Europe" (and a little later as the "sick man of the euro"; see Dustmann et al. [2014]). In Germany, poor performance was largely blamed on the "burden" of unification and, as usual, on "structural problems." In reality, it was not unification as such but the macro policy response to unification that had derailed the West German economy. The deliberately provoked recession of the early 1990s, which was the Bundesbank's crusade to prevent a third hyperinflation within one century, cost West Germany roughly 1.5 million jobs. These pointless job losses greatly augmented the budgetary pressures more directly related to the unification challenge.

Part of the unification challenge was owed to the fact that former East Germany's infrastructure, environment, and economic structures in general were rundown and/or outdated. It was clear from the beginning that an enormous volume of investment was needed to fix this deficiency. Another part of the unification challenge arose from fast and premature wage convergence between east and west. Given the poor state of the economy, productivity levels in former East Germany were way below West German levels. When East German wages shot up literally overnight, whole industries and millions of jobs in the east turned uncompetitive just as fast. Unbalanced competitiveness positions inflated the intra-German "transfer union" that was initiated with the unification of the two very unequal Germanys. With a unified fiscal and social regime, there would be automatic fiscal redistribution from the richer and/or growing regions (the west) to the poorer and/or stagnant ones (the east).

When Germany (re-)united in 1990, a monetary union between the two former Germanys was established that was also at once a fiscal union. Former East Germany was simply incorporated into the West German social systems, federal budget, and other budgetary processes. When millions of jobs were lost overnight in the east, which was left uncompetitive due to wage convergence, this created an enormous drain on the newly united fiscal and social union. The German transfer union led to the introduction of a special "solidarity tax" (an income tax surcharge) in the former West Germany. This experience alerted Germany to the risks of a transfer union. So Germany put even more pressure on its prospective EMU partners to, as it were, "get their fiscal house in order." In Germany itself, fiscal policy was by now reduced to little else but a blind obsession with balancing the budget no matter what.

Needless to say, the joint austerity crusade undertaken across the continent in the name of Maastricht did not help either. Europe got a foretaste of things that later reached their full blossom under the euro. But in Germany, stagnation and high unemployment can never be domestic-demand related; they can only be a reflection of a lack of competitiveness. Hence Germany's knee-jerk and fateful response was to set out to "restore" its competitiveness, which was embraced as national agenda around 1996.

### 6. THE EURO CRISIS, TOO, WAS "MADE IN GERMANY"

It is not necessary to delve in any length or detail here into the developments that led to the euro crisis about a decade after the common currency was launched. I have done so elsewhere (Bibow 2006, 2007, 2012) and will only briefly summarize the broad picture here.

The ERM of pre-euro times allowed for exchange rate "realignments." By contrast, members of a currency union lose the ability to adjust intraunion competitiveness positions through exchange rate adjustments. It therefore becomes absolutely essential to prevent diverging competitiveness positions from arising in the first place. The ECB's definition of price stability as "below, but close to 2 percent" provides the common benchmark that national unit-labor cost trends have to align themselves with. If national unit-labor cost trends persistently diverge from the common

norm, member states will be drifting apart and the currency union will be set on a collision course (Flassbeck 1997).

It is a great irony that once Germany had convinced its euro partners to sign up to the rules of the German-style stability union, it was Germany itself that reneged on the most essential euro commitment. Around 1996, it became Germany's national agenda to "restore" its competitiveness. Alas, it was a grand illusion that Germany had anything to restore. True, former East Germany was undergoing a comprehensive revamp. Former West Germany, by contrast, had simply lost the undue and unsustainable competitiveness advantage it had previously accumulated over the course of the 1980s as the rest of Europe was practicing disinflation while pegging to the deutschmark.

It may have felt differently to Germany and its powerful export interests. A country that runs persistent trade surpluses—the German model at work—will see its economic structures adapt to its distorted aggregate demand composition as certain export industries will expand at the expense of other, more domestic-oriented ones. German unification and the ERM crises had rebalanced Europe, and Europe had converged to Germany's historical stability standard and the agreed-upon common EMU norm of 2 percent inflation. The right conclusion would have been that the German model had outlived its practicability under the euro. Exporting the model to Europe through the euro meant just that. Unfortunately, though, the German authorities fallaciously thought differently.

The following statement made by Olaf Sievert (1933–)—arguably the most influential economist in Germany in the 1970s and 80s, <sup>12</sup>—in a speech entitled "Promise of Currency Union," captures a fateful error in economic logic: "National wage moderation raises international

<sup>&</sup>lt;sup>12</sup> Olaf Sievert was a member of the GCEE from 1970 until 1984, and was chair since 1976. He masterminded the wise men's preparation for West Germany's economic policy U-turn in the early 1980s. As a protégé of Herbert Giersch, he has been a long-time member of the "Kronberger Kreis," a highly influential circle of ordoliberal/neoliberal economists in Germany (that also includes Otmar Issing, who has arguably been Germany's most influential economist since the 1990s). In the 1990s, Sievert was rewarded by receiving the chairmanship of the *Landeszentralbank* (regional central bank) of Saxony and Thuringia.

competitiveness, without that currency appreciation against European partners could water down this effect." <sup>13</sup>

I observed above that West Germany had always resisted deutschmark revaluation under Bretton Woods for as long as possible. The deutschmark appreciation that arose in the 1970s under flexible exchange rates was considered excessive from a German perspective. <sup>14</sup> During the 1980s, the EMS reintroduced conditions similar to those that prevailed under Bretton Woods in the region. Yet, when ERM realignments occurred (for instance, devaluations by the Italian lira), it would lead to notorious outcries in West Germany, where this was widely seen as "unfair." Sievert's "promise" suggests that Germany had lured its euro partners into a euro trap: inside the trap German competitiveness gains achieved through wage moderation would no longer be "watered down" through currency appreciation.

I describe this as an error in economic logic because Sievert's implicit policy prescription—wage moderation to "restore" competitiveness—clearly clashes with another German policy objective, namely that Europe's EMU must not be a "transfer union." Germany had just experienced that unbalanced competitiveness positions inside a currency union lead to large fiscal transfers. After grossly mishandling the German unification challenge, Germany was adamant that the EMU must not lead to the creation of another transfer union (at Germany's expense) at the European level.

The vital point that Sievert's policy prescription misses is that running up persistent trade surpluses inside a currency union ultimately makes a transfer union inevitable. I dubbed this "Germany's euro trilemma," namely that Germany "cannot have it all—perpetual export

<sup>&</sup>lt;sup>13</sup> My translation. The German original (a speech by Olaf Sievert given at Hamburger Sparkasse on August 13, 1997) is cited by Flassbeck (1997): "Zur Verheiβung einer Währungsunion": "Eine nationale Mindersteigerung der Löhne erhöht die internationale Wettbewerbsfähigkeit, ohne dass eine Aufwertung gegenüber den europäischen Partnern diesen Effekt verwässern könnte."

<sup>&</sup>lt;sup>14</sup> To quote Olaf Sievert (1995) once more: "The stability-minded countries, which became notorious revaluation countries, have repeatedly experienced that the [nominal] appreciation of their currency became a real appreciation, that is, appreciation exceeded international inflation differentials. This has impaired their economic dynamism." ("Die stabilitätsbewußten Länder, die zu notorischen Aufwertungsländern wurden, haben immer wieder erlebt, dass die Aufwertung ihrer Währung zu einer realen Aufwertung wurde, also über das hinausging, was den internationalen Unterschieden in der Inflationsrate entsprochen hätte. Das hat ihre wirtschaftliche Dynamik beeinträchtigt.")

surpluses, a no transfer/no bailout monetary union, and a 'clean,' independent central bank" (Bibow 2012). Perpetual export surpluses ultimately bankrupt importing trade partners. This may be covered up by central bank operations only for so long. But we are running ahead of events here.

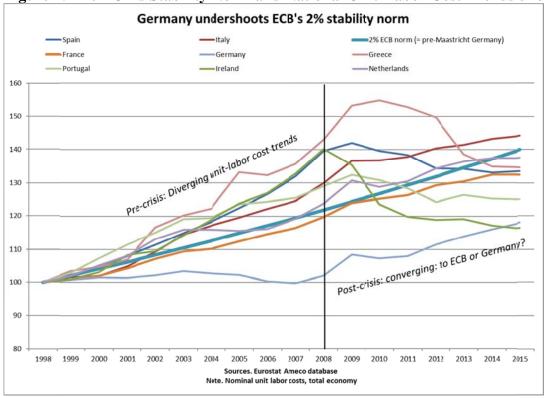


Figure 1: The ECB's Stability Norm and National Unit-Labor Cost Trends under the Euro

For before Germany bankrupted its euro partners, its preferred policies first of all made Germany itself sick, earning Germany the title of "sick man of the euro" (Dustmann et al. 2014). Mindless fiscal austerity since 1992 was one factor undermining recovery and domestic demand in Germany. When wage moderation was added to the mix starting around 1996, Germany's domestic demand troubles only got worse. When German wages stopped growing under the euro (see figure 1), private consumption stopped growing, too, which, in turn, also undermined private investment. In short, following Sievert's policy prescription earned Germany protracted domestic demand stagnation—together with cumulative competitiveness gains inside the currency union though.

Once triggered, the EMU policy regime further magnified divergences inside the currency union. The ECB's common monetary policy stance was consistently too tight for sick (stagnant) Germany, but consistently too easy for the later euro-crisis countries. These countries had received an early boost from the interest rate convergence process of the late 1990s. Germany's protracted stagnation under the euro added a second leg to existing trends: bubbles emerged in the periphery and intra-area imbalances built up. While Germany implemented numerous rounds of fiscal austerity only to overshoot the 3 percent Maastricht budget ceiling again, bubble economies like Spain and Ireland had scope for tax cuts.

All along, Germany's competitiveness improved, while it deteriorated in the later euro-crisis countries. Germany started running rising trade surpluses, while its euro partners had rising trade deficits; hence Germany's net external asset position improved, while the euro periphery's net external indebtedness deteriorated towards 100 percent of GDP. To the vigilant observer these developments were an accident waiting to happen (Bibow 2006). Yet the euro authorities were sleeping at the wheel while most mainstream economists agreed that inside a currency union the member countries' external positions would somehow be irrelevant.

The global financial crisis that originated in the US subprime mortgage market segment provided the initial external trigger. The euro area immediately had a banking crisis at hand. Simultaneously, its homegrown bubbles and imbalances imploded, too.

Remarkably, in 2009, Germany went through a brief "Keynes moment." I described the fiscal expansion at the time of German unification as a historical accident. This time it was a spontaneous Keynesian policy move to counter the global crisis and stimulate domestic demand. The fact that Germany had a federal election in the fall of 2009 probably helped. Global cooperation through the G20 probably also helped to contain Germany's natural instincts to simply freeload on exports (i.e., on other countries' stimulus measures). In the event, Germany's fiscal stimulus of 2009–10 was both sizeable and effective, and in 2010 Germany experienced a brisk recovery from the crisis.

But then the Greek debacle provided Germany with a welcome excuse to impose a quick return to unconditional austerity in Europe's EMU, allegedly as the unavoidable medicine to counter the so-called "sovereign debt crisis."

Europe's monetary union had failed to prevent the internal divergences and imbalances that were bound to cause fragility and end in crisis. When (inevitably) crisis finally arrived, Europe's monetary union—the supposed stability union—was ill-equipped to deal with it. Importantly, both the design of said monetary union and the very causes of its internal divergences and imbalances were actually "made in Germany." To add insult to injury, as the union's number one creditor nation, Germany then also came to dictate the improvised crisis response, which largely consisted of mindless austerity. Germany's price stability obsession also hindered a more timely and courageous response from the ECB (Bibow 2016).

Germany's constant attacks on the ECB in recent years are particularly ironic and only show that the German authorities still do not appreciate Germany's euro trilemma: the ECB's "unconventional" monetary policies are the last thing standing between Germany and a *de facto* eurozone transfer union. In case of a euro breakup, Germany will be presented with *ex post* transfers in the form of massive wealth losses on its foreign claims (Bibow 2013a).

On a slightly more positive note, since the crisis, Germany's unit-labor cost trend has increased and is now consistent with the ECB's 2 percent inflation benchmark. But, as figure 1 shows, Germany has resisted "internal revaluation," which would require (upward) convergence of Germany's price level with the price-level path that is implied by the ECB's 2 percent inflation benchmark.

This has effectively forced everyone else into "internal devaluation" and (downward) convergence with Germany's own lower price-level path. In some cases, this involved outright deflation. In all cases, massive economic hardship has left social and political instabilities in its wake. Germany's deep-seated macro policy folly—the country's notorious anti-Keynesianism—has brought Europe to its knees. Almost a decade into the euro crisis, Europe's common currency remains a ticking time bomb.

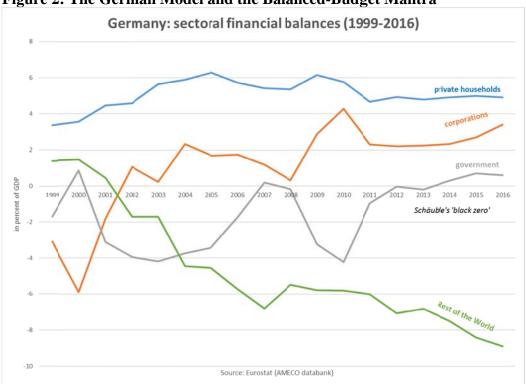


Figure 2: The German Model and the Balanced-Budget Mantra

The eurozone's domestic demand has yet to regain its precrisis level. Meanwhile, Germany's current account surplus has reached 9 percent of GDP—the biggest in the world. Internally, sectoral financial balances show persistent surpluses for both the household and corporate sectors. Reflecting the protracted weakness of corporate investment despite lavish corporate profits, the corporate sector's surplus has grown even bigger since the crisis. Following five years of "excessive deficits," the general government budget was balanced by 2007–08, and though briefly interrupted from 2009–11, has been balanced again since 2012. Germany's soaring external surplus makes this possible: The German model balances Germany's government budget as other countries load up on external debt corresponding to their external deficits.

Today, the external counterpart to Germany's exorbitant current account surpluses may no longer be primarily in the eurozone, as they used to be prior to the outbreak of the euro crisis, since imports of Germany's euro partners have shrunk in line with their compressed incomes and remain depressed, just as unemployment levels remain elevated. Instead, the eurozone's overall

current account surplus has now reached 4 percent of GDP and the constellation of sectoral financial balances has come to resemble Germany's. In effect, having brought Europe to its knees, Germany is now also holding the world community hostage, asking them to tolerate perpetual eurozone freeloading on external demand, or else risk pulling the rug out from underneath the euro.



Figure 3: The Eurozone is Turning German

### 7. CONCLUDING OBSERVATIONS

For a number of years now, Europe's EMU has been seen skating along the abyss, suffering its worst economic crisis since WWII and flirting with outright deflation and/or breakup. The fragility of the euro currency union has been a cause of instability across Europe and beyond. The argument advanced in this paper assigns Germany a leading role in the tragedy of supposed virtues turning out to be vices that have brought Europe to its knees. It ascribes a critical weight to the "power of ideas," particularly Germany's oddly anti-Keynesian views on matters of macroeconomic policy.

The ideas that brought wreckage to Europe have historical roots though: the success of the German model that was the basis of West Germany's postwar "economic miracle," its rise to prosperity and respectability, and eventual (re-)unification in 1990. Unfortunately, Germany has never fully understood the true sources of its success and learned the wrong lessons from its own economic history.

A peculiar monetary mythology has been at play here that justified the Bundesbank's stout antiinflationary bias. This approach brought fame to the Bundesbank itself and German pride in the
soundness of its deutschmark. Importantly, for a long time the Bundesbank's distinctive brand,
its bias against (hyper-)inflation, and Germany's stability culture did not hinder but even
supported German growth: export-led growth. For in the context of pegged nominal exchange
rates, achieving a superior (lower) inflation record translates into competitiveness gains. In this
way, (West) Germany learned to live quite well without Keynesian demand management. The
Bundesbank's real role was to enforce discipline—superior ("German") discipline in the form of
wage moderation and balanced budgets. Effectively, Germany took Keynes's diagnosis of
mercantilism in chapter 23 of the *General Theory* to heart, but ignored the remaining 23
chapters, thereby getting away with it by relying on others to do the real job.

The German model was launched, innocently enough, with the balance-of-payments crisis of 1950–51, when boosting exports was an urgency. It became a notorious habit—a habit that is intricately interwoven with Bundesbank mythology and which Germany cannot let go of. Somehow it all also seemed to confirm the supposed wisdom of ordoliberalism, so that an element of path dependency in policymaking made Germany a difficult place for Keynesian ideas to penetrate, and lastingly so.

Europe's tragedy is that under the thick fog of its monetary mythology, Germany failed to appreciate that the success of the German model critically depends on others behaving differently from itself. Exporting the German model to Europe was begging for trouble, and featured a fallacy of composition: Germany's export engine would stall when everyone becomes just like Germany.

Germany's reaction to *underbid its own model* backfired badly. At first it primarily made Germany itself "sick." When intra-union imbalances later unraveled, everyone else was found to be lacking competitiveness. And so Germany prescribed more of the same sickening medicine for everyone.

Germany's distinctive anti-Keynesianism costs Europe—and ultimately Germany itself, haunted by its "euro trilemma"—very dearly.

Even 80 years after the publication of *The General Theory*, there is still a lack of appreciation of Keynes's rationale for apparently using a closed-economy model in his most famous work—which he hoped would stop policymakers from engaging in the kind of folly that has brought Europe to its knees.

Asymmetric adjustment (of debtor countries only) and an inadequate macro policy stance continue to hold back recovery in the eurozone. While the ECB has belatedly begun to play a more constructive role in sustaining the euro (Bibow 2015, 2016), the euro's fiscal regime remains deeply flawed. Representing a minimalist fiscal union, the "euro treasury," which I proposed elsewhere (Bibow 2013b), would complement the euro monetary union.

#### REFERENCES

Allen, C. 1989. "The underdevelopment of Keynesianism in the Federal Republic of Germany." In P. Hall (ed.), The Political Power of Economic Ideas: Keynesianism across Nations. Princeton: Princeton University Press. Bibow, J. 2005. "Germany in crisis—The unification challenge, macroeconomic policy shocks and traditions, and EMU." International Review of Applied Economics 19(1): 29-50. -. 2006. "The euro area drifting apart—Does reform of labor markets deliver competitive stability or competitive divergence?" in European Trade Union Confederation (ETUC) (ed.) Structural Reforms and Macro-Economic Policy. Brussels: European Trade Union Confederation. -. 2007. "How the Maastricht regime fosters divergence as well as instability." In P. Arestis, E. Hein, and E. Le Heron (ed.), Monetary Policies—Modern Approaches. Basingstoke, UK: Palgrave Macmillan. -. 2009. "On the origin and rise of central bank independence in West Germany." *European Journal of the History of Economic Thought* 16(1): 155–90. -. 2010. "Zur (Re-)Etablierung zentralbankpolitischer Institutionen und Traditionen in West-Deutschland: Theoretische Grundlagen und politisches Kalkül (1946–1967)." In C. Scheer (ed.), Die deutschsprachige Wirtschaftswissenschaft in den ersten Jahrzehnten nach 1945, Band XXV Studien zur Entwicklung der ökonomischen Theorie. Berlin: Duncker & Humblot. -. 2012. "The Euroland crisis and Germany's euro trilemma." *International Review of Applied Economics* 27(3): 360–85. -. 2013a. "Germany and the Euroland Crisis: The Making of a Vulnerable Haven." Levy Economics Institute, Working Paper no. 767. Annandale-on-Hudson, NY: Levy Economics Institute of Bard College. -. 2013b. "Lost at sea: The euro needs a Euro Treasury." IMK Study no. 35, November. Dusseldorf: Hans-Böckler-Stiftung. Available at: http://www.boeckler.de/pdf/p\_imk\_study\_35\_2013 -. 2013c. "On the Franco-German euro contradiction and ultimate euro battleground." Contributions to Political Economy 32: 127–49. -. 2013d. "At the cross-roads: The euro and its central bank guardian (and savior?)." Cambridge Journal of Economics 37(3): 609–26.

- ———. 2015. "The euro's savior? Assessing the ECB's crisis management performance and potential for crisis resolution." IMK Study No. 42, June. Dusseldorf: Hans-Böckler-Stiftung.
- ———. 2016. "From anti-growth bias to quantitative easing: The ECB's belated conversion?" Levy Economics Institute, Working Paper No. 868. Annandale-on-Hudson, NY: Levy Economics Institute of Bard College.
- Blyth, M. 2013. Austerity: The History of a Dangerous Idea. Oxford: Oxford University Press.
- Bofinger, P. 2016. "German macroeconomics: the long shadow of Walter Eucken." In George Bratsiotis and David Cobham (eds.), *German macro: how it's different and why that matters*. European Policy Center, publication 6497, April. Brussels: European Policy Center. Available at: http://www.epc.eu/pub\_details.php?pub\_id=6497
- De Long, J., and B. Eichengreen. 1993. "The Marshall Plan: history's most successful structural adjustment program." In R. Dornbusch, W. Nölling, and R. Layard (eds.), *Postwar Economic Reconstruction and Lessons for the East Today*. Cambridge: MIT Press.
- Deutsche Bundesbank 1994. *The Monetary Policy of the Bundesbank*. Frankfurt: Deutsche Bundesbank.
- Dillard, D. 1985. "The Influence of Keynesian Thought on German Economic Policy." Iin H. Wattel (ed.), *The Policy Consequences of John Maynard Keynes*. Armonk: M.E. Sharpe.
- Dustmann, C., B. Firzenberger, U. Schönberg, and A. Spitz-Oener. 2014. "From sick man of Europe to economic superstar: Germany's resurgent economy." *Journal of Economic Perspectives* 28(1): 167–88.
- Dyson, K., and K. Featherstone. 1999. *The Road to Maastricht: Negotiating EMU*. Oxford: Oxford University Press.
- The Economist. 2014. "Hail, the Swabian housewife." February 1. Available at: http://www.economist.com/news/europe/21595503-views-economics-euro-and-muchelse-draw-cultural-archetype-hail-swabian
- Eichengreen, B.S. 2007. *The European Economy since 1945: Coordinated Capitalism and Beyond*. Princeton, NJ: Princeton University Press.
- Eucken, W. 1940. Grundlagen der Nationalökonomie. Berlin: Springer.
- . 1952. Grundsätze der Wirtschaftspolitik. Tübingen: Mohr Siebeck..
- Feld, L.P., E.A. Köhler, and D. Nientiedt. 2015. "Ordoliberalism, pragmatism and the Eurozone crisis: how the German tradition shaped economic policy in Europe." Walter Eucken Institut, Discussion Paper no. 15/04. Freiburg im Breisgau: Walter Eucken Institut.

- Fels, G., and H.-P Fröhlich. 1987. "Germany and the world economy: A German view." *Economic Policy* 2(4): 177–95.
- Flassbeck, H. 1997. "Und die Spielregeln für die Lohnpolitik in einer Währungsunion?" *Frankfurter Rundschau*, October 31. Available at: http://www.nachdenkseiten.de/upload/pdf/FR\_Dokumentation\_DRS\_Freitag\_31-10-1997\_2.pdf
- Galofré-Vilà, G., M. McKee, C.M. Meissner, and D. Stuckler. 2016. "The economic consequences of the 1953 London Debt Agreement." NBER Working Paper no. 22557, August. Cambridge, MA: National Bureau of Economic Research.
- Giersch, H., and H. Lehment. 1981. "Monetary policy: does independence make a difference?—the German experience." *ORDO* 32: 3–16.
- Giersch, H., K.-H.Paque, and H. Schmieding. 1992. *The Fading Miracle: Four Decades of Market Economy in Germany*. Cambridge: Cambridge University Press.
- Goodman, J.B. 1992. *Monetary Sovereignty: The Politics of Central Banking in Western Europe*. Ithaca and London: Cornell University Press.
- Guarjardo, J., D. Leigh, and A. Pescatori. 2011. "Expansionary austerity." IMF Working Paper no. 11/158. Washington, DC: International Monetary Fund.
- Hagemann, H. 2000. "The post-1945 development of economics in Germany." In A. Coats (ed.), *The Development of Economics in Western Europe Since 1945*. London: Routledge.
- ——. 2014. "The German edition of Keynes's General Theory: controversies on the preface." *Research in the History of Economic Thought and Methodology* 32: 159–66.
- ———. 2016. "Zur frühen Rezeption der General Theory durch deutschsprachige Wirtschaftswissenschaftler." presented at "Maynard Keynes in King's College and the General Theory of Employment, Interest and Money," Conference, Cambridge, October 8.
- Hayo, B. 1998. "Inflation culture, central bank independence and price stability." *European Journal of Political Economy* 14: 241–63.
- Hayo, B., and F. Neumeier. 2016. "The social context for German economists: Public attitudes towards macroeconomic policy in Germany." In George Bratsiotis and David Cobham (eds.), *German macro: how it's different and why that matters*. European Policy Center, publication 6497, April. Brussels: European Policy Center. Available at: http://www.epc.eu/pub\_details.php?pub\_id=6497
- Hefeker, C. 1994. "German monetary union, the Bundesbank and EMS collapse." *BNL Quarterly Review, Banca Nazionale del Lavoro* 47(191): 379–98.

- Helmstädter, E. 1988. "The irrelevance of Keynes to German Economic Policy and to international economic co-operation in the 1980s." In W. Eltis and P. Sinclair (eds.), *Keynes and Economic Policy. The Relevance of the General Theory after Fifty Years.*London: MacMillan.
- Hellwig, M., and M.J.M. Neumann. 1987. "Economic policy in Germany: was there a turnaround?" *Economic Policy* 2(2): 105–40.
- Henning, C.R. 1994. *Currencies and Politics in the United States, Germany, and Japan.* Washington, DC: Institute of International Economics.
- Hölscher, J. 1994. Entwicklungsmodell Westdeutschland. Aspekte der Akkumulation in der Geldwirtschaft. Berlin: Dunkcer & Humblot.
- Holtfrerich, C.-L. 1988. Relations between monetary authorities and governmental institutions: the case of Germany from the 19th century to the present." In G. Toniolo (ed.), *Central Banks' Independence in Historical Perspective*. Berlin and New York: de Gruyter.
- . 1998. "Geldpolitik bei festen Wechselkursen (1948–1970)." in Deutsche Bundesbank, Fünfzig Jahre Deutsche Mar: Notenbank und Währung in Deutschland seit 1948. München: Beck, C.H.
- ———. 2008. "Monetary policy in Germany since 1948: national tradition, international best practice or ideology?" In J.P. Touffut (ed.), *Central Banks as Economic Institutions*. Cheltenham, UK: Edward Elgar.
- Hutchison, T. 1979. "Notes on the effects of economic ideas on policy: the example of the German social market economy." *Journal of Institutional and Theoretical Economics* 135: 426–41.
- Issing, O. 2008. The Birth of the Euro. Cambridge: Cambridge University Press.
- James, H. 1989. "What is Keynesian about deficit financing? The case of interwar Germany." In P. Hall (ed.), *The Political Power of Economic Ideas: Keynesianism across Nations*. Princeton: Princeton University Press.
- ———. 2012. *Making the European Monetary Union*. Cambridge, MA: Harvard University Press.
- Johnson, P. 1998. *The Government of Money—Monetarism in Germany and the United States*. Ithaca, NY and London: Cornell University Press.
- Kaltenthaler, K. 1998. *Germany and the Politics of Europe's Money*. Durham, NC and London: Duke University Press.

- Keynes, J.M. [1919] 1971. The Economic Consequences of the Peace, reprinted in The Collected Writings of John Maynard Keynes, Vol. 2. London, Macmillan.
- ——. [1923] 1971. A Tract on Monetary Reform, reprinted in The Collected Writings of John Maynard Keynes, Vol. 4. London, Macmillan.
- ———. [1930] 1971. A Treatise on Money, reprinted in The Collected Writings of John Maynard Keynes, Vols. 5 and 6. London, Macmillan.
- ——. [1933] 1973. "A monetary theory of production." Reprinted in D. Moggridge (ed.), *The Collected Writings of John Maynard Keynes*, Vol. 13. London, Macmillan.
- ——. [1936] 1971. *The General Theory of Employment, Interest and Money*, reprinted in *The Collected Writings of John Maynard Keynes*, Vol. 7. London, Macmillan.
- Krüger, W. 1967. "Das harte Gesetz." *Die Zeit*, May 19. Available at: http://www.zeit.de/1967/20/das-harte-gesetz
- Krugman, P. 2016. "Germany's drag." *The New York Times*, August 26. Available at: http://krugman.blogs.nytimes.com/2016/08/26/germanys-drag/?\_r=0
- Mantoux, E. 1946. *The Carthaginian Peace, or the Economic Consequences of Mr. Keynes?* London and New York: Oxford University Press.
- Marks, S. 1978. "The myths of reparations." *Central European History* 11: 231–55.
- Marsh, D. 1992. The Bundesbank: The Bank That Rules Europe. London: Mandarin.
- Mee, S. 2015. "Germany's obsession with inflation: how post-war central bankers manipulated national memories to assert their power." Unpublished manuscript. March 25. Available at: http://www.ehs.org.uk/press/germany-s-obsession-with-inflation-how-post-war-central-bankers-manipulated-national-memories-to-assert-their-power
- ——. 2016. "Monetary mythology: The West German central bank and historical narratives, 1948–78." Draft of ongoing Ph.D. research at the University of Oxford.
- Munchau, W. 2014. "The wacky economics of Germany's parallel universe." *The Financial Times*, November 16.
- Perotti, R. 2014. "The austerity myth: gain without pain?" BIS Working Papers No 362. Basel: Bank for International Settlement. Available at: http://www.bis.org/publ/work362.htm
- Richter, R. 1999. Deutsche Geldpolitik 1948–1998. Tübingen: Mohr Siebeck.

- Rieter, H., and M. Schmolz. 1993. "The ideas of German Ordoliberalism 1938–45: pointing the way to a new economic order." *European Journal of the History of Economic Thought* 1: 87–114.
- Ritschl, A. 2011. "Germany owes Greece a debt." *The Guardian*, June 21.
- ——. 2012. "Germany, Greece and the Marshall Plan." *The Economist*, June 15.
- Sachverständigenrat (GCCE). 1977. *Jahresgutachten 1977*. Bonn: Bundesanzeiger and Stuttgart/Mainz: Kohlhammer.
- Schäuble, W. 2010. "Maligned Germany is right to cut spending." The Financial Times, June 23.
- ——. 2011. "Why austerity is only cure for the Eurozone." *The Financial Times*, September 5.
- ———. 2013. "Ignore the doomsayers, Europe is being fixed." *The Financial Times*, September 16.
- Scherf, H. 1986. Enttäuschte Hoffnungen—vergebene Chancen: Die Wirtschaftspolitik der Sozial-Liberalen Koalition 1969–1982. Göttingen: Vandenhock & Ruprecht.
- Schuker, S.A. 1985. "American 'reparations' to Germany, 1919–1933." in G.D. Feldman and E. Müller-Luckner (eds.), *Die Nachwirkungen der Inflation auf die deutsche Geschichte,* 1924–1933. Munich: Oldenbourg.
- Sievert, O. 1980. "Position des Sachverständigenrates, in: Deutsches Institut für Wirtschaftsforschung." *Vierteljahresheft* 1/80: 18–27.
- ——. 1995. "Pro und Contra Europäische Währungsunion: Zehn Thesen dafür." In *Europäische Währungsunion à la Maastricht: Pro und Contra*, Stiftung Demokratie Saarland, Dialog No. 3, p. 35-42. Munich: Oldenbourg. Available at: http://www.stiftung-demokratie-saarland.de/uploads/media/Dialog3.pdf
- 2003. "Vom Keynesianismus zur Angebotspolitik." In Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung (ed.), *Vierzig Jahre Sachverständigenrat 1963-2003*. Wiesbaden: Statistisches Bundesamt.
- Spahn, H.-P. 2010. "Vermögensmärkte, Investitionen und Beschäftigung—Ein Rückblick auf die keynesianische Phase im angebotstheoretischen Konzepts des Sachverständigenrates." In C. Scheer (ed.), *Die deutschsprachige Wirtschaftswissenschaft in den ersten Jahrzehnten nach 1945*. Studien zur Entwicklung der ökonomischen Theorie XXV, Schriften des Vereins für Socialpolitik 115, XXV, Berlin: Duncker & Humblot.
- Tietmeyer, H. 1991. "The role of an independent central bank in Europe." In P. Downes and R. Vaez-Zadeh (eds), *The Evolving Role of Central Banks*. Washington, DC: International Monetary Fund.

- Wallich, H.C. 1955. *Triebkräfte des deutschen Wiederaufstiegs*. Frankfurt am Main: Fritz Knapp.
- Wallich, H.C., and J.F. Wilson. 1979. "Thirty years (almost) of German surpluses." *Zeitschrift für die gesamte Staatswissenschaft / Journal of Institutional and Theoretical Economics*, vol. 135(3): 480–92.
- Wolf, M. 2013. "Germany's strange parallel universe." The Financial Times, September 24.