



# Why Did the Great Inflation Not Happen in Germany?

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## GERMAN MONETARY POLICY UNTIL 1973

**W**hen I first became aware of the title of the special conference at the Federal Reserve Bank of St. Louis, “Reflections on Monetary Policy 25 Years After October 1979,” I was puzzled for a moment and spontaneously asked myself what happened in 1979. Then it came to my mind that, while the United States suffered from the Great Inflation, this was not at all the case for Germany. This contribution deals with the possible reasons for this and asks for the lessons that could be drawn from such experiences.

To better understand this episode, one has to go back to the previous regime of fixed exchange rates. At the beginning of the 1970s, the Federal Republic of Germany found itself in a difficult economic situation caused, in essence, by high and rising inflation due to external pressures and fiscal and wage policies. At the same time, the possible ways for monetary policy to react to this inflationary environment were limited, as its freedom to act was constrained by the Bretton Woods system of fixed exchange rates. Consequently, from the second half of 1970, monetary growth—measured in terms of M1 or the central bank money stock—was very strong. In line with this development, bank lending to domestic non-banks was also expanding fast.

At the same time, German foreign exchange reserves rose by 40.9 billion Deutsche marks over the period from 1970 to May 1971 compared with an increase of 14.9 billion Deutsche marks from January 1968 to September 1969.<sup>1</sup> It should be noted that in various episodes the external com-

ponent of money creation was even higher than the growth of the monetary base, implying that the internal contribution of money creation was negative. The excessive rate of monetary expansion was an expression of the fact that, to a large extent, the Bundesbank had lost control of the money supply.

## FROM 1973 TO 1979—REGAINING MONEY SUPPLY CONTROL

### *The Move Toward a New Monetary Concept*

In March 1973, the Bundesbank was relieved of its obligation to intervene in the foreign exchange market with respect to the fixed parity against the U.S. dollar. The end of the Bretton Woods system and the transition to floating exchange rates in March 1973 gave the Bundesbank new scope for the control of domestic monetary conditions. While this did not mean complete freedom from exchange rate constraints, the strongest and most immediate external pressure had been removed. New opportunities opened up for monetary policy. In response, the Bundesbank pioneered the use of pre-announced annual growth targets for the money stock, the first of which was published in December 1974.<sup>2</sup>

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<sup>1</sup> See Issing (1996b) for a more detailed discussion.

<sup>2</sup> See Table 1 for a more detailed overview. For a fuller exposition, see also Issing (1992) and Deutsche Bundesbank (1995). It should also be noted that the practice of monetary targeting was continued until the year 1998—the end of the Deutsche mark as a currency.

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The choice of a monetary target in 1974 undoubtedly signaled a fundamental regime shift. Not only was it a clear break with the past but also a decision to discard alternative approaches to monetary policy.<sup>3</sup> There were two main arguments in favor of providing a quantified guidepost for the future rate of monetary expansion. First, and foremost, was the intention of controlling inflation through the control of monetary expansion. Second, the Bundesbank tried to provide a guidance of agents' (especially wage bargainers') expectations through the announcement of a quantified objective for monetary growth.<sup>4</sup> Therefore, with its new strategy, the Bundesbank clearly signaled its responsibility for the control of inflation. At the same time, the Bundesbank expressed its view that, while monetary policy conducted by maintaining price stability in the longer run would exert a positive impact on economic growth, the fostering of potential growth in the economy should be considered a task of fiscal and structural policies, while employment was a responsibility of the social partners conducting wage negotiations.

However, the Bundesbank made it clear from the beginning that it could not and would not promise to reach the monetary target with any degree of precision. Accordingly, in this period the new regime of monetary targeting was in many respects an experiment.

### **Determination of the Money Growth Target**

From the outset, the Bundesbank recognized the importance of adopting a simple, transparent, and, at the same time, comprehensible method for the derivation of the annual monetary targets.<sup>5</sup> Unlike some academic monetarists, the Bundesbank favored broad monetary aggregates. The choice of such aggregates was based not least

on the perception that, in countries with highly developed financial markets, substantial portfolio shifts between saving, time, and sight deposits might be observed. In essence, the targeted growth rate was derived as the sum of the predicted growth in potential output, the "normative" rate of inflation that was deemed acceptable in the medium term, and the trend rate of change in the velocity of circulation of money.

This approach reflected the insight that monetary growth consistent with this derivation would create the appropriate conditions for real growth in line with price stability. While these basic relationships were uncontested over medium- to longer-term horizons, the Bundesbank was fully aware that they might not strictly apply over the shorter term. On a month-to-month or quarter-to-quarter basis and even beyond, the basic relationship between the money stock and the overall domestic price level was often obscured by a variety of other factors such as supply and demand shocks. Any attempt to strictly tie money growth to its desired path in the short term might have led to disturbing volatility in interest and exchange rates, thus imposing unnecessary adjustment costs on the economy. Accordingly, the Bundesbank repeatedly pointed to the medium-term nature of its strategy.

First, experiences with monetary targets were not particularly encouraging. Between 1975 and 1978, the quantitative targets were clearly (and in 1978 considerably) overshot (see Table 1). Nevertheless, the Bundesbank was able to slow down inflation from the high levels before to 2.7 percent in 1978. During this period, the Bundesbank gained valuable insights into the new regime and introduced a number of technical modifications (see Table 1). These experiences helped the Bundesbank to enhance the monetary targeting concept from its experimental stage into a fully fledged strategy. As a consequence, at the end of 1978, the potential-oriented monetary targeting strategy had been established and had proven its value. Therefore, the Bundesbank was well prepared when Germany entered especially troubled waters.

<sup>3</sup> It must be recognized that the start of monetary targeting was characterized by a high degree of uncertainty. After all, Germany had just come out of the Bretton Woods "adjustable peg" system in which many topics were seen as irrelevant.

<sup>4</sup> See Schlesinger (1983) on this issue.

<sup>5</sup> See also Issing (1997) for the following considerations.

**Table 1****Monetary Targets for the Central Bank Money Stock or the Money Stock M3 and Their Implementation (percentages)**

Year	Aggregate*	Target form**	Target value	Actual growth	Target achieved	Inflation rate
1975	CBM	CY	8%	9.5%	No	5.9%
1976	CBM	AA	8%	9.2%	No	4.3%
1977	CBM	AA	8%	9.0%	No	3.7%
1978	CBM	AA	8%	11.4%	No	2.7%
1979	CBM	CY	6-9%	6.4%	Yes	4.1%
1980	CBM	CY	5-8%	4.8%	Yes	5.5%
1981	CBM	CY	4-7%	3.5%	Yes	6.3%
1982	CBM	CY	4-7%	6.0%	Yes	5.2%
1983	CBM	CY	4-7%	7.0%	Yes	3.3%
1984	CBM	CY	4-6%	4.7%	Yes	2.4%
1985	CBM	CY	3-5%	4.5%	Yes	2.0%

SOURCE: Various annual reports of the Deutsche Bundesbank; actual figures are rounded.

\*CBM = central bank money; \*\*AA = annual average; CY = in the course of the year, between the fourth quarter of the previous year and the fourth quarter of the current year, 1975 (December 1974 to December 1975).

## FROM 1979 TO 1985— THE STRATEGY BEARS FRUIT

### 1979 to 1981: Monetary Restriction

The economic situation in 1978 was broadly seen as rather comfortable. German real GDP had grown by around 3 percent, accompanied by high levels of employment growth and falling unemployment. The situation was, however, less positive in terms of monetary growth and inflation. Monetary growth had overshot its target, and there were signs of an acceleration in the rate of inflation, which in 1978 stood, on average, at 2.7 percent.<sup>6</sup> Furthermore, the sharp increase in the price of oil hit the German economy. The resulting massive increase in import prices, especially energy prices, augmented by a weakening of the exchange rate, brought about a turnaround in Germany's current account position, leading to a current account deficit in 1979 for the first time in many years.

At the same time, government fiscal policy

was clearly expansionary. Thus, fiscal policy rendered the central bank's task even more difficult. Moreover, the European Monetary System (EMS), an exchange rate regime defining the exchange rates of participating currencies in terms of central rates against the European currency unit, had begun rather quietly in March 1979 but subsequently faced tensions and the need to adjust parities as early as September 1979.

It was obvious from the beginning that the direct effect of the oil price shock on consumer prices could not be prevented by monetary policy. At the same time, the Bundesbank had carefully analyzed the lessons of the first oil price shock.

In 1973, the Bundesbank had declared the fight against inflation to be the principal goal of its monetary policy<sup>7</sup> and, in line with this, had already started to slow down inflation (which had peaked at almost 8 percent in mid-1973) when the first oil crisis broke out in October 1973. The rise in oil prices thwarted the efforts of the Bundesbank, while, at the same time, real output started to decline. Being confronted with such a

<sup>6</sup> On the Bundesbank's implementation of monetary targeting, see also Schlesinger (1985).

<sup>7</sup> See Deutsche Bundesbank (1974, p. 45).

situation, the Bundesbank attempted to keep monetary expansion within strict limits to avoid possible spill-over effects into the wage and price setting. In doing so, however, it did not commit itself to any clear strategy and quantification.<sup>8</sup> Instead, the Bundesbank mainly tried to influence the behavior of market participants by means of “moral suasion.” However, the social partners more or less ignored the signals given by the Bundesbank and agreed on high increases in nominal wages in 1974, trying to compensate for the loss in real disposable income. As a consequence, unemployment increased and inflation went up.

Against this experience, in 1979 the Governing Council of the Bundesbank was well aware of the threat that the oil price increase could translate again into sustained increases in inflation brought about by second-round effects in wage and price setting.<sup>9</sup> In responding to these challenges, the Bundesbank took decisive action. The discount rate was increased in steps, from 3 percent at the start of 1979 to 7.5 percent in May 1980. In parallel, the Lombard rate was increased from its initial level of 3.5 percent to 9.5 percent in May 1980, and in February 1981 it was increased—as a special Lombard—to as much as 12 percent, the normal Lombard window being closed.<sup>10</sup> In parallel, by subsequently reducing the monetary targets from 1979 onward, the Bundesbank sent out a clear signal for restoring price stability.

Not until the second half of 1981 did the growth rates for the monetary base begin to come down. Toward the end of 1981, there were increasingly clear signs of an easing of price and wage pressures. The Deutsche mark regained confidence in the foreign exchange markets and strengthened again, not only within the EMS but also in relation to the U.S. dollar. In parallel, the external adjustment process was promoted through a slowdown in domestic demand and the current account posi-

tion improved markedly. Furthermore, through the “monetary warning,” the government became aware of the unsustainability of its deficit policy. From then on, budget consolidation was increasingly recognized as being an urgent task.

### **1982 to 1985: Relaxation and Normalization of Monetary Policy**

While the episode from 1979 to 1981 was characterized by a sharply restrictive monetary policy, with the aim of forcing down inflation, the subsequent years 1982-85 can be regarded as a phase of monetary relaxation and normalization.

At the start of this phase, inflation was still very high—the annual average rate for 1982 was 5.2 percent—but it fell steadily to 3.3 percent in 1983, 2.4 percent in 1984, and 2.0 percent in 1985.<sup>11</sup> In line with this, long-term interest rates fell from their peak of 11.4 percent in September 1981 to slightly above 6 percent at the end of 1985.

The German current account ended 1982 in surplus once more, due to the decline in energy prices and the weakening of the domestic economy. On the foreign exchange markets, the Deutsche mark strengthened again. In fact, the Bundesbank proved able to successfully maintain its stability-oriented monetary targeting strategy also within the EMS. De facto, the Bundesbank became the dominant central bank and the Deutsche mark the anchor currency in the EMS, without this having been envisaged in the original design of the system. As in other countries at the time, German fiscal policy in the period 1982-85 was characterized by the initiation and implementation of a long-term consolidation program of the new government, in the course of which it proved possible to limit spending growth and budget deficits significantly. Thus, in contrast to previous periods, fiscal policy did not pose serious problems for monetary policy during this phase.

The Bundesbank’s monetary policy was focused on bringing down inflation and restoring the stability of the currency, and it proved able to realize this aim throughout this period. At the same time, the stability-oriented monetary policy fostered the economic recovery.

<sup>8</sup> In fact, the Bundesbank tried to ensure that “monetary expansion was not too great but not too small either.” See Deutsche Bundesbank (1974, especially p. 17).

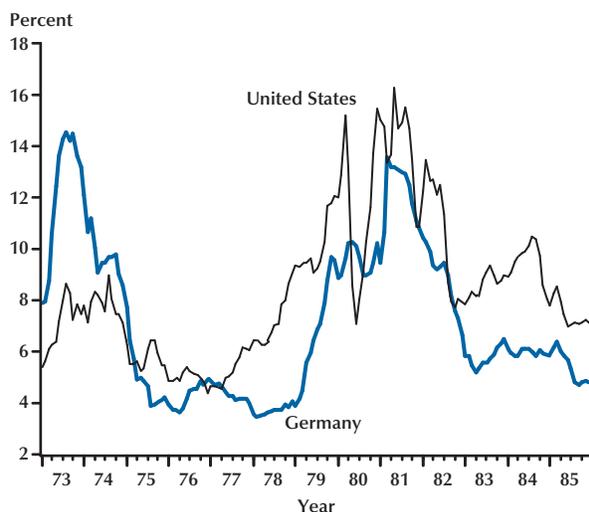
<sup>9</sup> See Schlesinger (1980) on this point.

<sup>10</sup> See Baltensperger (1999) for a more detailed description of this period, the monetary targets, and their realizations.

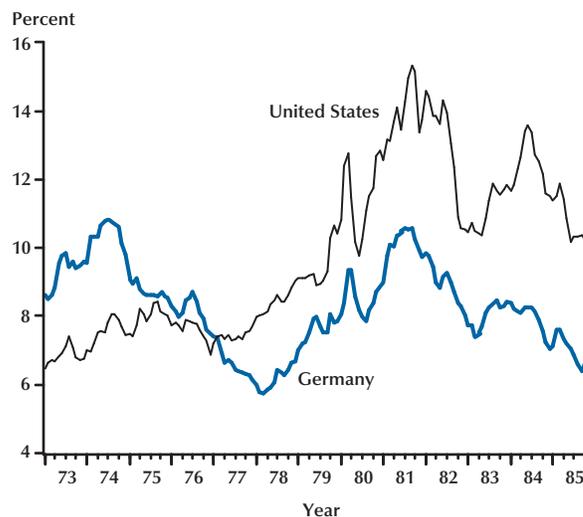
<sup>11</sup> All figures are annual.

**Figure 1**

**Short-Term Interest Rates in Germany and the United States (percentages per annum, monthly data)**

**Figure 2**

**Long-Term Interest Rates in Germany and the United States (percentages per annum, monthly data)**



Not least, these experiences provided a strong argument to maintain the monetary policy strategy until the year 1998, which marked the end of the Deutsche mark. The strategy had proven its value in the baptism of fire of the early 1980s. Later, it also successfully guided monetary policy in Germany through the challenges of German Unification and the ERM crisis in 1992-93 and in the preparatory stage for the European Monetary Union.

With the benefit of hindsight, the following interesting results emerge out of a very brief comparison of German and U.S. interest rates and inflation figures. First, short-term interest rates in Germany and the United States rose sharply in 1979, reflecting the restrictive monetary policy (see Figure 1). The German rates, however, did not rise as much as the U.S. rates and started to decline earlier. What is especially interesting is that long-term interest rates rose much less in Germany than in the United States. It is also worth noting that the decline in long-term interest rates in Germany occurred at an earlier stage, followed by a steady decline, until the end of 1985 (see Figure 2). Third, due to the vigorous action by

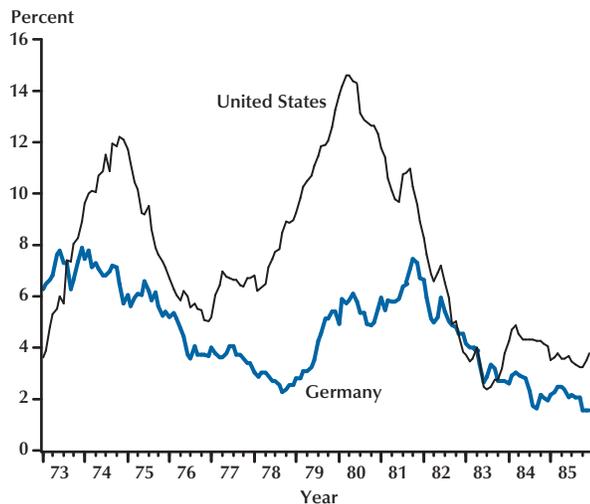
the Bundesbank, Germany experienced much lower inflation rates than did the United States. In fact, after its peak in 1981, when the inflation rate stood at 6.3 percent, the German inflation rate swiftly declined, reaching values of around 2 percent at the end of 1985 (see Figure 3). Fourth, the fact that the Bundesbank had successfully established a high degree of credibility with the public is also mirrored in the fact that nominal wage increases in the years 1979, 1980, and 1981 were considerably lower than their equivalents for the years 1973 and 1974 (see Figure 4).

## LESSONS

What are the lessons that can be drawn? Why was Germany in this period successful in terms of monetary stability? Several key aspects seem to emerge from this brief review of Germany's experiences from 1979 to 1985. To begin with, in early 1979, the Bundesbank was well equipped with a monetary policy strategy aiming at the maintenance of price stability over the medium term. The strategy was based on a consistent and

**Figure 3**

**Inflation in Germany and the United States (consumer prices, percentages per annum, monthly data)**

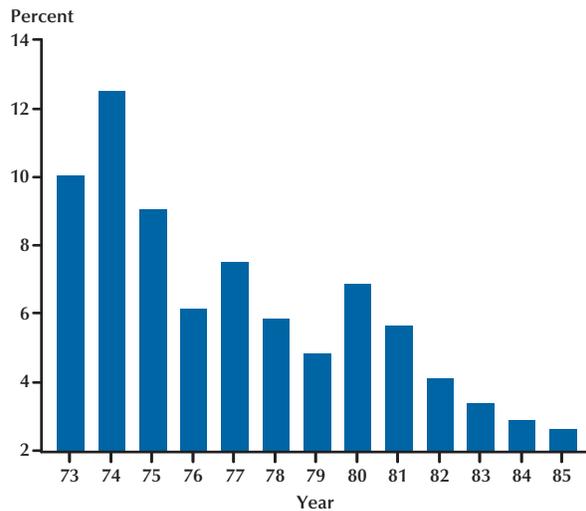


transparent framework, whose foundations were finally well understood by the public. Although in 1979 the strategy admittedly did not have a long-standing track record, it had been tested under real-life conditions and had been improved continuously. In doing so, it had managed to establish credibility, which in turn had started to set in motion a virtuous circle.

Germany had learned from the mistakes made at the time of the first oil price shock. When the second oil price shock hit the German economy, the Bundesbank was well prepared and—on the basis of its strategy of monetary targeting—acted with vigor and determination. Since the inability of a monetary authority to counteract first-round effects of such supply-side shocks had been clearly recognized, and in light of the experiences of the years 1973-74, the Bundesbank focused on avoiding possible second-round effects that could spread out into the economy. Following this clear orientation, the Bundesbank gave unambiguous guidance to the other economic decisionmakers as well as the public and, over a period of three years, kept a firm sense of direction.

**Figure 4**

**Growth of Average Monthly Wages in German Industry (annual percentage changes)**



It is fair to say, however, that the Bundesbank's policy benefited to a significant extent from the support of the high inflation aversion in the German public—which should be seen against the experiences with the hyperinflation in 1923 and the destruction of the successor currency ending in the reform of 1948—i.e., the German “stability culture” that had evolved over time after the Second World War. The goal of stable money was and has always been deeply rooted in German society. It was based on a consensus that was largely shared by the citizens. In this way, the German public, not least in critical times, has repeatedly proven to be a loyal ally of a stability-oriented monetary policy. Without this public support, the results might have been quite different. Conversely, the Bundesbank has helped to shape this stability culture in substantive terms. In this respect, the German experience could prove of use also for today's monetary policy.

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Why did inflation happen in Germany? The government printed huge quantities of money to pay striking Ruhr workers, making the German mark almost worthless. What was the Dawes Plan? A plan to help Germany recover by withdrawing French troops from the Ruhr and giving Germany American loans. Why did the Dawes Plan fail? The Great Depression restarted economic misery. What was Weimar culture like? New cultural movements were stimulated and writers and artists from around the world came to Berlin. When did Hitler develop his anti-Semitism? When he was living in Vienna. What was Mein Kampf? A book that Readers Question: Why does printing money cause inflation? Does this always occur? Summary. Examples of inflation caused by excess supply of money. Bank notes in Germany 1923 at height of hyperinflation. ADN-ZB (Aufnahme: Oktober 1923). US Confederacy 1861-64. During the Civil War, the Confederacy printed more paper money. This does not happen of course. (Similarly, why would manufacturers raise prices of their products just because the government prints more fiat money? Or does some other entity set the prices of goods?) How can people spend more if they don't have more? Sure, they can go in debt with credit cards, but debt is not equivalent to effectively having more cash.