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FROM INFLATION TO HYPERINFLATION: REASONS FOR GERMAN MACROECONOMIC IMPOTENCE IN THE INFLATION, 1918-1923.

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The hyperinflation that blighted the German economy in the years after World War I is probably the most popularised of all inflationary crises. Jonathan Schachter disentangles the political and economic forces that resulted in such dramatic price rises.

Introduction

"It pounds daily on the nerves: the insanity of numbers, the uncertain future, today, and tomorrow become doubtful once more overnight. An epidemic of fear, naked need" (Kroner, cited in Kaes 1995: 63). Such was the state of everyday life during the hyperinflationary period of the Weimar Republic. Why, though, had it come to this? Before the First World War, Germans were unaware of inflation, but even as their awareness increased, they had no clear understanding of the inflation experienced during the war (Borchardt 1991: 133; Peukert 1993: 62). After the armistice, German inflation was comparable to that of other defeated countries, but as time passed, the inflation grew worse. The government was increasingly dependent on borrowing, and the number of paper Marks in circulation soared. By November 1923, the value of the Mark against the Dollar had depreciated to approximately one trillionth (10^{-12}) of its pre-war value (Borchardt 1991: 137; Hetzel 2002: 8). There was an air of frenzied spending, so that consumers could purchase as many goods as possible before the Dollar value of their wages plummeted further. The Weimar economy was out of control.

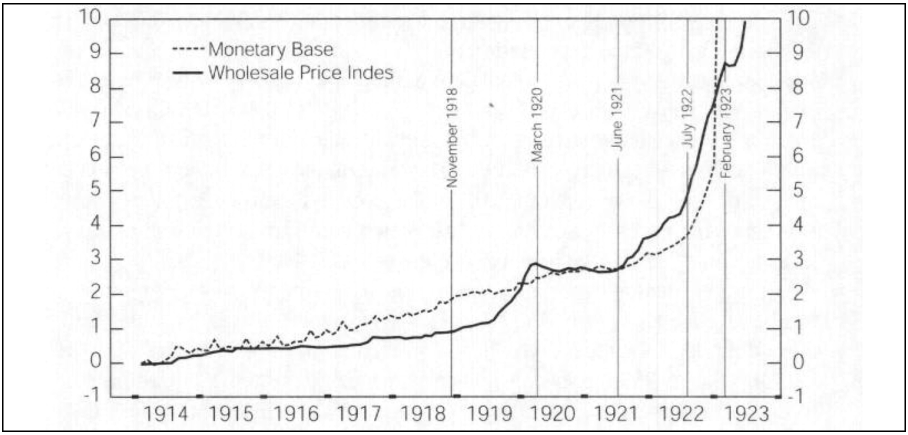
This essay will outline the reasons for the progression of inflation to hyperinflation, with a cursory definition of the important terms, followed by an investigation of several important reasons for the deterioration of the German economy to the point of crisis. Although it is possible to lay blame for the hyperinflation on Allied reparations demands, or mismanagement of the economy by the German government, it is more tenable to assume that various political and economic forces influnced the progression from post-war inflation to the catastrophic hyperinflation of 1922-1923; these included domestic, foreign, fiscal, and monetary policies.

In order to understand the phenomena of early Weimar economic history, it is important to understand the terms that economists use to analyse this time period. Inflation is the most important concept in the economic history of early post-war Germany. Although the concept is quite straightforward, most of the literature tends to take its meaning for granted. Quite simply, inflation is the rise in price levels. To a certain extent, prices rise naturally as the economy grows, but once this rate of increase exceeds 2.5 percent, it is called inflation. It tends to occur frequently in post-war economies, but may also be caused by increased demand for loans and government spending, as well as excess demand driven by a fear of diminished purchasing power (Ammer & Ammer 1984: 229; Sloman 1997: 426-8). Economic historians can measure inflation in various ways to express the variance and eventual magnitude of inflation in the early years of the Weimar Republic. The most common examples are the wholesale price index, the number of Marks in circulation, the Mark exchange rate (usually against the US Dollar), the prices of import goods, and the cost of living (Brescioni-Turroni 1937: passim).[1] Each of these indicators gives us a richer understanding of the inflationary German economy from 1914 to 1923. Hyperinflation is a rapid and extreme form of inflation that depreciates purchasing power by reducing a currency’s value to almost nothing. Hyperinflation tends to exacerbate itself. The expectation of further currency depreciation on a monthly, daily, or even hourly basis causes individuals and businesses to spend their money on goods rather than to wait for the money to become worthless. Producers tend to stockpile their goods, knowing that their prices will undoubtedly increase, while debtors tend to postpone repayment of their debts, knowing that their real value will diminish (Ammer & Ammer 1984: 408-9; Sloman 1997: 429). Hyperinflation, however, is not the necessary outcome of inflation; in most cases, governments control inflation, hence, there must be reasons for the massive extent of the inflation in the German case.

Between November 1918 and November 1923, the inflation had four distinct phases, as is clear in Figure 1.

[1] These expressions of the extent of the inflation are also throughout the other works cited.

Figure 1: Monetary base and wholesale price index (Holtfrerich 1986, cited in Hetzel 2002: 5)



Notes: Data normalised with 1913 equal to 1. Observations are the natural logarithm. The monetary base is cash in circulation plus commercial bank deposits in the Reichsbank.

One must be aware that this depiction of inflation in Germany obfuscates the fact that there was a two-fold increase in prices during the war. The first phase of the post-war inflation ended in Spring 1920. The subsequent phase of stability continued until Summer 1921, after which the inflation grew into hyperinflation. Immediately after the war, the government aimed to maintain political stability during the demobilisation, largely by minimising unemployment. The Versailles Treaty burdened Germany with war guilt and reparations, which were still to be calculated. Inflation rose until 1920, when a degree of confidence was restored to the German economy by the successful suppression of the Kapp Putsch and the left wing uprisings in the Ruhr, and by Erzberger's tax reforms. However, the reparations demands issued to Germany in the London Ultimatum in May 1921 increased the rate of inflation. Hyperinflation began in 1922, after the Morgan Committee refused to endorse Germany's request for reparations loans, and after the murder of Finance Minister Walther Rathenau (Balderston 2002: 34-6; Borchardt 1991: 63, 69). By the peak of the hyperinflation in November 1923, prices had risen enough to require the printing of currency in denominations up to 100 billion Marks. Clearly, the four inflationary phases are distinct and reflect changes in

Germany's political climate (Balderston 2002: 51-2; Brescioni-Turroni 1937: 24-5).

Political Causes of Weimar Inflation

Historians such as Borchardt argue that the inflation was, above all, a political phenomenon. There is no doubt that the instability of post-war political institutions in Germany, and the enormous foreign and domestic demands placed upon them, intensified the inflation. The government was left with a debt that was approximately half the value of national wealth, and four times the Reich revenues of 1913. Increased taxation was impracticable for two reasons: the tax system inherited from Wilhelmine Germany was unable to cope with inflation, and the public reaction to increased taxation in an already unstable republic could have had disastrous consequences (Borchardt 1991: 133-4; Hetzel 2002: 2-3). However, we cannot be sure whether these consequences would have been more disastrous than the hyperinflation. John Maynard Keynes argued that the plethora of burdens from Versailles—including loss of land and resources, in addition to the reparations—would cripple Germany and have dire effects on the rest of Europe (Keynes 1995: 5, 225). Steven Webb's analysis of Germany's dilemma was quite cogent: "Democracy, capitalism and reparations–the Germans might have achieved any two, but the Allies insisted upon all three within less than two years after lifting their blockade" (1986: 57). These irresolvable political tensions necessarily contributed to the early inflationary periods.

Indeed, there are also political causes of the stabilization of Spring 1920. The failed Kapp Putsch, and the brutal suppression of the left-wing risings in the Ruhr, increased confidence in the stability of the German political system, and temporarily reduced the rate of inflation (Peukert 1993: 68-70). This stabilization ended in May 1921 with the London Ultimatum, which demonstrated the effect foreign affairs had on the domestic economy of the Weimar Republic. The Ultimatum set the aggregate amount of reparations to 132 billion gold Marks and demanded an increase in annual payments from the 2.24 billion Marks paid in the year ending June 1920, to 4 billion Marks per year, with a price escalator (Borchardt 1991: 136-7; Hetzel 2002: 3, 5). By that point in time, the inflation rate began to rise again. While the political policies affecting inflation were domestic before the Ultimatum, from May 1921 onward, it was foreign policy crises that, for the most part, controlled inflation in Germany (Balderston 2002: 52). Webb argued, counterfactually, that the hyperinflation could have been averted had the commencement of cash reparations payments been postponed by one year to allow German finances to continue to stabilize and to prevent the decimation of the entire tax system (1986: 62-3).

Although the inflation was mismanaged by the government, these mismanagements alone did not cause the crisis of 1922-1923. The murder of Walther Rathenau in July 1922 shattered any remaining confidence in the political and economic stability of the Weimar Republic. His murder, shortly after the murder of Erzberger, demonstrated the domestic social and political turbulence in Germany, including an increasingly infuriated far right, as well as *Völkisch* currents of anti-bolshevism and anti-Semitism (Peukert 1993: 73-4). As foreign investors lost confidence in the German economy and moved their assets out of Germany, the value of the paper Mark plummeted. The Weimar Republic faced a liquidity crisis, and the only recourse was for the Reichsbank to print more bills. As the hyperinflation intensified, though, the Reichsbank was unable to print bills fast enough to satisfy the soaring prices, and incidentally the real money supply shrank (Balderston 2002: 45ff). According to Keynes, "There is no subtler, no surer means of overturning the existing basis of society than to debauch the currency" (1995: 236). Unfortunately, Germany's volatility limited its ability to experiment with deflationary measures to prevent currency depreciation.

The final stage of the hyperinflation began with the Franco-Belgian occupation of the Ruhr on 11 January 1923. The occupation had severe political, social, and economic repercussions, and the hyperinflation intensified itself until its peak in November 1923. By January, wholesale prices had already inflated to 2,783 times the 1913 level, but between January and November, wholesale prices grew by a factor of over 453 million (Hetzel 2002: 6-8; Peukert 1993: 64, 73). France's goal at Versailles had been to prevent German rearmament by slowing German economic growth, and supplanting Germany as continental Europe's largest economy; the French continued to demand reparations from an unsteady Germany. In his study of the iron and steel industries, Feldman argued that the recovery of the German iron and steel industries, and the French dependence on coke from the Ruhr, compelled France to occupy the Ruhr. France then garnered a better bargaining position for the upcoming repatriation of German tariff control in 1925, and subsequent negotiations (Feldman 1977: 346-8). From January until September, the policy of passive resistance—adopted jointly by industry and government, and advocated by Chancellor Cuno—promoted a reduction in productivity. It manifested itself in wage increases, shorter work days, and the shifting of resources out of the Ruhr. Germany incurred great expense by subsidising the unproductive labour costs of the resistance. This was the first major example of collusion between government and industry since the war, and the sacrifice of productivity revealed the primacy of political factors over economic factors in directing German policy. Cuno's resignation in August led to Stresemann's 'Grand Coalition,' which could not agree on deflationary measures to address the asymptotic depreciation of the Mark, but ended the passive resistance (Feldman 1977: 350-1, 393-5; Webb 1986: 56, 58). The economy looked increasingly hopeless, and the realisation set in that the currency had collapsed and could only be rectified by introducing a new currency, the *Rentenmark*, on 15 November. One Rentenmark equalled one trillion paper Marks. The subsequent stabilisation of the paper Mark, on 20 November, allowed for a fixed exchange rate between the Rentenmark and the Dollar (Balderston 2002: 58-9). Thus ended the first economic crisis of the Weimar Republic.

Economic Causes of Weimar Inflation

In addition to political factors, there were economic forces driving the German economy towards hyperinflation. These were rooted in the fiscal and monetary policies of the German government's Reichsbank. Bresciani-Turroni's work applied quantity theory to the inflation in Weimar Germany. He argued that, "German experiences show us the fundamental importance in the determination of the level of internal prices and of the currency's external value, of the quantity of money issued by the Government" (1937: 398). Inflation was driven by a growing supply of money. As prices rose, there was a growing demand for money. Furthermore, the German government's method of financing its deficits forced an increase in money supply. In addition, as prices rose, more money had to be printed. The Allies preferred this explanation because it suggested that Germany was intentionally destroying its own economy to escape the costs of peace. This view is quite unrealistic though, because the inflation relentlessly limited the government's available policy options. Other historians have argued that restrictions upon Germany necessarily caused a trade imbalance between imports and exports as prices rose, and the value of the Mark depreciated, this worsened. Contrary to quantity theorists, balance-of-payment theorists argued that the trade imbalance drove the inflation, causing the increase in money supply. The balance of payments model has been applied to theories on labour forces and inflation, in which the low Dollar value of the Mark led to demand for higher wages and consequently, higher prices (Balderston 2002: 29, 39-43; Peukert 1993: 62).

Regardless of the causal elements of the inflationary cycles, the inflation imposed limitations on German finances that would direct the country's fiscal policy. As the rate of inflation increased, the government's tax revenue decreased significantly in value due to the lag between assessment and collection (Borchardt 1991: 137; Hetzel 2002: 9). Webb's article (1986) analysed fiscal changes in the period, and their effects on inflation. Socialists hoped to implement revenue-side reforms to balance the budget. Erzberger, a moderate, attempted to increase revenue with several tax reforms. In Winter 1919-1920, the government centralised the fiscal system by taking from the states the right to tax individuals' property and wealth directly. In March 1920, the government introduced a progressive tax on personal and corporate income. In addition to tax reforms, one-time levies were introduced, including the 'Reich's Emergency Sacrifice;' however, these were less effective. Although the 1920 reforms increased tax revenue by 20 to 30 percent, these measures were unable to cope with hyperinflation (Webb 1986: 47, 51-5). Even the fiscal reforms of March and August 1923, which aimed to combat the depreciation of tax revenues by imposing a fine for the late payment of taxes, were relatively ineffective (Brescioni-Turroni 1937: 70; Webb 1986: 55). There were also fiscal changes in government expenditures, which are more challenging to analyse during the hyperinflation because projected figures for expenditures were irrelevant. During the entire inflationary period, there were three peaks of government spending; the demobilisation in 1919, the commencement of cash reparations payments in 1921, and the costs of resisting the occupation of the Ruhr in 1923 (Webb 1986: 55-8). The expectation of inflation in such an unsteady economy augmented the rate of inflation further. Most economists agree that monetisation of the debt from the beginning of the war was the key fiscal and monetary policy behind the German inflation, but other political factors affected its magnitude (Balderston 2002: 42-3, 47-8; Borchardt 1991: 132-4; Hetzel 2002: 2).

Conclusion

From its inception, the Weimar Republic faced extreme political, social, and especially economic pressures; although the factors that characterised the Weimar Republic are often regarded as existing only between the wars, the period also demonstrated the peace-time continuity of those endogenous and exogenous tensions in Germany that underpinned both wars. The instability of the German political climate resulted in a depreciated value of paper Marks, an increased money supply, and a rise in prices. The phases of the inflation coincided with major political events, which directly affected the course of the economy. As Germany appeared to grow more politically unstable, foreign investors lost all confidence in the German economy. Even though governments changed frequently during the hyperinflation, the foreign and domestic tensions of the Weimar Republic limited their abilities to control the economy. The hyperinflation was contingent upon the complex and interconnected domestic, foreign, fiscal, and monetary pressures that persisted through the inflationary period, and indeed throughout much of German history in the first half of the twentieth century.

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