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# DISCUSSION



# Hyperinflation, depression, and the rise of Adolf Hitler

#### Alessandro Roselli

University of Buckingham, UK

Correspondence

Email: roselli1ale@gmail.com

# 1 | INTRODUCTION

The coronavirus pandemic and its economic consequences, in terms of the monetisation of dramatically increasing public debts and of a sudden output collapse, have rekindled debates that are never entirely dormant on the economic and political consequences of traumatic, globally relevant events. The present pandemic has frequently been compared to a large-scale war, and attention has been devoted to the consequences of both. The fiscal and monetary policy response to the coronavirus crisis has evoked, particularly in Germany, memories linked to World War I and its aftermath: the chain of events leading from money oversupply to hyperinflation and, in 1933, to Adolf Hitler's appointment as Chancellor. Today, the pandemic has added further impetus to an aggressively accommodative monetary stance, particularly in the eurozone, and questions are raised about the risk of inflationary pressure and, in the long run, of unwanted political consequences.

There are two issues: one is related to past developments, on which we have by now extensive historical research, while the other is concerned with the relationship between the money stock and the price level under stressful circumstances, in an environment of profound uncertainty. I shall not tackle this latter issue. Here I want only to stress that all periods have their own specific circumstances, and to draw similarities in their consequences is at best hypothetical. I focus on past events, aware that interpretations of them differ. As a response to present-day inflationary risks and political developments, I shall try to formulate in the final section what is, at best, an educated guess.

To address the historical side of the matter in a short article is not easy; a long sequence of events must be considered, and their relative relevance is influenced by the 'mode of thought' of the writer. Moreover, this sequence raises the issue of causation, an issue that is much debated in historiography and puts to severe test the Latin dictum *post hoc, ergo propter hoc*, a dictum which, like many others coming from antiquity, is ambiguous: neither wholly wrong nor wholly right.

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#### 2 | GERMANY AFTER WORLD WAR I

My 'mode of thought' attaches great significance to Germany's monetary system. The introduction, or the demise, of a country's monetary regime is heavily influenced by war. A case in point is the gold standard, which was introduced in Germany after Prussia's victory over France in 1870, thanks to massive reparations paid by the defeated country. But more intriguing is the apparent survival of the gold standard in interwar Germany, notwithstanding the country's devastating defeat in World War I and the burden of reparations to be paid to the Allied powers.

Many well-researched studies on post-World War I Germany deal with reparations due from Germany during the Weimar Republic of 1919–33, the Reichsmark stabilisation, the boom and bust of the German economy during the 1920s, and the coming of Hitler as Reich Chancellor. These studies may emphasise the political and diplomatic aspects or the analysis of Germany's economic aggregates and policies; but, apart from the studies of the hyperinflation of 1923, they have rarely adopted an explicit monetary perspective of that period. This is in a way surprising, given that the whole interwar period saw all the anguish and convolutions that accompanied the shift from a commodity-based monetary regime to a 'chartalist' one (that is, a regime of money creation by the state, unbound by any reference to an objective – metallic – standard).

The shift was traumatic because the pre-existing commodity-based regime, the gold standard, was a pillar on which the whole structure and economic organisation of a modern society rested. As evidence of the attachment to the old regime, it is interesting that, even towards the end of the interwar period, in a generalised situation of nationalist economic policies and awareness of the gold standard's demise, the Tripartite Currency Agreement of 1936, between the United States, Britain and France, established a sort of de facto gold-dollar arrangement. (This agreement in some ways resembles the Bretton Woods system that emerged after World War II.)

I would like to reconsider the Weimar Republic from this monetary perspective, in order to show how its monetary arrangements and initiatives had a decisive influence on the course of events leading to Hitler's accession to power.

At the start of World War I, the main belligerents were all on the gold standard. According to the gold content of the respective currencies, the Reichsmark gold parity meant an exchange rate of 4.2 Reichsmarks to the US dollar, 20.4 to the British pound, and 1.23 to the Italian lira and the French franc. The enormous expansion of war-related expenses led to gold standard suspension and to high, if different, rates of inflation that were particularly severe in some of those countries, and to hyperinflation in Germany.

The war had also given rise to a complicated web of inter-Allied loans, leaving the United States and Britain as net creditors (the US in particular), and France and Italy as net debtors. What is of interest here is the German position: free of foreign debt, Germany was hit by the 'article of shame' (article 231 of the Versailles Treaty of 1919), which named Germany as solely responsible for the war tragedy. In 1921, the London Schedule of Payments placed on Germany's shoulders war reparations amounting to 132 billion gold marks (31.4 billion USD) to be paid to the Allies. The debt was represented by three categories of bonds, named A, B and C. The first two categories together amounted to 50 billion gold marks, both with an annual service of 6 per cent.<sup>2</sup> The Reparations Commission then changed the terms of the debt service, partly linking it to German exports. Nobody seriously expected the category C bonds, for the remaining 82 billion gold marks, to be issued *sine die*.

Was that debt sustainable? The reactions of J. M. Keynes and others were strongly negative. An available if uncertain estimate indicates a German national output of between 38.1 billion (1918) and 44.5 billion (1924), in 1913 marks (Webb, 1989). This would mean a foreign debt of

around 120-130 per cent of national output. These figures are very high, in particular for a defeated country, but not particularly onerous from a current perspective: "by no means impossible to bear" (Ritschl, 2012, p. 5). It should be taken into account that Germany's national output had not suffered a collapse during the war. Germany was on the one hand granted a respite from the enormous burden of war expenses, but on the other hand had to bear, in addition to ordinary budget expenditure, the cost of assistance to war victims, of servicing the domestic debt incurred by the war, and of the first instalments of reparations.3 This would have required a big jump in taxation from the relatively low pre-war level, but a necessary fiscal reform was not fully implemented and no long-term debt financing pursued. The German government was reluctant to raise taxes, amid the demoralisation and social unrest that typically follow a dramatic military and social collapse (Germany had suffered a short but violent Bolshevik revolution in 1918, after its defeat and the fall of the monarchy). At the same time the government followed the line of least resistance on inflation, prioritising the level of output, not its distribution. As for the issue of long-term debt as a substitute for taxation, inflation on the one hand, enabled the government to pay off its domestic - including war - debt, but on the other hand it undermined the confidence it needed to issue new debt.

Von Havenstein, the Reichsbank president, faced a dilemma: either refuse to buy up the floating government debt, thus obliging the government to issue bonds at a prohibitive interest rate, or consent to discounting those government bills. To avoid a severe economic contraction, he chose the second option: printing money was favoured.

This complacency about inflation worsened the exchange rate, implying a bigger reparation bill hence the government's need for new Reichsbank loans, and further inflation. Complacency finally muted into panic. In the midst of hyperinflation and of the Allied military occupation of the Ruhr region in 1923, a new bank, the Rentenbank, was established as a temporary stop-gap measure to restore confidence, with a new currency, the Rentenmark, backed by German land and industry through a mandatory mortgage on properties. It was understood that the new currency's value would be identical to the pre-war gold mark, and the Rentenbank's power of issue was rigidly constrained by an extreme commodity-based monetary regime. Alongside the Rentenmark, however, the devalued paper mark continued to circulate, its exchange rate against the dollar steeply worsening, well beyond 4,200 billion to the US dollar, in November 1923. The government of Chancellor Gustav Stresemann decided to stabilise the paper mark at that level, and to fix its exchange rate at 1,000 billion against the Rentenmark: which meant exactly 4.2 Rentenmark – or the new Reichsmark – to the US dollar, that is, the pre-war parity.

This is the convoluted technical story of the Reichsmark stabilisation at 4.2 to the US dollar. The political story is that the United States and the United Kingdom – which, having suspended the pound parity during the war, was fully committed to returning to it (Capie & Wood, 2012) – wanted the pre-war gold parity also for Germany. It is not surprising that, according to Costantino Bresciani-Turroni (1937), one of the first economists to devote an important study to this topic, it was an arbitrary rate, which bore no correspondence with the market rate.

In addition to the Allies, the main players in this drama were the German government and Hjalmar Schacht, the government-appointed currency commissioner. Schacht said later that he would have chosen a smaller gold unit,<sup>4</sup> but this seems at odds with the fact that, in his position, he had masterminded the whole transition to the new parity. Some role playing may have occurred, while these players seem not to have even attempted to use analytical instruments such as purchasing power parity or exchange equation calculations. Again, this is unsurprising. Any process of parity fixing ends up being a tug-of-war of conflicting interests. A lower chosen

parity would have led to a more competitive economy, making exports cheaper, but would have made the burden of reparations heavier.

By choosing the gold standard at the pre-war parity, the Weimar government targeted the exchange rate rather than domestic monetary conditions, in this way tying its own hands whenever pressure from creditors conflicted with pressure from the German public to sustain the domestic economy.

Awareness of the overall importance of Germany (still among the world's leading economic powers) not only in the European context prompted decisive support from the Allies, particularly from the United States. The Dawes Plan of 1924 was intended to put German stabilisation on a firm footing by rescheduling German reparation payments, ending the Ruhr occupation, and envisaging a large international loan to Germany (800 million RM, around 190 million USD). This was mostly an American loan, arranged by a consortium led by the Morgan bank.

Within successive agreements linking reparation payments to German exports or other variables, the 'transfer problem' (that is, the transfer of resources from Germany to the Allies) found a solution through a de facto linking of those payments to foreign credit. Following the Reichsmark stabilisation, restored confidence brought a huge inflow of foreign, mostly American, capital,<sup>5</sup> and was accompanied by a phase of economic growth, in real terms of almost 22 per cent over the period 1924–28 (with a minor contraction in 1926). It is debatable whether this was a 'golden age' for the German economy: the high level of interest required to maintain the parity casts a shadow over its economic performance (James, 1999), but the growth rate compares well with those of other European countries in the same period. A sort of Americanisation of the German economy introduced updated (automated and mechanised) modes of production; industrial mergers and cartels increased efficiency. The cultural climate and social mores were also strongly influenced by the United States.

The current account remained in deficit, but the capital inflow largely made up for the deficit and allowed a substantial increase of Germany's international reserves. At the same time, however, the foreign investment position became increasingly negative after 1924. The high level of the official reserves was, therefore, misleading. It was in fact misread by the Agent General for reparation payments, Parker Gilbert. He insisted on the German capacity to repay while the German government resisted reparation payments, at the same time remaining uncomfortably stuck at the old parity: "At the present time it would be particularly foolish to make a high rate of exchange a matter of pride ... in Germany, gold parity is imposing palpably too severe a handicap" (Hawtrey, 1931, p. 145).

When in 1928 the US Federal Reserve changed tack, raising the interest rate to curb stock market speculation, capital inflows to Germany dramatically decreased. In 1931, a net outflow started, and capital abandoned Germany en masse. Germany was unable to contain the onset of the Great Depression by lowering interest rates, as it had to defend the Reichsmark parity. Its opposition to reparation payments, set against its dwindling foreign investment position, prompted a revision of the debt situation. A new arrangement, the Young Plan, was adopted in 1930, and the responsibility for collection and distribution of reparations was moved to the newly established Bank for International Settlements (BIS) in Basel, as a sign of the depoliticisation of the whole problem. The new terms of repayment were heavy for Germany.

Unhappy with the Young Plan, Reichsbank president Hjalmar Schacht resigned. A new, 35-year international loan to Germany, for 300 million USD – the Young loan – was arranged. The loan did not provide transfer protection to foreign private creditors, a protection that had previously favoured capital inflows to Germany. Two-thirds of it went to creditor nations as reparations payments. It was clear that Germany could no longer rely on foreign inflows to pay for reparations.

Capital outflows shrank the gold reserves below the mandatory 40 per cent of the currency in circulation; tight policies by the German government to protect the gold parity brought deflation and recession from 1929. In June 1931 the US president, Herbert Hoover, announced a one-year moratorium on all intergovernmental debt payments (reparations and inter-Allied), on condition that the Reichsbank restricted access to its discount window.

The banking system, whose deposits consisted largely of foreign funds, was affected by the outflow of short-term capital, and unbalanced by its poor-quality long-term lending. Unable to rely on government support, the system collapsed in a general crisis after the failure of a major bank, the Darmstädter und Nationalbank (Danat), which led to a two-day bank holiday on 13 July 1931.

Devaluing the Reichsmark and pegging it to the pound sterling (which was to leave the gold standard in September 1931) came to be regarded as a possible alternative to deflationary policy. The new Reichsbank president, Hans Luther, claimed to have been flooded with proposals advocating this measure. But there were doubts that any export increase would be effective given the growing protectionist wave (for example, the American Smoot–Hawley Tariff of 1930), and it would frustrate attempts to obtain concessions on reparation payments. There were also fears of an inflationary spiral, prompted by the memory of the immediate post-war period and the certainty of the increase in the cost of servicing the foreign debt.

The path followed by Chancellor Heinrich Brüning was to continue adherence to the gold parity and to maintain the deflationary measures of high taxation, cuts in wages and prices, and reductions in social programmes. The whole policy was seen by many as a failure of the capitalist system, and it increased resentment towards the Allied Powers. Importantly, Brüning on 15 July 1931 established a regime of foreign exchange control, which would then become a sort of trademark of subsequent Nazi policy. Schacht, returning to the helm of the Reichsbank with Hitler's accession to power in January 1933, was seen as a 'Hitler's magician' (Muhlen, 1939).

Currency controls meant, over time, three general laws, up to 50 decrees of amendments, around 500 administrative rulings, a number of clearings, compensations and payment bilateral agreements: a "juristic maze" (Ellis, 1940, p. 9). A wide range of categories of 'blocked' (inconvertible) marks was created. The constraints of the gold standard, never formally abolished, became, thanks to these exchange controls, less stringent, and the Reichsbank reopened the discount window, helping banks to recover.

The price paid in the Depression was high indeed. Between 1928 and 1932 – the peak and trough of the cycle – real output fell by more than 16 per cent; the money stock<sup>6</sup> fell by 28 per cent (1929–32); consumer prices fell by 23 per cent (1929–33). Real wages had been kept high thanks to political arbitration and deflation, but this had pernicious effects on employment after 1929. Unemployment stood at 7.1 per cent in 1927, and at 31.5 per cent in 1932 with around 5.6 million unemployed.

Notwithstanding successive standstill agreements regarding German foreign private debt, the financial situation remained bleak. Brüning hoped to win concessions from creditors by complying with the gold standard orthodoxy, sticking to a policy of austerity. In May 1932 he was still confident that a renewed effort of international cooperation might put an end to reparations: in a speech to the foreign policy committee of the Reichsrat he said he was "in the last hundred metres from the finishing line" (Patch, 2006, p. 255). But at the end of the month he was dismissed, unable to keep together a coalition of forces necessary to preserve democracy, and replaced by Franz von Papen. It's almost ironic that, a few weeks later, Germany would obtain a de facto end to reparations with the informal Lausanne agreement of July 1932. The total amount of reparations paid by Germany under the Dawes and Young plans had been 11.3 billion RM: the war reparations were for the most part never paid.

Two successive rounds of elections were held in July and November 1932, amidst riots, political murders, assaults on party leaders and public slander. A general, Kurt von Schleicher, succeeded von Papen as Chancellor. He failed to attract the sympathies of conservatives, and flirted with the idea of an authoritarian, fascist-like corporate state and even a possible departure from the gold standard. Hitler had lost votes in the November election but the Nazis remained the biggest political party. Culturally conservative families, alienated from the cultural and political modernity the Weimar Republic stood for, and members of the professional, and mercantile and industrial bourgeoisie, reacted against the failures of the republic. Long-term psychological scarring effects of the post-war hyperinflation had never totally disappeared. The lower-middle class was afraid of being thrown into unemployment and deprivation. On 30 January 1933 Adolf Hitler was sworn in by President von Hindenburg as the new Reichskanzler.

# 3 | A LONG CHAIN OF CAUSES AND CONSEQUENCES

Causation in history is a difficult subject. In the field of economic history, the mechanical and logical methodology employed in economics, relying on quantitative data, has to be balanced against the use of other sources and attention to issues of a social, political and institutional nature. Far from narrowing the relevance of economic history, this approach gives researchers new opportunities, and contributes to filling possible gaps between economic, political, and social history.

In the time frame of ten years, from Germany's huge debt monetisation and hyperinflation (1923) to Hitler's accession to power (1933), there is an institutional continuity that motivates the study of this period as a specific field of enquiry. The sequence of events, summarised in section 2, is long. It includes Reichsmark stabilisation and gold standard re-entry, the Allies' support for stabilisation, the transfer problem connected with reparation payments, a short phase of economic growth, the collapse of the banking system and national output, deflation and massive unemployment, debt moratoria, recourse to exchange controls that de facto severed the link between gold and the German currency, social unrest and extreme political confrontation, and the arrival of Hitler at the helm of the Reich.

With the benefit of hindsight, we now know what happened after each stage of that sequence, and are tempted to say that each event is to be read as a necessary consequence of the previous one in a sort of steadily building causal pressure. In our case, the events are so many and so complex that the link between the first and the last cannot be so direct; all the others are also relevant. Moving from a *how* to a *why* perspective risks opening up the topic of counterfactual history, an intriguing intellectual exercise but not what history writing should be. Therefore, to assume that a single event – namely hyperinflation, the first event in the sequence – is the ultimate 'cause' of Hitler's accession to power seems to be a partial interpretation, mixing preanalytical assumptions with a complex of events difficult to disentangle. In the same vein, even the last phase (depression, lower-middle-class impoverishment, disillusion of the conservative classes) can be seen as the trigger of dictatorship, but again it would be reductive to neglect all the other developments – often unmeasurable and unforeseeable – that I have briefly described.

From a monetary perspective, the whole period shows that the gold standard, the emblem of the economic liberalism of the nineteenth century, was incompatible with the toil and trouble of the early twentieth century. With the demise of the gold standard, World War I and the interwar period marked the end of the first globalisation, leading all the main countries, regardless of their political regimes, towards defensive domestic measures and beggarthy-neighbour policies.

# 4 | WHAT NEXT?

Bearing in mind my remarks in section 1 about the difficulty of comparing different periods, what can we say about the similarities and differences between the Reichsbank and the European Central Bank?

There is in both cases a huge quantity of government securities, which the private sector would buy only at an interest rate higher than that at which the government would be willing to sell. In Germany after World War I, the expansion of the government's borrowing requirement resulted from the extraordinary expenditure on post-war assistance and war reparations, and from an unwillingness to raise taxes adequately. The Reichsbank would *passively* discount at the official rate all the debt the public wouldn't hold at that rate: mostly government but also corporate securities. The consequent enormous expansion of the monetary base provoked an increase in inflation expectations and further incentives to monetise debt.

In the eurozone, in addition to the need to incentivise an anaemic recovery after the Great Recession of 2008, it was felt necessary to align as far as possible the yields of the bonds issued by the different member states of the eurozone, in order to diminish their spread. Quantitative easing programmes (also involving corporates, as in 1920s Germany) were *actively* enacted – albeit by purchasing debt on the market rather than at the issue – and more recently strengthened by the economic consequences of the pandemic, resulting in a strong growth of the monetary base.

But the Reichsbank's and Eurosystem's figures are hardly comparable. In 1922, the Reichsbank had around 79 per cent of outstanding government debt (Deutsche Bundesbank, 1976). In 2020, the Eurosystem, as a consequence of quantitative easing programmes, held securities (mostly, but not exclusively, government securities) for 40 per cent of eurozone public debt (European Central Bank, 2021). To the increase in the high-powered money corresponds an increase in the money stock, in Germany in the early 1920s and in the eurozone in very recent times. Between 1918 and 1922, the money stock (M1) climbed in Germany from 52 billion to 3,061.8 billion RM. This would lead, in 1923, to a currency circulation of 46,507,425 billion RM<sup>9</sup> ('when money dies' 10). In the eurozone, in the longer period of five years between the start of quantitative easing programmes (2015) and 2020, M1 and M3 have increased respectively by around 55 per cent and 34 per cent: less than the increase in the monetary base of about 166 per cent. The money stock's growth is subdued, with stagnant output. Is this the result of a credit crunch arising from banks being burdened by the heavier regulation that followed the Great Recession of 2008, or of weak demand by the private sector, notwithstanding interest rates of almost zero per cent?

More recently, it has been observed that the money stock in its wider definition – M3 – is picking up, feeding inflation. In the case of the eurozone, the increase seems to affect M1 more than M3, currently growing respectively at an annual rate of around 16 per cent and 12 per cent, perhaps the result of the eurozone's financial structure being more bank-oriented than those of other major countries. Would this mean an increase in economic activity, or in inflation, or in both? Would a certain level of inflation necessarily be a negative development? The answer to these questions is difficult, and structural, long-term factors are mixed up with cyclical trends. According to some scholars, a sort of 'secular stagnation', à la Alvin Hansen (1939) – which it is not possible to discuss in this short article – might prevent any vigorous recovery and condemn us to a world of low income, low interest rates, and low inflation. From a cyclical perspective, even a quantitative approach does not forbid us to hypothesise that an expansion of the money stock, by any measure, is accompanied – on the other side of the quantity equation – by different mixes of price increases and real output growth. In addition, we should note

a growing (if premature) attention to tax increases to counteract the large growth, and monetisation, of government debt and to answer the question of who is going to foot the bill. On the social and political side, we are not threatened by a Bolshevik revolution or a revanchist putsch, even though populist tendencies have prompted, and may prompt again, some social unrest. On the whole, our institutions are definitely less shaky than those of the Weimar Republic, and we may look to the future in a more confident, less dark way than the Reichsbank of the 1920s did.

Two factors, however, appear important, both common (again) to early 1920s Germany and the present day: the tendency to assert the prevalence of the national interest, and the features of the institutional and operational relations between governments and central banks, which means the degree of influence of the former on the latter. Questions are therefore legitimate, not only in Germany and unrelated to the Weimar Republic's experience, about the risk of inflationary pressure stemming from the current extremely accommodative monetary policy.

About the former factor, organised labour is currently – as Paul Samuelson (1997) noted – in a 'cowed' state, but a decline in globalisation and an increasing focus on domestic considerations may strengthen national trade unions' pressure on wages. As for the second factor, central banks must maintain their independence of judgement, and not be prevented from effecting a timely 'normalisation' of interest rates when spikes in inflation make this necessary.

#### NOTES

This article is largely based on my book *Money and Trade Wars in Interwar Europe*, Basingstoke: Palgrave Macmillan, 2014.

- <sup>1</sup> Less so in the US, whose gold standard suspension was also brief.
- <sup>2</sup> The difference between categories A and B is not relevant to our purposes.
- <sup>3</sup> 'Interim payments' in 1919 and 1920 would be reckoned towards the amount due for reparations.
- <sup>4</sup> Two lectures delivered on 21–22 September 1926 at the Foreign Press in Vienna (Bank of England archive, OV 34/115).
- <sup>5</sup> BIS statistics do not confirm the widespread opinion that it was mostly short-term capital.
- <sup>6</sup> Currency, demand and time deposits.
- <sup>7</sup> A good example of counterfactual history would be the following: what if Brüning was not dismissed but remained in power until the Lausanne agreement a few weeks later? Would he have been able to relax his policy of austerity, and so avoid the tragedy of Hitler's dictatorship?
- <sup>8</sup> In the balance sheet of the Eurosystem, public sector securities alone accounted for around 33 per cent of the outstanding public debt of the eurozone.
- <sup>9</sup> The bank deposits figure is unavailable.
- <sup>10</sup> The title of a chronicle by Adam Fergusson (1975).
- <sup>11</sup> I mean this as a factual statement, not as a value judgement.

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