

**GoldMoney Foundation**  
**“Statistical Gold Analysis Worldwide”**

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**Short notes on the main economic developments and monetary history since mid 19<sup>th</sup> century: Canada, France, Germany, Italy, The Netherlands, Spain, UK, and USA**

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## 2.3. A short note on Germany's main economic developments and monetary history since the mid 19<sup>th</sup> century

Simone Selva <sup>10</sup>

### 2.3.1. Introductory notes

Changes and overall trends of the monetary and macroeconomic variables featuring the history of Germany since its unification throughout the twentieth century accounts for a national case study which can be regarded as a good case to show the close correlation between the size of the modern state's economic commitment to economic activities, the burden of money supply, the fiat money in circulation share of broad supply, and the ups and down of inflation and economic growth. In the history of Germany since its unification (1871) this correlation followed two paths very different each other:

(1) Before the Second World War (WWII), inflationary spirals and skyrocketing hyperinflation periods followed closely a steady expansion in government spending and were met through an expansion in the monetisation of debt—and as such the currency in circulation share of total money supply (S. B. Webb 1984, pp. 501 ff.)

(2) Afterwards, following the historical post WWII currency reform, price stability became the hallmark of West German monetary and fiscal policy, with a continuous insistence on keeping the discount rate and inflation rate stable (Battilossi-Foreman Peck and Kling 2010, p. 362). In this respect, the interwar fierce hyperinflation experience, which in Germany proceeded and followed the 1931 *Reichsbank* decision to suspend the free convertibility of the *Reichsmark* into gold, marked the way after WW II the German authorities shaped the money stock and used the available monetary policy instruments.

In this brief report, we will follow this interpretative sketch to shed light on the overall meanings of the data set reconstructed herewith. It is worth noting that during both periods the Deutsche central bank, namely the *Reichsbank* and the *Bundesbank* respectively, enjoyed substantial independent roles in either issuing banknotes or overseeing monetary stability (Dickhaus 1996 and 1998).

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<sup>10</sup> With the collaboration on data collection of Prof. Claude Diebolt.

Due to a variety of reasons, the most suitable start date to draw up a coherent account of the German economy's monetary and economic history, as well as its macroeconomic dynamics, is the country's unification in 1871. Basically, three arguments make the case for this periodisation: first, it is by this decade that the German economy enjoyed a truly monetary unification with the establishment of the *Reichsmark* and the dismissal of the Thaler, its Prussian predecessor. The *Reichsmark* set the stage for a single currency area for the new German nation-State. Secondly, it was only during the 1870s that a single central bank was established: this led to centralise both the right to issue banknotes and coins, and the power to keep under control paper currency payments. Thirdly, it was by 1871, as late as most West European countries, that Germany joined the classical gold standard, which abandoned by 1913-14. Furthermore, it was only after Germany's unification that the revenue system of the State was to some degree unified and an homogeneous tax system based on personal and direct taxes took place. This expanded revenues and the central government's gross receipts (Spoerer 2010).

### 2.3.2. Reserves and Money

The main characteristic of the classical gold standard shared by most countries which adopted mono-metallism was that money in circulation included both (gold) coin money and paper currency. Germany adopted this monetary system too, but what made the German case different from other classical gold standard countries was that only the newly created *Reichsbank* could issue paper money (thus a monopoly in notes issue), whereas in other countries, noticeably the United States, even the commercial banks were empowered to issue banknotes (Busch 2008). It is worth noting that during this period the ratio of metallic (gold) money in circulation to the overall money supply did change in a very different way with respect to most gold-pegged countries. In fact, during those decades prior to World War I, in many industrialised countries the upward economic growth required an increasing amount of gold which could be supplied only to a rather limited extent by mining or through non monetary means. This tendency led the share of metallic (gold) coins in broad money supply to decline even as total money supply tripled. In contrast to this tendency, in Germany, as our data shows, both metallic money in circulation and total money supply expanded, though metallic money increased at a pace slower than broad money supply.

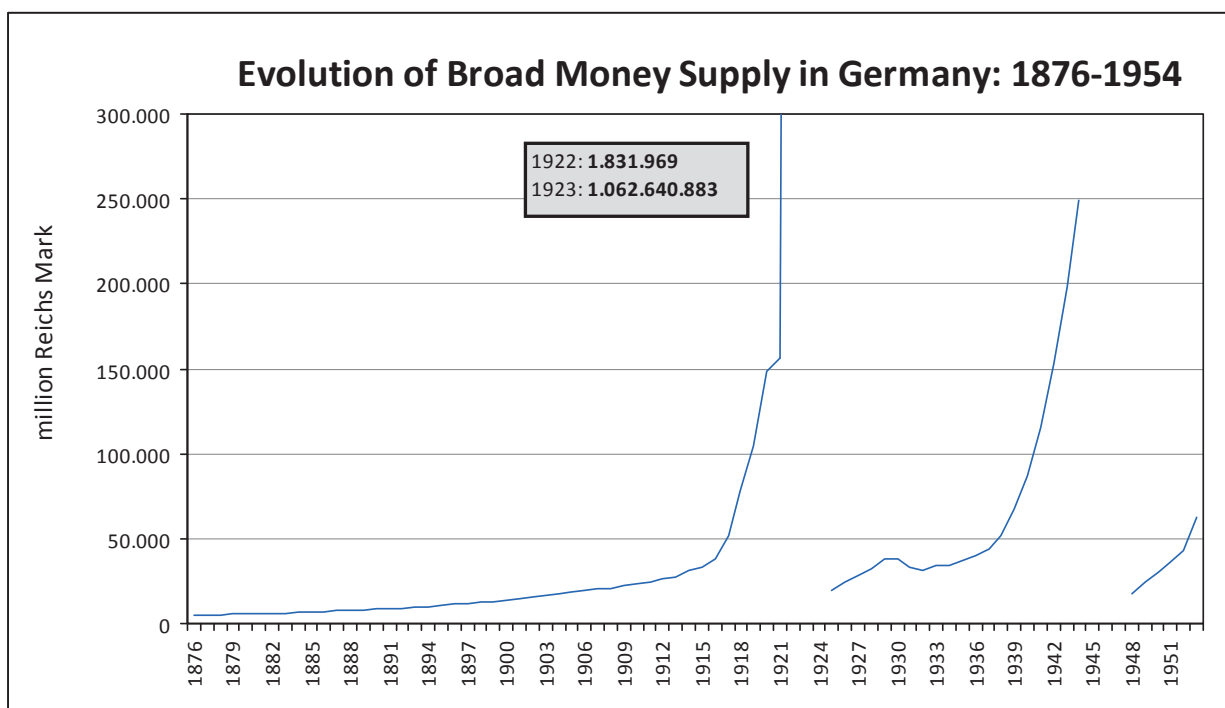
Following the 1910s' inflationary decade, culminated with the 1922-1923 skyrocketing hyperinflation period, between 1924 and 1931 Germany joined the so-called gold-

bullion standard, a commodity-pegged system where neither the Government coins gold nor gold coins circulated as money, as well as it could be used as reserves by commercial banks. During those decades, the German business community could resort to gold bars only to import or export goods, not as currency for domestic transactions. To this end, the German *Reichsbank* sold to or bought from commercial banks and enterprises gold bullions in return for its banknotes. During this decade proceeding Germany's final leaving of the gold standard, gold reserves and, above all, metallic money in circulation should be set in this historical framework and interpreted accordingly.

Figure 2.3.1



Figure 2.3.2



The period stretching from the eve of WWI to the eve of the early 1920s hyperinflation is a key phenomenon in order to analyse the long term evolution of real variables in the German economic and monetary history. This is both because it accounts for the following German concern about monetary and price stability which influenced German monetary authorities throughout the post WWII era; and because it shows the close relationship between the expansion in government deficits, a rise in money supply, and an upward trend of inflation. Out of data collected and presented herewith, if we compare base money and broad money supply during the period between 1914 and 1921, we can grab that the former rose 13 times, whereas the latter expanded only by 5 times or so, whereas fiat money in circulation rose as much as base money. What accounts for this statistical picture is the main trend featuring monetary policy during the decade. After leaving the gold standard, in Germany the commercial banks resorted to the monetary authorities to rediscount those debt securities they did not wish to hold. Besides, the German State's huge resort to debt instruments to finance public spending required extensive borrowing from the banking sector.

All of these facts account for that dynamic, whereas in the framework of the gold-bullion standard a sharp decline in both total currency in circulation, and base money as well as total money supply should be explained through a tight reference on: (1) on the one side, to the international capital markets' decision to freeze their borrowings to Germany during the 1922-23 hyperinflation period. And (2), on the other,

to the German monetary authorities' twin choice to intervene on the foreign exchange markets and the passing of a law pegging state liabilities to gold reserves (Webb 1984).

The break out of World War II expanded the German money market substantially: in particular, since 1941 both fiat money and the total monetary base, as well as the aggregate money supply, went up even as gold reserves contracted. Afterwards, the well-known post-WWII era price and monetary stability turned into a stable and constant increase in all of these monetary variables, with a slight leap in the 1980s and early 1990s: that was particularly the case for base money<sup>11</sup>.

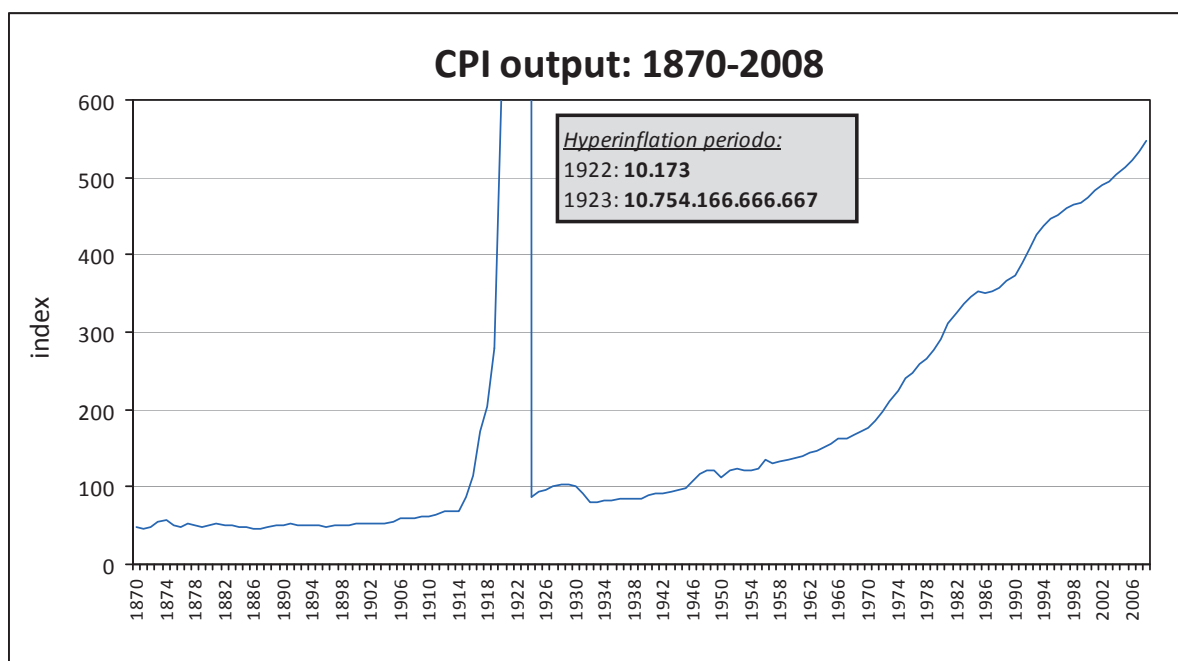
### 2.3.3. Prices and inflation

If we leave aside the 1910s' inflationary decade culminated with the early 1920s' hyperinflation, it is important to stress that under the classical gold standard the Consumer Price Index (CPI) did not follow the economy's ups and down. CPI rose constantly during both the late nineteenth century economic downturn and during the following beginning of economic growth, by German State's economic involvement and budgetary expansion. After the unprecedented upward trend of the 1910s and early 1920s, it is remarkable to underline that at a time when the World War II induced liquidity injection turned into a rise of both fiat money and the aggregate total monetary base as well as total money supply, CPI rose quite constantly, whereas inflation level kept stable around an annual 2 percent. Throughout the long term post WWII era, therefore, there was not, if not to a rather limited extent, a constant correlation between the expansions and contractions of the internal money market and the price stability pursued by the Federal Republic of Germany's monetary policy. It is remarkable to note how during the two post WWII expansionary periods occurring by the mid 1950s and in 1964, quickly repressed by the *Bundesbank* through discount rate hikes (Battilossi-Foreman Peck and Kling 2010, p. 376), variations of CPI and inflation levels were indeed rather limited.

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<sup>11</sup> A significant gap in our dataset on reserves and money pertains to the metallic (gold) money in circulation during a long term period stretching from the early 1930s down into the late twentieth century. This could not be filled up either through the German National Statistical Institute monthly bulletin, nor through a data-rich and very useful database such as [www.histat.gesis.org](http://www.histat.gesis.org)

Figure 2.3.3



#### 2.3.4. Exchange Rates

Finally, a truly short remark on the trends featuring the exchange rate. As data prior to the post World War II era is not available, the fixed exchange rate system laid down at the Bretton Woods conference in 1944 let the newly created Deutsche mark keep its exchange rate stability against the British pound throughout the two post WWII decades. Significantly, the picture changed in the second half of the 1960s; following the 1967 Sterling devaluation, the German currency experienced a revaluation and the fixed exchange rate system faded away. All the more so, this instability in the foreign exchange rate of the Deutsche mark continued during the 1970s, when the post-Bretton Woods floating international system set the stage for never-ending variations in the foreign exchange rates of the German currency.

#### 2.3.5. Real and per capita GDP

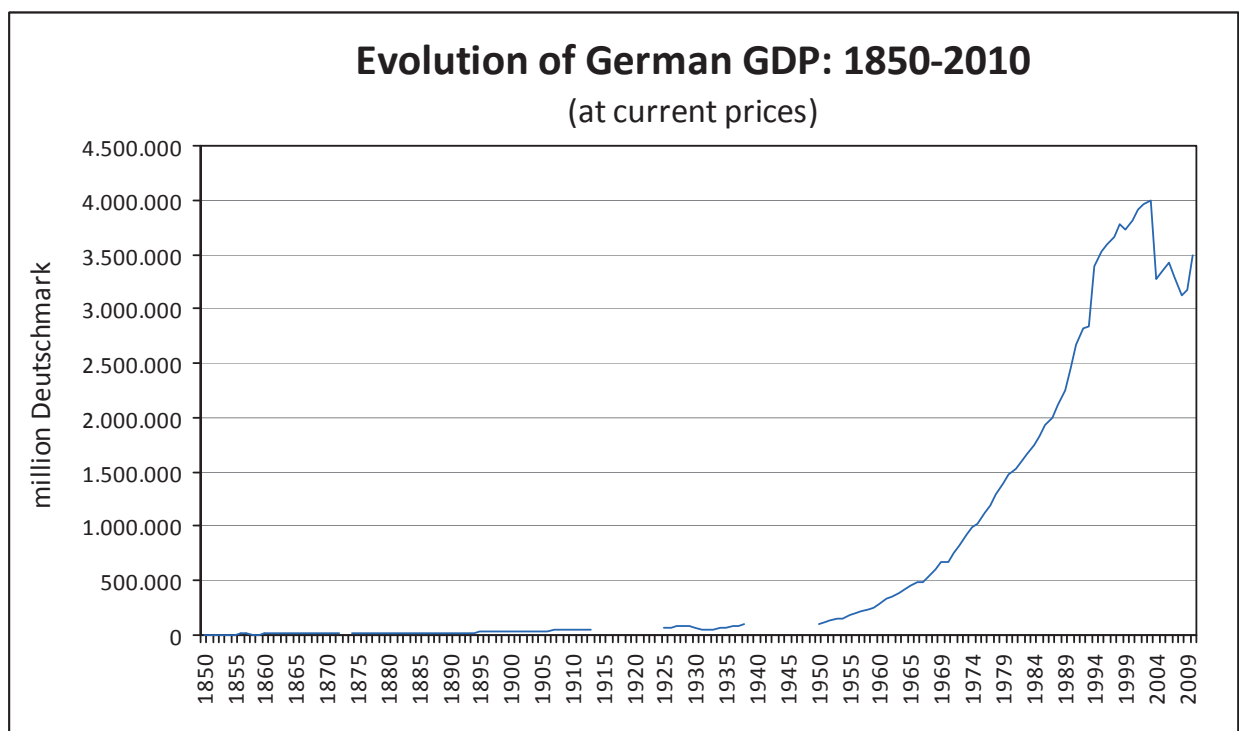
Production levels reflect a substantial lack of data on the period prior to 1925. Mitchell's *International historical statistics in Europe* (Mitchell 2007), an authoritative publication in the German economic historiography and statistics literature, provides long term series only for National Net Product (NNP) at current prices. Notwithstanding, an homogeneous series on real GDP at current prices at 1913 prices is available for the period since 1925 through the mid-1990s from A. Ritschl-M. Spoerer's (1997). It is



noteworthy to stress how, with reference to the post-World War II era, this series is in contrast to the figures on inflation (level). Whereas inflation level clearly reflects the expansionary turning points occurring during the 1950s and 1960s, during the same period, the GDP and particularly GDP per capita, came through a steady and constant rise. This variance makes the case for the argument that there is not correlation between volatility and expansion of currency in circulation and economic growth: thus, the German case shows that monetary injection through either a resort to debt instruments or intervention on the discount rate did not necessarily lead to higher production levels. Furthermore, these series add further evidence to this trend: as a matter of fact a unique historical turning point as the post WWII, currency reform let the economy absorbed the currency surplus and drove up production after 1948. In particular, that was the case of real GDP, whose growth was stable and quite constant without whatsoever acceleration during either the two expansionary conjunctures occurring throughout the post WWII era or the 1970s inflationary decade.

Furthermore, as prior to 1989 data on East and West Germany are disaggregate each other, it is noteworthy to stress how even in the German Democratic Republic there was a constant, though slow, upward trend in real GDP throughout the post-WWII era. This came to be the case even for the period since the early 1970s down into the 1980s, usually known as the decades of decline in industrial production and growth rates.

Figure 2.3.4



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