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GERMANY AND ITS LOW GROWTH [1]

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ABSTRACT

In Germany during the last 20 years the growth of domestic demand did not exceed 1% per annum, limiting the progress of GDP. It was a policy choice. The budgetary deficit was cut and transformed into a surplus. Since 2013 net public investment have been negative. National saving by far exceeded aggregate investment. Germany transferred to other countries a vast amount of real resources through an increasing surplus in the balance on current account. A huge creditor position with abroad was accumulated, at the cost of heavy lossess on portfolio investments. Being economically sub-optimal, this choice raises the question of its rationale. Evidently, Germany pursues non-economic goals. *De facto*, Germany could excercise political influence on debtor countries, including european partners. Such suspicion could jeopardize the unification of Europe.

Keywords: German Neomercantilism and Net Foreign, Asset Position, Declining Public Investment, Weak Domestic Demand and Growth, Politics versus Economic Policy.

German neomercantilism risks plunging the European Union into an unprecedented crisis that could threaten its very existence. Germany not only accepts, but seems even to pursue, abnormal current account surpluses. Over and above the quality of German-made goods, a tight fiscal policy, by cutting public investment, curbs domestic demand, limits imports and boosts exports. Consequently, the country's net international investment position continues to rise.

A strategy of this kind puts heavy economic burdens on the German: low income growth, resource wastage and foreign investment losses. The weight of the German economy and the "austerity" imposed on the other member states through European Union rules contribute to holding back

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the entire EU economy. In turn, high unemployment in Mediterranean Europe channels immigration flows from Africa and elsewhere toward Germany. This has repercussions throughout Europe as well as in Germany itself, giving rise to costs, tensions and centrifugal forces that, dramatized by demagogic, populist, nationalistic and far-right parties and movements, could bring the entire European edifice tumbling down, undoing decades of progress toward unity.

Two groups of factors – in addition to cultural deficiencies in understanding how a modern capitalist market economy operates – can be said to lie at the root of Germany's economic policy: values that make public opinion willing to sacrifice growth in return for low inflation and debt, and the choice of a political establishment that ties its hopes for Germany's geopolitical primacy in Europe to its economy's credit position. If even the merest suspicion of the latter aspirations were to spread among the other member states, the Union would collapse.

Any attempt to cast light on these issues must necessarily start from the economic and political history of modern Germany.

1. A Short Foray into History

Among the major Western countries, Germany is unique in the violence of the economic upheavals – and even more for the social and human trauma – it went through in the first half of the twentieth century, as cause and casualty of two world wars.[2] Rarely has a great nation inflicted such extreme suffering on itself as well as on others.

The first unification of 1867 – the North German Federation – was followed in 1871 by the proclamation of the united Reich.[3] From 1871 to 1913,

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[2] Robust and detailed narratives are provided in A.J.P. Taylor's masterful summary, Taylor 1968 [1945)], as well as in Winkler 2006, and the trilogy by R.J. Evans (Evans 2003, 2005, 2008.) An audacious reconstruction goes so far as to trace the values of the German people back to Tacitus's "Germania" – and also the negative traits that were to fuel the racial hatred, aggressiveness and lust for domination of Hitler's Nazism (Krebs 2011). And indeed, as a great historian wrote of the resurgent idea of empire on which German ambitions were presumed to be based, an "…important task would be to attempt an analysis of the influence, exercised by the imperial concept, on the trend of thought in Germany after 1250, for after all it has never been forgotten. (…). It might not be impossible even today to trace its effects in certain undercurrents of German patriotism which reveal a fundamental will to power" (Bloch 1967: 41).

[3] After Napoleon III's France had been defeated by Prussia and its allies, "on January 18, 1871, the restoration of the German empire was proclaimed in the Hall of Mirrors of the royal palace of Versailles dedicated *to all the glories of France*. From the House of Habsburg-Lorraine (…) the imperial dignity passed to the Hohenzollern kings of Prussia, who (in the words of the empire's constitution) concluded an *eternal alliance* with the other German heads of state" [Harden 1931 (1927): 9].

the German Empire's GDP grew by 2.8% per year: above the Western European average (2.1%), but less than the United States (3.9%).[4] In 1913, the German economy – which like China accounted for nearly 9% of world output – was second only to the United States (19%) in terms of GDP, while the country's per capita income was in line with the European averages, although it was less than 70% of the Britain and the US levels.[5]

The Great War dealt defeat on the home front well before the troops in the trenches surrendered: hunger, protests and strikes that began as early as April 1917 left the Reich's social and political cohesion in tatters.[6] The Reich gave way to the Weimar Republic.[7]

Throughout the bloody conflict – of the 16 million dead, 2.5 million were German – Germany's output fell year after year, shedding over one third between 1914 and 1919.[8] By January 1919, when Keynes reached Trèves with the British delegation to negotiate putting the merchant fleet under Allied control and the conditions of the food blockage imposed on the vanquished nation, the German people was in desperate straits: "(Germany) could buy no food, the period was approaching when the fruits of her own harvest would run low, and the starvation which had defeated her was to be prolonged into a period when her vitality was gone, her Government overthrown, and the support of hope removed".[9] And in the first year after the end of the war, the circumstances "justified the utmost pessimism. Germany lay prostrate. France gave open vent to her desire for our extermination, expressing it monumentally in her Prime Minister's words: 'there are twenty million Germans too many.' The continuation of the Al-

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4 Industrial production outstripped GDP, rising by 4% annually, slightly less than that of the United States (4.9%) but well above Great Britain (2%) (Bry 1960: 20: Tab. 3).

5 Maddison 2007, Statistical Appendix A. For the first, classic attempts to explain German growth in the Wilhelmine era, see Veblen 1915, Clapham 1923.

6 "… antiwar sentiments were further compounded by the breakdown of the food distribution system in the winter of 1916/17", with numerous strikes in 1917 [Hardach 1977 (1973): 71, Chapter 5 of which explores the inadequacies of Germany's rationing policy and its insufficient food supply during the war].

7 "On November 9, 1918, a German prince, Prince Max von Baden, announced the abdication of the Emperor, without the latter's consent. On June 28, 1919, two representatives of the German republic were made to sign a peace treaty in the Hall of Mirrors of the royal palace of Versailles whereby the verdict of a victorious League of Nations (…) buried the German empire that had been founded on January 18, 1871. All Germany's dynasties had stepped down from their thrones, and their *eternal alliance* had lived but forty-eight years" [Harden 1931 (1927): 11].

8 Industrial production had dropped by 45% (as against 20% in the Western European economies and the United States) (Paretti and Bloch 1956: 259: Tab. 2). Historical data on national accounts are given by Ritschl and Spoerer 1997.

9 Keynes 1949: 23.

lied blockade was rapidly fulfilling this wish; within six months from the Armistice it had achieved a casualty list of 700,000 children, old people and women".[10]

The industrial recovery of 1920-1922, rapid though it was, came on top of the inflation that had been raging since the beginning of the war. Inflation did not hamper, and perhaps even helped, the upturn while the war's victors suffered through the recession of 1920-1921. Soon, however, it degenerated into hyperinflation. In little over a year, between August 1922 and November 1923 (when the *Rentenmark* introduced by the Minister of Finance Hans Luther stabilized prices), the currency's domestic and external value plummeted, dropping by the billionfold.[11] The distributional effects on household wealth and income were devastating. The middle classes were particulalry hard hit as inflation ate away at their salaries and savings. Real wages fell (between 25 and 50%, depending on employment category) in 1914-1917, seesawed up and down until mid-1922, and were then sent into a tailspin by the hyperinflation that followed.[12] Social upheavals reached explosive levels. Hunger-fueled riots, revolutionary uprisings (such as that of the Spartacists, with the murder of Karl Liebknecht and Rosa Luxemburg in January 1919), violent attacks that reaped a heavy toll in deaths and injuries (like the assault in June 1922 that took the life of Walter Rathenau, the industrialist, financier and chairman of AEG who was then Foreign Minister[13]), attempted coups d'état (including Hitler's Munich Putsch in November 1923, with 16 victims) and ferocious government repression all marked the first five postwar years.[14] In 1923, sociopolitical tensions and economic imbalances brought another drop in GDP (-13%), leaving one quarter of the labor force out of a job.[15]

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[10] Kessler 1928: 217.

[11] In those sixteen months, prices rose by a number of times estimated at 1.02x10 to the tenth power. In December 1923, a kilo of bread cost 400 billion, a liter of milk 360, an egg 320, and a tram ticket 50. Banknote denominations reached one hundred thousand billion. See Stolper, Häuser and Borchardt 1967 [1940]: 84: Tab. 11; (Cagan 1956: 26: Tab. 1 provides a statistical comparison of Germany's situation with six other hyperinflations).

[12] Holtfrerich C.L. 1980; Bry 1960.

[13] (Rathenau 1918; Cacciari 1979). "Political murder had at that time become one of the commonplaces of German public life (…). In his pamphlet *Four Years of Political Murder*, Herr Gumbel gives the names and exact circumstances of the assassination of more than three hundred republicans and radicals, who (…) were murdered in cold blood by Nationalists between 1918 and 1922" (Kessler 1928: 356).

[14] The entire period between the end of the First World War and the Nazi's seizure of power was punctuated by violence and social unrest. Hundreds of deaths took place in the "relatively stable years from 1924 to 1929" and even more in 1930-1931 (Evans 2005: 6).

[15] On the causes of Germany's inflation see, *inter alia*, Graham 1930 (which emphasizes the weight of the reparations the country was forced to pay, and the collapse in the exchange

In 1924-1928, output started to grow again at rates approaching 7% per year, though there was a significant slowdown (1%) in 1926. Output returned to 1913 levels only in 1928, fifteen years later.[16]

The "1929" depression hit the German economy early: in 1928, GDP growth had already slowed sharply by comparison with 1927. In 1929-1932, the drop in GDP was devastating, with a total loss of 27% over the four-year period.[17] Employment also fell by 27%.[18] Thus, "between the summer of 1929 and early 1932, German unemployment rose from just under 1.3 million to over 6 million, corresponding to a rise in the unemployment rate from 4.5 percent of the labor force to 24 percent. Following a seasonal upswing in labor demand, reducing the level to 5.1 million in September 1932, unemployment again exceeded 6 million at the start of 1933".[19] In industry, the proportion of jobless workers reached 44% in 1932, leaving the unemployment insurance system utterly unable to cope.[20] The depth of the depression was similar to that in North America, unequalled elsewhere in the world.

Starting in 1933, the German economy engineered a rapid recovery, followed by steady growth in industrial output. It is essential to distinguish between recovery and growth. GDP returned to 1928 levels in 1935, adding 10% per year over the 1933-1935 period (+17% per year for industrial production). After the cyclical upturn, the economy continued to pick up speed until 1943. Throughout Hitler's heyday – from 1933 to 1943 – GDP rose by more than 10% annually. With production expanding at this pace, the labor market was quick to return to health. By 1936, the market had es-

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rate that resulted); Bresciani-Turroni 2005 [1933] (which identifies the government deficit and the excessive creation of money in order to finance it as the causes); Pedersen and Laursen 1964 (who underscore the role of wage pressures and on p. 68 put the unemployment rate at the end of 1923 at 25%); Holtfrerich 1980: 8 (who views inflation as "the final 'output' of a political, social and economic 'production process'").

16 The 1926 slowdown has been attributed to the tight monetary and credit policy that the Reichsbank had embraced since March 1924 to slow the excessive increase in economic activity amid fears of renewed inflation only a few months after the end of hyperinflation, which would have jeopardized the new currency (Sommariva and Tullio 1987: 166). In 1925, according to Schumpeter, there was "a severe relapse – in the fourth quarter, particularly severe in employment – (…) which was due to a variety of circumstances peculiar to the situation" (Schumpeter 1939: 767).

17 Industrial production fell even further: -43%, as against -24% for the advanced economies as a whole (Sommariva and Tullio 1987: 167: Tab. 4.3.; Paretti and Bloch 1956: 259: Tab. 2).

18 Ritschl 2002: Database: Tab. C1: col. C.1.4 IFK series.

19 Dimsdale, Horsewood and Van Riel 2006: 778. In addition to the official figures, there was also a "hidden" unemployment, estimated as involving up to 1.5 million people (Bologna 1996: 97). On the limitations of Germany's labor statistics in this period, see Schumpeter 1939: 971.

20 Evans and Geary (eds.) 1987.

sentially reabsorbed unemployment, bringing the number of jobless workers back down to 1.1 million. In 1938, the figure dropped to 200,000: to all intents and purposes, joblessness was nonexistent. In 1940, Germany's per capita GDP outstripped the European average by 10%, and had narrowed the gap with Britain and the US, reaching nearly 80% of their levels.

The military disasters of 1944-1945, along with 7.4 million German deaths (including 2.1 million civilians) and the terrible destruction inflicted by the two million tons of bombs dropped on Axis Europe by US and British planes, mostly on German cities,[21] also brought Germany's economy to its knees. GDP fell farther than in any other Western European country. In 1946 it was less than one third of what it had been in 1938.[22] In a divided nation, the prewar level would once again be reached around fifteen years later by the Federal Republic of Germany.

Economically reconstructed in the postwar years, reunified in 1990, Germany once again numbered among the world's most efficient economies, a leader in Europe and the lynchpin of the euro area and the European Union. From 1950 to date, Germany's GDP has logged a sevenfold increase (fivefold for per capita GDP). Unemployment rates are now among the lowest, prices among the most stable. Germany's share of world trade – at 7.5% – is more than double the country's share of world GDP. Its formidable export capacity, together with a relatively small appetite for imports, make Germany one of the major international creditors, after Japan and China, in a complex relationship – political as well as economic – with the other countries.

The extensive debate around these issues continues today.[23]

2. Germany's Postwar Performance

"For a wave of destruction had swept over our country (…) we were completely cut off, leaving us, the Federal Republic, with only half our agricultural resources and with an area, already over-populated and industrially lopsided, into which nine to ten million refugees were squeezed, without any personal belongings, without means of production".[24]

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[21] Stolper, Häuser and Borchardt 1967 [1940]: 171: Tab. 21. The total number of casualties in the Second World War is estimated at 54 million, 30 million of whom were civilians.

[22] Postan 1967: 12-13.

[23] For bibliographic information, see Deutsche Bundesbank (ed.) 1976; Borchardt 1991; the writings of Ritschl et al. cited herein. In addition to Stolper et al., see Guillebaud 1939; Arndt 1944; Bettelheim 1946; Hardach 1976.

[24] Erhard 1963 [1962]: 108. In the country as a whole, including the Saar, food supplies under rationing had fallen to 1729 calories per person per day, as against 3113 in 1936 [Stolper, Häuser and Borchardt 1967 (1940): 205: Tab. 23].

At the beginning, the victorious Allies were even harsher towards the vanquished Germans than they had been at Versailles, after 1918. At the Quebec Conference in September 1944, when victory was in sight, Stalin, Roosevelt and Churchill endorsed the Morgenthau Plan, formulated by the US Secretary of the Treasury Henry Morgenthau Jr. under the influence of Harry Dexter White: converting Germany "into a country principally agricultural and pastoral".[25] At the Potsdam Conference in July 1945, three months after the war in Europe was won, Stalin, Truman and Churchill confirmed the punitive line. But as early as March 1946, the line softened somewhat in the so-called "Level of Industry Plan" put forward by the Allied Control Council, which had broken up Germany into thirteen military districts, by zone. Under the plan, Germany could retain a much-reduced industrial capacity, producing nothing that could be put to military use, while the countries devastated by the German armed forces were to receive reparations paid principally out of Germany's capital assets. Certain of Germany's industrial activities were to be forbidden, others curtailed, production of ships and aircraft prohibited, equipment and machinery seized as reparation, major combines (such as IG Farben and Vereinigte Stahlwerke) and the big banks decentralized and decartelized, the great "feudal" estates of the Junker landowners broken up.

Soon, however, two key considerations – one economic, the other political – came together with the humanitarian urge to assist a battered and exhausted populace, leading the Western powers, and the United States in particular, to reconsider and relent in their draconian measures against defeated Germany. First, the economic rebirth of Europe as a whole hinged on restoring German industry's ability to provide crucial production inputs, primarily machinery and technology. Second, the cold war – inaugurated on America's part upon Truman's accession to the presidency immediately after Roosevelt's death on April 12, 1945[26] – made it advisable to reinforce Europe's capitalist economies in order to contain the Soviet Union, preventing internal tensions that could have instilled pro-Russian sympathies in certain segments of society.

As early as 1945, the American military government in Germany distributed aid through the GARIOA program to help make up for the severe postwar shortages of foodstuffs, seeds, fertilizers and fuel.[27] In December,

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[25] Steil 2013: 269. At the end of 1943, Roosevelt remarked to his Secretary of the Treasury, Henry Morgenthau Jr., "we either have to castrate the German people or you have got to treat them (economically) in such manner so they can't just go on reproducing people who want to continue the way they have in the past" (*Ibid*.: 267).

[26] Fleming 1961: Ch. xi.

[27] The program's aid efforts, together with the food packages sent by private agencies

the US State Department "interpreted" the Potsdam Declaration as mere guidelines, expressly rejecting the idea that its goals were to permanently destroy the German economy. In September 1946, Secretary of State James F. Byrnes declared, with Truman's full approval and support, that the German people were not to be denied the *right* to build up their industries for peaceful purposes. In February 1947, the American mission to Germany led by the ex-president Herbert Hoover, assisted by the German economist Gustav Stolper, recommended "reviving German industry and thus exports with which to relieve American and British taxpayers from their burden in preventing starvation in Germany".[28]

The Plan launched by the American General George C. Marshall in his speech at Harvard University on June 5, 1947, and which operated from April 1948 to 1951 as the European Recovery Program, was the concrete expression of this change of tack. The Plan disbursed aid for 17 billion dollars (6% of US GDP in 1948). The amount that Germany cumulatively received in Marshall aid amounted to 4% of the country's GDP in 1950, less than half that granted to the United Kingdom and France and more or less the same as was given to Italy, even though the latter's economy was smaller than Germany's. Nevertheless, this aid was invaluable, chiefly in covering imports that were far above exports. In 1948, fully two-thirds of German imports were paid for out of Marshall Plan funds.[29]

Domestically, efforts to reconstruct the defeated nation and the crippled economy were inspired by the ordoliberalism – which took its name from the journal *Ordo* – propounded by the Freiburg School of economists and sociologists such as Walter Eucken, Alexander Rüstow, Wilhelm Röpke, Franz Böhm and Alfred Müller-Armack. The latter coined the happy term "social market economy", whose "key task is to pursue free markets while respecting the social equilibrium and the principle of the moral responsibility of the individual towards the community".[30] This vision was translated into practice by Ludwig Erhard and by Konrad Adenauer in their leadership of the Christian Democratic Union (CDU) party and their various government responsibilities.

The social democrats – the SPD – were opposed for years, favoring a planned economy. Their opposition persisted even as production, wages

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such as CARE and citizens abroad, are credited with saving "tens of thousands of families from inanition, sickness, and death" [Stolper, Häuser and Borchardt 1967 (1940): 210].

[28] Stolper, Häuser and Borchardt 1967 (1940): 199 and *passim*.

[29] Ritschl 2012; Martinez Oliva and Stefani 2000: 178-179: Tab. 6.

[30] Erhard 1963 [1962]: 210. Nevertheless, monopolistic groups and cartels were in actual fact accepted (Sylos Labini 1960). For the subsequent developments of ordoliberalism and the social market economy, Magnani 1996a and Sartor 1996; Felice F. 2008.

and social spending continued to grow.[31] But faced with an economy that went from success to success, they fell back on espousing "competition when possible, planning when necessary". The social market economy – where organized labor was even powerful enough to own major banks – had no problem with this flexible formula.

Reconstruction can be said to have reached completion in 1951, when exports covered imports.

In 1950-1960, the Federal Republic's real GDP growth reached 7% per year, while GDP per hour worked rose by 6% per year, more than in the other Western countries.[32] Nevertheless, none of these countries offered job opportunities matching those in Germany. The unemployment rate dropped from 7.2% to 0.9% of the workforce, even though the latter increased, partly as a result of massive immigration. Exports by volume ballooned by 16% per year, more than twice the worldwide rate. Trade barriers – especially those between European countries – came down, encouraging this process to the extent that in 1960 slightly under two-thirds of Germany's exports flowed to its European trading partners (9% to France, 6% to Italy, 5% to the United Kingdom). From 1952, the rapid rise in Germany's material wellbeing was joined by a steady current account surplus. Again by comparison with the other Western countries, Germany's investments were among the highest (one quarter of GDP) and the most profitable: this was true both in terms of production capacity (with an incremental capital output ratio of 3, as against values ranging from 4 to 6 in the other economies) and in terms of returns. This is one of the reasons that "in the course of the 1950s government expenditure on goods and services increased faster in money terms than private demand in all countries except Germany".[33] The interwar economy and the prominent role that the state played in it had been transformed into one of the world's most market-oriented, though competition was not always given free rein.

The German economy continued to grow at a healthy clip between 1960 and 1973, year of the Yom Kippur War and the first oil crisis. Throughout the "golden age" of world growth, 1950 to 1973, the Federal Republic's GDP rose 6% per year. The acceleration of technical progress – as approxi-

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[31] At the joint conference of the CDU and the SPD in Düsseldorf on December 8, 1951, Erhard announced: "In July, 1948, our production was 57% of the 1936 figure (…); in the area of the Federal Republic today, in spite of the severe damage suffered during and after the war and of Germany's tragic history, 34% more is being produced than in 1936, a year in which, as you know, rearmament was already under way (…). Germany's present wage index stands at 123, Britain's at 109 circa, Italy's at 113 (…). In the Federal Republic, expenditure on social services represents 51.8% of tax revenue…" [Erhard 1963 (1962): 97-98].

[32] Maddison A. 1964.

[33] *Ibid.*: 104.

mated by total factor productivity – has been estimated at 4% per year, as compared to 5% in Japan, 3.2% in France, and less than 2% in the United States and the United Kingdom. The rate of accumulation of fixed non-residential capital stock in Germany kept pace with GDP, and thus was less rapid than Japan's 9.2% per year, but above the United Kingdom's 5.2%, France's 4.8%, and the United States' 3.3%. Foreign trade's contribution to economic growth was also – slightly – below what is was in Japan, but significantly above the other Western economies.[34]

The German economy did not escape the stagflation of the Seventies: the "disproportionality" crisis that in the industrialized countries was sparked by the interaction of the wage and oil shocks with the difficulties encountered by the allocative mechanisms – markets, large firms, public administrations and financial intermediaries – in realigning resource use with the new constellation of relative prices resulting from these shocks.[35]

In 1970-1973, wage pressures and burgeoning global demand were followed by steep rise in Germany's inflation rate, from 3.3 to 6.9 per cent annually, that income policy, fiscal policy, and even monetary policy had been unable to prevent. The wildcat strikes of 1969 had been censured by trade unions that gained strength from the "concerted action" institutionalized in 1967. Union membership rose from 30% in the Sixties to 35% in 1975. From 1969 to 1974, yearly increases in nominal wages averaged 11% (with a peak of 15% in 1970), whereas real wages rose by 6%, and productivity by 4%. Real GDP grew by 4% per year. The years 1966-1972 had seen the brief – and only – postwar flirtation with "German Keynesianism", associated with Karl Schiller, Economics and Finance Minister in the Kiesinger and Brandt governments. The public deficit hit a high of 6% of GDP in 1975, after the surge in the price of oil and other commodities. The annual rate of growth of the money supply reached 15% in 1972.

But before the shocks, the fundamentals of the German economy had strengthened. As input-output analysis shows, in 1965-1970 innovations were introduced in both products and techniques, boosting production efficiency, while vertical integration increased resource allocation to meet final demand. In 1975, energy sources accounted for less than 11% of intermediate costs, and imported inputs less than 8%.[36] The industrial sector produced half of total added value. In turn, machinery, chemicals, metals, electrical goods and vehicles made up half of industrial added value. Forty

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[34] Maddison 1995: 41-42: Tab. 2.6.

[35] Ciocca 1981-1982, "Disproportionalities, Allocative Mechanisms, and Stagflation", *Journal of Post Keynesian Economics*: 231-239 and Ciocca 1987.

[36] Croce 1977: 156; Rubino 1996: 87: Tab. 8 and 86: Tab. 7.

per cent of exports – chiefly manufactured products, and capital goods in particular – came from not more than ten large groups. Germany exported one third of its GDP, and in 1970 overtook the United States to become the world's largest exporting country.[37] The impact of rising oil prices, though significant, did not reduce the structural trade deficit by more than one quarter in 1974.

Once the tensions with Schiller, and later with Helmut Schmidt, had passed, the Bundesbank was authorized by the government in February 1973 to introduce restrictive measures. The Bank proceeded to do so in March of that year, after the Smithsonian Agreement on exchange rates broke down. The Bundesbank was thus the first central bank to implement the "monetarist" shift, a course that other countries would not follow until years later.[38] Expansion of the monetary base slowed, from 15% in 1972 to 11% in 1973, and down to 9% in 1974. Despite the oil shock, inflation began to drop during 1974, from an annualized 9.9% in the first quarter to 3.8% in the third. Buoyed by the country's social cohesion, businesses, unions and the government agreed at the end of the year to "coordinate expectations" towards lower inflation in the future. The Bundesbank declared that it would maintain tight control over liquidity. Consequently, high unemployment could result if cost of labor trends were to spin out of control. Already in the fourth quarter of 1974, nominal wage growth slowed, to 7% per year. In 1975-1979, although the unemployment rate stayed below 4%, the average rise in nominal wages did not exceed 6% per year and real wage growth fell below increases in productivity, bringing the profit share back up. GDP grew by 2.6% per year, in line with the rest of Europe. Inflation was kept to 3.6% per year, as against 8.4% for the OECD area as a whole. Though trends in wages, global demand and international commodity prices were far from favorable, Germany continued to run a current account surplus averaging nearly 11 billion marks per year in 1971-1975.

Over the entire period from 1949 to 1977, the cost of living in the Federal Republic rose by only 2.7% per year, compared to 3.4% in the United States, 5.5% in Italy, 6.1% in France, 6.4% in Great Britain, and 6% in the in-

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[37] "The level of costs and prices, productivity, the degree of industrial concentration, the range of commodities, technological innovation and industry's focus on foreign markets are all factors that may often be more favorable in any of a number of other developed capitalist countries than they are in the FRG, *but only in West Germany do all of these factors together show a high level of competitiveness*" (Dal Bosco 1987: 135).

[38] This shift was celebrated in the historical volume promoted by the Bundesbank, *Fifty Years of the Deutsche Mark. Central Bank and the Currency in Germany since 1948,* Oxford University Press, Oxford, 1999. In the book, the central bank maintains that the years 1969-1973 saw the "inability of the government to cope with the disequilibrium that had resulted from excessive demand and conflict over income distribution" (Deutsche Bundesbank 1999: 421).

dustrialized countries as a whole. In these thirty years, real GDP increased over sixfold, at a rate of 6.3% a year. The external value of the deutschmark – the effective nominal exchange rate against 16 other currencies – nearly doubled. In 1977, public sector debt barely reached 30% of GDP. In 1978, thirty years after it was introduced to replace the Reichsmark, the D-Mark was celebrated by the President of the Deutsche Bundesbank by referring to these brilliant achievements in words that explicitly linked the currency's solidity with the standing that Germany had once again come to enjoy in the world: "The strength of our currency is first and foremost a political asset of the highest order. Just imagine where the FRG would be today on the international scene if our currency were as weak or sickly as that of certain other European countries, or if we had to depend on foreign loans from time to time! The fact that today's FRG is no dwarf, politically or otherwise, is undoubtedly due at least in part to the strength of its currency, its sizeable currency reserves, and its healthy balance of payments".[39] The nexus between the economy and foreign policy could not have been expressed more directly. And were that not enough, it was expressed by a "technical" institution – the bank of issue – whose role is hardly that of commenting on foreign policy.

In 1976-1980, monetary and exchange rate policy changed again to focus on correcting the deficit that the current account balance was then showing, largely because of increasing deficits in the services account (especially foreign travel) and transfers, while the trade surplus had stopped improving as a result of the new upswing in imported energy prices. Though the deficit was modest – 441 million deutschmarks per year – and there was a risk of importing inflation, the D-mark's real rate of exchange was allowed to depreciate.[40] Inflation rose slightly (to 4.6%), while increasing far more in the OECD area (to 10.3%). GDP growth was in line with the rest of Europe.[41] While the primary deficit climbed to 2% in 1981, the Bundesbank's target corridor for monetary growth was narrowed from 1979's 6/9% to 5/8% in 1980 and to 4/7% in 1981. In all three years, money stock growth was close to or below the lower limit of the corridor.[42]

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39 Emminger 1978 (last paragraph of Section III, p. 2).

40 Setting 2010 as the base year at 100, the exchange rate stood at 123 in 1973, dropped to 116 in 1975, rose to 119 in 1979, and then fell to 103 in 1981 and 98 in 1985 (the lowest prior to the introduction of the euro).

41 "The current account position and the exchange rate became important additional target criteria for the Bundesbank, and as the economy increasingly cooled down they came more and more into conflict with the goal of smoothing out the business cycle" (Deutsche Bundesbank 1999: 442).

42 Deutsche Bundesbank 1999: 445.

From the structural standpoint, capital continued to replace labor, which had become more costly, throughout the Seventies.[43] Wage restraint and a robust manufacturing base went hand in hand with a widespread reallocation of resources. Among the allocative mechanisms, the major corporations of Rhine capitalism did more than the markets or the government. They proved adept at R&D and at planning new production strategies based on long-term investments supported by ties to some of the world's largest banks.[44]

In the international crisis of the Seventies, Germany once again showed the stability and production capacity that it had been able to build since the postwar period, solidly based in the fundamentals of its economy and precisely targeted economic policies.

In the subsequent decade, up to the time of reunification, inflation was the lowest among EU countries: 2.9% per year, against an average of 7.5%. Rises in money wages did not exceed 4% per year, as compared to the EU average of 9%. The current account went back to running a surplus of 19 billion deutschmarks a year in 1981-1985, which jumped to a yearly 92 billion in 1986-1990. The deutschmark ranked as the main international currency after the US dollar.[45] However, GDP growth began to wane, slipping to 1.8% per year compared to the Seventies' 3.1%, slightly below the European average, likewise in decline.

In 1990, the two Germanys were reunited, with monetary, economic and social union coming into force on July 1, followed by political union on October 1. Union with the German Democratic Republic brought the postwar period's first significant current account deficit.[46] In 1990-1993, the deficit amounted to 23 billion deutschmarks per year, and until 2001 remained in the neighborhood of 2% of GDP. The current account returned to positive territory in 2002, and then embarked on the uptrend that continues at the time of writing (2017).

Unification put a further brake on growth. Though the resulting surge in global demand boosted West Germany's GNP by more than 5% a year in 1990-1991, the East's GDP plunged over 16% in 1990 and by 23% in 1991.

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[43] In manufacturing in particular, capital stock grew by 2% yearly, while man-hours dropped by 2.6% per year (Bruno and Sachs 1985: 163: Tab. 8.10.and 184: Tab. 9.3).

[44] Albert M. 1993.

[45] In 1990, around 15% of international trade transactions, official reserves and financial assets were denominated in deutschmarks (Frenkel and Goldstein 1996: 708-709: Tab. 6; 713: Tab. 7 and 717: Tab. 9).

[46] It is estimated that at the time of unification – the second half of 1990 – East Germany's GDP was less than 10% of that of West Germany, its population (16 million) was one quarter, and its per capita GDP was thus less than one third (Maddison 1995: 131: Tab. B-6).

For the Nineties as a whole, GDP growth in the united Germany slowed to 1.7% per year, below the 2.1% of the future Euro area. Yearly public sector transfers amounted to 4.5% of West Germany's GDP and over one third of East Germany's. The budget surplus of 1989 turned to a deficit of approximately 3% of German GDP in the following years. Rather than being used to boost the productivity of the entire country's businesses, significant resources raised through tax levies covered the transfers needed to provide the weaker East German economy with basic tangible and intangible infrastructures. The increases in taxes, interest rates and public debt between 1992 and 1999 hampered investments in West Germany, where capital stock increased by only 2%, while in the East it grew three times as fast. Disposable income per capita in East Germany rose from 49% to 66% of that in West Germany (a gap which is not dissimilar to that between Southern and North-Central Italy), though unemployment in the East (including Berlin) approached 20% at the end of the Nineties.[47]

On the basis of the comparative growth accounting analysis cited earlier,[48] the years 1973 to 1992 – the period of the oil shocks and reunification – differed markedly from the two "golden" decades that preceded them, as Germany's annual GDP growth rate dropped from 6 to 2.3%: farther than in the USA, France, the United Kingdom and even Japan. Though still higher than in the other countries, the rate of technical progress dropped from 4% to 1.5% per year, while the rate of capital growth also fell, from 6% to 3.3% per year.

In 1993-1998, until the euro replaced the deutschmark, Germany's average annual GDP growth dropped yet again, to 1.3%, reflecting an economy that was still burdened by the weight of reunification. Nevertheless, inflation stood at 1.7% per year, below the 2.5% average for the countries that were to become the euro area. Germany's monetary and commercial primacy was now consolidated: "Utter defeat in two world wars has not, after all, prevented Germany from ending the twentieth century as the dominant state in that continent".[49]

In 1998-2017, German inflation and that of the other euro economies tended to converge, remaining below the 2% maximum threshold. Moreover, GDP growth in the entire euro area dropped further, reaching one of the lowest rates – 1.2% per year – to be found in the major areas of the globe. In Germany, internal demand rose 1% per year on average, less than GDP (1.4%). Growth in private consumption and in private and public

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47 Hunt 2006 and the literature cited therein.

48 Maddison 1995.

49 Hobsbawm 1996: 130.

investment barely managed to top 1%, limiting demand-driven increases in production. Some of the cracks in the Rhine model that had begun to appear in the Nineties[50] now widened. The corporatist method of constructive compromise in the relations between capital and labor was on the wane. Financial globalization and the financial crisis of 2008 had undermined the banks' centrality and the stability of industrial groups' governance. The stock market's importance increased, with the introduction of hitherto little-used techniques such as takeover bids. East Germany's hoped-for transformation into a sort of Teutonic Silicon Valley failed to materialize. Labor productivity slowed in1999-2007 (gaining only 0.8% per year on average, as against 1% in the Euro area and 1.3% across the entire OECD) and reached a standstill in 2008-2016 (compared to +0.2% per year for the Eurozone and 0.5% for the OECD area).

From 2002, Germany's current account climbed back to a surplus, which then continued to grow. Since 2015, it has been over 8% of GDP, overstepping the amount that European rules consider exorbitant and in need of correction by two percentage points. In 2017, by contrast, Japan's surplus was running at 4% of GDP and China had dropped to 1.4%. Wage restraint was a contributing factor in Germany's surplus, as per-worker wages rose in 1999-2016 by only 1.7% per year, as against the OECD average of 3%. But the major factor was the drop in domestic absorption of resources: national savings as a percentage of GDP went from 22% in 1998-2002 to 28% in 2017, while fixed investments oscillated around 19% of GDP. Growth in exports by volume exceeded that of imports, partly because of the combined effect in the rest of the Eurozone of rising unit costs of labor – which remained virtually constant in Germany – and the irrevocable conversion rates set when the single currency was introduced.

Germany's net international investment position thus burst all former boundaries. From 1.6% of GDP in 2000, it reached nearly 60% in 2017. In US dollars – 2 trillion – it is similar to that of China, and is exceeded only by Japan's 3 trillion.

3. The Weight of the Past?

Understandably, the history of the twentieth century instilled a deep-seated conviction in Germany's leaders and people: debt and inflation are harbingers of doom. Over and above their consequences for production and distribution, they can turn even an economic giant into a political dwarf.

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[50] Albert 1997; Valli 2002: 112-128.

But since 1999 – when the euro was introduced – German inflation has trended below the tolerated 2% annual limit. 1923 is far away. Public sector debt is under control. In 2009, a constitutional amendment reinforced the country's "debt brake".[51] And yet, Germany persists in *wanting* to be a net creditor of Europe and the rest of the world. This, far from benefiting the country economically, burdens it with enormous costs. Gross domestic product, actual and potential, grows less than it could. One GDP point lost, in a single year, today corresponds to over 30 billion euros. Through its trade surplus, Germany continues to transfer major real resources – goods and services – abroad, to the detriment of domestic production. Had they been invested at home rather than shifted to other countries, these resources would have raised the Germans' standard of living, supporting effective demand as well as productivity. And the rate of inflation would have remained the same. In particular, "for Germany, there remains a strong case for an increase in public investment, for example for the upgrade and maintenance of transportation infrastructure".[52] In the opinion of at least one German economist – one of the "five wise men" of the German economy, who jocularly calls himself the "last of the Keynesian Mohicans" (but actually the only one!) – a balanced public budget "has no justification whatsoever. According to the golden rule of fiscal policies, government investments should be financed through borrowing. Balancing the budget is a weight for future generations. It prevents the German government, which could borrow at almost no cost, from investing in infrastructures, in public buildings, in the school system, in day care centers. In these areas Germany is below the OECD average. And the government is throwing a lot of growth potential to the winds".[53]

Because of its size and structure, the foreign asset position has also meant far from negligible valuation losses. Between 2006 and 2012, Germany's accumulated valuation losses, for the most part in portfolio investments, are estimated at over 600 billion euros or 20% of the country's annual GDP. Domestic investments would have been much more profitable. The debate in Germany has thus raised the issues of "bad investments abroad", "wasted…investments", and "wasted resources".[54]

In addition, immigration to Germany – one million people in 2015 – is encouraged by the high unemployment that stringent German and EU

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[51] In this connection, and for the historical background, see Saitto 2015.

[52] IMF 2014: 51.

[53] P. Bofinger, interview with the Italian newspaper *la Repubblica,* June 2, 2016. Otmar Issing, in another interview from 2016, also complained of the shortcomings of Germany's infrastructures.

[54] Baldi and Bremer 2015: 303-309; Ma G. and McCauley 2013, especially 18-19.

fiscal policies contribute to causing in Spain, France, Italy and Greece. In Germany – apart from mini-jobs – employment is higher, as is the demand for unskilled or low-skilled labor. Migrant flows from the southern shores of the Mediterranean thus tend to pour into the German market despite the limits set by the Dublin Regulation. This not only creates burdens for the German budget, but also fuels social and political tension in a country one quarter of whose population is already made up of first- and second-generation immigrants.

Germany's leaders cannot be unaware of the economic costs stemming from the country's large positive foreign asset position. This is true for heads of industry, bankers, politicians and government officials, but it is also true for the labor unions in an economy whose success in exporting depends to a significant extent on the wage restraint ensured by highly co-operative relationships between capital and labor.[55] Here, cultural reasons and political considerations provide an essential backdrop. The Germans do not want to be debtors.

Perhaps, though, they do not want to be debtors because of their time-honored Lutheran frugality and moral sense: those who sin must atone.[56] Above all, they do not want to be debtors because their past, the past century, continues to weigh on them: "Escape the slavery of debt", foreign debt first and foremost.

And yet, there is a difference between not having debts and having credits that approach the two trillion dollar mark … When it was a debtor, Germany suffered all the onus of that condition. Politically, the onus was crushing, and the German people perceived it as such between 1919 and 1933. The inflation after the First World War also depended on the pressures that paying reparations put on the exchange rate and the public finances. The severity of the "1929" recession was worsened by the end of US aid to Weimar Germany, the increase in the cost of money, the banking crisis, and Brüning's procyclical policy which aimed at demonstrating that it was impossible to honor the country's reparation debt. And after the Second World War, it was not until the 1953 London Agreement – which the Americans had promoted for geopolitical reasons – that the country was able to ease the burden of foreign debt.

In its time as a creditor, Germany has obtained much, politically as well as economically. Reunification in October 1990 brought about a shift. Uniting with the economically backward German Democratic Republic proved

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[55] Magnani 1996b.

[56] This is the view taken by De Grauwe 2012: 29-39. We must not forget, however, that the Federal Republic was a majority Catholic country, beginning with the rich and ultra-Catholic Bavaria.

enormously costly. Nevertheless, it could be financed thanks to the net external assets that Bonn had amassed in the preceding decades. With the consent of the United States (and of the crumbling Soviet Union), reunification was accepted by the European partners partly because, with the euro's introduction in the offing, it was conflated with an adieu to a deutschmark that internal stability and external credits had made into a powerful asset.[57] The other countries' true intentions – of neutralizing Germany's economic, and hence potentially political, strength in the Euro area – failed miserably. Indeed, the monetary and budget principles espoused by the Federal Republic and the Bundesbank dominated the Euro area's governance, heavily influencing the other member states' economic policies.

It has been said that "Germany's political and economic hegemony is not under discussion. That is why it is not a matter of asking *whether* Europe should be led by Germany or not, but *how* this leadership should be exerted, i.e., how Germany should organise its *auctoritas*".[58]

What, today, are Germany's political aims? What use will its leaders want to make of Germany's strength in Europe?[59] Will it be put to the service of a cohesive Europe, or will it turn into a concrete, fully operative hegemony over the partners? After all, the UK chose to exit from the EU in 2016 because the majority of the British refused to depend *politically* on a Berlin concealed behind Brussels. If such a fear were to come true, the entire European project would unravel. The best German culture is not unaware of this risk, and indeed dreads it, and yet seems reluctant to make the basic choices it would call for.[60]

The euro, as a currency, is an excellent currency. It is stable. It is in high demand. This is also true internationally, as a reserve currency (where it now accounts for 20% of the total). For many countries, Italy included, leaving the euro would mean devaluation, higher interest rates, plunging securities, inflation and eroding savings: recession and an enormous loss of household wealth. Long-term competiveness cannot be ensured by weakening the exchange rate, but only by providing quality products and striking a balance between wages and productivity.

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57 The French President Francois Mitterrand hoped to "water down" the influence of a reunited Germany that was regaining the geopolitical centrality it had lost in 1945 by exchanging the deutschmark for the euro and integration in the EU.

58 Varsori and Poettinger (eds.) 2014: 12. The volume includes a chapter by G. Wegner on *The Genealogy of German Ordo-Liberalism and the European Project*.

59 At the military level, German recently took on greater responsibilities that reflect the increasing demands resulting from European foreign policy. It has increased its active participation in NATO, upped its defense budget (which now stands at 37 billion euros or 1.2% of GDP), and shifted its priorities from foreign missions to territorial defense (see Major 2017).

60 Offe 2015.

Europe's macroeconomic problem is not in its currency. It is in the inadequacy of its economic policy. The single monetary policy is not matched by a single budget policy, or even an appropriately coordinated budget policy. German economic culture continues not to acknowledge the fact – ordoliberalism apart – but Keynes made it clear[61] that a structurally balanced government budget, net of business cycle, is essential in curbing public sector debt, an instability factor that Keynes abhorred. But the *composition* of government spending – Keynes suggested – must be heavily tilted towards stabilizing investment in infrastructures that are useful for the general public and the production system. In a situation like that prevailing in Europe today, marked by high unemployment, external account surpluses, stable prices, inadequate infrastructures and low productivity, it makes no economic sense for Germany, the bloc's major country, to limit public investments only within its own borders and – starting with its demand that the "Golden Rule" be written into the EU treaties – keeps them from being made in the rest of the area.

Europe should replace today's Hayekian rigor – the balanced public budget – with a Keynesian rigor: a balanced budget, but many public investments with a high multiplier effect both on aggregate demand and on the economic system's productivity.

The European Union accounts for 12% of world GDP. Germany's GDP, though the largest on the Continent, is less than 3.5% of the world's. Outside of Europe, two great economic, political and military powers loom large. China's output is approaching 18% of world GDP, the United States' stands at 16%. China and India (another 7% of world GDP) have different but not necessarily divergent interests; London is close to an ever more insular Washington but not to Berlin. And in the background, so to speak, sits Russia.

Geopolitically, Germany is significant only as part of the Euro area and the European Union. Germany needs Europe no less than Europe needs it. For it to find full cooperation from the other European countries, it must show itself able to understand their problems, to not interfere with overcoming them, to contribute to solving them.

All that remains to be added is the obvious. To the extent that the other European countries' economic problems are structural, their solutions must first be sought in these countries themselves, in their economic policies and in their businesses' production capacity.

The case of Italy is among the most complex.

For the Italian economy, being on its own outside the euro and outside the Union would be disastrous. The "lira" would depreciate immediately.

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[61] Keynes 1980, especially 319-320: 322: 352: 354.

Worsening terms of trade would cut into per capita income and demand, already too low. Imported inflation would eat away at the real value of savings, of salaries, of pensions. Distrust in the financial markets and inflationary expectations would spread. Rising interest rates would bring down the value of stocks and bonds. Lack of financing and higher mortgage costs would depress real estate values. The falling exchange rate, inflation, soaring interest charges, public debt woes and the restrictive monetary and fiscal policies fielded in reaction to these unbalances would bring on a third recession. In Italy's beleaguered banking system, despite the efficient supervision of the Bank of Italy, the number of credit institutions falling into illiquidity and insolvency would be far from inconsiderable. And their losses would be passed on to savers and taxpayers.

The Italians would become poorer, while the depreciated currency would not provide breathing space for exports, nor would it help profits and investments take off again. Devaluations have never solved Italy's economic problem. Since the lira's crash in 1992, it has been a structural productivity problem, due to public sector indebtedness, poor infrastructures, shortcomings in business law, and insufficient competition. As has been the case in the past, the easy profits favoured by a weak exchange rate would make firms even less inclined to invest in efficiency and technical advances.

Sluggish productivity is a question of supply, rooted in factors that are very much a part of Italian society. Much must be done. It is necessary to bring the reform of public finance to completion; implement an infrastructure investment program, especially in Southern Italy; rewrite business law; correct high income inequality; make businesses be competitive.[62]

But the demand component of Italy's economic decline would be significantly counterbalanced if Germany were to abandon its neomercantilism, combining the solidity of the euro with more sustained growth in its economy, bringing positive repercussions for cooperation, for coordinated economic policies, for economic cohesion: all necessary conditions and prerequisites for institutional progress towards the United States of Europe.

References

Albert M. 1997, "Quale futuro per il modello renano?", in M. Arcelli (ed.), *Globalizzazione dei mercati e orizzonti del capitalismo*, Roma-Bari: Laterza.

— 1993, *Capitalism against Capitalism*, New York: Wiley.

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[62] Lastly, for what should be done – or not done – for the Italian economy, I direct the reader to Ciocca 2018: 14-19.

Arndt H.W. 1944, *The Economic Lessons of the Nineteen-Thirties: A Report*, Oxford: Oxford University Press.

Baldi G. and Bremer B. 2015, "The Evolution of Germany's Net Foreign Asset Position", *DIW Economic Bulletin*, June: 303-309.

Bettelheim C. 1946, *L'économie allemande sous le nazisme, un aspect de la décadence du capitalisme*, Paris: Rivière.

Bloch M. 1967, "The Empire and the Idea of Empire under the Hohenstaufen", (lectures delivered 1927/28), in *Land and Work in Medieval Europe: Selected Papers*, translated by J.E. Anderson and extracted from *Mélanges Historiques*, Routledge: Kegan Paul.

Bolaffi A. and Ciocca P. 2017, *Germania/Europa. Due punti di vista sulle opportunità e i rischi dell'egemonia tedesca*, Roma: Donzelli.

Bologna S. 1996, *Nazismo e classe operaia, 1933-1993,* Roma, Manifestolibri.

Borchardt K. 1991, *Perspectives on Modern German Economic History and Policy*, Cambridge: Cambridge University Press.

Bresciani-Turroni C. 2005 [1933], *Le vicende del marco tedesco*, Milano: Vitale & Associati.

Bruno M. and Sachs J.D. 1985, *Economics of Worldwide Stagflation*, Oxford: Blackwell.

Bry G. 1960, *Wages in Germany, 1871-1945,* Princeton: NBER.

Cacciari M. 1979, *Walther Rathenau e il suo ambiente, con una antologia di scritti e discorsi politici, 1919-1921*, Bari: De Donato.

Cagan P. 1956, "The Monetary Dynamics of Hyperinflation", in M. Friedman (ed.), *Studies in the Quantity Theory of Money*, Chicago: University of Chicago Press.

Ciocca P. 2018, "Cose da fare, e da non fare, per l'economia italiana", *Italianieuropei*, I: 14-19.

— 1987, *L'instabilità dell'economia*, Torino: Einaudi.

— 1981-1982, "Disproportionalities, Allocative Mechanisms, and Stagflation", *Journal of Post Keynesian Economics*: 231-239.

Clapham J.H. 1923, *The Economic Development of France and Germany, 1815-1914*, Cambridge: Cambridge University Press.

Croce E. 1977, "Struttura produttiva e prezzi relativi nel sistema economico italiano", in G. Carli (ed.), *Sviluppo economico e strutture finanziarie in Italia*, Bologna: il Mulino.

Dal Bosco E. 1987, *Germania economica. La Rft nel contesto internazionale*, Roma: Ediesse.

De Grauwe P. 2012, *The Eurozone as a Morality Play*, Valencia: University of Valencia.

Deutsche Bundesbank 1999, *Fifty Years of the Deutsche Mark. Central Bank and the Currency in Germany since 1948*, Oxford: Oxford University Press.

— (ed.) 1976, *Währung und Wirtschaft in Deutschland, 1876-1975*, Frankfurt am Main: Knapp.

Dimsdale N.H., Horsewood N. and Van Riel A. 2006, "Unemployment in Interwar Germany: An Analysis of the Labor Market, 1927-1936", *Journal of Economic History*: 778.

Emminger O. 1978, "30 Jahre D-Mark", in Deutsche Bundesbank, *"Auszüge aus Presseartikeln"*, 46, June 21.

Erhard L. 1963 [1962], *The Economics of Success*, London: Thames and Hudson.

Evans R.J. 2008, *The Third Reich at War. How the Nazis Led Germany from Conquest to Disaster*, London: Allen Lane.

— 2005, *The Third Reich in Power, 1933-1939*, London: Allen Lane.

— 2003, *The Coming of the Third Reich*, London: Allen Lane.

Evans R.J. and Geary D. (eds.) 1987, *The German Unemployed. Experiences and Consequences of Mass Unemployment from the Weimar Republic to the Third Reich*, London: Croom Helm.

Felice F. 2008, *L'economia sociale di mercato*, Soveria Mannelli: Rubbettino.

Fleming D.F. 1961, *The Cold War and Its Origins, 1917-1960*, London: Allen & Unwin.

Frenkel J.A. and Goldstein M. 1996, "The International Role of the Deutsche Mark", in Deutsche Bundesbank, *Fifty Years of the Deutsche Mark. Central Bank and the Currency in Germany since 1948*, Oxford: Oxford University Press.

Graham F.D. 1930, *Exchange, Prices and Production in Hyper-Inflation: Germany, 1920-1923*, Princeton: Princeton University Press.

Guillebaud C.W. 1939, *The Economic Recovery of Germany from 1933 to the Incorporation of Austria in March 1938*, London: Macmillan.

Hardach G. 1977 [1973], *The First World War, 1914-1918*, Berkeley-Los Angeles: University of California Press.

Hardach K. 1976, "Germany, 1914-1970", in C. Cipolla (ed.), *The Fontana Economic History of Europe. Contemporary Economies -1*, Glasgow: Collins.

Harden M. 1931 [1927], *Da Versailles a Versailles,* Milano: Corbaccio.

Hobsbawm E.J. 1996, *The Age of Extremes*, New York: Random House.

Holtfrerich C.L. 1980, *The German Inflation 1914-1923: Causes and Effects in International Perspective*, Berlin:Walter de Gruyter.

Hunt J., *The Economics of German Reunification,* McGill University and NBER, February 2006. Available at: http://www.rci.rutgers.edu/~jah357/Hunt/Transition_files/german_unification.pdf (accessed September 21, 2018).

IMF 2014, *World Economic Outlook*, Washington, October.

Kessler H. 1928, *Walther Rathenau, His Life and Work*, Whitefish MT: Kessinger Publishing.

Keynes J.M. 1980, "Activities 1940-1946. Shaping the Post-War World: Employment and Commodities", in *The Collected Writings of John Maynard Keynes*, vol. XXVII, London: Macmillan.

— 1949, "Dr. Melchior: A Defeated Enemy", in *Two Memoirs*, London: Rupert Hart-Davis.

Krebs C.B. 2011, *A Most Dangerous Book. Tacitus's "Germania" from the Roman Empire to the Third Reich,* New York: Norton.

Ma G. and McCauley R.N. 2013, "Global and Euro Imbalances; China and Germany", *BIS Working Papers* No. 424, September 5: especially 18-19.

Maddison A. 2007, *Contours of the World Economy, 1-2030 AD. Essays in Macro-Economic History*, Oxford: Oxford University Press.

— 1995, *Monitoring the World Economy, 1820-1992*, Paris: OECD.

— 1964, *Economic Growth in the West. Comparative Experience in Europe and North America*, London: Allen & Unwin.

Magnani M. 1996a, "L'economia della Germania e la duplicità tedesca: riflessioni in margine a una ricerca", in Sundry Authors, *La Germania unita. L'economia tedesca di fronte all'unificazione*, Padova: Cedam.

— 1996b, "Le istituzioni della contrattazione salariale in Germania e in Italia: consenso ed efficienza in prospettiva storica", in Sundry Authors, *La Germania unita. L'economia tedesca di fronte all'unificazione*, Padova: Cedam.

Major C. 2017, "Germany: The (not so) Timid Leader", *Carnegie Europe*, February 3.

Martinez Oliva J.C. and Stefani M.L. 2000, "Dal Piano Marshall all'Unione europea dei pagamenti. Alle origini dell'integrazione economica europea", in F. Cotula (ed.), *Stabilità e sviluppo negli anni Cinquanta,* 1, *L'Italia nel contesto internazionale*, Roma-Bari: Laterza.

Offe C. 2015, *Europe Entrapped*, Cambridge: Polity Press.

Paretti V. and Bloch G. 1956, "La production industrielle en Europe Occidentale et aux Etats-Unis de 1901 à 1955", *Moneta e Credito*.

Pedersen J. and Laursen K. 1964, *German inflation, 1918-1923*, Amsterdam, North-Holland.

Postan M.M. 1967, *An Economic History of Western Europe, 1945-1964*, London: Methuen.

Rathenau W. 1918, *Die neue Wirtschaft*, Berlin: S. Fischer.

Ritschl A. 2012, "Germany, Greece and the Marshall Plan", *The Economist*, June 15.

— 2002, *Deutschlands Krise und Konjunktur*, Berlin: Akademie-Verlag.

Ritschl A. and Spoerer F. 1997, "Das Bruttosozialprodukt in Deutschland nach den amtlichen Volkseinkommens- und Sozialproduksstatistiken 1901-1995", *Jahrbuch für Wirtschafts Geschichte*, 2.

Rubino P. 1996, "Italia e Germania: Un confronto attraverso le tavole delle interdipendenze strutturali (1975-1985)", in Sundry Authors, *La Germania unita. L'economia tedesca di fronte all'unificazione*, Padova: Cedam.

Saitto F. 2015, *Economia e Stato costituzionale. Contributo allo studio della 'Costituzione economica' in Germania*, Milano: Giuffrè.

Sartor N. 1996, "L'intervento pubblico nell'economia tedesca", in Sundry Authors, *La Germania unita. L'economia tedesca di fronte all'unificazione*, Padova: Cedam.

Schumpeter J.A. 1939, *Business Cycles. A Theoretical, Historical, and Statistical Analysis of the Capitalist Process,* New York: McGraw-Hill.

Sommariva A. and Tullio G. 1987, *German Macroeconomic History, 1880-1979*, London: Macmillan.

Steil B. 2013, *The Battle of Bretton Woods*, Princeton: Princeton University Press.

Stolper G., Häuser K. and Borchardt K. 1967 [1940], *The German Economy, 1870 to the Present*, London: Weidenfeld and Nicolson.

Sylos Labini P. 1960, "Osservazioni intorno al miracolo dell'economia tedesca", in *Economie capitalistiche ed economie pianificate*, Bari: Laterza.

Taylor A.J.P. 1968 [1945], *The Course of German History. A Survey of the Development of German History since 1815*, London: Methuen.

Valli V. 2002, *L'Europa e l'economia mondiale. Trasformazione e prospettive*, Roma: Carocci.

Varsori A. and Poettinger M. (eds.) 2014, *Economic Crisis and New Nationalism. German Political Economy as Perceived by European Partners*, Brussels: Peter Lang.

Veblen T. 1915, *Imperial Germany and the Industrial Revolution*, London: Macmillan.

Winkler H.A. 2006, *Germany: The Long Road West*, Oxford: Oxford University Press.