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Wages, Investment, and the Fate of the Weimar Republic: A Long-term Perspective*

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I. Introduction: The Borchardt Debate and the Uses of History

When the second oil crisis struck in 1979, West Germany's prospects for economic growth seemed to go from bad to worse. During the early 1980s, the Federal Republic was looking back on a decade that had brought an end to the post-war era of rapidly growing prosperity. Massive wage increases, a considerable expansion of social welfare spending, and the first oil crisis had ushered in a period that saw, parallel to the rise of stagflation, a declining belief in the Keynesian management of the economy.

It was in this atmosphere that Knut Borchardt, the Munich economic historian, sparked off a debate about the Brüning government in Germany (1930–2) and its ability to alleviate the economic crisis during Weimar's final years. He expounded his argument not only in scholarly journals and in front of learned societies,[1] but in a number of newspaper and magazine articles as well.[2] Contrary to the virtually unchallenged *communis opinio* of his

* I should like to express my gratitude and intellectual indebtedness to A.J. Nicholls, European Studies Centre, St. Antony's College, Oxford, who directed me to this topic and was kind enough to comment on earlier drafts. I would also like to thank an anonymous referee for constructive criticisms and helpful suggestions. Generous financial assistance by the German Academic Exchange Service is gratefully acknowledged.

[1] K. Borchardt, 'Zwangslagen und Handlungsspielräume in der großen Weltwirtschaftskrise der frühen dreißiger Jahre', Bayerische Akademie der Wissenschaften, *Jahrbuch 1979* (Munich, 1979), reprinted in K. Borchardt, *Wachstum, Krisen, und Handlungsspielräume der Wirtschaftspolitik* (Göttingen, 1982); & 'Wirtschaftliche Ursachen des Scheiterns der Weimarer Republik', in K. D. Erdmann and H. Schulze (eds.), *Weimar, Selbstpreisgabe einer Demokratie* (Düsseldorf, 1980), reprinted in K. Borchardt, *Wachstum, Krisen.*

[2] Cf. K. Borchardt, 'Die deutsche Katastrophe. Wirtschaftshistorische Anmerkungen zum 30. Januar 1933', *Frankfurter Allgemeine Zeitung*, 29 Jan. 1983; C. Holtfrerich, 'Arbeitslosigkeit, Sozialabbau, Demokratieverlust. Ergebnis zu hoher Löhne in der Weimarer Republik?', *Gewerkschaftliche Monatshefte*, 34 (1983).

colleagues, Borchardt contended that a strategy of demand management and deficit spending would not have diminished the severity of the crisis. Lack of political support and the imperatives of foreign policy—especially the reparations question—were prohibitive obstacles.

Even if what Borchardt perceived as insurmountable political restraints could have been overcome, he argued that no economic measures taken by the government would significantly have altered the business climate. Furthermore, this would have been undesirable since the crisis finally made it possible to overcome the basic socio-economic weaknesses of Weimar. Room for manoeuvre was limited by the objective need to reverse the excessive level of wages and lavish state consumption. The reason for the unusual severity of the depression in Germany was its prehistory—in short, 'a crisis before the crisis'. For Knut Borchardt, both difficulties proved so strong that even during its 'golden years' (1924–9) Weimar was 'in the long run [an] unviable economic system in an already barely functional political system'.[3] After the massive cost reductions during the period of deflation from 1930 to 1932, the Nazis were able to exploit the benefits gained by Brüning's heroic efforts. Borchardt therefore cites Brüning's own memoirs, according to which he was ousted a hundred metres before the finishing line—a tragic situation indeed.

For a number of reasons, this discussion about German economic policy during the 1920s left the academic ivory tower and joined the larger group of semi-public historical debates that occupied centre stage during the 1980s, such as the *Historikerstreit*[4] and the discussion about a national historical museum. Employing rhetoric that has been used many times since 1948, Borchardt forcefully argued that—*historia magistra vitae*—the lessons of Weimar should be learned, which to him, in the Federal Republic of the early 1980s, meant primarily that overgenerous wage increases and the profligate welfare state endangered the economic foundations of democracy.[5] Borchardt's comments received wide public attention because he sided with the employers of his own day in a climate of increased social tensions due to major labour disputes. Furthermore, this was bound to spark controversy as he did so in a country which, since Max Weber, had come to regard absence of value judgements as the hallmark of academic excellence. In addition, modern history knows of few events in which the political and economic spheres were as closely interrelated. As Ian Kershaw, in his overview of the Borchardt debate, has recently remarked: 'The economic crisis in Germany

[3] Borchardt, *Wachstum, Krisen*, p. 182.

[4] Cf. J. von Kruedener, 'The "Borchardt Debate" on the Failure of Economic Policy at the End of the Weimar Republic', in J. von Kruedener (ed.), *Economic Crisis and Political Collapse* (Oxford, 1990), p. xi; *'Historikerstreit'. Die Dokumentation der Kontroverse um die Einzigartigkeit der nationalsozialistischen Judenvernichtung* (Munich, 1987).

[5] Borchardt, *Wachstum, Krisen*, pp. 188–99, 201–5.

triggered off, therefore, a withdrawal of support, not only from the government of the day, but from the political system as a whole . . .'.[6] To the present day, the rise of Hitler is seldom thought of in public memory without reference to the six million unemployed at the height of the Great Depression.

In recent years, the debate has broadened in two respects. With important contributions by British and North American scholars, it is firstly no longer confined to German historians.[7] Secondly, the controversy has evolved into a wider, multi-causal enquiry into both Weimar's relatively stable years and the strategy of the Brüning government.[8] This essay will attempt to give an overview of the debate in two parts. The first section will deal with the question of whether the republic's 'golden years' may justifiably be called an era of crisis. In doing so, the contributions to the Borchardt controversy are described. After a discussion of the available statistical material, the concluding thesis will be that the Weimar economy, while being anything but doomed before 1927, was severely harmed by an accidental accumulation of detrimental state action. In the second part, the Brüning government's action will be examined. It will emerge that the room for manœuvre was far greater than Borchardt assumes, and that sufficient means may have been available to alleviate the depression. In the final analysis, deliberate choices of policy-makers, rather than the working of anonymous economic forces provide a far better explanation of economic policy during Weimar's final years.

2. The Debate about the 'Crisis before the Crisis'

From Borchardt's perspective, Weimar's fundamental deficiency was an excessive level of private and state consumption[9] as well as wage increases that outstripped gains in productivity.[10] Profits and, subsequently, investments are said to have been infringed. As a result, economic growth during the Weimar republic was, while not exactly sluggish, not comparable with the post-1945 'economic miracle'.[11] The precondition of disproportionate pay rises was a labour market that was sheltered from the working of market forces through a system of state arbitration.[12] From 1923, the state could intervene to declare arbitral awards binding when unions and employers could not agree on a wage settlement. Workers' pay became a political issue. Borchardt maintains that all parties' claims were legitimate and had to be met. Since,

[6] I. Kershaw, 'Perspectives of Weimar's Failure', in I. Kershaw (ed.), *Weimar: Why Did German Democracy Fail?* (London, 1990), p. 20.

[7] H. James, 'Economic Reasons for the Collapse of the Weimar Republic', in Kershaw, *Weimar*; J. Lee, 'Policy and Performance in the German Economy, 1925–35: a Comment on the Borchardt Thesis', in M. Laffan (ed.), *The Burden of German History* (London, 1988); A. J. Nicholls, *Weimar and the Rise of Hitler*, 3rd edn. (Houndmills, 1991), pp. 143–58.

[8] R. Bessel, 'Why Did the Weimar Republic Collapse?', and D. Geary, 'Employers, Workers, and the Collapse of the Weimar Republic', in Kershaw, *Weimar*.

[9] Borchardt, *Wachstum, Krisen*, pp. 195, 199.

[10] Kruedener, 'Preface', in Kruedener, *Economic Crisis*, p. xxii.

[11] Borchardt, *Wachstum, Krisen*, p. 195.

[12] Ibid. 189.

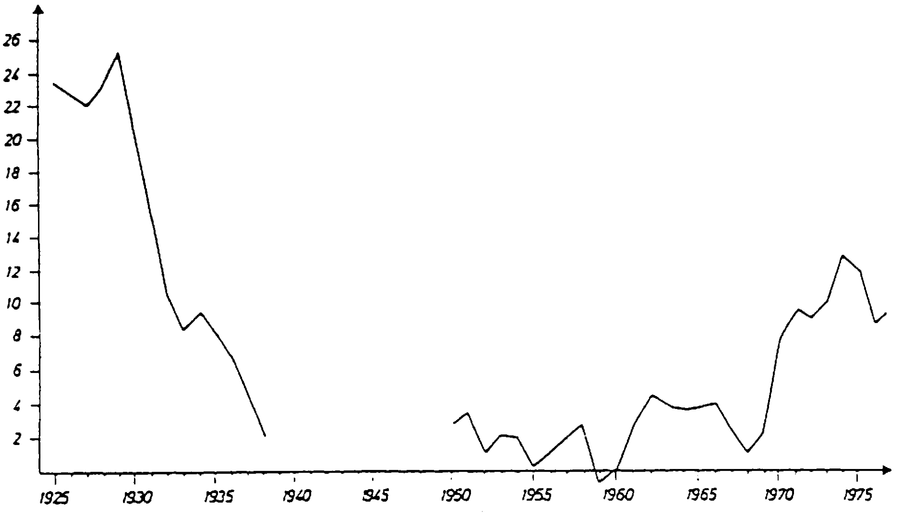

FIG. 1: (from K. Borchardt, *Wachstum, Krisen*, p. 178)

however, the state's and employees' larger share of the national income diminished growth, the Weimar economy became increasingly unable to satisfy the growing demands. Only an 'economic miracle' could have broken the deadlock.

As unions and employers became more and more intransigent, it increasingly fell to state arbitrators to determine the amount of wage increases.[13] Haunted by the spectre of Communism, the state favoured placating the workers. In an ill-fated attempt to trade off economic development for political stability, long-term prospects for growth were undermined.[14]

The standard answer to such a type of deadlock is normally inflation. In that case, the different groups' demands on the gross national product would seem to be met while price increases diminish the value of nominal payments.

After the stabilization of the mark in 1924, the government did not have recourse to this strategy. The *Reichsbank* was independent of state control, and cheap money no longer existed. Borchardt substantiates his view that wages were too high by examining the accumulated real wage position. This statistical device, currently used by the *Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung*, measures whether or not changes in the average wage have an effect on the level of production costs. A rise in wages is neutral with respect to the wage/income level if it does not surpass the framework set by changes in productivity.[15] Fig. 1 shows Borchardt's calculation of the accumulated real wage position between 1925 and 1977.

[13] Ibid.
[14] Ibid. 203.
[15] Ibid. 281 n. 72.

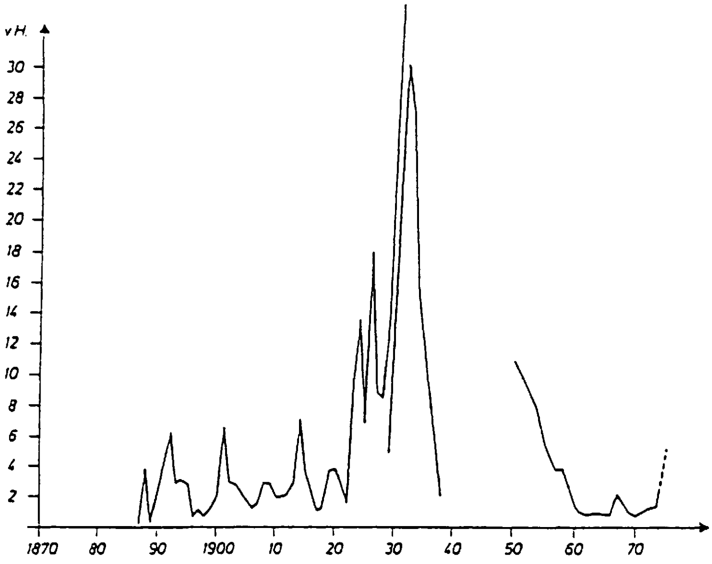

FIG. 2: (from K. Borchardt, *Wachstum, Krisen*, p. 179, change in calculation from 1927 onwards)

When compared with 1960, the Weimar years show a major upward movement from a relatively high level. Borchardt is furthermore able to point to an unusually high share of wages in the national income.[16] Since wages were too high from a strictly economic standpoint, unemployment was bound to persist at unprecedented levels (fig. 2). With an average of 7 per cent of all union members out of work, the job market was already troubled even before the onset of the crisis.

In the ensuing debate, Carl-Ludwig Holtfrerich has maintained that exact calculations of the accumulated real wage position should take the terms of trade, the cost of capital and the structure of the workforce into account. Improvements in the terms of trade and alterations in the workforce's composition enabled industry to pay higher wages, and only the relatively high rate of interest tended to diminish enterprises' ability to grant pay rises. The impact of interest rates had to be weighed against the benefits that industry received from post-war inflation. With virtually no debts in 1924, he claims, the economy could live with a higher price for new capital.

In addition, Borchardt compares productivity per employee with hourly earnings. As Holtfrerich emphasises, this would have been legitimate only if the total amount of working hours had not been reduced.[17] Since the 1918–19 revolution drastically reduced the average amount of time dedicated to

[16] K. Borchardt, *Die «Krise vor der Krise»* (Munich, 1989), p. 21.

[17] C.-L. Holtfrerich, 'Zu hohe Löhne in der Weimarer Republik?', *Geschichte und Gesellschaft*, 10 (1984), 127.

work through the introduction of the eight-hour working day, a false picture had to emerge. If hourly earnings are compared with productivity per man hour, Holtfrerich concludes, wage increases exceeded productivity gains only in 1927.[18]

Furthermore, Borchardt's reference to the increased wage/income quota is misleading from Holtfrerich's perspective, since small capital holders became almost extinct after the hyperinflation. As the members of this *rentier* class now had to work for a living, they increased the proportion of the national income taken up by workers' pay. Furthermore, the ratio of salaried employees to wage earners rose dramatically. As salaries were normally higher than the pay of average workers, this development in itself increased the wage/income quota. Since, however, the different composition of the labour force was only due to the altering needs of industry, and not to union pressure or state arbitration, it was a more technologically advanced capitalism that brought about this development. In order to explain the statistics, one therefore does not need to assume that extravagant pay rises occurred.[19]

Holtfrerich, while being a stern critic of Borchardt's views on wage levels, nevertheless agrees that the Weimar economy was abnormal, even 'sick'. He shares Borchardt's view that investments lagged, but to him the unusually high share of labour in national income is a symptom and not a cause of this development. In contrast to Borchardt, he surmises that depressed exports and high interest rates were responsible for this.[20] Since the working class did not take over the *rentiers*' role of saving for capital formation, a system of government incentives should have enabled it to do so. The interest received would have benefited workers, while enterprises would have had easier access to the capital they required.

J. von Kruedener has pointed to a further determinant of the accumulated real wage position—social security payments. The employers' contribution to social insurance leapt from 2.5 per cent of gross wage payments in 1913 to 7.4 per cent in 1925, and to 10 per cent in 1932.[21] As gains in productivity could only be distributed once, the amount of wage rises possible without impeding profits and investments was even more restricted. Kruedener, therefore, while arguing along slightly different lines, sides with Borchardt.[22] He has also stressed an often neglected aspect of Borchardt's initial argument: workers' pressure for higher income was highly legitimate during the Weimar years, and the situation that evolved was therefore truly inescapable.[23]

18 Ibid. 131.

19 Ibid. 139; C.-L. Holtfrerich, 'Economic Policy Options and the End of Weimar', in Kershaw, *Weimar*, p. 81.

20 Holtfrerich, 'Zu hohe Löhne?', p. 135.

21 J. von Kruedener, 'Die Überforderung der Weimarer Republik als Sozialstaat', *Geschichte und Gesellschaft*, 11 (1985), 366.

22 Ibid. 376.

23 Kruedener, 'Preface', p. xxviii.

The most recent contribution on productivity and pay stems from one of Borchardt's disciples, Albrecht Ritschl. He takes Holtfrerich's comments into account and arrives at a new calculation of the accumulated real wage position. If one focuses on industry alone, the relationship between pay and productivity directly after the stabilization of the mark was already distorted (Table 1). While real wages were undoubtedly low, production had fallen even further. The later upward trend of workers' earnings therefore did not correct the unhealthy starting situation, but rather aggravated the problems already besetting industry. Furthermore, exact calculations yield a social product that is five billion marks smaller than the figure used by Holtfrerich.[24]

Theodore Balderston has attempted to elucidate Weimar's economic development from a slightly different angle. Working from an economic model of adaptive expectations, he tries to show that major wage increases were confined to the two years immediately after the inflation came to an end. As trust in the stability of the mark returned, upward pressure on workers' pay diminished considerably. The Phillips curve, however, was moved outward while fears of inflation persisted, leaving politicians with a particularly unfavourable trade-off between unemployment and price increases.[25] Balderston's economic model presupposes a working labour market, a somewhat doubtful assumption, as evidenced by the numerous infringements of market forces which Borchardt has identified.

Table 1: Accumulated Real Wage Positions
(1928 = 100)

	according to Holtfrerich	*according to Ritschl*
1913	94.3	83.7
1925	85.2	96.8
1926	87.5	93.7
1927	87.8	91.6
1928	100.0	100.0
1929	96.3	99.4
1930	92.5	96.1
1931	92.1	95.9
1932	84.4	92.3

(Source: Ritschl, 'Zu hohe Löhne?', pp. 392, 398)

[24] A. Ritschl, 'Zu hohe Löhne in der Weimarer Republik?', *Geschichte und Gesellschaft*, 16 (1990), 398.
[25] T. Balderston, 'Links between Inflation and Depression', in G. Feldman *et al.* (eds.), *Die Nachwirkungen der Inflation auf die deutsche Geschichte 1924–1933* (Munich, 1985), p. 172.

Charles S. Maier, in one of the most astute comments in the debate, has suggested a Keynesian solution to the economic difficulties of Weimar. The deadlock would thereby have been broken by renewed growth.[26] Increased money supply would have reduced real wages via price increases, and the accumulated real wage position would have diminished during the upswing. In this way, Keynesian demand management no longer appears as the diametrically opposed alternative to a conservative strategy of wage cuts, but rather as its necessary antecedent. His proposal nevertheless suffers from a flaw: he misconceives the Reichsbank's role, believing it to be under the elected government's influence.[27] This view, while being a necessary precondition for his solution, is proved incorrect by the continued clashes between Hjalmar Schacht and various Weimar cabinets.

Harold James has added a new perspective to the discussion surrounding investments during Weimar's years of relative stability. Not only were too few investments made, but they were of lower quality as well, as most of them were channelled into rather unproductive sectors such as the food industry and textiles: '. . . the extent of technical change was surprisingly limited. Modernity took place on the cinema screen and in the novel, but on the whole not in the German workplace.'[28]

James also stresses another aspect of unemployment which does not confirm Borchardt's view that wages were too high. By taking into account the altering supply of labour, he points to a force of major importance for the job market. Large numbers of school-leavers entered the job market during the later 1920s. As unemployment was already exacerbated by the unfavourable demographic development, wages seem to have been of less importance.

On turning to the crucial issue of the debate—the level of wages—James puts less stress on long-term development. He emphasizes the drastic upward movement of earnings during 1927–8. While not necessarily in itself exceeding the capacity of the economy, it clouded business prospects. As entrepreneurs anticipated that their profits were likely to be eroded at a comparable pace, investments began to fall.[29] In the final analysis, however, James endorses Borchardt's assessment, stressing that Weimar was a 'stalemate economy [that] had resulted from the politicization of wages'.[30]

It therefore emerges that despite disagreement about the causal factors, most participants in the Borchardt controversy believe in an underlying economic crisis before the recession. The following section will attempt to assess in what respect this prevailing view is valid.

[26] C. S. Maier, 'Die Nicht-Determiniertheit ökonomischer Modelle', *Geschichte und Gesellschaft*, 11 (1985), 290.

[27] 'Geldpolitik war der Vollmacht der Exekutive unterworfen, wenn der politische Wille vorhanden war', ibid. 294.

[28] James, 'Economic Reasons', p. 36.

[29] Ibid. 38–40.

[30] Ibid. 55.

3. Weimar and the Long-term Development of the German Economy

One of the least-challenged of Borchardt's assumptions is that Weimar suffered from a significant weakness of investment. While it is accurate, as he points out, that investments' share of the net domestic product fell from 16 per cent in 1910–13 to 10.5 per cent in 1925–9, it should yet be noted that the long-term average during the pre-1913 era was a mere 11.6 per cent.[31] Investments during the 'golden years' of the Weimar Republic were therefore only 1.1 per cent below those from the 1850s onwards. Despite the fact that the 1920s economy still had to recover from the effects of the war, this hardly signifies a dramatic drop.

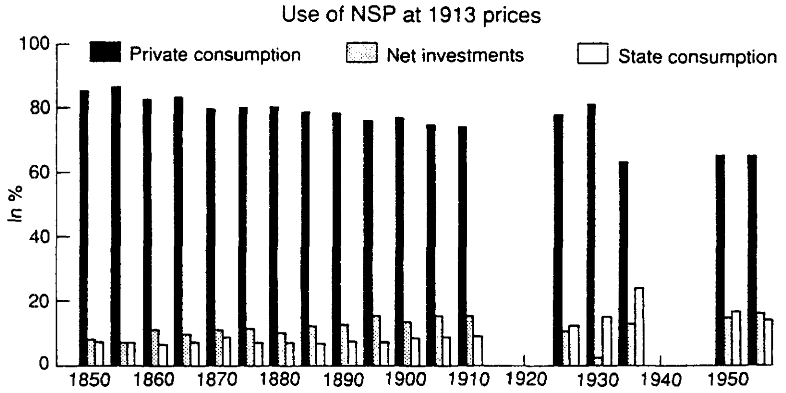

FIG. 3: Use of Net Social Product at 1913 Prices (from W. Hoffmann, *Wachstum der deutschen Wirtschaft*, p. 104)

Fig. 3 confirms this assessment. The use of the net social product is given as five-year averages (the figure for 1850 should therefore be read as the mean of the following five years). The level of private consumption for the period 1925–9 is lower than in any period before 1890–4. The truly dramatic change is the increase of state expenditure, which leapt from an average of 8.5 per cent to 12.2 per cent of the net social product (NSP), surpassing the total of investments.

Fig. 4 shows the development of capital stock in Germany at 1913 prices. Instead of comparing investment and capital stock with 1913 alone, figures for a longer period are given in Table 2 and Fig. 4. In this way, Weimar's performance can be compared with both the prevailing tendency of the Empire

[31] Borchardt, *Wachstum, Krisen*, p. 280; the long-term average is calculated from W. Hoffmann, *Das Wachstum der deutschen Wirtschaft seit der Mitte des 19. Jahrhunderts* (Berlin, 1965), Table 36, p. 104.

Table 2: Investment in Germany (as a percentage of NSP)

	(1913 = 100)	*(1850–1913 = 100)*
1925	74.24	98.88
1926	45.83	61.03
1927	98.38	131.03
1928	82.52	109.91
1929	44.47	59.22
Average	69.09	92.01

(Source: Hoffmann, *Wachstum der deutschen Wirtschaft*, p. 828)

and the reconstruction period of the Federal Republic. Table 2 demonstrates the effect of using 1913 as a base year; Weimar appears much less like a period of unusually low investment when a long-term perspective is introduced. Although investment only exceeded the 1850–1913 level during two of Weimar's five 'golden years', capital stock surpassed, from 1925 onwards, the level that would have been indicated by the overall trend since 1900. What may be inferred from the data so far presented is that neither investment nor capital stock suggests an essentially 'sick' economy. The Weimar upswing differs from the Empire's and the Federal Republic's boom years less in absolute values than in the curve's incline. Whereas the Kaiserreich and the Bundesrepublik enjoyed continuing increases in capital stock, the 'normal'

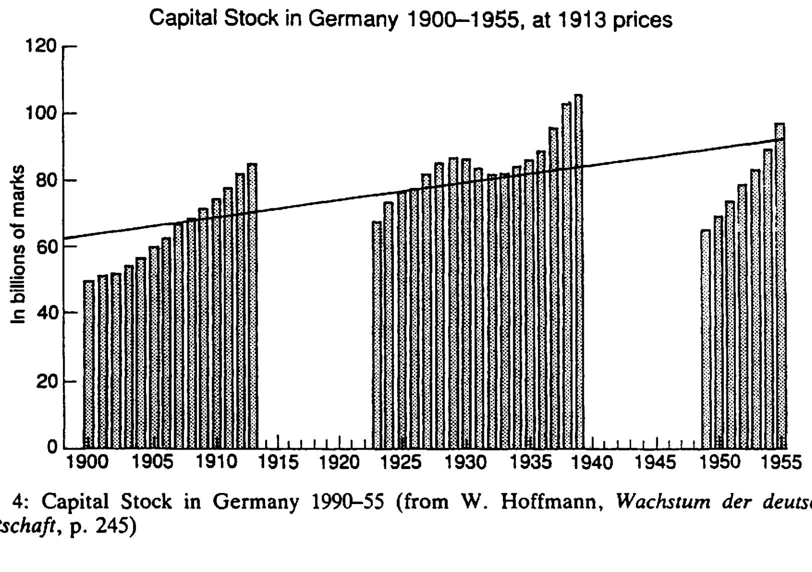

FIG. 4: Capital Stock in Germany 1990–55 (from W. Hoffmann, *Wachstum der deutschien Wirtschaft*, p. 245)

upward movement in Weimar slowed down after 1927. The sharp drop during the Great Depression is therefore preceded by an abnormal decline in the growth rate of capital stock, with the figure for 1928 actually exceeding the 1900–13 average.

Harold James has maintained that the better investment figures during some of Weimar's good years were caused only by restocking rather than by the building of new plant.[32] It is correct that a large part of the total accounted for this. As evidenced by comparable ratios during the 1950s, this is, in contrast to James's view, a normal situation.[33]

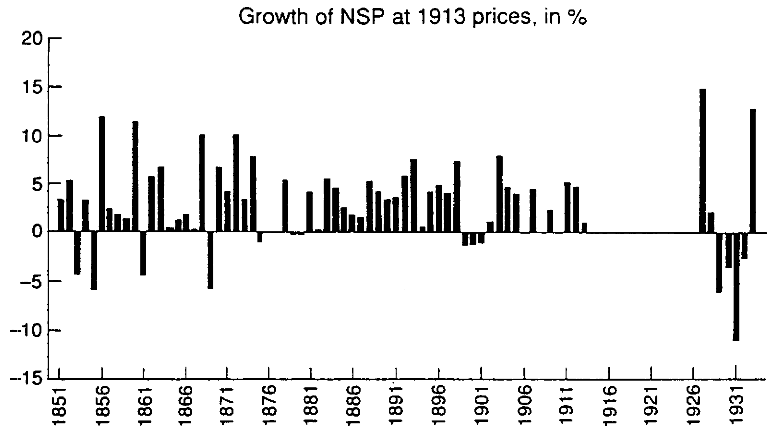

FIG. 5: Growth of Net Social Product at 1913 Prices (from W. Hoffmann, *Wachstum der deutschen Wirtschaft*, p. 827)

This view corresponds with the annual growth figures of the NSP (Fig. 5). Growth lessened markedly after 1927 and in fact became negative after 1929. Where the five-year averages show a normal increase in national wealth (Fig. 6), the annual development hints at a decisive change in business climate after 1927.

The pivotal issue in the Borchardt debate was the level of wages. Fig. 7 sets the development of the wages' share of income in industry in a long-term perspective. There are two reasons why the wage/income ratio in industry, instead of the accumulated real wage position, is used throughout this paper. Firstly, a rise in labour's share of income *per definitionem* means that pay rises exceeded productivity growth. Secondly, the part of Germany's economy that the debate centred on was industry. The shrinking share of entrepreneurial

[32] James, 'Economic Reasons', p. 34.
[33] Hoffmann, *Wachstum der deutschen Wirtschaft*, p. 425.

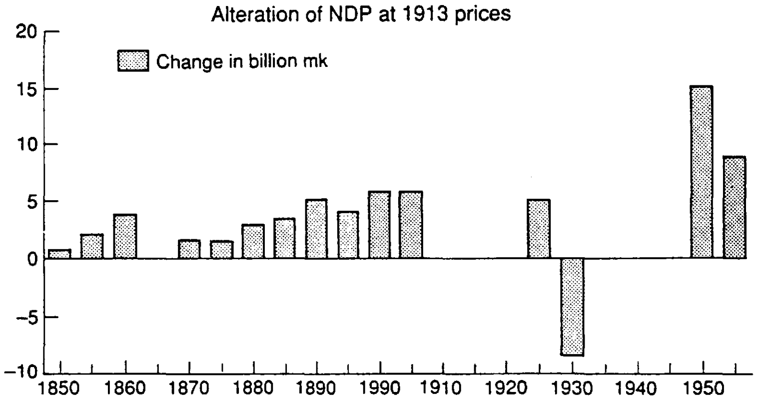

FIG. 6: Alteration of Net Domestic Product at 1913 Prices (from W. Hoffman, *Wachstum der deutschen Wirtschaft*, p. 14)

income in the economy as a whole is largely due to the crisis in the agricultural sector.[34]

One of the problems with the common practice of using 1913 as a base year is that wages were at an unusually low ratio to income in 1913. As a matter of fact, it was the second lowest ratio recorded since 1880. Only in 1900 was the share of income that was taken up by wages even lower than in 1913. The frequent comparisons with that year, then, will inevitably lead to the impression that Weimar's wage/income level was much higher than that

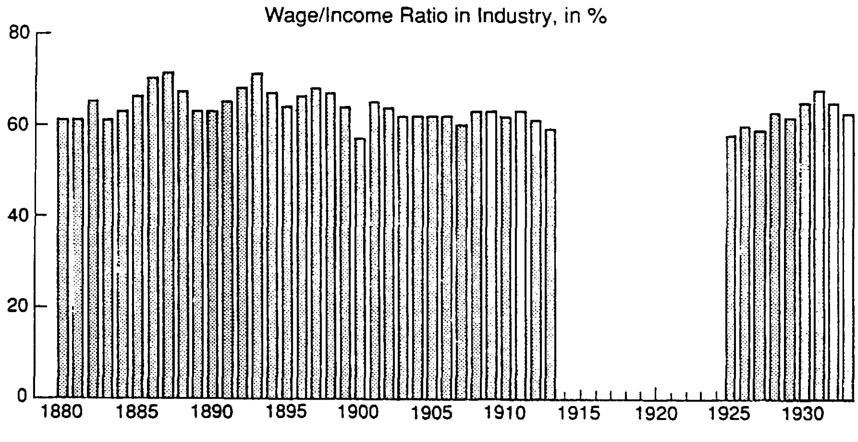

FIG. 7: Wage/Income Ratio in industry (from E. Phelps Brown, *A Century of Pay*, App. 3)

[34] Holtfrerich, 'Economic Policy Options', pp. 81 ff.

Table 3: Wage/Income Ratio

	(1913 = 100)	*(1880–1913 = 100)*
1925	98.3	90.6
1926	101.7	93.8
1927	100	92.2
1928	106.8	98.4
1929	105.1	96.9
1930	110.2	101.6
1931	115.3	106.3
1932	110.2	101.6

of the Empire. Borchardt himself stresses the importance of a long-term perspective, but nevertheless employs 1913 as a base year.[35] Table 3 conveys an impression of the degree of distortion involved. Weimar looks very much less like an era of economic crisis when the average for 1880 to 1913 is used as the index's basis. During the 'golden years' 1924–29, the ratio remains below the long-term average—as should be expected during boom years. The wage/income ratio only surpasses the 1880–1913 figure after the onset of the depression.

Borchardt has furthermore pointed out that one of the abnormal aspects of Weimar's boom was the increase of the wage/income ratio during an upswing.[36] Since profits react more quickly to changes in business climate than wages, economic theory holds that this variable should increase during years of depression and fall in years of growing prosperity. The question then is whether the development noted above was unusual by pre-1913 standards. Figure 8 compares annual growth of NSP with changes in the wages' proportion of national income. Again, the 1910–13 business cycle conforms to the economists' expectations, since the wage/income ratio drops below 60 per cent during years of considerable growth. However, it should be noted that concurrent movements occur from 1888 to 1894 and from 1896 to 1902. Hence, the parallel movement of both variables during the first republic's 'golden years' signifies not a divergence of Weimar from normality, but of historical reality from the world of economic theory.

[35] K. Borchardt, 'A Decade of Debate about Brüning's Economic Policy', in Kruedener, *Economic Crisis*, pp. 129, 142. Cf. C. Holtfrerich, 'Was the Policy of Deflation Unavoidable?', ibid. 77. At best, averages for a small number of years preceding the war are given: Borchardt, 'A Decade of Debate', p. 128; D. Petzina, 'Was there a Crisis before the Crisis?', in Kruedener, *Economic Crisis*, p. 14.

[36] 'The fact that they [the wage share and real wage position] continued to rise is a sign of the abnormality of the period', K. Borchardt, 'A Decade of Debate'; p. 142.

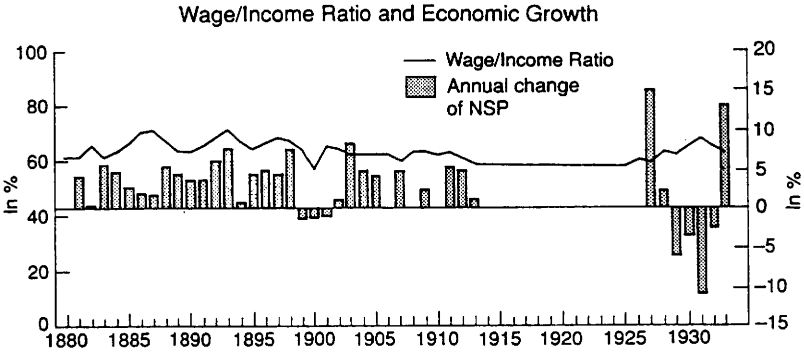

FIG. 8: Wage/Income Ratio and Economic Growth (from E. Phelps Brown, *A Century of Pay*, App. 3; W. Hoffmann, *Wachstum der deutschen Wirtschaft*, p. 828)

Furthermore, the thesis of a 'profit squeeze' needs to be modified. When profit rates are compared with those of the UK, which was subjected to similar export problems, two aspects merit special attention. First, the continued difference between the United Kingdom and German profit margins (Fig. 9) almost vanishes between 1923 and 1927. Second, the drop in profit rates only began after 1927, when divergence becomes significant. No such difference can, however, be inferred from comparisons with the USA (Fig. 10).

The development of unit wage costs (Fig. 11) since 1928 marks a turning point. From that year, Germany surpasses Sweden and the USA. It is quite clear that Germany had not lost its competitive edge before 1927, which was the last year in which German unit wage costs were, relative to the 1890–9 average, below those of Sweden and the USA.[37] That Germany admittedly

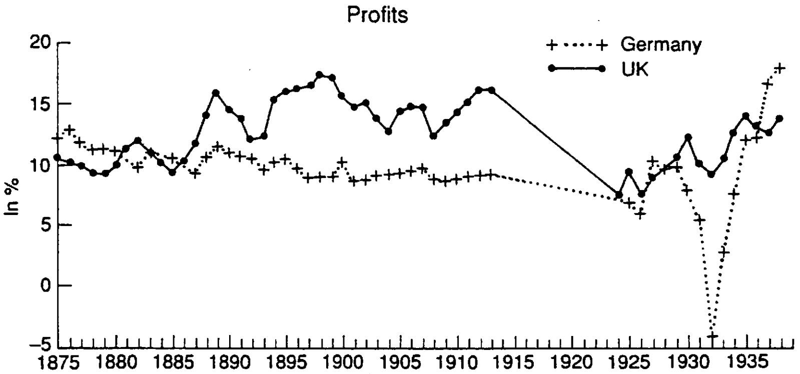

FIG. 9: Profits (from E. Phelps Brown, *A Century of Pay*, App. 3)

[37] E. H. Phelps Brown and M. Browne, *A Century of Pay. The Course of Pay and Production in France, Germany, Sweden, the United Kingdom, and the United States of America, 1860–1960* (London, 1968), Appendix 2. For Sweden, 1892–97 = 100.

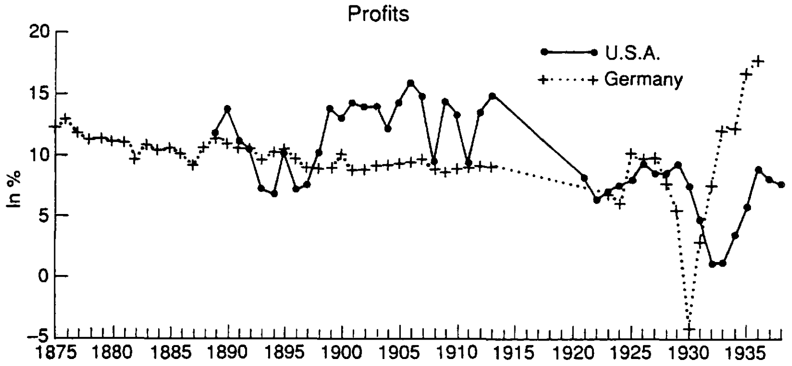

FIG. 10: Profits (from E. Phelps Brown, *A Century of Pay*, App. 3)

experienced a more marked upward movement than its competitors seems to be a result of the inflation, which left workers in a particularly unfavourable distributional position.

So far, the Borchardt thesis emerges virtually unscathed when it is examined quantitatively. The data confirm that a slowdown in business activity occurred, and that wage pressure was probably an important cause of this development. However, it was not the entire period which was characterized by excessive wage levels, but rather the years from 1928 onwards. Harold James, who has sided with Borchardt, also restricted the period of wage-induced 'crisis before the crisis' to these latter years.[38] But what caused the dramatic alterations in 1927? If the structure of Weimar's political and social system was responsible, Borchardt's conclusion that the republic's economy was doomed will be

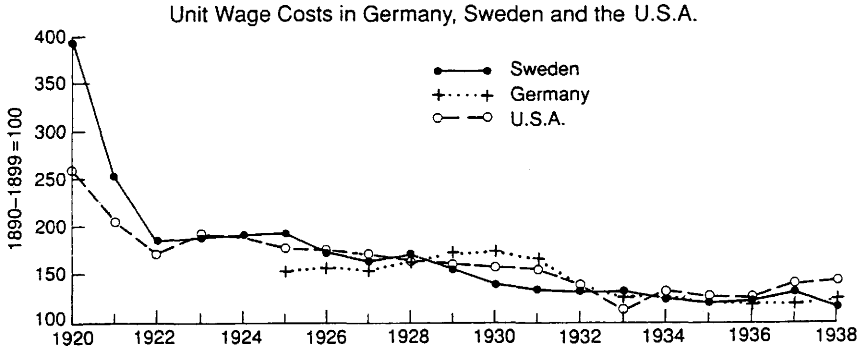

FIG. 11: Unit Wage Costs in Germany, Sweden, and the USA (from E. Phelps Brown, *A Century of Pay*, App. 2)

[38] James, 'Economic Reasons', p. 39.

confirmed. If, however, other factors were relevant, the small-cake economy of late Weimar may be the result of non-economic factors.

4. Civil Service Salaries and Hjalmar Schacht: An Alternative Interpretation

It is a basic assumption of economic theory that interest rates are an important determinant for investment decisions. From February 1925, the Reichsbank's discount rate was 9 per cent. Despite Chancellor Luther's repeated pleas for a lowering of rates, Reichsbank president Schacht, backed by the banks, declined to do so.[39] It was not until January 1926 that the Reichsbank lowered the discount rate to 8 per cent. Afterwards, repeated downward adjustment led to a drop to 5 per cent by January 1927. In considering the effect of this development, a certain lag has to be accounted for. Companies require time to make investment decisions, and alterations in the price of capital may influence investment plans that are not carried out until a year later. Allowing for this delay, the decline in interest rates certainly aided the 27.9 per cent increase in real terms of investment outlays between 1925 and 1928.

In 1929, the increase in capital stock shrank to a mere 1.9 per cent.[40] One of the possible reasons for this drastic loss of momentum was an alteration of the discount rate (compare Fig. 12). Schacht had originally intended to diminish foreign lending, especially by municipalities, by lowering rates. Since, however, the continuing inflow of foreign capital tended to increase the money supply, the Reichsbank wished to decrease the discounting of commercial bills by the same amount. The Reichsbank therefore returned to its former policy,

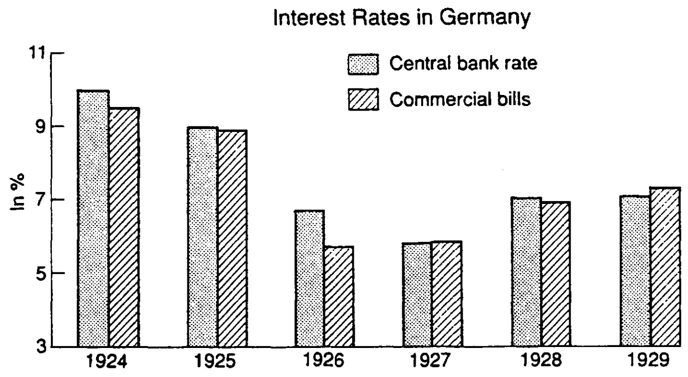

FIG. 12: Interest Rates in Germany (from H. Müller, *Die Zentralbank*, p. 63)

[39] H.-A. Winkler, *Der Schein der Normalität* (Berlin, 1989), p. 31.
[40] Hoffmann, *Wachstum der deutschen Wirtschaft*, p. 242.

introducing a discount rate of 7 per cent in October 1927.[41] It is therefore the largely arbitrary decision of a single man, Hjalmar Schacht, that played a leading role in the ending of Weimar's only genuine boom. Schacht fostered an irrational dislike of foreign loans and believed that only private industry was truly productive, whereas state and municipal authorities were parasites:[42] 'All of this [borrowing abroad for municipal improvement], which during peacetime might have been regarded as a sign of growing prosperity, was grossly inappropriate for our impoverished country which was worn down by war and the post-war period.'[43]

The independence of the Reichsbank, which was introduced amid the turmoil of inflation in 1922, allowed him to introduce measures to his liking. Borchardt contends that the growing politicization of economic decision-making harmed the economy. On the contrary, the apolitical nature of the German central bank enabled it to reject the government's sensible proposals.

A second reason can be found for the weakening of growth. If, as is commonly believed, the surge in wages squeezed profits, we must ask why this development occurred after 1927. It was neither the system of state arbitration nor the general politico-social framework of Weimar, but an accidental and arbitrary decision, that was taken without foresight or economic understanding, that can be held responsible for this. The new Finance Minister, Köhler, a scion of a minor civil servant's family, believed that employees in the public sector were underpaid. The subsequent pay rise amounted to an average of 16 per cent, and as much as 33 per cent for the most-favoured groups.[44] The trade unions responded with increased wage demands. When the number of days lost through strikes surged from 1.3 million in 1926 to 6.0 million in 1927 and 20.3 million in 1928, industry was forced to grant major wage increases. As prices did not rise proportionately, the ensuing decrease in investment growth and profits was inevitable.[45] One may contend that the *Ruhreisenstreit* in 1928, as well as other industrial conflicts, were resolved through state arbitration. The result in the industrial region of the Ruhr was, however, not exactly generous to workers.[46] Furthermore, the parallel development of wages and strike activity proves that arbitral awards did not disregard the state of the labour market, but rather reflected the strength of both sides' bargaining power quite accurately.

[41] Winkler, *Schein der Normalität*, p. 31. The effect of the change in interest rates was compounded by the precarious position of German commercial banks. Since they did not recover from the effects of the hyperinflation, and furthermore had to live with the constant threat of credit rationing, they were particularly tempted to increase their profits by widening the margin between borrowing and lending rates. Cf. T. Balderston, 'German Banking between the Wars: The Crisis of the Credit Banks', *Business History Review*, 65 (1991), 604–5, 570.

[42] H. Müller, *Die Zentralbank—Eine Nebenregierung* (Opladen, 1973), pp. 62–71.

[43] H. Schacht, *76 Jahre meines Lebens* (Bad Wörishofen, 1953), p. 295; cf. E. Peterson, *Hjalmar Schacht. For and against Hitler* (Boston, 1954), p. 71.

[44] H. James, *The German Slump* (Oxford, 1986), p. 218.

[45] Ibid. 219.

[46] Winkler, *Schein der Normalität*, pp. 568 ff.

Neither of these developments, which led to the fatal weakening of growth, was a result of the 'Weimar system'.[47] Rather, it was the accidental accumulation of minor strains on industry that led to the absence of a sustained upswing. The weight of external factors was further increased by the troubled state of foreign markets that were, unlike in the pre-war era or later under the Federal Republic, protected by tariff barriers.[48] One may therefore conclude by saying that despite the large number of crises, no fundamental crisis of the Weimar economy as such can be perceived. Hence, there is no reason to assume that it was an 'in the long run unviable economic system'.[49]

5. Limited Room for Manœuvre? The Brüning Government and the Policy of Deflation

Borchardt's second controversial point is that after the advent of the crisis, Brüning had hardly any alternative but to expose the economy to a rigid policy of deflation and cost-cutting. Immediately after the war, scholarly enquiry had focused on the political aims of Brüning. The discipline was split into those who saw the Chancellor as an upright defender of the republic amid the turmoil of the Great Depression and those who saw his time in office as a semi-authoritarian period that unwittingly prepared the stage for Hitler. The publication of Brüning's memoirs helped to clarify the picture since they showed him as a monarchist awaiting an opportunity to reintroduce the Hohenzollerns as heads of state.[50] The Chancellor envisaged one of the crown prince's sons later becoming king in a constitutional monarchy, and installing Reichspräsident Hindenburg as regent in the meantime. Field-Marshal Hindenburg bluntly refused to consider any such idea and declared that only the restoration of Wilhelm II was acceptable to him. As such a move could be supported neither by Brüning nor by any major political party, the plan was abandoned.

Borchardt's initial argument is that, before the summer of 1931, no reason existed to expect that the crisis would reach such depths in 1932.[51] The downward movement in 1926 occurred far more quickly and was much deeper. Therefore, no cause for alarm could be perceived.[52] During early 1931, there were already signs of improvement. It is one of his strongest points that, from a contemporary perspective, hardly any reason for changing the course of policy could be found before the banking crisis in the summer of 1931 and the Bank of England's abandoning the gold standard. It should nevertheless

[47] The single exception to this is the introduction of compulsory unemployment insurance in 1927.
[48] Petzina, 'Crisis before the Crisis?', pp. 14 ff.
[49] Borchardt, *Wachstum, Krisen*, p. 182.
[50] J. Wheeler-Bennett, *Hindenburg. The Wooden Titan* (London, 1936), p. 355; H. Brüning, *Memoiren* (Stuttgart, 1970), p. 512; Kershaw, 'Perspectives', p. 2.
[51] Borchardt, *Wachstum, Krisen*, p. 167.
[52] Ibid. 169.

be noted in passing that for any German in 1931, the memory of 1926 was clearly associated with the success of a contracyclical policy. The Reich's government brought pressure to bear on the Reichsbank to lower discount rates, which the latter—reluctantly, but with great effect—did. Borchardt therefore incorrectly concludes that no change of policy could have been expected before the summer of 1931 unless one demands a 'prophetic gift' from the protagonists.[53] One does not place superhuman demands on the German government if one thinks that resorting to the once successful strategy would have been a natural choice at the outbreak of the Great Depression. Given the legal independence of the Reichsbank, it is not necessarily safe to assume that the government would have prevailed again in a possible conflict—the crucial aspect is that the government did not even attempt to lean on the German central bank.

Borchardt's second pivotal issue is the availability of adequate resources for a programme of deficit spending. While the lack of demand amounted to 30 billion marks, even the most extreme plans only envisaged extra spending of about 2 billion. This 2.3 per cent of GNP, according to Borchardt, can hardly be expected to have made a difference when the 5.2 per cent the Federal Republic spent additionally in 1975 had hardly any impact on unemployment.[54] Parenthetically, it is worth noting that the effect of deficit spending depends on the elasticity of money supply and the degree to which capacities are used at a suboptimal level. Historical analogies should only be employed with the greatest care, and Borchardt gives little evidence that the situation in 1975 was comparable to that in the years of the slump.

Two more aspects feature prominently in his line of argument. He stresses the problems caused by foreign policy and the Young Plan. Neither a devaluation nor measures diminishing the speed of deflation could be contemplated because they would have brought the Brüning government down or thwarted its central aim: the end of reparations.[55] Furthermore, he sees the politicians' possibilities for action infringed even further by the general fear of inflation. In a later article, he contends that any change in the Reichsbank's legal status, a budget deficit, or a devaluation of the mark would, by causing a general panic, have led to an inflationary process.[56] By pointing to the psychological climate, Borchardt attempts to undermine the significance of the objective fact that no inflationary situation existed—the amount of money in circulation between 1930 and 1932 dropped by more than 25 per cent.[57]

It is precisely this general fear of inflation that leads Borchardt to the conclusion that no political or social support for countercyclical measures

[53] Winkler, *Schein der Normalität*, p. 31: Borchardt. *Wachstum, Krisen*, p. 170.
[54] Ibid. 174.
[55] Ibid. 171 ff.
[56] K. Borchardt, 'Das Gewicht der Inflationsangst in den wirtschaftspolitischen Entscheidungsprozessen während der Weltwirtschaftskrise', in Feldman, *Nachwirkungen*, pp. 241, 244.
[57] Nicholls, *Weimar*, p. 155.

could have been garnered. Even on the left, inflation had become bitterly unpopular and was denounced in propaganda as right-wing exploitation of the workers. Anti-inflationary consensus united the democratic parties.[58]

Ursula Büttner has come forward with a cogent rebuttal of this thesis. After careful examination, she sees the possibility of widespread support for a programme that would have actively combatted the depression. Workers and civil servants would happily have joined the rank and file of Brüning's followers had he committed himself to a change of economic policy. In addition, important economists and industrialists would have supported him.[59]

It seems safe to say that numerous proposals for a different policy were put forward and that none enjoyed great political support.[60] The decisive question, therefore, is a counterfactual one. C.-L. Holtfrerich has placed particular emphasis on the fact that political consensus does not always originate from the bottom, but can also be induced by powerful political leaders.[61] That Brüning did not even contemplate doing so is clearly not due to economic constraints, but rather to political ones as well as to his own determination to free Germany of reparations payments. Neither a reallocation of the economically wasteful subsidies for the Junkers or of the large expenditure on the military, nor the taking of loans from France, were obstructed by economic factors, but because Brüning would have lost the all-important support of the Reichspräsident.[62] It therefore seems sensible to attribute Brüning's limited room for manœuvre to domestic policy instead of to economic circumstances and diplomatic restrictions.[63]

Whether or not the deliberately chosen aim of Brüning—Germany's liberation from the Young Plan—actually constituted an exigency (*Zwangslage*) is more of a terminological question. What is certain is that if the Chancellor had settled for a solution that was only marginally short of the complete abolition of reparations, he could easily have achieved a 20 per cent devaluation of the mark. In his memoirs, Brüning tells us that in December 1931 he could have negotiated a complete end of Young payments with the exception of the Reichsbahn's annual contributions three months before that date. Under the Dawes and Young plans, the state-owned railroad company was obliged to pay a certain share of Germany's annual obligation. The political success of such a result could have been resounding. Instead, Brüning decided to pursue the policy of fulfilment until he had achieved a comprehensive termination of reparations and to postpone the already envisaged devaluation

[58] The Communists also used this opportunity to spread the fear of inflation, Borchardt, 'Gewicht der Inflationsangst', p. 250.

[59] U. Büttner, 'Politische Alternativen zum Brüningschen Deflationskurs', *Vierteljahrshefte für Zeitgeschichte*, 37 (1989), 248.

[60] Nicholls, *Weimar*, p. 155.

[61] C.-L. Holtfrerich, 'Alternativen zu Brünings Wirtschaftspolitik in der Weltwirtschaftskrise?', *Historische Zeitschrift*, 235 (1982), 614.

[62] Borchardt, *Wachstum, Krisen*, p. 172.

[63] Holtfrerich, 'Alternativen', p. 630.

of the mark until then.[64] Even if a major change in business climate would not necessarily have followed, an early change of the mark's external value could have helped export industries in no small measure. Brüning himself was unwilling to resort to such a move since he anticipated that German industry would have 'such an advantage on the world market that our contention that we were unable to pay, would [be] ludicrous'.[65] Possibilities of at least easing the slump were readily available for policy-makers in late Weimar.

The incident that illuminates the *Präsidialregierung*'s strategy also gives a valuable hint as to the nature of the inflation scare. Brüning, who was certainly most adamant in avoiding any inflationary move, expected no automatic price increases after a devaluation. The fourth emergency decree (*Notverordnung*) on the economy involved a 20 per cent reduction in wages and cartelized prices and had, according to Brüning's memoirs, originally envisaged an equal cut in the foreign exchange value of the mark. Devaluation, therefore, was not automatically equated with inflation, as Borchardt seems to suggest.[66]

The idea that inflation always originated from a drop in a currency's exchange rate was central to the so-called balance-of-payments theory. This theory had been discredited during the hyperinflation. The only inflationary danger of a limited devaluation could have stemmed from a potential panic among the public if the mark's exchange rate had dropped below 80 per cent of its previous level. The plans Brüning presents in his memoirs to avoid this are so precise that little doubt can remain that he felt reasonably confident about being able to stabilize the mark.[67] Time and again, the only true obstacle to helpful measures was the lack of political will.

6. Deflation, 'Purification', and the Possibility of a Secret Reflation

So far, this essay has focused on only one part of Borchardt's reasoning. But he not only held Brüning's actions to be inescapable, he furthermore endorsed them as a necessary, though harsh, way of curing a fundamentally 'sick' economy. By exposing Germany to the effects of deflation, it emerged purified from an era of sluggish growth and high unemployment.[68] The nascent upswing of 1932–3 is therefore said to have been a natural one that owed little to the increased government spending of the *Reinhardt-Programme* in 1933.

It has been noted that the 'cured' economy looked rather unhealthy until 1935, when public expenditure became even greater.[69] Without work-creation schemes, GNP would have fallen even further in 1933, and private investment

[64] Brüning, *Memoiren*, pp. 485, 475.
[65] Ibid. 475.
[66] Borchardt, 'Gewicht der Inflationsangst', p. 235.
[67] Brüning, *Memoiren*, p. 476.
[68] J. von Kruedener, 'Could Brüning's Policy Have Been Successful?', in Kruedener, *Economic Crisis*, p. 84; Borchardt, *Wachstum, Krisen*, p. 182.
[69] Lee, 'Policy and Performance', p. 139.

remained negative until 1935.[70] In addition, Joseph Lee has stressed the construction sector's decisive importance in the recovery. No other sector could point to steeper increases in employment. None that was so dependent on the state's, and especially the local authorities', spending had been hit so dramatically by budget cuts.[71] Lee finishes by saying, therefore, that the 'purification' concept needs refinement before it can help to shed light on the Great Depression. How, therefore, can it, in order to be used as a scientific tool, be made to transcend 'moralistic inspiration and medical analogy'?[72]

Borchardt has always held excessive wage costs to have been one of the most important weaknesses of the Weimar economy. Two factors helped to diminish pay costs; massive lay-offs of workers and reduced wages for individual employees. That the decreased input of labour did not alleviate the change of business climate is clearly shown by Hoffmann's figures. In 1928/30–1931/3, labour productivity, for the only time in recorded history, decreased by 24 marks per hour.[73] The increase in capital intensity tended to boost productivity, but this trend was reversed by the even greater drop in capital productivity. The German economy was hence not helped by less employment, but was operating at a suboptimal level of labour input.

In order to examine whether the deflationary policy, through cuts in prices and wages, actually led to a 'purification', the wage/income ratio in industry should once more be considered (Fig. 13). As output collapsed faster than workers could be laid off and their wages cut, the ratio rises during 1930 and

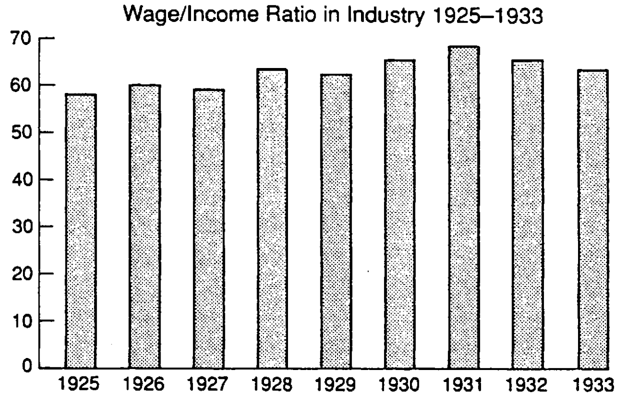

FIG. 13: Wage/Income Ratio in Industry 1925–33 (from E. Phelps Brown, *A Century of Pay*, App. 3)

[70] Ibid.
[71] Ibid. 141.
[72] Ibid. 143.
[73] Hoffmann, *Wachstum der deutschen Wirtschaft*, p. 24.

1931. In 1932, it declines slightly, but is still 7.6 per cent higher than the average for 1925–9. What does this mean? The relative burden of wages in relation to the value of production did not decrease, and Brüning's policy did not help entrepreneurs in this respect. Out of the total income generated, pay for workers took a larger, not a smaller, share during the crisis that was supposed to overcome the excessive wage levels Borchardt finds in Weimar's 'golden years'. This may still be explained by the 'normal' development during a business cycle. It is however remarkable that the economy that emerged—allegedly 'cleansed' of high wages—after the height of the crisis continually operated with roughly the same wage pressure that prevailed during the second half of the 1930s: the average for 1933–8 is 61.5 per cent, as compared to 60.4 per cent for 1925–9.[74] The burden of wages does not begin to diminish before 1933, a result of employment programmes and credit expansion. Employment programmes and deficit spending therefore seem to have made a more decisive impact on the recovery than any modification of the wage structure.

The macroeconomic perspective, however, can be misleading. Divergent cost structures in different sectors of industry can cause a false impression. What is therefore needed to test the validity of the statistical tool is the focus on a single branch of industry. Building seems to be a natural choice since it recovered strongly after 1932 (Fig. 14). It emerges that the 276 per cent increase in employment in building[75] from 1933 to 1934 probably owed little to any 'cleansing' of the economy from high wage costs. Deflationary pressure was so strong that, despite the nominal decline, real wages actually rose. The overall level of wages remains fairly constant through the entire period. It is

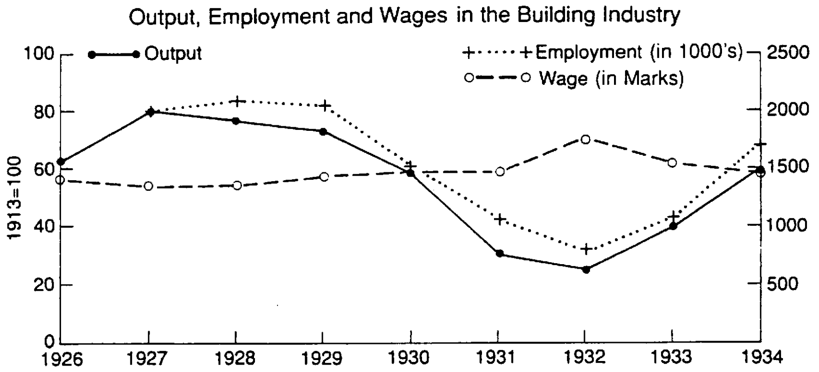

FIG. 14: Output, Employment, and Wages in the Building Industry (from W. Hoffmann, *Wachstum der deutschen Wirtschaft*, pp. 470, 393, 199)

[74] Phelps Brown, *Century of Pay*, App. 3.

[75] Lee, 'Policy and Performance', p. 141. As Lee used data for the period from Feb. 1933 and Feb. 1934, a divergence from the figures below is inevitable.

Table 4: Wages and Output in Building

	1. Production (1913 = 100)	*2. Employees (in 1000's)*	*3. Wages (at 1913 prices)*	*4. Total Wage Bill (1913 = 100)*	*Index (col. 4/col. 1 · 100)*
1926	63	1559	1393.1	121.2	192.38
1927	80	1977	1329.9	146.8	183.44
1928	76.5	2075	1342.9	155.5	203.27
1929	72.4	2030	1416.9	160.16	221.2
1930	57.5	1505	1456.8	122.27	212.64
1931	29.7	1054	1486.3	87.5	294.41
1932	24.9	775	1759.4	76.1	305.62
1933	39.8	1066	1532.4	91.2	229.1
1934	60.4	1726	1446.1	139.3	230.7

only employment which varies parallel with total output, as the diagram in Fig. 14 clearly shows.

This conclusion is strengthened by the fact that a calculation of an indexed wage/output ratio yields results that are very similar to those obtained for the economy as a whole. As figures for the total income generated in building are unavailable, Hoffmann's index for output is used.[76] Annual income of workers in building has been adjusted for price alterations through E. Phelps Brown's GNP deflator. The total wage expenditure is the result of the multiplication of this figure by the number of employees.[77] The index for output is then divided by the index for total wage cost (Table 4; Fig. 15).

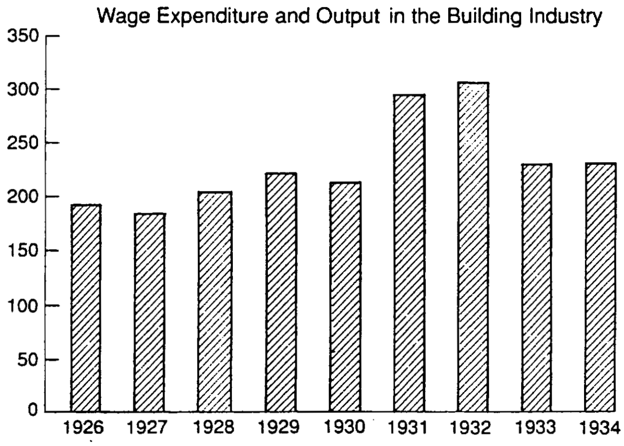

FIG. 15: Wage Expenditure and Output in the Building Industry (from Table 4)

As the table shows, the wage burden in the building industry did not begin to diminish, but actually rose, before the *Reinhardt-Programme* came into effect. Economy of scale, and not any deflationary strategy of 'cost-reduction', accounted for this. One should also note that at least in the area of building, the (according to Borchardt) 'healthier' economy that emerged from the purge of deflation operated with a ratio of wage expenses to output that was higher, not lower, than in any year before 1931.

Hence, 'purification' cannot be traced in the world of quantitative data. There is therefore no reason to suppose that work-creation programmes could not have exercised a significant influence before 1932. With the problems of possible political support for an achievable impact of reflationary measures resolved, the question that remains is whether such a scheme could have been financed.

[76] Hoffman, *Wachstum der deutschen Wirtschaft*, p. 393.
[77] Ibid. 470, 199; Phelps Brown, *Century of Pay*, App. 3.

The measures in 1932 depended on the Reichsbank's willingness to expand credit in the form of tax coupons and debt guarantees[78] at a time when its reserves were strained. It was willing to contemplate such moves from December 1931 onwards if they could be implemented under a veil of secrecy.[79] Harold James has pointed to an important aspect that has often been neglected: the Reichsbank allowed the mark's coverage ratio to fall below the 40 per cent level that was demanded by the Dawes Plan. Despite the outflow of gold and foreign currency, it managed to stabilize the amount of circulating currency. The cover of notes consequently fell as low as 22.5 per cent on 30 July 1932. The contraction in money supply therefore almost entirely originated in alterations to deposits (Fig. 16). Whereas money stock fell considerably in nominal terms, it increased from 1931 to 1932 when deflated with the wholesale price index. Harold James has therefore referred to this as the 'Brüning-Luther secret reflation'.[80]

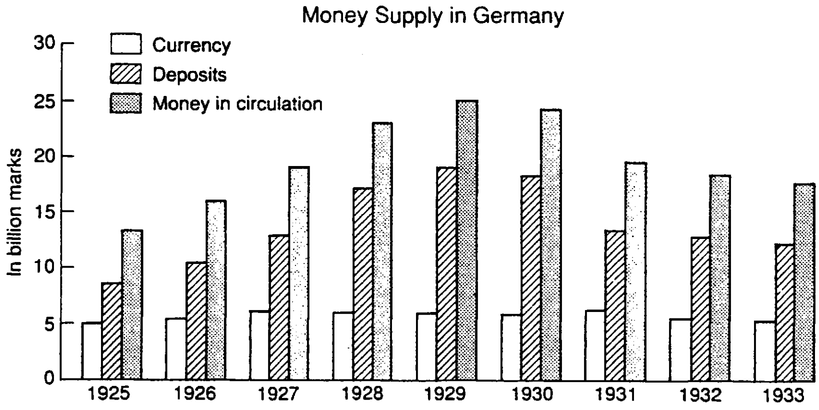

FIG. 16: Money Supply in Germany (from H. James, *Reichsbank*, pp. 364 et seq. As James recalculated money stock, a divergence from the figures given on p. 18 is possible)

From November 1929 to February 1932, the sum of currency and deposits dropped from 24.017 billion marks to 18.954 billion.[81] It is against this background of a dramatic contraction in the money supply that the importance of the Reichsbank's more flexible stance has to be viewed. Not surprisingly, the bank's willingness to ignore minimum cover requirements was hailed as an 'epoch-making' change in policy by some of the economists who discussed

[78] H.-A. Winkler, *Der Weg in die Katastrophe* (Berlin, 1987), p. 826.
[79] Nicholls, *Weimar*, p. 155.
[80] H. James, *The Reichsbank and Public Finance in Germany 1924–1933* (Frankfurt a. M., 1985), pp. 287–92, 347–9.
[81] Ibid. 347–9. The 25% reduction (in nominal terms) mentioned on p. 283 above largely occurred between 1930 and 1931.

ways of overcoming the crisis at the Reichsbank's premises in Berlin in September 1931.[82]

While it remains doubtful whether the positive effects of a 'real' reflation—when nominal money stock declines less rapidly than prices—were not more than offset by the psychological effects of nominal monetary contraction, it seems tempting to ask why the measures of the 'secret reflation' should not have been employed on a larger scale. How far would the cover have been lowered had the Reichsbank, resorting even more to this silent form of reflation, stabilized the money stock at the 1929 level? A preliminary calculation yields a coverage of 13.37 per cent, or about half the ratio of 30 July 1932.[83] The conscience of *Reichsbank* officials would certainly have been strained, but only a gradual alteration, and not an impossible act, would have been demanded of them. When on 29 October 1932 the Reichbank's President Luther assumed, due to insufficient information from the bank's subsidiaries, that the mark's cover had fallen as low as 15 per cent, he neither urged drastic measures, nor observed signs of panic among the public: 'It should be noted that measures to cover the currency are not decisive. The public already views the question of coverage more calmly than previously.'[84] The six billion mark increase (or 6.9 per cent of GNP) would almost certainly have had a positive effect on the German economy, and the gold/foreign currency coverage might very well not have fallen as far as the worst-case scenario suggests.

This is not to say that a return to the days of Weimar parliamentary democracy would have been possible, nor even that Hitler's accession to power would necessarily have been halted. What is important to stress,

[82] K. Borchardt, 'Wirtschaftliche Sachzwänge oder Primat der Politik? Die Ära Brüning im Widerstreit der historischen Forschung', in H.-A. Winkler (ed.), *Die deutsche Staatskrise 1930–1933. Handlungsspielräume und Alternativen* (Munich, 1992), p. 121. Borchardt contends that none of the assembled economists saw an alternative to the government's policy. But evidence from other, independent, sources speaks against this idea. Wilhelm Röpke, who was present, put forward his assessment in no uncertain terms: 'The notion we have just considered [to hope for the self-healing powers of the economy] is tantamount to an economic liberalism [*konjunkturpolitischen Liberalismus*] the consequences of which will lead to economic nihilism [*konjunkturpolitischen Nihilismus*]', W. Röpke, 'Praktische Konjunkturpolitik', *Weltwirtschaftliches Archiv*, 34 (1931), 450. What was needed, according to him, was a public works programme and credit expansion in order to kickstart the economy, ibid. 441.

[83] The currency, including private bank notes, Rentenbank certificates and coins, amounted to 6.0351 billion marks in Feb. 1932, while Reichsbank note circulation alone was 4.003 on 23 Feb. Cover was calculated only on the basis of the latter. Given that the 3-to-2 ratio between the two currency figures could have been maintained, the lacking 6.063 billion would have required an additional 4.042 billion of Reichsbank notes, thereby bringing the total to 8.045 billion. Gold and foreign currency eligible as cover amounted to 1.076 billion, yielding a cover of 13.37%. For the figures used: James, *Reichsbank*, pp. 362, 365, 367. The precondition of this calculation is that additional Rentenbank certificates could have been floated so as to maintain the 3-to-2 ratio between all currency and Reichsbank notes alone. In the cabinet on 14 July, 1931, Staatssekretär Schäffer pointed out that this would be strictly legal. Cf. T. Koops (ed.), *Die Kabinette Brüning I und II* (Boppard, 1982), p. 1358.

[84] Ibid. 1864.

however, is that the relevance of governmental action—and not the self-healing powers of the economy—was greater than Borchardt believes. Furthermore, and irrespective of political support, the Brüning government could have given considerable impetus to growth by a more thorough implementation of measures to which it had already resorted, such as the 'secret reflation'. Despite the fact that depression would have taken hold in Germany irrespective of political action,[85] effective means to better the workers' lot were in the Reich government's hands. That Brüning did not employ them owed more to political considerations and constraints than to any economic deadlock.

[85] Holtfrerich, 'Was the Policy of Deflation Unavoidable?', in Kruedener, *Economic Crisis*, p. 66.