# **Part I** PROLOGUE, 1918–1933



# PATH DEPENDENCE

Through all the ups and downs of the German economy after 1918 – rapid conversion to peacetime production in 1919–20, runaway inflation that made a nullity of the currency by 1923, monetary stabilization followed by recovery of prewar levels of production and prosperity by 1927, and then the abyss of the Great Depression that began in 1929 and worsened in 1931-32 - the German corporate world struggled with a gap between supply and demand. While Germany's manufacturing capacities had been run down during World War I, they also had grown, even as the conflict generated new competitors abroad, strengthened old ones, and thus reduced sales prospects. Defeat in World War I then cost the country territory and population, income on lost patents and subsidiaries, access to some markets, and until 1925 the ability to protect the domestic one.<sup>1</sup> The depreciation of the German currency cheapened German goods and thus buoyed their sales for a while after the war, but also worsened the central problem by encouraging a "flight into real values," that is, from cash into buildings and machinery, which left more excess output behind when inflation ended. What the nation could produce remained persistently greater than what it could sell, especially in a world increasingly inclined to erect barriers to imports.

In response, during the 1920s, German big business fixated on restoring sales and profitability through cutting costs, both those imposed upon it and those generated internally. The attack on the

# 4 / Part I: Prologue, 1918-1933

former category led to increasingly intense clashes with the democratic regime established in 1918-19 because the corporate world's desire to reduce tax payments and labor costs collided with two key government policies. The first of these was the defense of the Central Work Community (Zentralarbeitsgemeinschaft or ZAG) and Stinnes-Legien Agreement of late 1918 by which business had accepted the eight-hour day and the negotiation of contracts governing wage and working conditions between unions and management on an industry-wide basis. The second was the practice of paying the war reparations mandated the following June by the Treaty of Versailles while trying at the same time to get them reduced, that is, the "fulfillment" program. Most leaders of German big business had accepted the concessions to labor and the Treaty terms under duress, seeing them as necessary to head off domestic revolution and foreign occupation. Backsliding began quickly in 1921, when the Allies finally revealed how much they expected in reparations (nominally 132 billion gold marks, but really a still formidable 50 billion or US\$12.5 billion). The size of the bill prompted some of the nation's most prominent corporate leaders to advocate defiance. Led by Hugo Stinnes, probably the nation's wealthiest person at the time, and consisting largely of colleagues in so-called heavy industry, that is, coal, iron, and steel firms, but also including Franz Urbig, a prominent figure in the Deutsche Bank, they insisted not only that the sums involved were beyond what Germany could pay, but also that even raising lesser amounts would require repealing, in Urbig's words, "the so-called social, but in reality purely socialist achievements of the revolution."2

By 1922, the leaders of the newly formed National Association of German Industry (Reichsverband der Deutschen Industrie or RDI) were echoing the arguments that the burdens of both reparations and the ZAG were unsupportable and in need of revision.<sup>3</sup> This became the fixed and retrograde position of German corporate leaders throughout the history of the Weimar Republic: Only a return to pre-1918 conditions could restore profitability and rates of productivity per worker. Leading entrepreneurs differed recurrently about tactics and tone, however, with one group of executives and trade associations favoring open confrontation with the Allies and the unions and expressing increasing antagonism toward the German parliamentary regime, and another arguing for conciliation to persuade foreigners and labor of the reasonableness of industry's positions and its acceptance of the

#### 5 / Path Dependence

existing constitution and thus of the need to abandon reparations and the ZAG. The more intransigent bloc centered around heavy industrial leaders in the Ruhr region – Stinnes until he died in 1924, Fritz Thyssen, Ernst Borsig, sometimes Albert Vögler and Paul Reusch – but did not comprise all of them – Gustav Krupp von Bohlen und Halbach and Peter Klöckner were prominent exceptions – and drew additional support from the regional business association of the state of Saxony. The more temperate group consistently predominated in the presidium of the RDI, and its main protagonists were IG Farben's Carl Duisberg, the organization's president from 1925 to 1931; Krupp von Bohlen, Duisberg's successor at the RDI; Carl Friedrich von Siemens of his family's electrical firm; and, less consistently, Paul Silverberg of the brown coal industry.<sup>4</sup>

As these affiliations and cleavages suggest, the groups did not divide according to the conventional image of export-versus domesticmarket-oriented firms or older/heavy versus newer/chemical-electrical firms.<sup>5</sup> Before and during the 1920s, such lines became blurred, as changing sales interests and product portfolios pulled enterprises and their leaders in multiple directions. In consequence, membership in each group was unstable, at least at the margins. Individual executives often shifted affiliations, depending on the issue at hand or perceived circumstances or simple vacillation.<sup>6</sup> Stinnes agreed with Duisberg in opposing both the right-wing, militarist Kapp Putsch of 1920 and the Allies' London Ultimatum on reparations a year later but their respective allies diverged over accepting the Dawes and Young plans of 1924 and 1929 that revised the reparations terms; Krupp reluctantly joined in management's lockout of striking iron workers of 1928 but otherwise rejected a hardline approach to the unions; Silverberg grew less outwardly compromising toward labor as time passed; and Hermann Bücher of Siemens' rival General Electric (Allgemeine Elektricitäts Gesellschaft or AEG) stood with the moderates on reparations but with the hardliners toward labor.7 Heavy industry split sharply after 1928 between supporters and opponents of the mulish, autocratic, and protectionist Alfred Hugenberg as leader of the German National People's Party (DNVP).<sup>8</sup>

Such fluctuating divisions should not obscure some common political trends within the corporate world. For one thing, its leaders shifted gradually rightward during the 1920s as many who had enrolled in the left-liberal German Democratic Party (DDP) in 1919

# 6 / Part I: Prologue, 1918-1933

moved to the right-liberal German People's Party (DVP) or from it to the nationalist DNVP. Simultaneously, fewer corporate leaders took a direct role in politics, including seats in the parliament, after the mid 1920s, opting instead for indirect representation through favored, subsidized representatives.9 Neither should tactical or personal differences conceal the general agreement on social and economic policy that prevailed in the upper reaches of the business world. In the course of the stabilization of the mark during 1923/24, the Republic reaffirmed the eight-hour day, albeit with a provision that employers could require up to six hours of overtime per week, and inaugurated a system of state arbitration of labor management contracts (Schlichtungswesen) that by 1932 had issued some 4,000 binding agreements. Industry simply hated the infringement on its autonomy and bargaining power that these policies represented, and corporate animosity reached fever pitch in the late 1920s, when the arbitration system's decisions seemed partial to labor's demands.<sup>10</sup>

Opposition to the eight-hour day and compulsory arbitration now became the centerpieces of business's collective claim that government policy made profitability next to impossible.<sup>11</sup> From executives' point of view, their rational and objective economic calculations of optimal shift lengths and affordable wage rates had been usurped by emotionally and politically driven "dictates" that bore no relation to measures of profitability or even the cost of living.<sup>12</sup> The only ways to restore reliable levels of employment and prosperity were to expel the government from economic life and to reduce public expenditures to make room for increased private investment. From the RDI's first announced public program of December 1925 to its nearly apocalyptic statement entitled "Rise or Downfall" (Aufstieg oder Niedergang) in late 1929, this was the common lament of corporate leaders, most specialized trade associations, and nearly all prominent financiers, including such tactically and rhetorically cautious figures as Duisberg and Silverberg. Only "a return to a state-free economy" could save Germany, they chorused.<sup>13</sup>

This is not to say that German industry externalized all responsibility for dealing with market constraints and reacted entirely passively during the 1920s. On the contrary, large German firms developed – and mixed and matched – multiple coping strategies that stimulated a great deal of intramural activity. One such, an expansion on prewar practice, was the effort to contain the destructive

#### 7 / Path Dependence

effects of slackened demand through engaging in countless domestic and international market-sharing, price-fixing, and profit-pooling agreements. The 1920s may well have been the apogee of cartelization of this sort, both at home and abroad, and the largest German enterprises, especially in mining, steel, chemicals, and electrical apparatus, were deeply enmeshed.<sup>14</sup> As defensive measures in the short run, cartels could and did prove effective in sustaining some firms and giving all participants a degree of predictability about receipts. But the deals suppressed the sort of market and price signals that prompt adaptation to changing conditions, and thus short-circuited competition that otherwise would have produced the "creative destruction" characteristic of thriving economies.<sup>15</sup> Meanwhile, by setting prices at levels tolerable to the least efficient signatory, cartels hampered efforts to increase demand, that is, to address the central problem German business faced.

A second common response was also less effective than it seemed in dealing with Germany's immediate economic crisis. The 1920s were also the most intense period of concentration - of consolidation of multiple enterprises into gigantic firms through mergers and acquisitions - in the German economy during the first half of the twentieth century. Although not unique to Germany, the trend there was quite pronounced.<sup>16</sup> It transformed the cigarette industry into a virtual monopoly of the Reemtsma organization by the end of the decade.<sup>17</sup> In banking, a takeover wave turned the Commerzbank into a national presence, with the densest branch network of any large Berlinbased bank.<sup>18</sup> The Deutsche Bank not only followed suit with numerous provincial acquisitions, but also participated in by far the largest banking merger prior to the Depression, the fusion with the Disconto-Gesellschaft in October 1929.<sup>19</sup> Among the most famous products of the penchant for combination were the still extant Daimler-Benz and Lufthansa companies, along with two mammoth enterprises that lasted only from 1925 to 1945, the United Steelworks (Vereinigte Stahlwerke or VS) and the IG Farben corporations, by most indices Germany's first- and second-largest private enterprises.<sup>20</sup> By the late 1920s, the former firm controlled 50% of German raw iron output and 43% of that of crude steel, while the latter held 48% of the invested capital in the German chemical industry, dominated the output of dyes, synthetic nitrogen, and explosives, and was nearly as strong in pharmaceuticals and synthetic fibers.<sup>21</sup>

## 8 / Part I: Prologue, 1918-1933

In every instance, the purpose of consolidation was to reduce duplication and staff, and thus to lower costs and prices and thus increase demand and profits. Yet, in almost every case, the acquirers failed to pursue the objective with sufficient urgency during the brief boom of the late 1920s that followed the currency stabilization, so overlapping or uncoordinated operations declined too slowly.<sup>22</sup> Meanwhile, the newly formed entities carried the costs of their formation: interest on any necessary loans to fund the transactions, fees for expanded boards of directors, severance payments to redundant employees, and long waits in disposing of surplus offices and plants. Even large staff reductions made disappointing inroads on wage and salary bills because of the tendency to keep on the most experienced personnel. The Deutsche-Disconto merger probably was representative of the overall pattern. Its most recent students conclude that at 3.5 million Reichsmark, "the costs of integration were well above the short-term savings."23 Banking, in fact, provided a strong demonstration of the inefficacy of consolidation, since its breadth did not reverse the relative decline of the big banks' standing among Germany's largest corporations during the great inflation, nor remedy their subsequent undercapitalization.24

Still a third corporate reaction to the gap between output and demand became a buzzword of the age: rationalization, by which practitioners meant modernization and mechanization of production processes, increased standardization of components and models, and simplification and centralization of administrative procedures. In the late 1920s, mining firms in the Ruhr closed more than 100 uneconomical pits and raised the proportion of coal cut by machines to 90%, while VS shut down multiple operations, specialized others around a limited product range, and invested nearly 300 million Reichsmark in new facilities and machinery.<sup>25</sup> Krupp poured tens of millions of Reichsmark into new iron and steel makers at Borbeck and Rheinhausen.<sup>26</sup> Across the country in Silesia, the Kokswerke corporation built 33 million Reichsmark-worth of new coal-mining and coke-making operations.<sup>27</sup> Unlike many German firms that resisted assembly-line processes and held to more traditional notions of handicraft, Siemens introduced flow manufacturing extensively and successfully.<sup>28</sup> But even among producers that might have most easily adapted to such methods, notably automobile makers, change was laggard.<sup>29</sup> Because of the expense involved and many producers' suspicion of too much standardization

#### 9 / Path Dependence

à la Henry Ford, rationalization in Germany remained more talked about than carried out, more a matter for the largest enterprises than many others. Moreover, where practiced, the resulting gains in output only aggravated industry's problems. Rationalization was expensive; it had to be paid for out of receipts that were not rising because demand was not; it ate the savings in unit costs that it achieved, especially if, as frequently was the case, the modernization expenses were booked, in whole or in substantial part, as operating costs rather than mostly depreciated over time; and the new installations that appeared usually could make profits only if operated at close to capacity, which current levels of demand seldom permitted.<sup>30</sup>

Perhaps the only genuinely effective intramural strategy that emerged from the demand crisis of the 1920s was diversification - the pursuit of new sales through new products - usually through buying up their makers, and even that often did not work. Among its most visible exponents were the Haniel family's Gutehoffnungshütte (GHH), which Paul Reusch led throughout the decade and transformed from a Ruhr coal-mining firm into a mixed-mining, machinery, and shipping operation through a chain of acquisitions mostly in and around Nuremberg and Augsburg.<sup>31</sup> But the metals firms failed to develop into large consumers of GHH's coal or offsetting earners; in fact, they drained money from mining operations.<sup>32</sup> Across the country in Upper Silesia, Kokswerke's failure to capitalize wisely on diversification proved even more extreme, though the flow of funds ran in the opposite direction. Beginning in the early 1920s, the mining company bought up a potash producer, a dye and lacquer firm, two chemical enterprises, and, through one of the last named, a series of providers to the photographic industry. The parent company then showed little interest in turning these into buyers of its coal. Neither did Kokswerke work to integrate or synergize the other operations. Instead, in the late 1920s Kokswerke merely milked them as cash cows to fund its expanding, and increasingly superfluous, coal and coke output.33

An atypical case of corporate success with diversification occurred in conscious response to marketing issues, rather than ones of overcapacity. Ernst Busemann headed the German Gold and Silver Separation Institute (Deutsche Gold- und Silber-Scheideanstalt or Degussa), an inorganic chemicals firm in Frankfurt that specialized in refining precious metals, chemicals derived from wood distillation, and sodium compounds including cyanide and perborate, the active

# 10 / Part I: Prologue, 1918-1933

ingredient in the bestselling German detergent Persil. In the mid 1920s, he concluded that none of these product lines offered reliable prospects of future growth and began searching for new sorts of business. His program blossomed during the Depression and, coupled with vigorous rationalization of existing production units, allowed Degussa to emerge from the economic crisis almost unscathed.<sup>34</sup>

Busemann's venturesomeness was rare, and the demand shortage of the 1920s provoked remarkably little innovation or imagination on the part of the nation's corporate magnates. "Because of their backward-looking orientation," as Toni Pierenkemper puts it, executives exhibited much more path dependence and repetition than eagerness to pursue new undertakings for new markets.<sup>35</sup> This automatism characterized even one of the outwardly most ambitious undertakings of the age, IG Farben's massively costly (426 million Reichsmark from 1924 to 1932) pursuit of manufacturing motor fuel from coal via hydrogenation. The effort reflected a desire to duplicate two different, but interrelated pasts: the synthesis of indigo dye from coal at the dawn of the twentieth century, and the extraction of nitrogen from the air under enormously high pressures on the eve of World War I. Now marrying the traditional feedstock to the new process to make gasoline was supposed to offset declining proceeds from both these previous breakthroughs and to generate a new, lucrative, and similarly time-bound monopoly that would not only replace the fading returns, but also solve the problem of overcapacity at the nitrogen works. As crude oil prices fell faster than production costs, however, IG's vision retreated like the horizon, which only made chasing it more expensive, to the point that the chief reason the project survived a review in 1932 is that shutting it down by then seemed likely to cost more than letting it limp along.<sup>36</sup> Sales of pharmaceuticals and other consumer goods enabled Farben to survive the Depression, but the firm, like Kokswerke, devoted greater attention to "investing in valuedestroying businesses" than recognizing and developing genuinely new earnings sources, and skepticism about the prospects of international trade reinforced this course.37

Since the 1980s, discussions of the late Weimar economy have been dominated by Knut Borchardt's thesis that the German economy suffered at the macroeconomic level from restricted access to credit, which prevented countercyclical spending in response to the Depression, and at the microeconomic level from inadequate investment

## 11 / Path Dependence

that resulted from a profit squeeze caused by wages, social expenditures, and taxes that had risen faster than productivity gains.<sup>38</sup> The microeconomic side of this argument suffers from at least two major problems. The first is that the profitability figures on which Borchardt and subsequent analysts have relied are, in fact, not reliable. As Mary Nolan pointed out decades ago, standard accounting practices in the 1920s scarcely existed, so firms booked and reported items on published balance sheets as they wished and to their own advantage, and considerable inconsistency and deception resulted.<sup>39</sup> Recent research has shown that many of the balance sheets submitted to tax authorities also reflected considerable manipulation, with the result that they, too, understated corporate profits.<sup>40</sup>

In fact, industrial investment in Germany in the late 1920s was quite high – as a percentage of gross domestic product, the volume approached or exceeded the level of 1913 in every year from 1925 to 1929.<sup>41</sup> That firms paid for much of this with borrowed foreign funds that later were withdrawn abruptly proved debilitating in subsequent years, but loans were not the sole source of the investments and their overall supply was not insufficient. Neither does the record suggest that more capital would have been better spent, precisely because the path-dependent and backward-looking groupthink in the upper reaches of German big business barred any more imaginative course than trying to do what firms already had been doing, only more cheaply. "The problem," in the words of three distinguished economic historians, "was not that the supply of capital in Weimar Germany was deficient; it was rather that the demand for investment was skewed toward 'unproductive' purposes."<sup>42</sup>

In short, the principal economic problem of the late 1920s was a widespread corporate failure to think in effective strategic terms and a tendency instead to throw good money after bad. Rationalization chased its own tail, and so did concentration. Faced with this, as the late Christopher Kobrak astutely and gently summarized, "It was hard for business to see itself as part of the problem .... Many business leaders ... had difficulty ... resisting the temptation to deflect selfcriticism by attributing their difficulties solely to a combination of government ... and worker attitudes."<sup>43</sup> No matter that Ruhr miners were, in fact, underpaid in comparison to their counterparts in Great Britain and Belgium, or that in companies like Schering, which made chemicals and pharmaceuticals, the rising labor costs stemmed from