MAJOR FACTORS IN BUSINESS FORMATION AND DEVELOPMENT: GERMANY IN THE EARLY INDUSTRIALIZATION PERIOD*

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BUSINESS HISTORY AND ECONOMIC HISTORY: A POINT OF CONVERGENCE

The role of business history has traditionally been defined as and delimited to the description—especially biographical and chronological—of the entrepreneur and the firm. On the other hand, economic historians have deemed it their foremost task to deal—whether descriptively or analytically—with the overall aspects of economic causality, thus illuminating economic institutions and conditions, factors of economic growth and development, and even the individual sectors and industries of an economy. It is precisely in this latter—and very essential—step that the economic historian presses dangerously into the no man's land marking the ideological barrier between the two disciplines. Ideological cohabitation between business history and economic history has received occasional nods of approval;[1] until recently, however, such propositions have charged the academic air with considerable friction and reluctance. In fact, it might be asserted that the mutual and sometimes categorical disregard of both disciplines for the contributions of the other has precluded their achieving the fullest potential development even as separate fields of inquiry.

The results of this indifference, if not reluctance, to arranging for a lasting "marriage of convenience" have been self-evident in the past: on the one hand, business histories that deal only with data and forces that can be identified and explained from an intrafirm vantage point, and thus may often preclude mention—

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[1] See, for example, Arthur H. Cole, "Business History and Economic History," *The Journal of Economic History*, vol V, Supplement, December 1945, pp 45–53, and "Meso-economics: A Contribution from Entrepreneurial History," *Explorations in Entrepreneurial History* VI (Fall 1968), 3–33.

or at least reasonable evaluation—of forces that are of cardinal importance to the development and survival of the firm; on the other hand, economic histories that are preoccupied with passing forward through time random pieces of information which somehow—and quite fortuitously—are calculated to tell a coherent and complete story, and that are more concerned with reciting the theories and chanting the professional jargon of the economist than with a thorough exploration of the evidence available at the grass-roots level.

The schism between business history and economic history is still far from bridged. A mutual exploitation of the most relevant findings of both fields, however, appears increasingly imperative. Business histories must analytically incorporate significant aspects of the macroeconomic environment of the firm and entrepreneur, while economic histories must be written in full cognizance of the wealth of microeconomic data made available by the business historians—data ready to be employed in the construction and testing of economic theories, in the verification and quantitative exemplification of hypothesized chains of economic causality, and in a massive process of statistical inference whereby, through the accumulation and analysis of the data found in the most important and reliable business histories, statistical series reflecting the growth, production levels, and cyclical fluctuations for entire industries and sectors of the economy conceivably could be constructed.

It would appear, as Arthur H. Cole has suggested, that the perfect meeting point for the two disciplines is the period of the early industrialization of the major Western economies. In this time period, the modern business historian must find it quite difficult to ignore the major aspects of the socio-economic milieu and aggregate economic events, insofar as they bear with direct relevance on the viability of the firm. Similarly, the economic historian must find it increasingly absurd to evolve an economic history of this important time period from abstract generalizations and assumptions, while ignoring the valuable spadework of the business historian into the stories of the leading firms and entrepreneurs of that industrialization period. By employing that spadework, however, he may construct a micro-oriented economic history of the various aspects of the industrialization process. Conceivably, this type of economic history could serve to test the assumptions as well as the conclusions of the discipline at the level of the firm; more than that, it could generate new data and new hypotheses altogether. In a more modest spirit, the following brief review of several factors retarding economic development in Germany in the nineteenth century is proffered as an example of the utility of business histories in the construction of a micro-oriented economic history.

Germany in the 19th Century: Negative Factors in Business Formation and Development

At first sight, it appears that the topic of this paper must engender three-fold criticism. In the first place, it is at best an abstraction to speak of "Germany" in the nineteenth century, in view of the fact that we are in fact dealing with a good many more or less independent states during much of this time period. Secondly, to deal with factors retarding business development suggests an immediate and severe eclecticism. Finally, to employ business histories in this task evokes the traditional caveats: beware of distortions and misrepresentation, don't generalize from the individual firm, and so on. All of these objections are equally germane and equally valid. Those who make these objections should, however, be equally pacified by this observation: throughout much of the nineteenth century, and particularly the pre-1870 period, several broad conditions acted to inhibit the economic development of Germany; these factors were pervasive enough to be operative more or less actively in the various German states, and their impact is traceable in many German business histories embracing a sizeable portion of the nineteenth century.

The reality of negative factors in Germany's early industrialization period looms so large on the historical record, that an emphasis on these alone, to the preclusion of "positive factors," appears warranted.

Given the admittedly small sample of German business histories employed for this study, I have chosen to limit my discussion to three broad conditions: governmental economic policies, financial institutions and business organization, and the disadvantages of backwardness. The following comments along these broad lines are intended to be exploratory, rather than exhaustive.

Governmental Economic Policies

Many regions of Germany entered the nineteenth century burdened with provincial and localistic restrictions on economic development dating back to the Middle Ages. This is particularly true of the areas outside the northern commercial cities and the Prussian territories Provincial tariffs in the early nineteenth century placed a definitive brake on the production and marketing decisions of many early businesses.[2] Another form of provincial limitations on German businesses consisted of the restrictions emanating from the guilds and local governments. Permission to operate a business was usually granted under such conditions in view of the ability of new businesses to coexist harmoniously with the existing guilds and crafts. The intrinsically anti-progressive nature of such economic policies is clear enough. Not so apparent is the fact that whereas most German states managed to free business from this serious limitation by legislating for *Gewerbefreiheit* by the early nineteenth century, not all regions were thus emancipated. Bavaria by 1840, for example, documents histories of businesses still wrestling with localistic chicanery and restrictions.[3] Yet another component of the significance of this political fragmentation and regionalistic orientation was the lack of a uniform system of weights and measures, of money, and of standard safety regulations. Even though the customs union had begun eliminating these barriers, the process was slow. As late as the 1860s the ordering of advanced technological products across state lines was still complicated and delayed by this condition.[4] The implications of such difficulties in terms of regional specialization, product cost, and rates of technological innovation, are self-evident.

Our discussion must next turn to a consideration of the negative economic policies by the states. In the spirit of a sweeping generalization, it appears tenable to suggest that the economic policies of most states before the 1860s were sometimes hostile, and more frequently passive, to business formation and industrialization. Strangely enough, the first half of the nineteenth century was a favorable business climate neither in the states such as Baden, practicing close state paternalism in economic matters, nor in those such as Prussia, significantly influenced by laissez-

[2] Friedrich Krupp, for example, faced such limitations on the demand for his cast steel, especially in the form of the provincial tariffs of eastern Prussia. Firma Krupp, *Krupp 1812–1912* (Essen: Krupp, 1912), p. 23.

[3] Fritz Büchner, *Hundert Jahre Geschichte der Maschinenfabrik Augsburg-Nürnberg* (1840–1940), p. 21

[4] See, for example, the complications involved in ordering a technologically advanced boiler across state lines, in Heinrich Voelcker, *75 Jahre Kalle: Ein Beitrag zur Nassauischen Industrie-Geschichte* (Wiesbaden-Biebrich: Kalle & Co. A.G.), pp. 59–60.

faire liberalism. The former attitude proved to be a negative factor in economic development by virtue of its suppression of capitalistic enterprises, discouragement for capital imports, and the limited financial means and economic perspectives of the state governments, while the latter attitude was essentially a negative factor because, whereas superficially it may have resembled a laissez-faire policy, it was not accompanied by the type of strong governmental endorsement and support of private businesses that was evident in England and the United States, for example.

Aside from such traditional areas as incorporation laws and financial facilitation, such an endorsement normally finds expression in the tariff system. In the case of much of Germany, however, the tariff policies were neither generally favorable to industrialization nor consistent over time. In the case of Prussia the tariff law of 1818 clearly reflected the free trade sentiment of the government as well as the disconcern with promoting indigenous industrialization. Not until 1844 did the Prussian tariff structure become more protective, but by the mid-1860s arguments for free trade reappeared, culminating in a nonprotectionist tariff policy for Germany by the mid-1870s. The law of 1879 once more returned the nation to a heavily protective tariff.

It is thus clear that German businesses were hardly beneficiaries of favorable tariff policies in this time period. In fact, it appeared difficult to limit the basic free trade philosophy of the German Customs Union of 1834 to the participating states only. If the philosophy was sound among states that had once considered themselves to be economic and political rivals, it required only a minor stretching of the imagination to accept its validity vis-à-vis England, France, and the United States. The impact of tariff policies on German business firms has received considerable attention in many German business histories.[5]

Another aspect of state economic policies toward business involves direct assistance in the form of financial aid and product purchases. Both categories of state support to businesses were far from automatic, especially the former. An illustrative case of this fact of life is that of the early supplication for Prussian financial assistance by the Firma Krupp. This firm requested loans from the Prussian government in 1817, 1818, 1823, 1830, and 1835.

[5] See, for example; *Krupp 1812–1912*, pp 60–61, 94–95, 220–221; Conrad Matschoss, *Ein Jahrhundert Deutscher Maschinenbau: von der Mechanischen Werkstätte bis zur Deutschen Maschinenfabrik 1819–1919* (2d ed.; Berlin: Julius Springer, 1922), p. 48; Karl Helfferich, *Georg von Siemens: Ein Lebensbild aus Deutschlands grosser Zeit* (Berlin: Julius Springer, 1921), I, p. 24.

Some of these requests were ignored altogether, others were rejected on a local or regional level of the Prussian bureaucracy, still others were returned with the explanation that the government's economic principles compelled it to remain aloof from the individual business units of the economy.[6] With the exigencies of nationalism, however, this attitude toward businesses declined. In the case of the Firma Krupp, the Prussian government had dramatically changed its policies by the late 1860s, when the government's credit was made readily available to the firm. With the attainment of national unification such assistance not only became more normal, but also more extensive.[7]

In regard to state acceptance of the products and services produced by Germany's nascent private businesses, it can be observed that such acceptance was quite often painstakingly slow. This reluctance found expression in various ways. On the one hand, the state governments frequently mistrusted, and thus delayed, the introduction of major technological breakthroughs. The railroads are a notorious case in point here, being significantly delayed from reaching their technologically feasible, fullest development in the 1830s and 1840s, due to the ambiguous or even hostile stand of the state governments. On the other hand, a reluctance on the part of the state governments toward purchasing the products of their indigenous private businesses is no less significant.

The Krupp history gives some startling examples of this problem, especially insofar as the Prussian government appeared difficult to convince of the quality of Krupp's cast-steel products. This was the case in Krupp's weaponry, where the government in the mid-1840s refused even to test Krupp's cast-steel projectile barrels for a number of years, then tested them and found them superior to the pre-existing bronze weapons in 1849, but did not begin to order them until ten years later, by which time Austria, England, Russia, and Egypt were purchasing them regularly.[8] Much the same thing is true in regard to railroad equipment, particularly axles, springs, and wheels. Krupp's cast-steel products in these areas were frequently tested privately and rated superior to any others available in the 1850s, only to encounter the government's adamant position: the cast-steel parts were recommended to be employed only experimentally, with imported parts to be

[6] *Krupp 1812–1912*, pp. 31–32, 43, 63, 77; Joachim von Kürenberg *Krupp: Kampf um Stahl* (Berlin: Buchmeister-Verlag, 1935), pp. 66–68.

[7] von Kürenberg, *op. cit.*, pp. 226–228, 263 ff.

[8] *Krupp 1812–1912*, p. 111; von Kürenberg, *op. cit*, pp. 197–199.

preferred. Sizeable exports to other countries, notably England and France, here too preceded full endorsement at home.[9]

FINANCIAL INSTITUTIONS AND BUSINESS ORGANIZATION

Under this admittedly broad heading I would like to single out two germane topics: the reluctance to embrace the corporate form of business organization, and the relative underdevelopment of German financial institutions. Both of these factors can be well documented from business histories as significant impediments to business development and industrialization.

The reluctance to establish corporations in Germany especially in the first half of the nineteenth century has at least a dual explanation: state politics, and entrepreneurial preference. It may be suggested that the former undoubtedly influenced the latter historically. Evidence of state interference with business incorporation is legion for many of the German states. General incorporation laws were scarce, and the legislative process required to push a charter through the state legislatures was often slippery and time-consuming. In the case of major technological innovations, such as the railroads, which required the corporate form of business organization to succeed as private business ventures, the legislative processes centering on incorporation laws often retarded the development of an entire industry by five, even ten, years. Essentially, two forces were at work in this ambiguous posture of the state, and both acted to retard Germany's industrialization: first, the states were frequently incapable or unwilling to commit themselves regarding the desirability of such major innovations, and second, they were reluctant to reduce their patriarchial role traditionally played in economic matters.

A reluctance on the part of Germany's entrepreneurial class toward corporate business organization played a no less important role in retarding German business development, especially in the first half of the nineteenth century. Even though a rapidly increasing number of new businesses were founded as joint-stock ventures by the 1850s, and certainly in the *Gründerjahre* of the early 1870s, many of the businesses that had been founded as family enterprises and partnerships chose to forego the incorporation process. Krupp provides a fitting example of this reluctance to incorporate: in 1853, and again in 1874, the financial condition of the firm was dire enough to pressure Alfred Krupp into considering incorporation. In both instances, however, he rejected

[9] *Krupp 1812–1912*, pp. 111, 117; von Kürenberg, *op. cit.*, pp. 190–191.

the possibility as unacceptable and counter to his desire to remain independent in his entrepreneurial activities.[10]

A recurring theme in German business history in much of the nineteenth century is the problem of underdeveloped financial institutions and capital procurement. Most of the banks in pre-1850 Germany were small, private, and highly limited in their means, and consequently in their willingness to finance nascent businesses. Not until the mid-nineteenth century did joint-stock banks come into existence, playing an aggressive role in the marketing of railroad and state securities. Even these institutions did not play an active role in the rudimentary financing of German industries, a fact that was to plague the progress of German industrialization into the 1870s.[11] Even the famous Deutsche Bank, under the progressive policies of Georg von Siemens, did not begin to play an active role in industrial finance until about 1880, ten years after its creation.[12]

The impact of such conditions on the individual industrial firm is manifested in a sporadic and uneasy relationship with banks and a heavy reliance on other capital sources. In the case of the Firma Krupp, the raising of capital was a process involving primarily loans from relatives and friends, especially into the 1850s. Bank loans had been utilized from an early date, but the inflexible terms of these remained a problem to the firm until as late as the 1850s. Consequently, the Krupps were reluctant to turn to the banks for assistance. Only by the late 1860s and early 1870s had this attitude changed.[13] The capital scarcity, brought about by the weak financial institutions and the forces inhibiting incorporation, is one of the key variables in an explanation for the slow industrialization of Germany. In this setting the potential formation of new businesses and the expansion of existing ones was held back even in periods of business optimism, such as the years following the formation of the Customs Union in 1834.[14]

The Disadvantages of Backwardness

Many of the readily identifiable hallmarks of economic backwardness are at the same time impediments to economic develop-

[10] *Krupp 1812–1912*, p. 198; von Kürenberg, pp. 253–255.

[11] Helfferich, I, pp. 202–210.

[12] *Ibid.*, 25–27.

[13] *Krupp 1812–1912*, pp. 24, 74, 197–201.

[14] In this period the need for expansion capital was particularly great. See, for example: Matschoss, *op. cit.*, p. 42; von Kürenberg, p. 98. It is in time periods such as these that the inadequacies of the capital supply mechanism become most readily apparent.

ment. In perusing the rich literature of business history some of these key aspects of underdevelopment become readily apparent. Since no Western economy has opted for economic underdevelopment, it seems fitting to deal briefly with some major symptoms of that condition in nineteenth-century Germany.

Within the German economy, one of the fundamental problems was the limited nature of the domestic market, as well as establishing economic access to that market. Not only were demand levels for the commodities of modern industries (e.g., the iron and steel industry and the machine shops) low, but the transportation system was generally inadequate, particularly in the first half of the nineteenth century. In the German machinery industry, for example, the limited market has been singled out by one business historian as the prime explanation for the lack of adequate production specialization and progress of the industry throughout the nineteenth century.[15] The early history of the Krupp firm also points to this problem. In the entire 1812–1826 period only 11 percent of Krupp's total sales were made outside the state of Prussia, and most of the remainder was marketed locally in the Essen area.[16]

Transportation is only one of the many factors explaining the limited market, but land transportation in most of Germany was catastrophically inadequate before the 1840s. Water transportation, on the other hand, was quite feasible, a factor which gave a keen competitive edge to imports in supplying many regions of Germany.[17] Furthermore, some business historians have claimed that even Germany's early railroad lines were initially constructed in harmony with the needs for product imports, rather than with the needs of domestic industry in mind.[18]

The significance of expanding the market can be illustrated by reference to the Krupp firm. The gradual unification of the German national market induced Alfred Krupp to embark on an extensive sales trip by 1832, collecting orders especially in new territories such as southern Germany. The formation of the customs union in 1834 was in large part responsible for the fact that

[15] Bertold Buxbaum, 'Der deutsche Werkzeugmaschinen—und Werkzeugbau im 19. Jahrhundert," in *Beiträge zur Geschichte der Technik und Industrie: Jahrbuch des Vereins Deutscher Ingenieure*, ed. Conrad Matschoss, vol. IX (Berlin: Julius Springer, 1919), p. 128.

[16] *Krupp 1812–1912*, p. 41.

[17] *Ibid.*, p. 39; Matschoss, *op. cit.*, pp. 30, 34.

[18] Matschoss, p. 49.

Krupp's sales increased by more than 1,000 percent from 1833 to 1837.[19]

Looking outside the German economy, competition from abroad looms large as one of the key aspects of economic underdevelopment. While it is reasonable to speak of the "penalties of taking the lead" in dealing with technological competition between nations, it is no less fitting to deal with the "vicissitudes of fighting the lag." A technological lag can be much more than a simple matter of international competition; it can be an intimidating force for a nation's entrepreneurial talents. Thus, for example, Friedrich Krupp in the difficult beginning years of his enterprise could easily have heeded the pessimistic warnings of his friends: give up, because even if you succeed to produce cast steel as good as that of the British, theirs will still be cheaper and hard to replace from its dominant market position.[20] Whereas the German iron and steel industry was under particular competitive pressure in the first half of the nineteenth century, the machinery industry was under such pressure throughout the entire century, specifically from the British until the 1860s, and from the Americans thereafter.[21]

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This preliminary example of a micro-oriented economic history is perhaps an ungainly apparition to many business historians and economic historians alike. Nevertheless, it might be significant that this type of history—macroscopic and microscopic at the same time—can be constructed with almost complete reliance on business histories alone. If this example is not convincing evidence of the value of such an undertaking, the fault may lie in the brevity of this study rather than in the validity of its methodology.

I have a dream that—contrary to the classically presumed value of dreams—creates more problems than it hides. I see a gigantic, benevolent computer, ridden by an economic historian, raid the major business history libraries and archives, devouring—with an occasional bout of indigestion—the vast wealth of materials in its path. At the end of its rampage, it deposits ten neatly bound, massive volumes entitled: "A Comprehensive Economic History from the Grass-Roots Level." A note, hastily attached to volume one, reads: "Take a close look at the fellow who tried to program me to the effect that many business histories do not equal economic history!"

[19] *Krupp 1812–1912*, pp. 67–79.
[20] von Kürenberg, *op. cit.*, p. 50.
[21] Buxbaum, *op. cit.*, pp. 97–98, 188 ff.