

The Political Economy of Public Finance and the Industrialization of Prussia, 1815-1866

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Source: *The Journal of Economic History*, Dec., 1966, Vol. 26, No. 4, The Tasks of Economic History (Dec., 1966), pp. 484-497

Published by: Cambridge University Press on behalf of the Economic History Association

Stable URL: <https://www.jstor.org/stable/2115904>

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# *The Political Economy of Public Finance and the Industrialization of Prussia, 1815-1866*

*Always the capitalists have needed the State to establish profits on a truly grand scale, never have they been able to consolidate their economically, socially and politically predominant position without the backing of the public finances.*

RUDOLF GOLDSCHIED<sup>1</sup>

## I

AT the close of the Napoleonic Wars in 1815 Prussia was an industrial backwater. By the mid 1860's Prussia had achieved a considerable degree of industrialization. In a sense, her economy had "taken off." The turning point dates from around 1840 and was closely related to railroad building.<sup>2</sup> Before 1840 industrial investment grew haltingly. The combination of inadequate markets and the lack of supporting enterprise made industrial investment—particularly in those lines in which Europe's industrial leader, England, was already specialized—too risky and/or its anticipated yields too low for most potential investors, who preferred to invest in real estate, commerce, and in foreign government bonds.<sup>3</sup> As leading Prussian entrepreneurs argued, the country's industrial development required public investment in river improvements, roads, canals, railroads, banks, and other facilities which would generate external

<sup>1</sup> "A Sociological Approach to Problems of Public Finance," in Richard A. Musgrave and Alan T. Peacock, eds., *Classics in the Theory of Public Finance* (New York: Macmillan, 1958), p. 211.

<sup>2</sup> For statistical support of this periodization, see Walter Hoffmann, "The Take-off in Germany," in W. W. Rostow, ed., *The Economics of Take-off into Sustained Growth* (New York: St. Martin's, 1963), and Arthur A. Spiethoff, *Die wirtschaftlichen Wechsellagen* (2 vols.; Tübingen: Mohr, 1955), I, 113-17; II, tables 13 and 20.

<sup>3</sup> Evidence on Prussian investor preferences is plentiful; for example, Gustav von Gülich, *Geschichtliche Darstellung des Handels, der Gewerbe und des Ackerbaus* (5 vols.; Jena, 1830-45), II, 436; Bernhard Brockhage, *Zur Entwicklung des preussisch-deutschen Kapitaleports* (Leipzig: Duncker and Humblot, 1910), esp. 71-77. See also the summary of sources by Knut Borchhardt, "Zur Frage des Kapitalmangels in der ersten Hälfte des 19. Jahrhundert in Deutschland," *Jahrbücher für Nationalökonomie und Statistik*, CLXXIII (1961), 404-21. Contemporary studies comparing British and German production costs further suggest the underlying rationality of such preference patterns.

economies and make private investment, for example in metalworking enterprise, more profitable. Theoretically, such public investment could have been financed by curtailing other governmental expenditures, by taxing unproductive consumption, and/or by borrowing. The technical proficiency required by such investments was either domestically available or could be readily borrowed from abroad. Even Prussian political economy, through its interpretation of the Classicists, reflected these conditions and called for state assistance.<sup>4</sup> The will, the means, and a rationale for a program of public investment were at hand: one could truly speak of an abundance of "advantages of backwardness" in Prussia after 1815.

Yet the fact is that these opportunities remained largely unexploited until the 1840's. The Prussian government undertook relatively few "pro-industrial" investment projects and, indeed, offered private entrepreneurs little encouragement to carry through such investments themselves.<sup>5</sup> This Prussian experience, interestingly, contrasts sharply with the substantial program of "internal improvements" carried out in the United States after 1815 and also, to take a closer example, with the state-supported investments in independent Belgium after 1830.<sup>6</sup> It was after the initial success of some private railroad enterprises in the later 1830's that railroad construction began to expand substantially and to receive large-scale governmental support. The railroad construction boom of the 1840's was expanded in the 1850's, particularly its government-financed component. In the 1850's, moreover, a great flood of investment in mining and metallurgical enterprise accompanied it, much of this no doubt induced by railroad building. By the 1860's the basic frame-

<sup>4</sup> For the views of contemporary entrepreneurs, see Dietrich Eichholtz, *Junker und Bourgeoisie vor 1848 in der preussischen Eisenbahngeschichte* (Berlin: Akademie-Verlag, 1962), esp. p. 30; Joseph Hansen, ed., *Rheinische Briefe und Akten zur Geschichte der politischen Bewegung, 1830-1850* (2 vols.; Essen, 1919-1942), I, 185-93; *idem*, *Gustav von Mevissen* (2 vols.; Berlin, 1906), I, 148-49. For excerpts from early Prussian political economists, see Wilhelm Roscher, *Geschichte der Nationalökonomie in Deutschland* (Munich, 1874), pp. 596 and ff. See also Wilhelm Treue, *Wirtschaftszustände und Wirtschaftspolitik in Preussen, 1815-1825* (Stuttgart: W. Kohlhammer, 1937), esp. p. 146, for a contrary view.

<sup>5</sup> One thinks, for example, of the government's restrictive regulatory machinery in mining or of its restrictive incorporation procedures.

<sup>6</sup> On the U.S., see Carter Goodrich, "American Development Policy: The Case of Internal Improvements," *JOURNAL OF ECONOMIC HISTORY*, XVI (1956); for Belgium, P. Schöller, "La transformation économique de la Belgique de 1832 à 1849," *Bulletin de l'Institut de Recherches Economiques et Sociales, Université de Louvain*, XIV (1948), 525-96.

work of Prussian industry, with its distinctive emphasis on heavy industry and large-scale organization, was firmly laid.<sup>7</sup>

## II

The argument of this paper is that the Prussian government's fiscal policies bore a significant share of responsibility for the development pattern sketched out: as an element of backwardness before the 1840's and as a growth stimulant thereafter. My aim is to show how fiscal policies became more growth conscious around this time and to suggest why this change took place. The economic impact of the change is more or less assumed and not argued here. The Goldscheid statement quoted above, though a drastic oversimplification, captures part of the truth I seek: he treats the state and its fiscal policies as a partially dependent, rather than an independent, factor in the socioeconomic process. Calling attention to the class bases of government is a healthy offset to treatments anachronistically stressing the independent role of the nineteenth-century state and is particularly useful in reviewing the Prussian experience.<sup>8</sup> It might also serve as a helpful reminder to fiscal-policy specialists that the field of public finance has an important sociopolitical dimension all too frequently assumed away.<sup>9</sup>

Prussia's sluggish response to opportunities for public investment before the 1840's reflected and resulted from the country's social and political structure. Before 1848, Prussia was an absolute monarchy whose political affairs were in fact controlled by a coalition of king, landed aristocracy, and bureaucracy. Predominant was the aristocracy—the *Junker*. Junker aristocrats in the East Elbian provinces controlled local affairs directly by means of such institutions as the manorial courts and manorial police powers. They exercised decisive

<sup>7</sup> On this, see Pierre Benaerts, *Les origines de la grande industrie allemande* (Paris: F. H. Turot, 1933), pp. 456 ff.; also Rondo Cameron, *France and the Economic Development of Europe, 1800-1914* (Princeton, N.J.: Princeton University Press, 1961), pp. 369 ff. For the boom of the 1850's, see Horst Blumberg, "Die Finanzierung der Neugründungen und Erweiterungen von Industriebetrieben in Form der Aktiengesellschaften während der fünfziger Jahre des 19. Jahrhunderts," in Hans Mottek and others, eds., *Studien zur Geschichte der Industriellen Revolution in Deutschland* (Berlin: Akademie-Verlag, 1960).

<sup>8</sup> Compare the approach of W. O. Henderson, *The State and the Industrial Revolution in Prussia, 1740-1870* (Liverpool: Liverpool University Press, 1958); see also Ulrich Ritter, *Die Rolle des Staates in den Frühstadien der preussischen Industrialisierung* (Berlin, 1961).

<sup>9</sup> A point made by Gunnar Myrdal, *The Political Element in the Development of Economic Theory* (London: Routledge and Paul, 1953), pp. 180, 185.

national influence by supplying most of the monarchy's chief ministers and by filling leading positions within the civil and military bureaucracy.<sup>10</sup> Apart from government itself, their major concern was with their estates, both as sources of revenue and as the basis of their political and social ascendancy. Until the 1840's they showed little interest in furthering industrial development, except insofar as that followed from improvement of their estates. Prussian governmental policy tended to reflect their views rather than those of the politically excluded middle classes. The building of the *Zollverein*, which seems to have been the major exception to this rule, can be explained largely in terms of Prussian-German power politics.<sup>11</sup>

This political configuration affected economic policy at many points. Official regulation of monetary and banking institutions in Prussia remained relatively conservative until 1870, though some relaxation was permitted in the 1840's and 1850's. Bureaucratic controls blocked innovation in mining (mainly coal) until reform began in 1851. Railroad projects advanced by private entrepreneurial groups from the early 1830's were held up by the suspicious government out of concern for agrarian and bureaucratic vested interests.<sup>12</sup>

Fiscal policy fared similarly, but here the link between politics and policy was more direct. Since at least 1806 (the year of the Prussian collapse at Jena) the question of popular constitutional restraints upon the Prussian monarchy had been raised and associated with the question of taxation. Napoleonic War finance required enlarged revenues, enlarged revenues meant a heavier tax burden, and Prussian statesmen such as Hardenberg felt that heavier taxes could be imposed only if accompanied by the promise of con-

<sup>10</sup> Business leaders frequently complained about this Junker predominance in government; Eichholtz, ch. ii, pp. 124-25, and sources cited there.

<sup>11</sup> Interest in increased revenues (partly through the reduction of smuggling) also played an important role; Carl Bergius, *Grundsätze der Finanzwissenschaft, mit besonderer Beziehung auf den preussischen Staat* (Berlin, 1865), pp. 385-86; see also Wolfram Fischer, "The German Zollverein: A Case Study in Customs Union," *Kyklos*, XIII (1960), 65-89; and Theodore S. Hamerow, *Restoration, Revolution, Reaction: Economics and Politics in Germany, 1815-1871* (Princeton, N. J.: Princeton University Press, 1958), p. 11, and sources cited there.

<sup>12</sup> For the roots and expressions of Prussia's reluctant railroad policy, see Eichholtz; for a critique of Prussian monetary and banking policies, my *Financial Institutions and Industrialization in the Rhineland, 1815-1870* (Madison: University of Wisconsin, 1966), esp. pp. 13-15 and chs. iii and vii; and for a brief review of restrictive mining policies, Wolfram Fischer, "Die Bedeutung der preussischen Bergrechtsreform für den industriellen Ausbau des Ruhrgebiets," *Vortragsreihe der Gesellschaft für Westfälische Wirtschaftsgeschichte*, IX (1961).

stitutional government. During the Napoleonic Wars, edicts of 1811 and 1815 specifically contained this promise. They were reinforced in the postwar period by a series of edicts, including a number of tax reforms. Of pivotal importance was the law or edict of January 17, 1820. It reported on the size and composition of the government's debt and was designed, like the earlier edicts mentioned above, to improve the government's credit.<sup>13</sup> Most important, it fixed a "legal" ceiling on the debt, the Crown promising neither to add to it nor to introduce any new *direct* taxes without consulting that quasi-parliamentary body, the United Diet.<sup>14</sup> The United Diet was in principle a national version of the provincial diets (which met fairly regularly) and, like them, represented the "estates of the realm": the landed aristocracy, the landowning peasantry, and the urban bourgeoisie. It did not promise to be a very radical political instrument, but the Prussian monarchy felt that steps in its direction were concessions toward "democracy" to be avoided at all costs. This stand, one should remember, was strongly influenced and supported by Prussia's conservative Austrian and Russian allies (the "Holy Alliance"). In any case, one very important result of this was the government's attempt to restrict and disguise its revenues and expenditures during subsequent years. Another was the growing tendency for both liberal and conservative political figures to equate tax reform with constitutional government. It is worth noting that some political figures like David Hansemann found tax reform a good political issue with which to keep the general issue of constitutional government alive and thus a means rather than an end in itself.<sup>15</sup> At any rate, fiscal policies (and particularly government spending) favorable to industrialization were major casualties of this polarization. Thus, general antipathy on the part of Prussia's ruling class to industrial development was reinforced in the area of fiscal policy by politico-legal arrangements which made public spending patterns dependent upon changes in revenue sources.

<sup>13</sup> Brockhage, pp. 102 ff.; also Adolf Arndt, "Der Anteil der Stände an der Gesetzgebung in Preussen von 1823-1848," *Archiv für öffentliches Recht*, XVII (1902), 570-88.

<sup>14</sup> Contemporaries believed in the "inherent inelasticity" of indirect taxes, so that a measure excluding them did not promise to permit expansion of governmental spending without constitutional reforms.

<sup>15</sup> On this, see letters of David Hansemann to Prince Salm-Dyck, May 28, 1845, and Hansemann to H. von Beckerath, May 28, 1845, in Hansen (cited in n. 4), I, 885-86, 889.

The sociopolitical context changed markedly in the 1840's. Many factors were responsible for this, not least of all the accession of a new king, with the result a more favorable governmental attitude toward industrial development.<sup>16</sup> Railroad policy well illustrates the change. After opposing and restricting the railroad plans advanced by groups of bourgeois entrepreneurs in the 1830's, the government's leaders began to see some of the advantages (particularly for military operations) of furthering those plans, and thus had to face up to the problem of financing them. A policy of subsidies and interest guarantees was begun (in 1842) and the possibility of governmentally owned railways was seriously investigated. This led to certain difficulties, however. The financing of railways required that the government withdraw funds from other employments and/or develop substantial new sources of income. The first course ran into the opposition of a variety of vested interests, mainly within the civil and military bureaucracy. For example, one important source of opposition was the postal ministry, which enjoyed a near monopoly of certain kinds of freight shipments and therefore feared a reduction in its revenues and in its importance generally as a probable consequence of development of railroads.<sup>17</sup> The second course involved unwelcome political concessions, for the "estates of the realm," particularly their bourgeois component, proved unwilling to support or endorse the government's new spending plans except on the condition that the Crown explicitly recognize and accept certain constitutional controls. In fact, the government considered this possibility in the 1840's and even went so far as to convene the United Diet in 1847; but a compromise could not be reached. The government refused to concede and implement the principle of legislative review in financial matters, even in the limited form proposed by the estates. The latter, in consequence, refused to support suggested tax reforms or to underwrite proposed government borrowing.<sup>18</sup>

This impasse continued into 1848 and was certainly one of the factors behind the revolutionary changes of 1848-1849 which

<sup>16</sup> The advent of Frederick William IV in 1840, the industrial success of Belgium, and the increasing recognition by Junker landowners of the advantages of an enlarged German market for their agricultural produce were among the leading factors underlying the change in attitude.

<sup>17</sup> Eichholtz, pp. 41-42; Otto Schwartz and G. Strutz, *Der Staatshaushalt und die Finanzen Preussens* (3 vols.; Berlin, 1901-1904), I, Book 3, 570.

<sup>18</sup> Hansen, *Gustav von Mevissen*, I, 312, 467ff.; Eichholtz, pp. 119-24; Schwartz and Strutz, I, Book 3, 580-83.

cleared most of the political tension away. Middle-class leaders, and especially entrepreneurs, had come to fear the revolt of the laboring poor and to appreciate in this connection the usefulness of Junker power and authority (particularly the army). While bourgeois political aims were accordingly scaled down, Junker leaders in the government also saw the utility of an alliance with middle-class groups and cemented the alliance with some constitutional trappings and with more progressive financial and economic policies. Thus constitutional restraints on the government were introduced in 1850 and a large-scale program of railroad spending and borrowing was launched.<sup>19</sup> Political—and thus fiscal—harmony reigned until the 1860's, when Bismarck and the Crown came into conflict with the lower legislative chamber over the military budget. The government showed how weak were the legal constitutional restraints upon its powers by operating without legislative approval of its budgets. However, its relatively liberal economic policies and its support of industrial entrepreneurs now made its political intransigence much more bearable than had been the case in the 1840's.<sup>20</sup>

### III

The preceding sketch suggests that social and political factors significantly influenced fiscal policy in Prussia, 1815-1866. But does a closer examination of the evidence confirm that suggestion? And what is the evidence? Our raw materials consist of the published governmental financial reports and the opinions of contemporaries. They can be broken down along three main lines: (1) overall expenditures and revenues; (2) the composition of spending and revenues; and (3) the importance of governmental borrowing.

The government's financial statistics are weak in both quantity

<sup>19</sup> In an 1849 session of the Prussian lower house, a Representative Carl delivered a perceptive analysis of the shift in fiscal policy associated with constitutional controls: "The previous administration perhaps failed through stingily refusing to provide the sums necessary to develop the country. However, we now stand at the government's side and will always approve the funds necessary for the promotion of improved transport and for the support of commerce, industry and agriculture, even if the government budget is thereby enlarged; after all, these employments represent an investment which yields abundant returns"; *Verhandlungen des preussischen Landtags, Haus der Abgeordneten*, 23 March 1849, p. 250.

<sup>20</sup> See Friedrich Zunkel, *Der rheinisch-westfälische Unternehmer, 1834-1879* (Cologne: Westdeutscher-Verlag, 1962), pp. 184-86, for excerpts of entrepreneurial support of the state's economic policies; and *ibid.*, pp. 205-19, for its criticism of the military spending of the 1860's.

and quality. Paradoxically, however, their weaknesses are in themselves an important illustration of the political side to public finance. Free from constitutional or legal controls, the state's leaders published fiscal information only when political or financial pressures dictated. Only five budgets were published between 1815 and 1847; thereafter they appeared annually, but they were always very approximate in nature. Before 1848 many governmental departments (for example, the post office) reported only their net revenues, thus excluding all expenditures incurred in the revenue-earning process and to that extent understating the true amount of governmental outlays. Then, too, Prussian expenditures of borrowed money did not generally appear in the published budgets—which were concerned with disposition over expected *current* revenues. Finally, the government owned assets which earned income not reported in the published budget, and this led to further financial understatement particularly, though not exclusively, for the period before 1848.<sup>21</sup> In 1856 Friedrich von Reden, a careful statistician, reported that the published figures for the years up to 1841 underestimated annual governmental revenues by at least 60 per cent.<sup>22</sup> Criticism by contemporaries like Eugen Richter and Carl Bergius in the 1860's suggests that comprehensive and clear financial reporting was slow to appear in Prussia, constitution or no constitution.<sup>23</sup>

Table 1 begins the statistical story. Since published budgets were balanced, only a spending figure—which excludes borrowed funds—is included here. Which statistics are most relevant? Owing to the "money illusion," total governmental spending was discussed mainly in terms of current prices, and it is this statistic which reflects most clearly the changing political environment (though per capita spending was employed by the more sophisticated polemicists). We find the first substantial upward shift in the 1840's, but by far the most dramatic rise is between 1849 and 1856. In per capita terms one observes a declining diminution of spending in

<sup>21</sup> The government's contingency fund (*Staatsschatz*) earned unreported income which remained the object of constitutional dispute from the 1840's into the 1860's; Carl Bergius, *Preussische Zustände* (Münster, 1844), pp. 188-89; and *idem*, *Grundsätze* (cited in n. 11), pp. 421-22 and ff.

<sup>22</sup> That is, actual *ex ante* revenues were larger than reported *ex ante* revenues by more than 60 per cent of the latter; Von Reden, *Allgemeine vergleichende Finanz-Statistik* (3 vols.; Darmstadt, 1852-56), I, Book 3, 96-99.

<sup>23</sup> Bergius, *Grundsätze*, p. 58; Eugen Richter, *Das preussische Staatsschuldenwesen und die preussische Staatspapiere* (Breslau, 1869), chs. iii-vi, pp. 92-99.

TABLE 1  
TOTAL AND PER CAPITA CENTRAL-GOVERNMENTAL SPENDING  
IN PRUSSIA, IN CURRENT AND 1913 PRICES, 1815-1866

<i>Spending</i>	1821	1829	1838	1847	1849	1853	1856	1866
Spending, current prices (millions of thalers)	82	83	86	93	94	103	127	158
Spending, 1913 prices (millions of thalers)	77.9	64.7	68.8	79.2	61.6	102.5	133.4	146.9
Spending, per capita, current prices (thalers)	7.5	6.5	5.9	5.8	5.7	6.1	7.3	8.1
Spending, per capita, 1913 prices (thalers)	7.0	5.1	4.7	4.9	3.8	6.0	7.7	7.5

Sources: Carl Bergius, *Preussische Zustände* (Münster, 1844), pp. 20-41; Von Reden, *Finanz-Statistik* (Darmstadt, 1852), pp. 80, 96-99, 334-43; Adolf Wagner, *Finanzwissenschaft* (Leipzig, 1910) IV, 49-54; David Hansemann, *Preussen und Frankreich* (Leipzig, 1833) pp. 111-99, 212-49; Schwartz and Strutz, I, Book 1, Appendix XXVI; Book 2, Appendix XXXVI; Book 3, Appendix XIII; Book 4, Appendix LXXI.

the 1840's and the most substantial increase in the 1850's. In constant (1913) prices the same turning points are evident, though the early 1850's predominate even more than with the other standards. One may add that national-income figures are available from 1851 and that almost no change in the ratio of governmental spending to national income can be registered for the 1850's and 1860's. Thus, the importance of increased governmental spending was not a matter of mere size, and it is necessary to look to the composition of spending and revenues for additional clues.

Increased budgetary allocations for industrial development purposes meant that overall revenues had to be increased or redistributed. Tables 1 and 2 reveal that both factors were at work, with both increase and redistribution concentrated in the period after 1847. It should be pointed out once more that redistribution

TABLE 2  
COMPOSITION OF PRUSSIAN GOVERNMENTAL SPENDING, 1821-1866  
(PER CENT OF TOTAL)

<i>Spending</i>	1821	1829	1838	1847	1849	1856	1866
Military	27	26	31	28	29	27	29
Debt	13	14	13	8	8	11	11
Commercial <sup>a</sup>	16	16	16	19	27	30	31
Administrative	44	44	40	44	36	32	29

<sup>a</sup> Includes spending on mines, forests, Crown lands, railroads, postal services, and expenditures by the ministries of Commerce and Industry.

Sources: As in Table 1.

was a painful process and one which was facilitated in the period of rapid growth when overall revenues grew rapidly anyway. In the 1830's, for example, public spending on railroads was stymied partly by the priority enjoyed by military spending and also because the railroads threatened vested interests such as the postal authority.

TABLE 3  
PRUSSIAN TAX AND NON-TAX REVENUES, 1821-1866  
(PER CENT OF TOTAL)

	1821	1829	1838	1847	1849	1856	1866
Non-Tax <sup>a</sup>	34	35	34	34	35	44	51
Tax	65	65	66	66	65	56	49

<sup>a</sup> Includes fees which were in reality taxes; for example, mining authority income. Sources: As in Table 1.

Looking at the revenue side it is interesting to observe the continued—indeed, increasing—importance of non-tax revenues throughout the period. As Gustav Schmoller (and, perhaps more important, contemporary critics) observed, this was symbolic of, as well as a means of maintaining, the Crown's independence of constitutional fiscal controls.<sup>24</sup> Some of this revenue represented the transfer of true "costs of production," but most of it represented hidden taxes. Their persistence, in combination with the resurgence of military spending in the 1860's, suggests some of the hollowness of the constitutional changes after 1848.

Examination of revenues, however, does suggest that some important changes were associated with the development of constitutional government in Prussia. After the flurry of tax reforms which followed the Napoleonic Wars (1818-1821), virtually no change took place in the government's fiscal policy until the 1840's. The law of January 17, 1820, discouraged both borrowing and change of direct taxes. Indirect tax revenues were regarded as practically incapable of expansion, both because of their low income elasticity and because they were subject to commercial treaty provisions (the *Zollverein*).<sup>25</sup> Two prerequisites of tax-revenue expansion were re-

<sup>24</sup> Gustav Schmoller, "Die Epochen der preussischen Finanzpolitik bis zur Gründung des deutschen Reiches," *Umriss und Untersuchungen zur Verfassungs-, Verwaltungs- und Wirtschaftsgeschichte* (Leipzig, 1898), pp. 198, 215-16; Bergius, *Grundsätze*, p. 58. The relative growth of non-tax revenues after 1849 was largely attributable to the railways and railway shares owned by the states.

<sup>25</sup> Bergius, *Grundsätze*, p. 354; Erwin von Beckerath, *Die preussische Klassensteuer und die Geschichte ihrer Reform bis 1851* (Munich and Leipzig, 1912), p. 33.

distribution of the land tax (which fell relatively heavily on Prussia's newer and most progressive provinces of Rhineland and Westphalia) and the establishment of an income tax, and these could not be achieved in the political tensions of pre-1848 Prussia.<sup>26</sup> After the Revolution of 1848, tax reform was achieved. In 1851 a new income tax was enacted which provided more revenue and which was regarded as more equitable, not least because the payment of income tax above a certain minimum entailed suffrage rights.<sup>27</sup> In 1861 the old land tax, long a bone of contention, was modernized after extended public debate and its burden redistributed in favor of the more industrialized parts of Prussia. Table 4 indicates roughly

TABLE 4  
DISTRIBUTION OF PRUSSIAN LAND TAX, 1821-1838 AND 1864  
(PER CENT OF TAX YIELD)

	1821-38	1864
Eastern agrarian provinces <sup>a</sup>	25	39
Western industrial provinces <sup>b</sup>	75	61

<sup>a</sup> Pomerania, Posen, Brandenburg, and Prussia.

<sup>b</sup> Silesia, Saxony, Rhineland, and Westphalia.

Sources: J. G. Hoffmann, *Die Lehre von den Steuern* (Berlin, 1840), p. 129; Schwartz and Strutz (cited in n. 17), I, Book 4, 1114.

how the burden shifted, in harmony with the Crown's recognition of a new "balance of social forces" within Prussia. Middle-class reformers and entrepreneurial critics had henceforth few complaints to make about the tax structure (though they continued to criticize spending policy). Adolph Wagner's approving review of Prussia's fiscal history in this period found fault only in the fact that the "lower orders" seemed to be paying an excessive share of the burden—thus reflecting the informal alliance between landed power and business wealth ushered in after 1848.<sup>28</sup>

In the short run, of course, governmental expenditures did not necessarily depend upon anticipated budgeted revenues. The government could conceal its expenditures, could print paper money

<sup>26</sup> Representatives of the older provinces fought tax reform consistently; *ibid.*, pp. 43 and ff. The potency of the land tax as a political issue can be seen in the fact that the liberal Hansemann ministry of 1848 was replaced by the Crown, owing in large part to its insistence on a redistribution of the tax's burden. See Hamerow (cited in n. 11), p. 177; Gustav Croon, *Der rheinische Provinziallandtag bis zum Jahr 1874* (Düsseldorf, 1918), p. 182.

<sup>27</sup> Von Beckerath, pp. 93, 96.

<sup>28</sup> *Ibid.*, p. 93; Adolph Wagner, *Finanzwissenschaft* (Leipzig: C. F. Winter, 1910), IV, 47.

or central bank notes, and, most significantly, could borrow in the capital market. Because of this and because the budgets excluded the expenditure of borrowed funds, a look at the national-debt figures is warranted. Table 5 reflects the parsimony of Prussian financial policy before 1848 and the bulge in expenditures in the years immediately thereafter.<sup>29</sup> These facts, further supported by the figures on debt servicing implied in tables 1 and 2, strengthen

TABLE 5  
PRUSSIAN GOVERNMENTAL DEBT, 1820-1865\*  
(MILLIONS OF THALERS)

Year	Funded	Paper Money	Note Issue <sup>a</sup>	Total
1820	206.6	11.2		217.8
1833	163.8	17.7		181.5
1848	138.1	30.8	.7	169.6
1855	227.7	20.8	10.5	259.0
1865	268.7	15.8	63.4	347.9

\* Does not include all governmental debt, since the liabilities of several governmental institutions represented a part of that debt for which no data were published.

<sup>a</sup> Net of Prussian Bank's specie holdings.

Sources: Eugen Richter (cited in n. 23), pp. 30-63; Curt Schauer, *Die Preussische Bank* (Halle, 1912), p. 41.

the importance of 1848 as a turning point in Prussian fiscal history. Evidence on governmental borrowing reflects a high proportion of productive expenditures: well over half (105 million thalers) of nearly 200 million thalers' worth of governmental loans contracted in 1848-1864 went into the railroad system.<sup>30</sup>

This borrowing pattern and fiscal policy generally were associated with the government's credit standing. The reforms of 1818-1821 and the parsimonious policy which dominated until the 1840's were related to the government's shaky credit standing in the years 1815-1820. By limiting expenditures and retiring debt, the government was able to establish a very strong standing by the 1830's.<sup>31</sup> Spending on railroads in the 1840's and uncertainty about

<sup>29</sup> It is interesting to observe that the decline in funded debt in the 1840's was to some extent offset by the increase in unfunded debt. Perhaps this reflected a desire to conceal spending activities. The great growth in unbacked bank note circulation after 1855 invites a variety of interpretations.

<sup>30</sup> At least they were entitled "railroad loans" and were earmarked for particular railroad projects; Bergius, *Grundsätze*, p. 445; Schwartz and Strutz, I, Book 3, 1023-25. Railroad loans to the amount of 83.2 million thalers were made between 1849 and 1855.

<sup>31</sup> See Brockhage, pp. 102, 104-5, 124ff., for a sketch of the quantitative evidence.

the budget from around 1845 led to a sharp fall in the standing of the Prussian government's securities, relative to the securities of other European governments.<sup>32</sup> After the Revolution of 1848 the air cleared, and borrowing approved by a "popular" legislative chamber could be carried out on improved terms, particularly since the funds were allocated largely to railroad building. In the 1850's, greatly expanded borrowing went on while the relative borrowing terms of the Prussian government remained almost stable, as measured by Prussian governmental bond yields relative to the Berlin discount rate, on the one hand, and to the yields on foreign governmental securities, on the other. In the 1860's the government borrowed heavily for military purposes against the protests of bourgeois circles and against the will of the lower legislative chamber, but now its relative borrowing terms remained nearly stable nevertheless.<sup>33</sup>

#### IV

The paper's argument may be recapitulated as follows: Before 1848 the Prussian government largely failed to exploit opportunities for public spending on growth-inducing investments. Until around 1840 this was because the ruling coalition (aristocracy, bureaucracy, and monarchy) was hostile to the interests of industrial development. From around 1840 to 1848, interest in industrialization grew, but its satisfaction seemed to mean popular constitutional restraints upon the coalition's governing powers, and an institutionally created "lag" or "gap" emerged. The Revolution of 1848 eliminated this gap by allying the interests of the bourgeoisie and the ruling coalition against an emerging laboring class. Thereafter, spending on productive purposes expanded, though this expansion leveled off in the 1860's. In a narrow sense, the moral of the story is that governmental spending depends upon revenue-raising arrangements. In a larger sense, the moral for economists is that economic policies, particularly fiscal policies, have an important sociopolitical dimension. The moral for historians, finally, is that

<sup>32</sup> *Cologne Chamber of Commerce Report for 1846* (Cologne, 1847).

<sup>33</sup> This quasi-quantitative sketch derives from a cursory examination of the English, French, and Prussian governmental bond yield and of Berlin discount-rate behavior over the period in question; tables in Spiethoff (cited in n. 2), tables 11 and 12. A more rigorous comparative analysis along these lines might prove rewarding.

the state—and particularly the nineteenth-century Prussian state—must be interpreted as an intermediary factor in the process of social and economic development.

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